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WAGES AND HOURS OF LABOR IN THE LUMBER, MILLWORK, AND FURNITURE INDUSTRIES 1907 T0 1913
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## U. S. BUREAU OF LABOR STATISTICS.

## WAGES AND HOURS OF LABOR IN LUMBER MANUFACTURING, MILLWORK, AND FURNITURE MANUFACTURING, 1907 T0 1913.

## LUMBER MANUFACTURING.

## SUMMARY.

This report, based on information obtained from representative establishments, shows the full-time weekly earnings, the full-time hours of labor per week, and the rates of wages per hour in the principal occupations in the lumber industry in the United States. Figures relating to full-time hours of labor per week and rates of wages per hour are presented for the years 1907 to 1913 inclusive, and for full-time weekly earnings for the years 1910 to 1913 inclusive.

Earlier reports of this Bureau present wages and hours of labor in the industry from 1890 to $1912 .{ }^{1}$

Briefly summarized, the average full-time weekly earnings of employees engaged in lumber manufacturing in 1913 were 3.4 per cent higher than such earnings in 1912, 4.9 per cent higher than in 1911, and 5.4 per cent higher than in 1910. The full-time hours of labor per week in 1913 were 0.7 per cent lower than in 1912, and 0.5 per cent lower than in each of the years 1910 and 1911. Rates of wages or earnings per hour in 1913 were 4 per cent higher than in 1912, 5.4 per cent higher than in 1911, and 5.7 per cent higher than in 1910.

The most significant facts concerning the occupations covered by this report are summarized in the table below. The data for the years 1907 to 1911 were secured in 1911. Owing to the difficulty of finding establishments having records extending back for a period of years and also owing to the amount of work involved, data for 1907 to 1909 were secured from a smaller number of establishments than have furnished data for the later years.

According to the plan of the table, direct comparisons, which are indicated by the grouping of the years within brackets, can be made properly only between two or more successive years where the data are for identical establishments.

[^0]The data are for one pay-roll period in each year, the period ending nearest May 15 being selected, except in a very few establishments in which conditions in May were abnormal.

The figures for the years 1907 to the first presentation for 1912 are reproduced from Bulletin No. 129, except the average full-time weekly earnings for 1910 to 1912, which figures have been computed for this Bulletin from data gathered for those years. The average full-time weekly earnings have not been computed for the period 1907 to 1910 owing to the lack of funds. It will be observed that the average full-time weekly earnings generally are not exactly the same as the product of the average rate of wages per hour and the average full-time hours per week. This difference is explained on page 16.

In 1913 the average full-time weekly earnings of employees engaged in lumber manufacturing, represented by 10 occupations, varied from $\$ 10.40$ for laborers to $\$ 33.90$ for band sawyers. The full-time hours of labor per week in 1913 varied in the several mills. In a few instances the working time was less than 60 hours, and in a few instances over 66. The predominating working time was 60 hours per week, although for quite a percentage of the employees it was 66 hours.

All of the employees for whom figures are presented in this report are males.

AVERAGE AND CLASSIFTED FULLTIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACE OF THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]


AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1907 TO 1913-Contd.

| Occupation, and number of establishments. | Year. | Number of em-ployees. | age fulltime hours per week. | Per cent of employees whose full-time hours per week were- |  |  |  |  | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { rate of } \\ \text { wages } \\ \text { per } \\ \text { hour. } \end{gathered}$ | Per cent of employees earning each classified rate of wages per hour. |  |  |  | $\begin{aligned} & \text { Aver- } \\ & \text { age } \\ & \text { full- } \\ & \text { time } \\ & \text { week } \\ & \text { ly } \\ & \text { earn- } \\ & \text { ings. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Un- } \\ \text { der } \\ 60 \end{gathered}$ | 60 | Over 60 and un- der 66 | 66 | $\underset{66}{\text { Over }}$ |  | Under 14 cts. | $\begin{gathered} 14 \\ \text { and } \\ \text { un } \\ \text { der } \\ 18 \\ \text { cts. } \end{gathered}$ | $\begin{gathered} 18 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 25 \\ \text { cts. } \end{gathered}$ | $\begin{gathered} 25 \\ \text { ets. } \\ \text { and } \\ \text { over. } \end{gathered}$ |  |
| Machine feeders, planing mill: <br> 178 establishments. . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\{1911$ | 1,156 | 61.3 | 1.7 | 75.3 | 5.5 | 17.4 |  | \$0.1792 | 17.3 | 42.5 | 28.1 | 12.3 | \$10.94 |
|  | $\{1912$ | 1,165 | 61.1 | 7 | 78.8 | 5.9 | 14.6 |  | . 1849 | 14.2 | 39.7 | 33.1 | 12.9 | 11. 27 |
| 253 establishments. - | $\{1912$ | 1,548 | 61.4 | . 7 | 73.8 | 4.6 | 19.5 | 1.4 | . 1810 | 20.0 | 36.9 | 31.2 | 12.0 | 11.07 |
|  | (1913 | 1,531 | 61.1 | 3.1 | 75.6 | 5.1 | 15.2 | 1.0 | . 1863 | 15.0 | 39.3 | 30.3 | 15.4 | 11.34 |
| Trimmer operators: | 1907 | 72 | 60.7 | 2.8 | 83.3 | 4.2 | 6.9 | 2.8 | . 2070 | 9.7 | 15.3 | 55.5 | 19.4 | (1) |
| 37 establishments | 1508 | 68 | 60.7 | 3.0 | 82.4 | 4.4 | 7.4 | 2.9 | . 1959 | 10.3 | 29.4 | 41.2 | 19.1 | (1) |
|  | 1909 | 72 | 60.7 | 2.8 | 83.3 | 4.2 | 6.9 | 2.8 | . 1971 | 8.4 | 30.5 | 41.7 | 19.4 | (1) |
| 228 establishments. . | (1910 | 74 | 60.7 | 2.8 | 82.4 | 5.4 | 6.8 | 2.7 | . 1969 | 8.1 | 20.3 | 48.7 | 23.0 | (1) |
|  | $\{1910$ | 503 | 61.0 | 1.8 | 78.9 | 3.4 | 15.3 | . 6 | . 2089 | 11.3 | 18.1 | 46.0 | 24.7 | 12.71 |
|  | \{1911 | 485 | 61.0 | 1.8 | 79.0 | 3.5 | 15.1 | . 6 | . 2113 | 11.0 | 18.5 | 43.7 | 26.8 | 12.85 |
| 294 establishments.. | 1911 | 479 | 61.3 | 1.2 | 75.6 | 5.0 | 17.3 | . 8 | . 2092 | 11.0 | 20.1 | 41.9 | 26.9 | 12.77 |
|  | \{1912 | 441 | 61.3 | 1.9 | 75.1 | 5.3 | 17.0 | . 9 | . 2104 | 10.4 | 20.9 | 42.8 | 25.8 | 12.84 |
| 346 establishments. . | \{1912 | 511 | 61.2 | 2.2 | 75. 7 | 4.3 | 16.8 | 1.0 | . 2088 | 10.4 | 22.5 | 42.9 | 24.3 | 12. 73 |
|  | (1913 | 538 | 61.0 | 3.5 | 78.1 | 3.9 | 13.6 | . 9 | . 2172 | 7.8 | 20.4 | 42.4 | 29.4 | 13.20 |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Un- } \\ \text { der } \\ 20 \\ \text { cis. } \end{gathered}$ | 20 and under 25 ets. | $\begin{gathered} 25 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 30 \\ \text { cts. } \end{gathered}$ | 30 cts. and over. |  |
| Carriage men: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 41 establishments. . |  | 208 | 60.7 | 3.9 | 81.2 | 6.2 | 5.3 | 3.4 | . 2184 | 30.7 | 32.7 | 29.8 | 6.7 | (1) |
|  | $\left\{\begin{array}{l}1908 \\ 1909\end{array}\right.$ | 201 | 60.8 | 4.0 | 80.6 | 6. 5 | 5.5 | 3.5 | . 2074 | 42.8 | 29.9 | 20.9 | 6.5 | (1) |
|  | $\left\{\begin{array}{l}1909 \\ 1910\end{array}\right.$ | 195 | 60.8 60.7 | 4.6 | 79.5 | 6.7 | 5.6 | 3.6 | . 2115 | 36.4 | 32.3 | 24.1 | 7.2 | (i) |
|  | 1910 | 215 | 60.7 | 3.7 | 81.9 | 6.1 | 5.1 | 3.3 | . 2196 | 27.9 | 36.3 | 29.8 | 6. 0 | (1) |
| 245 establishments.. | $\{1910$ | 1,327 | 61.4 | 2.2 | 72.9 | 4. 7 | 19.7 | . 7 | . 2088 | 43.8 | 26.3 | 18.4 | 11.5 | 12.76 |
|  | (1911 | 1,298 | 61.3 | 2.2 | 73.9 | 4.8 | 18.4 | . 7 | . 2119 | 41.6 | 25.6 | 20.1 | 12.7 | 12.94 |
| Edgermen: | 1907 | 79 | 60.7 | 2.6 | 82.3 | 6.3 | 6.3 | 2.5 | . 2535 | 19.0 | 15.2 | 40.5 | 25.4 | (1) |
| 41 establishments | 1908 | 78 | 60.7 | 3.9 | 80.8 | 6.4 | 6.4 | 2.6 | . 2457 | 20.6 | 20.5 | 42.3 | 16. 7 | (1) |
|  | 1909 | 77 | 60.7 | 3.9 | 80.5 | 6.5 | 6.5 | 2.6 | . 2481 | 20.8 | 19.5 | 40.3 | 19.5 | (1) |
|  | (1910 | 84 | 60.7 | 3.6 | 82. 1 | 6.0 | 6.0 | 2.4 | . 2647 | 16.8 | 16. 7 | 35.7 | 31.0 | (1) |
| 245 establishments.. | $\{1910$ | 585 | 61.2 | 1.9 | 75.6 | 5. 2 | 16.9 | . 5 | . 2553 | 16.1 | 19.5 | 37.1 | 27.2 | 15. 58 |
|  | (1911 | 569 | 61.2 | 1.9 | 76.1 | 5.5 | 16.0 | . 5 | . 2589 | 14.5 | 18.8 | 36.6 | 30.3 | 15.79 |
| 299 establishments. . | $\{1911$ | 684 | 61.3 | 1.3 | 76.2 | 5.2 | 16.7 | . 6 | . 2599 | 14.0 | 18.9 | 37.6 | 29.4 | 15.86 |
|  | (1912 | 686 | 61.2 | 1.6 | 76.4 | 5.9 | 15.5 | . 6 | . 2601 | 14.0 | 18.1 | 38.5 | 29.4 | 15.87 |
| 361 establishments. | $\{1912$ | 751 | 61.2 | 1.7 | 75.8 | 5. 7 | 16.0 | . 8 | . 2617 | 13.2 | 18.1 | 39.3 | 29.4 | 15.97 |
|  | $\{1913$ | 754 | 61.0 | 4.0 | 77.1 | 5.8 | 12.3 | . 8 | . 2677 | 12.7 | 15.1 | 38.1 | 34. 1 | 16.28 |
| Sawyers, resaw: 98 establishments. |  |  |  |  | 85.9 |  |  |  |  |  |  |  |  |  |
|  | $\{1911$ | 149 | 60.7 | 1.3 | 85.9 | 4. 7 | 8.1 |  | . 2515 | 14.8 | 28.9 | 30.2 | 26.2 | 15.24 |
|  | $\{1912$ | 147 | 60.7 | 1.4 | 85.7 | 4.8 | 8.2 |  | . 2556 | 12.9 | 27.2 | 31.3 | 28.6 | 15. 48 |
| 138 establishments.. | $\{1912$ | 197 | 60.7 | 1.0 | 85.3 | 4.1 | 9.6 |  | . 2543 | 14.2 | 28.4 | 30.5 | 26.9 | 15.41 |
|  | $\{1913$ | 192 | 60.7 | 2.1 | 85.4 | 3.6 | 8.9 |  | . 2607 | 12.5 | 24.5 | 31.8 | 31.3 | 15. 77 |
| Setters:301 establishme |  |  |  |  |  |  | 16. |  |  |  |  |  |  |  |
|  | $\left\{\begin{array}{l}1911 \\ 1912\end{array}\right.$ | 714 | 61.3 | 1. 2 | 75. 2 | 5.6 | 16.9 | . 8 | . 2506 | 15.8 | 22.4 | 34. 2 | 27.6 | 15.30 |
|  | (1912 | 713 | 61.3 | 1.6 | 75.3 | 5.9 | 16.3 | 1.0 | . 2518 | 15.5 | 21.3 | 36.5 | 26.6 | 15.37 |
| 361 establishments. . | $\{1912$ | 780 | 61.3 | 1.8 | 75.4 | 5.5 | 16. 2 | 1.2 | . 2499 | 15.6 | 21.7 | 38.3 | 24.4 | 15. 29 |
|  | \{1913 | 782 | 61.0 | 3. 2 | 77.6 | 5.5 | 12.3 | 1.4 | . 2583 | 12.7 | 20.7 | 38.0 | 28.6 | 15.71 |

AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONSIN LUMBER MANUFACTURING, 1907 TO 1913-Concld.

| Occupation, and number of establishments. | Year. | Num ber of emees. | $\begin{array}{\|c} \text { Aver } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{array}$ | Per cent of employees whose full-time hours per week were- |  |  |  |  | Average rate of wages perhour. hour. | Per cent of employees earning each classified rate of wages per hour. |  |  |  | A ver-agefull-timeweek-lyearn-ings.ng |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\left\lvert\, \begin{gathered} \text { Un- } \\ \text { der } \\ 60 \end{gathered}\right.$ | 60 | Over 60 and un- der 66 | 66 | $\left\|\begin{array}{c} \text { Over } \\ 66 \end{array}\right\|$ |  | $\begin{gathered} \text { Un- } \\ \text { der } \\ 25 \\ \text { cts. } \end{gathered}$ | $\begin{aligned} & 25 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & 30 \\ & \text { cts. } \end{aligned}$ | 30 and un- dor 40 cts. | cts. cts. and over. |  |
| Sawyers, gang: |  |  |  |  | 100.0 |  |  |  | 80.2708 |  | 66.7 | 33.3 |  |  |
| 5 establishments. | 1908 | 6 |  |  | 100.0 |  |  |  | . 2558 | 33.3 | 50.7 | 16.7 |  | (1) |
|  | 1909 |  | 60.0 |  | 100.0 |  |  |  | .$^{2583}$ | 33.3 | 33.3 | 33.3 |  | 13 |
|  | 1910 | 6 | 60.0 |  | 100.0 |  |  |  | . 2642 | 16.7 | 50.0 | ${ }_{33.3}^{33 .}$ |  | (1) |
| 52 establishments. . . | 1910 | 64 | 61.4 |  | 75.0 | 4.7 | 20.3 |  | . 3092 | 22.0 | 21.9 | 32.8 | 23.4 | \$18.88 |
|  | 1911 | 60 | 61.6 |  | 71.7 | 5.0 | 23.3 |  | . 3006 | 23.4 | 23.3 | 33.3 | 20.0 | 18.42 |
| 66 establishments. . | [1911 | 74 | 61.6 |  | 71.6 | 2.7 | 25.7 |  | . 3061 | 19.0 | 27.0 | 31.1 | 23.0 | 18.77 |
|  | 1912 | 75 | 61.6 |  | 70.7 | 4.0 | 25.3 |  | . 3058 | 14.6 | 30.7 | 32.0 | 22.7 | 18.74 |
| 71 establishments. | 1912 | 79 | 61.7 | 1.3 | 69.6 | 2.5 | 25.3 | 1.3 | . 3072 | 15.2 | 29.1 | 35.4 | 20.3 | 18.86 |
|  | 1913 | 80 | 61.4 | 5.0 | 68.8 | 2.5 | 22.5 | 1.3 | . 3109 | 13.8 | 27.5 | 38.8 | 20.0 | 19.02 |
|  |  |  |  |  |  |  |  |  |  | Un- der 40 cts. | 40 and un- der 50 cts. | $\begin{gathered} 50 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 60 \\ \text { cts. } \end{gathered}$ | 60 cts. and over. |  |
| Sawyers, band : |  | 71 | 60.8 | 28 | 84.5 | 5.6 | 7.0 |  | . 4901 | 11.3 | 32.4 | 39.4 | 16.9 |  |
| 34 establishments. . |  | 69 |  | 2.8 |  | 4.3 | 7.2 |  | . 4807 | 14.5 |  |  |  | (1) |
|  | $\left\{\begin{array}{l}1909 \\ 1910\end{array}\right.$ | 69 | ${ }_{60}^{608} 8$ | 2.8 | 85.5 86.3 | 4.3 | 7.2 |  | . 48904 | 14.5 | 27.5 | 36. 3 | ${ }_{21.7}^{15}$ | ${ }_{1} 13$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 203 establishments. . | 1910 | 429 | 61.2 | 2.3 | 74.6 | 6.5 | 16.5 |  | . 5431 | 7.5 | 20.7 | 34.0 | 37.8 | 33.18 |
|  | 1911 | 432 | 61.2 | 2.3 | 75.2 | 6.7 |  |  | . 5535 | 7.2 | 19.2 | 32.4 | 41.2 | 33.79 |
| 243 establishments. - | 1911 | 508 | 61.2 | 1.6 | 76.4 | 6.3 | 15.7 |  | . 5503 | 8.1 | 17.3 | 35.2 | 39.4 | 33.61 |
|  | (1912 | 492 | 61.2 | 2.0 | 77.0 | 6.1 | 14.8 |  | . 5514 | 7.3 | 18.7 | 33.5 | 40. | 33.64 |
| 288 establishments. . | 1912 | 561 | 61.1 | 2.0 | 77.2 | 5.3 | 15.5 |  | . 5457 | 6.8 | 20.3 | 34.9 | 38.0 | 33.47 |
|  | (1913 | 554 | 60.9 | 3.6 | 78.2 | 5.4 | 12.8 |  | . 5568 | 6.5 | 18.1 | 33.6 | 41.9 | 33.90 |
| Sawyers, circular: | (1907 | 14 | 61.3 | 7.1 |  |  |  | 14.3 | 5448 | 7.1 | 21.4 | 42.9 | 28.6 |  |
| 12 establishments. . | 1908 | 14 | 61.3 | 7.1 |  | 7.1 |  | 14.3 | . 5186 | 7.1 | 35.7 | 28.6 | 28.6 | (1) |
|  | 1909 | 13 | 61.3 | 7.7 | 69.2 | 7.7 |  | 15.4 | . 5254 | 7.7 | 30.8 | 38.5 | 23.1 | (1) |
|  | 1910 | 14 | 61.3 | 7.1 | 71.4 | 7.1 |  | 14.3 | . 5501 |  | 35.7 | 28.6 | 35.7 | (1) |
| 58 establishments. . | 1910 | 81 | 61.9 | 1.2 | 66.7 | 2.5 | 25.9 | 3.7 | . 4964 | 11.1 | 32.1 | 39.5 | 17.3 | $30.66$ |
|  | \{1911 | 78 | 62.0 | 1.3 | 65.4 | 2.6 | 26.9 | 3.8 | . 4976 | 11.6 | 29.5 | 41.0 | 17.9 | 30.77 |
| 72 establishments. . | 1911 | 95 | 62.6 | 1.1 |  | 4.2 | 34.7 | 3.2 | . 5036 | 11.6 | 28.4 | 42.1 | 17.9 | 31.42 |
|  | (1912 | 94 | 62.5 | 1.1 | 58.5 | 4.3 | 29.8 | 6.4 | . 5091 | 14.9 | 19.1 | 46.8 | 19.1 | 31.70 |
| 92 establishments. . | 1912 | 119 | 62.4 | 2.5 | 58.0 | 7.6 | 25.2 | 6.7 | . 4990 | 18.5 | 20.2 | 41.2 | 20.2 | 31.03 |
|  | 11913 | 123 | 62.0 | 3.3 | 64.2 |  | 17.9 |  | . 5134 | 15.4 | 21.1 | 37.4 | 26.0 | 31.71 |

${ }^{1}$ Not computed.
Wages and hours of labor vary in different establishments. Hence the inclusion or exclusion of an establishment in a group, if the wages and hours therein differ considerably from the average, may raise or lower the average for the group. In the above table it is seen that data for laborers, for instance, are reported for 245 identical estab-
lishments in 1910 and 1911, and for 299 identical establishments in 1911 and 1912. This does not mean, however, that all of the 245 establishments in the former period are included in the 299 reported in the latter period; 26 dropped out and 80 others were added, hence, as the average earnings of laborers in the establishments which dropped out varied from the average of those which were added, the average earnings for 1911 differed in the two groups of establishments. In this occupation it is seen that the average full-time weekly earnings decreased from $\$ 10.12$ in 1910 to $\$ 10.10$ in 1911, in 245 establishments; and increased from $\$ 9.91$ in 1911 to $\$ 10.04$ in 1912, in the 299 establishments reported. As the two groups of establishments do not show exactly the same earnings for 1911, it would not be a safe comparison to state that the earnings decreased from $\$ 10.12$ in 1910 to $\$ 10.04$ in 1912. The movement from one year to another is indicated with a greater degree of certainty by the figures for identical establishments. The difference between $\$ 10.12$ and $\$ 10.10$ represents the decrease from 1910 to 1911 , and the difference between $\$ 9.91$ and $\$ 10.04$ represents the increase from 1911 to 1912, as nearly as can be determined from the data available. In the table the comparable data for identical establishments are bracketed together.

Owing to variation in the number of establishments from year to year it is difficult to make a comparison of the actual data over a period of several years which will give an exact measure of the changes. To aid in the making of such a comparison relative (or index) numbers have been computed from the averages in the preceding table for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation for the years 1910 to 1913, inclusive. These relative or index numbers are simply percentages in which the figures for 1913 are taken as the base, or 100 per cent. The relative for each year is the per cent that the average in that year is of the average for 1913, as determined by the method explained on page 18. Thus, in the table below, the full-time weekly earnings of laborers in 1910 were 95.4 per cent of the full-time weekly earnings in 1913.

It will be observed that the general tendency of the several occupations is toward a reduction of working hours and an increase in rates of wages per hour and of earnings per full week. No data are available to show the amount of work afforded employees each year or the variation from year to year. The relative full-time hours per week indicate the change in the hours of labor of employees working full time, but do not reflect in any way the greater or less amount of full-time work afforded. This point is further discussed on page 15.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1910 TO 1913.
(1913 $=\mathbf{1 0 0 . 0}$.)


A like table of relative numbers is next shown for the industry as a whole, as determinsd by a combination of the data for the several occupations covered. Data were obtained for the principal occupations of the industry but not for all occupations. The method of computing this table is explained on page 19.

RELATIVE FULL-TME HOURS PER WEEK, RATES OF WAGES PER HOUR AND FULL TIME WEEKLY EARNINGS IN LUMBER MANUFACTURING, 1910 TO 1913.
(1913 $=100.0$.

| Year. | Relative full-time hours per week. | Relative rates of wages per hour. | Relative full-time weekly earnings. |
| :---: | :---: | :---: | :---: |
| 1910. | 100.5 | 94.6 | 94.9 |
| 1911. | 100.5 | 94.9 | 95.3 |
| 1912. | 100.7 | 96.2 | 96.7 |
| 1913. | 100.0 | 100.0 | 100.0 |

From the table it is seen that the relative or index number for fulltime hours per week in lumber manufacturing decreased from 100.5 in 1910 to 100 in 1913, or, in other words, full-time hours per week in 1910 were 100.5 per cent of what they were in 1913. The relative or index number for rate of wages per hour increased from 94.6 in 1910 to 100 in 1913. The increase in full-time weekly earnings was practically the same as the increase in wages per hour, it being from an index of 94.9 in 1910 to 100 in 1913.

In examining the relative or index numbers for the several occupations and for the industry as a whole in the two tables above, it will be observed that they have been computed with 1913 taken as the base, or 100 per cent. In the preceding reports of the Bureau relating to this industry relative numbers for rates of wages per hour and for hours of labor per week were presented back to 1890 and the base, or 100 per cent, was not the average rate of wages per hour or the average full-time hours per week in any one year, but the average rate of wages per hour and the average full-time hours per week for the 10 -year period, $1890-1899$. The table of such relative numbers for the years 1890 to 1912 appears on page 154.

There are several reasons for changing the base to the most recent year.

The primary reason for changing the base to the last available year is that as the scope of the inquiry has been enlarged in recent years it has seemed necessary in order to represent the industry adequately to include additional occupations. As no data were available for these occupations for 1890 to 1899, no relatives or index numbers could be computed for them with such period as a base. By using the last year as a base, however, it is possible to compute relatives for such additional occupations.

Again, relative or index numbers are most frequently used to compare the current year with different preceding years, and generally with the few years immediately preceding. Probably comparison between 1913 and 1912 will be made more often than between any other two years, and a comparison of any relative number with 100 conveys a clearer idea than a comparison with any other number. For example, the ratio $99.4: 100$ is more clearly grasped than the equal ratio 154.4 : 155.4.

A third reason for a change of base from 1890-1899 to 1913 is that any imperfections of data (due, for example, to a small number of establishments) are carried into the index numbers for the earlier years and continued when additions are made from year to year. The data for 1913 are the most comprehensive and satisfactory that have been gathered in any year and the data back to 1910 are more satisfactory than in the earlier years. This reason for the change of base is further explained on page 16.

For this Bulletin relative numbers have been computed back to the year 1910 on the basis of 1913 equal to 100 per cent. They were not computed for earlier years because data were available from a very much smaller number of establishments, and further because of the large amount of work involved. The relative numbers for the several occupations were computed in both the old and the new series by the same process, which is explained on page 18 The relative numbers for the occupations shown in the new series here
presented differ from those of the old series, shown in preceding reports, because of the change of the base; but the ratio existing between any two years is the same in both series. The relative numbers for the industry as a whole have likewise been recomputed with 1913 as the base.

In addition to making a change of the base year, a change has also been made in the method of computing the industry relatives; and, because of this change, the relatives for the industry as a whole here presented not only differ from the relatives computed by the old method but show a slightly different ratio of change from year to year. In Bulletin No. 129 the relative numbers for this industry were averages of the relative numbers of the several occupations. For each year, for example, the relative rate of wages per hour of each occupation was multiplied (weighted) by the number of employees in that occupation. The products thus computed for all occupations were added, and the sum divided by the total employees in all occupations.

In computing the relative numbers from 1910 to 1913 for the industry as a whole, as presented in this Bulletin, a combination was made, not of the relative numbers for the several occupations, but of the actual hours and wages of the several occupations. For each year the average hours and wages were computed for all employees in all occupations and the average for each preceding year was compared with the average for 1913 to determine the index. It was deemed necessary to make this change in method because a change in the industry is not always accurately reflected by the relative computed by averaging the occupation relatives. This reason is more fully explained on page 19.

In addition to the relative numbers shown for the several occupations and for the industry, three tables are here presented showing the per cent of increase or decrease in full-time hours of labor per week, rates of wages per hour, and full-time weekly earnings in 1913, as compared with each preceding year back to 1910 . The figures of these tables are computed from the relative numbers shown on page 10, and simply reverse the method of comparison. Each of the three tables also shows the increase or decrease in 1912 as compared with 1911, and in 1911 as compared with 1910.

Referring to the third line of the first table, it is seen that the full-time hours of laborers in 1913 were 0.5 per cent lower than in 1910, 0.5 per cent lower than in 1911, and 0.7 per cent lower than in 1912. Further, it is seen that the full-time hours of labor in this occupation were 0.2 per cent higher in 1912 than in 1911 and in 1911 the same as in 1910. The other figures of the table are read in like manner.

PER CENT OF INCREASE OR DECREASE IN FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1913 COMPARED WITH EACH OF THE 3 YEARS PRECEDING, 1912 COMPARED WITH 1911, AND 1911 COMPARED WITH 1910.

FULL-TMME THOURS PER WEEK.

| Occupation. | Per cent higher ( + ) or lower ( - ) in 1913 than in- |  |  | Per cent higher ( + ) or lower ( - ) in- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1910 | 1911 | 1912 | $\begin{aligned} & 1912 \text { than } \\ & \text { in } 1911 \end{aligned}$ | 1911 than in 1910 |
| Doggers.. | (1) | -0.5 | -0.3 | -0.2 | (2) |
| Edgermen. | $-0.5$ | $-.5$ | $-.3$ | -. 2 | (3) |
| Laborers.. | -. 5 | -. 5 | -. 7 | $+.2$ | ${ }^{8}$ |
| Machine feeders, planing milile | $\left.{ }^{2}\right)$ | -. 8 | -. 5 | -. 3 | (2) |
| gawyers, band...... | $-.3$ | $-.3$ | $-.3$ | $\left.{ }^{8}\right)$ | (8) |
| Sawyers, circular | $-.7$ | $-.8$ | $-.7$ | -. 1 | +0.1 |
| Sawyers, gang. . | -. 2 | -. 5 | $-.5$ | (3) | $+.3$ |
| Sawyers, resaw | ${ }^{(2)}$ | ${ }^{(3)}$ | ( ${ }^{8}$ ) | (8) |  |
| Setters....... | $(1)$ | $-.7$ | $-.5$ | -. 2 | (2) |
| Trimmers. | -. 3 | $-.3$ | -. 3 | (8) | $\left.{ }^{8}\right)$ |
| The industry. | $4-.5$ | $-.5$ | $-.7$ | $+.2$ | ${ }^{8}$ ) |

## RATES OF WAGES PER HOUR.

| Doggers. | (1) | +2.6 | +1.9 | +0.6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Edgermen......................................... | +3.8 | +2.4 | +2.2 | $+.1$ | +1.5 |
| Laborers. | +5.2 | $+5.5$ | +4.2 | $+1.3$ | $-.3$ |
| Machine feeders, planing mill | $\left.{ }^{2}\right)$ | +6.2 | $+2.9$ | +3.2 | (2) |
| Sawyers, band........... | +4.2 | +2.1 | $+2.0$ | $+.1$ | +2.0 |
| Eawyers, circular. . . . . . . . . . . . . . . . . . . . . . . | +4.3 | $+4.0$ | +2.9 | $+1.0$ | $+.3$ |
| Sawyers, gang. | ${ }^{-1.7}$ | +1.1 | $+1.2$ | $-.1$ | -2.8 |
| Sawyers, resaw | ${ }^{2}$ | $+4.2$ | +2.5 | $+1.7$ |  |
| Setters.. | (1) | +3.8 | +3.3 | $+.5$ | (2) |
| Trimmers. | $+5.8$ | +4.6 | +4.1 | $+.5$ | +1.2 |
| The industry. | $4+5.7$ | +5.4 | +4.0 | $+1.4$ | $+.3$ |

FULL-TEME WEGKLY FARNINGG.

| Doggers. | (1) | +2.1 | +1.4 | +0.7 | (2) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Edgermen. | +3.4 | +2.0 | +1.9 | $+.1$ | $+1.3$ |
| Laborers.- | +4.8 | $+5.0$ | $+3.7$ | +1.3 | -. 2 |
| Machine feeders, planing mill | $\left.{ }^{2}\right)$ | +5.5 | +2.5 | +3.0 | $\left.{ }^{2}\right)$ |
| Sawyers, band............. | +3.2 | +1.4 | +1.3 | $+.1$ | $+1.8$ |
| Sawyers, circular. | $+3.4$ | +3.1 | +2.1 | $+.9$ | $+.3$ |
| Sawyers, gang.... | -1.8 | $+.7$ | $+.8$ | $-.1$ | -2.5 |
| Sawyers, resaw | ${ }^{2} 1$ | +4.0 | $+2.4$ | $+1.6$ |  |
| Setters...... | ${ }^{1}{ }^{1} 5$ | +3.2 | +2.8 | $+.4$ | $\left.{ }^{2}\right)$ |
| Trimmers. | +5.4 | +4.3 | +3.7 | $\pm .5$ | +1.1 |
| The industry. | $4+5.4$ | +4.9 | $+3.4$ | +1.5 | $+.4$ |

1 Not shown as a separate occupation.
2 No data.
s No change.
41910 data for carriage men are not considered or shown in detail in this table, but are considered and do enter in the figures for 1910 for the industry. Carriage men were divided into doggers and setters in 1911, 1912, and 1913.

## EXPLANATION OF SCOPE AND METHOD.

This report includes establishments engaged in manufacturing lumber, including planing and kiln drying when carried on in connection with the sawmills. The planing is in most cases done immediately following and in connection with the sawing of lumber and is therefore quite properly considered a part of lumber industry.

All information in this report was secured from pay rolls of the various establishments by the agents of the Bureau. The number of establishments for which data were secured varied considerably during the period included in this report as follows:

$$
\begin{aligned}
& 1910 \text { and 1911................................. . . } 245 \text { identical establishments. }
\end{aligned}
$$

$$
\begin{aligned}
& 1912 \text { and 1913................................. } 361 \text { identical establishments. }
\end{aligned}
$$

The data for 1907 to 1911 were secured in 1911 and the number of establishments included for the full period for 1907 to 1910, inclusive, was limited owing to the difficulty of finding establishments that had preserved complete records for those years and also owing to the large amount of work involved.

The establishments varied from year to year, as establishments go out of business or cease to be representative and new establishments must be substituted in the wage study. Occasionally occupations are dispensed with in a mill or new occupations introduced and sometimes data are not available for all occupations desired from a mill. Data for a group of establishments in any year will not be precisely the same as for a different group in the same year, even though nearly all of the establishments may be common to both groups. In using the actual figures in this report comparison from year to year should be made only between data coming from identical establishments. In the tables the data from identical establishments are bracketed together. Data from an establishment are not included in the report unless the information for at least two years is available.

In selecting establishments from which to secure data the Bureau undertook to represent all States in which lumber manufacturing is of material importance, the measure of importance being the number of employees reported by the United States Census of Manufactures. The table which follows shows by States the number of employees in lumber manufacturing, as reported by the United States Census Office for 1910, the total number on the pay roll in the establishments from which the Bureau secured data for 1913, and the number in the selected occupations for whom data for 1913 are shown.

TOTAL NUMBER OF EMPLOYEES TN LUMBER MANUFACTURING AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1913.

| State. | Number of employees reported by United States census of 1910 . | Establishments for which data are shown by the Bureau of Labor Statistics for 1913. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number of establishments. | Number of employees- |  |
|  |  |  | On pay roll. | For whom data are shown. |
| W isconsin. | 25,445 | 19 | 4,788 | 2,370 |
| Washington. | 41,684 | 25 | 6,890 | 2,604 |
| Michigan.. | 27, 325 | 30 | 5,908 | 2,566 |
| Louisiana. | 43,996 | 23 | 5,784 | 2,864 |
| Arkansas.. | 31, 404 | 19 | 5,047 | 2,636 |
| Mississippi. | 32, 106 | 16 | 3,596 | 1,877 |
| Minnesota. | 16,650 | 7 | 3,464 | 1,737 |
| Pennsylvania | 15,707 | 19 | 1,281 | +907 |
| Georgia... | 18, 110 | 22 | 2,845 | 1,606 |
| Tennessee. | 19,233 | 29 | 1,849 | 1,209 |
| Alabama | 20,949 | 14 | 2,757 | 1,245 |
| North Carolina. | 30,534 | 23 | 3,352 | 2,185 |
| Texas.... | 21, 519 | 12 | 3,653 | 1,601 |
| California. | 15, 614 | 14 | 2,934 | 1,600 |
| Virginia.. | 29,758 | 23 | 2,567 | 1,698 |
| Maine . . . . . | 13,203 | 19 | 1,803 | 1,206 |
| West Virginia. | 17,629 | 20 | 1, 903 | 1,070 |
| Florida. .-... | 17, 842 | 12 | 2,306 | 1,250 |
| South Carolina. | 13, 586 | 9 | 2,261 | 1,108 |
| Oregon. | 13,460 | 6 | 2,104 | , 989 |
| Other States ${ }^{1}$. | 81,424 |  |  |  |
| United States.. | 547, 178 | 361 | 67,092 | 34, 328 |

${ }^{1}$ Including States having less than 11,000 each.
According to the census of 1910 more than 85 per cent of the total number of employees in the industry are found in the States in which the establishments furnishing information to the Bureau of Labor Statistics are located.

The number of employees in the establishments from which the Bureau obtained 1913 data was equal to 12.3 per cent of the total in the industry in 1910, and the number of such employees for which the Bureau presents detailed information for 1913 was equal to 6.3 per cent of the total in the industry in 1910.

The pay-roll period taken each year was the one nearest May 15, except in a very few establishments where abnormal conditions made it desirable to take a pay roll for some other time of the year.

The full-time hours of labor per week shown in the tables of the report are the regular full-time hours of work of the occupation under normal conditions in the establishment. The working time is the hours on duty including intervals of waiting for work. The fulltime hours per week and the relatives based thereon do not in any way indicate the extent of unemployment. Employees may work overtime, or 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, as presented in this Bulletin.

The rates of wages per hour appearing in the tables include the wages of time workers and the earnings of the few pieceworkers found amongst laborers in two establishments. All time rates by the day or week have been reduced to rates per hour, and the earnings of pieceworkers have been reduced to rates per hour, by dividing the earnings by the hours worked. The time workers and pieceworkers are combined in one group.

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 changes in fulltime earnings per week, notice should also be taken of changes in fulltime hours of labor per week.

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.

It will be observed that the average full-time weekly earnings generally are not exactly the same as the result that would be obtained by multiplying the average rate per hour by the average hours per week, owing to the fact that hourly rates for individual employees are based on varying hours per week, which has the effect of changing the relative weighting of the wages of the several employees. A hypothetical illustration shows the difference.


The product of $\$ 0.2670$ multiplied by 54 is $\$ 14.42$, while the average earnings per week is $\$ 14.25$.

The change of the basis of comparison in computing the relative or index numbers from the average of $1890-1899$ to 1913 is in part explained on page 11.

One of the reasons for the change of the base from 1890-1899 to the last year is that any imperfections in the data for earlier years are continued and compounded in the relative numbers when additions are made from year to year to an old series of relative numbers. The data for the period 1890-1899 were obtained mostly in 1901 from old and often incomplete pay rolls, and it was sometimes difficult to classify properly the employees into the several occupations.

For the 10-year period, 1890-1899, data were obtained from only 56 establishments, while data were obtained for 1912 and 1913 from 361 establishments. The number of establishments varied in the intervening years. While the average of 56 establishments possibly might have been a fairly acceptable base, the average of more than six times as many establishments recently canvassed becomes more nearly representative of the industry, and thus a more satisfactory base. Data are available from 301 establishments for 1911 and 1912 and from 245 establishments for 1910 and 1911.
Were the relative numbers for the occupations recomputed back to 1890 with 1913 as the base, any imperfections in the data for the earlier years would of course be carried into the index numbers for those years, but would not appear in the index numbers for the later years.

With either period as the base, the relative numbers would show with the same degree of accuracy the trend from one year to the next. With 1890-1899 as the base, however, any fault in the relative number for the early years is continued and the relative for 1913 will be at fault. But with the last year as the base, the relative number for any of the recent years is as nearly accurate and representative as the data collected for such years, and does not retain in itself because of a faulty base any imperfections of data gathered in the earlier years. In one series, the relative number, if beginning in fault, continues in fault even though the data of later years be entirely satisfactory. In the other series with the large volume of data for 1913 as the base, any weakness of earlier years does not appear except in such years.

To illustrate the change in the relatives produced by the change of base, relative full-time hours of labor and relative rates of wages per hour of band sawyers for the years 1910 to 1913 are given in the table following, computed with 1913 as the base, and with the average 1890-1899 as the base, so that the relative numbers computed on the two bases may be compared.

RELATIVE FULL-TIME HOURS PER WEEK AND RATE OF WAGES PER HOUR OF BAND SAWYERS COMPUTED ON TWO BASES: AVERAGE $1890-1899=100$ AND 1913=100.


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The first column of relative numbers indicates that the hours per week in 1910 were 96.6 per cent of the average hours in the period 1890-1899, while the next column shows the hours in 1910 to be 100.3 per cent of the hours in 1913. Both series of relatives indicate the same change from 1910 to 1913, each making a decrease of 0.3 per cent.

The first series of relative wages per hour shows an increase from relative 135.9 in 1910 to relative 141.6 in 1913, an increase of 4.2 per cent. The second series shows an increase from 96 in 1910 to 100 per cent in 1913, an increase of 4.2 per cent, or identically the same per cent of increase as in the other series.

The relative rates of wages per hour and the relative full-time hours per week from 1890 to 1912 on the basis of 1890-1899 equal to 100, published in Bulletin No. 129 are reproduced in this Bulletin on pages 151 to 156 .

Relative or index numbers for the several occupations and for the industry as a whole from 1910 to 1913 are presented on page 10.

The method of computing such relative or index numbers for an occupation can best be explained by an illustration. The rates of wages per hour of edgermen are taken as an example.

|  | Number of identical estab-lishments. | Year. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1910 | 1911 | 1912 | 1913 |
|  | 245 | \$0.2553 | \$0.2589 |  |  |
| Rate of wages per hour. | 299 |  | . 2599 | \$0.2601 |  |
| Relative rate of wages per hour computed therefrom. | 361 | 96.3 | 97.7 | .2617 .97 .8 | $\$ 0.2677$ 100.0 |
| Rate of wages per hour in identical establishments |  |  |  | 97.8 | 100.0 |
| covering the full four years. . . . . . . . . . . . . . . . . . . . | 201 | . 2546 | . 2580 | . 2590 | . 2644 |
| Relative rate of wages per hour computed therefrom.. |  | 96.3 | 97.6 | 98.0 | 100.0 |

The rate per hour for 1913 is taken as the base (100), then $\$ 0.2617$ divided by $\$ 0.2677$ equals 97.8 , the relative for 1912 . Theratio of 1911 to 1912 is $\$ 0.2599$ to $\$ 0.2601$. The relative for 1912 just determined, 97.8 , multiplied by $\$ 0.2599$, divided by $\$ 0.2601$ equals 97.7 , the relative for 1911. The ratio of 1910 to 1911 is $\$ 0.2553$ to $\$ 0.2589$. The relative for 1911, 97.7 , multiplied by $\$ 0.2553$, divided by $\$ 0.2589$ equals 96.3, the relative for 1910 .

This method of computing relative numbers over a period of years, as illustrated above, is used because of the changes which occur in the number of establishments.

A method of computing a series of relative numbers should take into account changes in establishments from year to year, as changes naturally occur, some establishments discontinuing operations or ceasing to be representative, and new establishments entering the
field. The method explained above, bringing in the new establishments, has been followed in computing the relatives in this report. Otherwise no use could have been made in the index of the data from the additional establishments obtained for the later years.
Of the 245 establishments reporting data for 1910-11, 44 dropped out later and only 201 reported for the entire period. The average rates of wages per hour for the 201 establishments reporting for the entire period are shown also in the above table, with relatives computed therefrom. As might be expected, these relatives differ from the relatives based on the greater number of establishments. Presumptively they are not as nearly representative as are the relatives based on the greater number of establishments, but they are given here as an illustration of the difference shown by relatives based on different amounts of data.

Data concerning rates of wages and hours of labor for the period 1907 to 1910, being available from a preceding Bulletin, are here reproduced, but, as before stated, owing to the small number of establishments in that period, and limited funds, it has not been deemed advisable to compute relative numbers therefor, and average full-time weekly earnings have not been computed for that period.

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 years. Thus, in the table above, the relative rate of wages per hour increased from 96.3 in 1910 to 100 in 1913, an increase in the relative of 3.7 over the relative 96.3 , making an increase of 3.8 per cent.

While the base for the computation of the relative numbers for the several occupations has been changed from the average of 1890-1899 to 1913 , the method of computation has remained the same.

The relative numbers for the industry as a whole, however, have been computed for this Bulletin not only with a change of base but in a different manner than for preceding Bulletins and hence may be expected to show some variations in results. The change is referred to on page 12. The relative numbers for the industry published in Bulletin No. 129 were computed from the relative numbers of the several occupations. The relative numbers for the industry here presented, covering 1910 to 1913, are computed directly from the average hours of labor, rates of wages per hour, and weekly earnings of all employees in all occupations combined. In other words, the relatives for the industry as a whole have been computed for this report in the same manner as the relatives for each occupation.

It was deemed necessary to make this change because by this method the changes in the industry are more accurately reflected by the relative thus computed than by computing the industry relative from the relatives of the several occupations.

The following table for a hypothetical industry illustrates how a change in the industry as a whole may not be reflected by a combination of the relatives of the occupations:

Actual wages.

| Occupation. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |

Relative wages.

| Oceupation A. Occupation B | 20 20 | 90 90 | 1,800 1,800 | 30 10 | 100 100 | 3,000 1,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 40 |  | 3,600 | 40 |  | 4,000 |

In this hypothetical table it is assumed that there were two occupations, A and B. Each occupation received an advance of wages in 1913, but there was a change in the number of employees in the two occupations, a larger proportion of lower skilled employees being employed.

The average rate of wages of both occupations combined in 1912 was $\$ 2.40$ and in 1913 it was $\$ 2$. Taking 1913 as the base, the relative for the industry for 1912 would be 120. On the other hand, computing the relative for each occupation, combining the relatives, and making the average thereof, the relative for 1912 is 90 as against 100 for 1913. Computed from occupation relatives, the relative rate of wages for the industry appears to increase from 90 to 100 , while the relative for the industry as a whole, computed from the average rates, because of the change in number of employees in the occupations, actually decreased from 120 to 100.

The general tendency of many industries is toward an increase in the proportion of unskilled or low skilled employees to highly skilled employees, because of specialization and the increasing efficiency of machinery.

Even though it were possible to cover the same number of establishments each year, it would not be possible to cover identical establishments for a considerable number of years, as firms go out of business or for some reason it becomes impossible to get acceptable data from some firms. The desire of the Bureau is to enlarge the scope of the study from time to time by covering a larger number of
establishments. In computing the relative from year to year, it is necessary, therefore, to use the method described on page 18, grouping the data for identical establishments in groups of two or more years as available. This method is necessary whether the industry relative be computed from the actual average wages and hours of all occupations or an average of the relatives of all occupations.

In the necessary use of the method described, a material statistical error may result if the industry relative is computed from the relatives of the occupations instead of the average for the industry. If the establishments should remain identical through a period of a few years and wages and hours in a later year return to the same wages and hours as in a preceding year, industry relatives computed from actual averages will be the same for the same averages occurring in the different years. If, however, the industry relative be computed from the relatives of the several occupations, like averages will not be represented by like relatives.

The subject is illustrated in the table below, showing a hypothetical industry of three occupations, A, B, and C, of one employee each.

| Occupation. | Employees. | 1911 |  | 1912 |  | 1913 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Rate of } \\ & \text { wages per } \\ & \text { day. } \end{aligned}$ | Relative wage, as compared with 1912. | $\begin{gathered} \text { Rate of } \\ \text { wages per } \\ \text { day. } \end{gathered}$ | Relative wage, as compared with 1913. | Rate of wages per day. | Relative wage. |
| (1) | (2) | (3) | (1) | (5) | (6) | (7) | (8) |
| A. | 111 | \$1.00 | 100.00 | \$1.00 | 100.00 | \$1. 00 | 100.00 |
| B......................................... |  | 2.00 3.00 | 80.00 66.67 | 2.50 4.50 | 125.00 150.00 | 2.00 3.00 | 100.00 100.00 |
| A verage.... | 3 | 6.00 | 246.6782.22 | $\begin{aligned} & 8.00 \\ & 2.66 \frac{2}{3} \end{aligned}$ | $375.00$$125.00$ | 6.00 | 300.00 |
|  |  | 2.00 |  |  |  | 2.00 | 100.00 |
| Relative computed from occupation relatives by method described. 1913 equals 100. |  |  | 102.78 |  | 125.00 |  | 100.00 |
| Relative average rate 1911 (\$2) compared with average rate 1912 ( $52.66 \frac{2}{3}$ ). |  |  | 75.00 |  |  |  |  |
| Relative computed from average rate of all occupa-tions. |  |  | 100.00 |  | 133.33 |  | 100.00 |

In this table column 7 shows the wages of each employee in 1913, and the average wages, $\$ 2$. Columns 3 and 5 show the detailed wages and average wages in 1911 and 1912, respectively. Column 8 shows the relative wages with 1913 as the base (100). Column 6 shows the relative wage of each occupation for 1912 as compared with 1913 and the average of such relatives, namely, 125. Column 4 shows the relatives for 1911 as compared with 1912 and the average of such relatives namely, 82.22.

Below the line of the average is the relative for the industry as computed from the averages of the several occupation relatives by
the method explained on page 18, with 1913 equal to 100 . The relative for 1912 is 125 as compared with 1913. Computing 82.22 per cent of 125 produces the relative 102.78, the relative for 1911 on the basis of 1913 equal to 100 . Thus, the relative for the industry computed from the relatives of the occupations, beginning with 1913 as 100 and working back to 1911, are: 1913 equals 100 ; 1912 equals 125; 1911 equals 102.78 . The actual average wages, however, are: $\$ 2, \$ 2.66 \frac{2}{3}$, and $\$ 2$. Thus, the same average wage for the industry is not represented by the same relative.

Comparing $\$ 2.66 \frac{3}{3}$, the average rate for 1912 , with $\$ 2$, the average rate for 1913, the relative is found to be 133.33. Comparing the average rate for 1911 (\$2) with the average rate for 1912 ( $\$ 2.66 \frac{3}{3}$ ), the relative is 75 , and 75 per cent of 133.33 , the relative for 1912, is 100 , the relative for 1911 on the basis of 1913 equal to 100, as computed by the described method from the average wages of the industry.

Thus, the illustration shows that the industry relative computed from the average wages for the industry by the described method in identical establishments gives like industry relatives for like industry averages, but that if the industry relative be computed from the relatives of the several occupations, the industry relative may not be the same for the same average wages for the industry in another year.

The industry relatives given in this Bulletin have been computed from the actual average full-time hours per week, rates of wages per hour, and full-time weekly earnings for all employees reported for the industry in the same manner as for each separate occupation. While this method always produces like relatives to represent like actual wages and hours when applied to the data for two groups of establishments, both having one and the same average for any year, it must not be understood that the like relatives will appear for the same concrete numbers when the relatives are computed from data where different groups of establishments show different averages for one and the same year.

Thus, on page 18 it is shown that the relative rate per hour in 1910 as computed through successive pairs of comparable data is 96.3 , although $\$ 0.2553$, the average rate for 1910 in 245 establishments, is 95.4 per cent of $\$ 0.2677$, the average rate shown for 1913 in 361 establishments.

The relative numbers for the lumber manufacturing industry, computed by both methods, are brought into comparison in the table given below. It will be observed that the results obtained by the two methods differ to some extent.

RELATIVE FULL-TIME HOURS PER WEEK AND RATES OF WAGES PER HOUR IN THE LUMBER-MANUFACTURING INDUSTRY COMPUTED ON TWO BASES: 1913=100 AND AVERAGE $1890-1899=100$.

| Year. | Method used in this report, 1913 equals 100 . |  |  | Method used in preced ing report, average 1890-1809 equals 100 . |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative full-time hours per week. | Relative rates of wages per hour. | Relative full-time weekly earnings. | Relative full-time hours per week. | Relative rates of wages per hour. |
| 1910. | 100.5 | 94.6 | 94.9 | 96.5 | 130.0 |
| 1911. | 100.5 | 94.9 | 95.3 | 96.5 | 129.9 |
| 1912. | 100.7 | 96.2 | 96.7 | 96.6 | 131.5 |
| 1913. | 100.0 | 100.0 | 100.0 | $\left.{ }^{1}\right)$ | (1) |

${ }^{1}$ Not computed
The figures computed according to the present method show an increase of relative hours of labor from 100.5 in 1910 to 100.7 in 1912, an increase of 0.2 per cent. The figures by the other method show an increase of relative hours from 96.5 in 1910 to 96.6 in 1912, or 0.1 per cent.

Relative rates of wages per hour computed by the present method show an increase from relative 94.6 in 1910 to 96.2 in 1912, an increase of 1.7 per cent. According to the figures by the other method, the increase was from 130 in 1910 to 131.5 in 1912, an increase of 1.2 per cent. Relative full-time earnings were not computed by the other method.

In addition to the text tables presented in the summary, 7 general tables are given, namely:

Table I.-Average and classified rates of wages per hour in the United States, by years, 1907 to 1913.

Table II.-Average and classified rates of wages per hour in each year, by States, 1912 and 1913.

Table III.-Average and classified rates of wages per hour in each State, by years, 1912 and 1913.

Table IV.-Average and classified full-time hours of work per week in the United States, by years, 1907 to 1913.

Table V.-Average and classified full-time hours of work per week in each year, by States, 1912 and 1913.

Table VI.-Average and classified full-time hours of work per week in each State, by years, 1912 and 1913.

Table VII.-Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913.

In Tables I and IV, in addition to actual data, percentages computed therefrom are given. The data from these two tables are summarized in the text table on pages 6 to 8 .

When sufficient data for a State are available to warrant presentation, such data are presented by States in Tables II, III, V, and VI. Tables III and VI repeat the data for the several States given in Tables II and V rearranged for the convenience of the reader.

## DESCRIPTION OF PRINCIPAL PRODUCTIVE OCCUPATIONS.

The lumber industry as treated in this report, begins with the work on the $\log$ pond and ends with the delivery of the finished product to the carrier for shipment.

Considerable difference in equipment and method of operation exists in the various sections of the country, due in part to the size of the logs, the size of the plant, and also to some extent to the nature of the output; that is, whether largely boards, largely timbers, or a fair proportion of each.

The equipment of a sawmill consists of several or all of the following: Band saw, circular saw, gang saw, resaw, edger, trimmer, and slasher. The band saw is a steel band or belt having a saw-tooth edge. This saw is operated over two wheels, one above and the other below the saw deck. The circular saw is a disk with the cutting teeth on the perimeter. The gang saw is a set of several straight saws set parallel in a frame, which frame operates up and down as the cant is propelled through it.

The band saw is much thinner than the circular and slightly thinner than the gang, and therefore makes less waste in sawdust and a correspondingly greater marketable output from a given log. The resaw is used to saw boards from slabs, to separate into halves the thicker boards, to standardize boards of odd sizes, to cut boards having a bad side to give a clear board, and to increase capacity.

The selected occupations for which data as to wages and hours of labor are compiled by the Bureau are as follows:

| Doggers. | Sawyers, circular. |
| :--- | :--- |
| Edgermen. | Sawyers, gang. |
| Laborers. | Sawyers, resaw. |
| Machine feeders planing mill. | Setters. |
| Sawyers, band. | Trimmer operators. |

The work of these occupations is performed exclusively by males. A description of the occupations follows.

## DOGGERS.

The dogger works on the carriage. He secures the log in place by means of barbs or "dogs" located in the headblocks of the carriage. These "dogs" are operated through levers, by which a downward movement drives them into the $\log$ and secures it in place, while an upward movement releases it for turning, etc. In the reports for the years 1907-1911 the occupation term carriage men was used to designate the men working on the carriage, including both doggers and setters.

## EDGERMEN.

The edger is a machine having adjustable saws, used to remove the rough edges from the boards and to reduce them to specified widths. The duties of the edgerman are to adjust the saws of the edger to cut the desired widths and to feed the boards into the machine. He inspects the boards to determine the width and adjusts the saws by means of levers.

## LABORERS.

This occupation includes the following subdivisions:
In sawmill:

Cant setters.
Deck men.
Dock men.
Edger helpers.
Edger tailers.
Gang tailers.
Pond men.
Resaw tailers or off-bearers.
Saw tailers.

Sawyer helpers, resaw. Sizer men. Slasher men. Sorters.
Stackers, kiln, shed, yard. Transfer men. Trimmer loaders. Truckers, shed, yard. Unstackers.

In planing mill:

Feeder helpers.
Loaders, buggy, dolly, truck, and railroad car.
Off-bearers or machine tailers.

Setters, truck or dolly. Shed men. Tiers or tiers-up. Truckers.

Cant setters.-The work of the cant setter is that of placing the cants in position for the gang saw. A cant is a log from which two slabs have been sawed from two opposite sides. If the cants are made from small logs they may be piled one on top of another to a height that will barely pass through the machine, and the cants are also placed side by side to make up the desired width. The logs are moved over rolls as a rule and the work is mainly done by hand with the aid of cant hooks and bars. A few plants have a power crane which is used in setting heavy cants.

Deck men.-The duties of the deck men are to keep the logs straight on the log deck and to roll them down for loading on the carriage. The deck inclines downward to the carriage in order that gravity may do a good deal of the work of rolling down, but irregularities in the logs make the work of the deck men necessary.

Dock men.-Usually the men who handle the timbers going directly from the sawmill to the timber dock as well as those working on the dock and at loading are called dock men. It is not uncommon for the dock men to be known by different names suggested by the particular part of the work they do. The men who come immediately after the live rolls and are the first ones to handle timbers leaving the
mill are sometimes called butting saw men. The men who move the timbers over the rolls from the sawmill to the yard are called roll men or roller men. Those working immediately on the dock may be called skid men and loaders.
. Edger helpers.-In large mills the edgerman has one or more helpers whose duty it is to place the boards in such position on the edger table that the edgerman may readily inspect them and be able to adjust his machine without loss of time.

Edger tailers.-These employees are stationed beside the live rolls behind the edger and remove the strips or edgings to the slasher conveyor. This conveyor runs beneath the edger roll table and at right angles to it, so the edgings are simply pulled off the side of the roll table and dropped on the conveyor.

Gang tailers.-The men who work behind the gang saw and take care of the product of that machine are called tailers. They pick out the shims, bark, and other material that becomes entangled or gets in the way, keep the boards in position if they tend to fall down, and, when the sawing is completed, transfer them to the edger. The work is all done by hand except the transferring, which is done by live rolls controlled by a lever.

Pond men.-The men working on the pond, or pound as it is sometimes called, propel the logs to the foot of the incline and start them on the chain which carries them up to the log deck in the mill. They stand on a board walk barely above the surface of the pond, on a small flatboat, or even on the floating logs themselves to do their work, and use a pike pole with which to propel the logs. Incidentally, these men raise the logs which may have sunk in the pond and carry them to the chain by supporting them on the surface of the water.

Resaw tailers.-These men work behind the resaw, take the waste material from the roll table and place it on the conveyor beneath. If a given slab is capable of yielding another board, it is placed on another conveyor, which returns it to the front of the resaw.

Saw tailers.-The slabs, the boards, and the timbers must be removed promptly from the band and circular saws and the accomplishment of this work is the chief duty of the saw tailer. The actual removal of the material is achieved by "live rolls," but some of the material takes a diagonal position on the rolls as it falls from the saw, and the saw tailer must straighten this so that it will go straight over them. To do this he uses a short-handled, sharp-pointed hook, with which he catches the rear end of the timber, board, or slab, and moves it toward or from him, as the case may be, so that it will run straight. Slabs do not run well over the rolls with the bark side down, so the saw tailer, using his hook, gives the slab a quick pull from the lower edge just as it is cut off and causes it to fall face down.

The boards are transferred from the live rolls by this employee by means of two levers. The one lifts a stop on the roll table and bars the progress of the boards, while the other lifts a set of transfer chains which run across the live rolls and pick up the boards and deposit them in front of the edger. In some cases the saw tailer also removes the slabs from the live rolls to the slasher conveyor with the same kind of device used for transferring the boards to the edger. In other cases this work is done by the slasher man. A band mill has a guide through which the band saw runs to hold it steady and causes it to run true through the log. The position of this guide is immediately above the $\log$ and of course to meet this demand the guide must be adjustable. It is the duty of the saw tailer to adjust this guide, which he does with a lever. This duty does not apply in the case of a circular saw, but every other duty of the tailer is the same in both types of mill.

Sawyer helpers, resaw. When conditions demand it, one helper or more assists the sawyer in placing the slabs in position on the resaw table.

Sizer men.-All of the employees under this occupation name are timber handlers. The timbers are carried from the sawmill over the dead rolls to the sizer, which reduces the timber to exact size, and thence to the ramps or timber dock.

Slasher men.-The slabs and edgings are thrown on a conveyor and carried laterally through the slasher, where they are cut into 4 -foot lengths. An employee who attends this conveyor and keeps the material going smoothly is called a slasher man.

Sorters.-These employees stand alongside the sorting chain or table, each one taking off a specified grade and placing it on the trucks or dollies.

Stackers, kiln.-The stacking by hand for the kilns is done in the same manner as the yard stacking, but this work when done by machine or patent stacker, as it is frequently called, is quite a different work, yet it is not skilled labor. The power stacker is a chain transfer apparatus which stacks the boards automatically and requires a smaller number of employees to handle the output of a mill than is necessary to do the work by hand. The movements of the machine are controlled by a lever, and when one layer has been placed it is stopped, the strips laid, the machine started again and another layer placed; in this way the operation is repeated until a full car is stacked.

Stackers, shed.-The shed stackers take care of the storing of the kiln-dried lumber. They stack or pile the product in the shed, working in somewhat the same way as the stackers in the yard, except that no transverse strips are placed between successive layers of boards.

Stackers, yard.-This is the work of storing the lumber in the yard for air drying. The men work in pairs, one, standing on the stack which he is building, receives the boards from the other, who stands on the ground and passes the boards to him one by one. In piling transverse sticks are placed at intervals between the layers of lumber in order to permit the passage of air through the piles and thus expedite the drying. An occasional mill delivers the lumber to the yard on wagons, dumping it in the driveway. It is then piled against the stack upon which it is to be placed. This work is also called stacking.

Transfer men.-Between the live-roll tables and the trimmer is a chain transfer or conveyor which delivers the product in front of the trimmer and one man usually attends this for the purpose of disengaging entangled boards. He is sometimes called conveyor man.

Following the work of sorting, the lumber is sometimes handled on a transfer car, and employees handling this work are called transfer men. This work differs from that of the transfer man inside the mill. The transfer car runs on a track parallel to the sorting table and in a depression which brings the top of the car on a level with the floor upon which the trucks stand. These are on tracks running at right angles to the sorting table, and there are corresponding tracks across the top of the transfer car. Transfer men remove the trucks to the transfer car and by it carry them either to the desired track leading to the yard, or to some other place from which the trucks can be taken by team to the yard. There is also a similar track arrangement and transfer car between the sorting table or stacker and the kiln. The cars in both these cases are usually moved by hand and the operators are called transfer men.

Trimmer loaders.--The chain transfer which conveys the lumber to the trimmer ends at the front of the trimmer. Two men, called trimmer loaders, stand here on opposite sides of the conveyor and lift the lumber from the conveyor to the trimmer. They place it so that it will be drawn to the saws regularly and in position to be trimmed most economically.

Other employees are engaged behind the trimmer to keep the product running smoothly on the sorting chain and the waste going into the burner conveyor.

From the trimmer the product passes over a long sorting table, or sorting chain, as it is frequently called, and one or more laborers are usually employed on this to take care of entanglements and move short stock over to one side.

Truckers, shed.-Trucking to the shed is handwork and consists of moving the loaded trucks from the kilns to the dry shed.

Truckers, yard.-These employees move the loaded trucks from the sorting chain to the yard.

Unstackers.-After the cars of dry lumber have been removed from the kilns, the unstackers remove it to the trucks preparatory to carrying to the dry shed for storage or to the planing mill for further manufacture. A few mills do unstacking mechanically.

If the entire product of the mill goes through the kilns it may not be graded while green, but after being dried. In this case the unstackers place the lumber on the head end of a sorting chain or table and it is then graded and sorted in the same manner as at the green sorting chain behind the trimmer. In this way there may be graders and sorters at the kilns.

Feeder helpers.-When heavy stock is being planed, the feeder has an assistant called a helper. He aids the feeder in placing the lumber in position for the machine. He incidentally learns the work of feeding and may succeed to that position.

Loaders, truck or dolly and railroad car.-Lumber is placed on trucks or dollies for transportation about the plant and on railroad cars for shipment by men designated as loaders.

Off-bearers or machine tailers.-If the machine is turning out material that does not require grading an employee called a tailer or off-bearer stands behind it and removes the product.
Setters, truck or dolly.-This work is that of the common laborer, and consists of removing the empty truck and placing the loaded one in position for the machine feeder.

Shed men.-Lumber which is not for immediate shipment is stored in a shed built for this purpose, and is stacked therein by men called shed men or shed stackers.

Tiers or tiers-up.-Molding and light boards, such as ceiling and flooring, are usually tied in small bundles, and this work constitutes the duty of the tier. The grader places the material in racks in the desired quantity for a bundle and the tier secures the bundle with short pieces of tarred cord and places it on a dolly.

Truckers.-The employees in this occupation move the loaded hand trucks from place to place about the plant as conditions may demand. In some cases the same crew may do both loading and trucking.

## MACHINE FEEDERS, PLANING MILL.

The work of the feeder is that of taking the lumber from the truck or dolly and feeding it into the machine. His skill lies in his ability to determine quickly the position that the board should be given in order to get the best results. It frequently happens that he must turn the board over or even turn it end for end. On what are known as slow machines it is possible for the feeder to place the boards in position to get the very best results and highest grade of product, but a feeder of a fast machine must place the boards practically as they come to him.

## SAWYERS, BAND OR CIRCULAR.

The duties of the sawyer are the same in both the band and circular mill. He controls the movements of the carriage holding the $\log$ and also the "nigger," a power appliance used to turn the log on the carriage. In this work he uses levers, and his efficiency depends upon his ability to make the movements of the carriage prompt and uniform, as well as to make the manipulation of the "nigger" sure and timely, and above all to determine how to saw the $\log$ with the least waste and get from it the most desirable size and quality of lumber. The successful working of the entire plant depends upon the sawyer more than upon any other one wageworker in the mill, possibly with the exception of the filer. The setter and the dogger work under the saw-yer's direction.

## SAWYERS, GANG.

The duties of the gang sawyer are to adjust the pressure rolls which hold the logs in position for the gang saw and to regulate the feed of the machine. Large cants may be sawed singly, but small ones are stacked one on top of another and side by side to make a load as large as can be put through the machine. When the cants have been placed in position the sawyer, by use of a lever, lowers the pressure rolls which lie on top of the cants and hold them firmly in position as they pass through the machine. The rolls upon which the cants lie drive them through the machine. By the use of another lever the speed of the feed is controlled; if the timber is hard or the load especially large the feed may be slower, while if the timber is soft or the load small the feed may be faster.

## SAWYERS, RESAW.

Some mills conserve a part of the waste by resawing all slabs that are thick enough to make one or more short boards, while others relieve their band or circular saw by making the boards double the desired thickness and reducing this heavy stock by the resaw. The resaw sawyer has charge of the operation of resawing. A horizontal band saw is usually used for resawing slabs and a vertical band saw for resawing heavy lumber.

## SETTERS.

The setter works on the carriage. It is his duty to move the $\log$ into position for each successive line to be sawed. This is usually handwork and is accomplished by means of a ratchet connected with the headblocks by a shaft and cogs. The ratchet is turned by a lever and has a graduated dial and indicator by which the setter determines when the $\log$ is in position for the desired cut. In some mills the ratchet is moved by steam power, the setter controlling the power by a lever. (See also doggers.)

## TRIMMER OPERATORS.

The trimmer is a machine used to cut boards to standard length and to square the ends of them. It has saws set at intervals of 2 feet across and above or below the surface of the machine. The board goes across the machine sidewise, and such saw as is desired to cut the board is raised into position by the operator.

This employee usually occupies a pulpit located several feet in front of the trimmer and immediately over the conveyor. He accomplishes his work in different ways, depending on the construction of the machine. Some have cords properly attached with ends hanging in front of the operator, who pulls the cord controlling the saw which he desires to bring into operation; some have levers which accomplish the same work; while others have a keyboard and keys communicating pneumatically with the mechanism of the machine. In a small mill the saw operator helps to load the trimmer and operates the saws by means of foot levers located near the floor at the loader's position.

Table I.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
NUMBER.

| Occupation, and number of establishments. | Year. | Number of em-ployees. | Aver-agefull-timehoursperweek. | age rate of wages per hour. | Employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 10 | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 |  |
|  |  |  |  |  | Un- | and | and | and | and | and | and | and | and | and | and | 60 |
|  |  |  |  |  | der | un- | un- | un- | un- | un- | un- | un- | un- | un- | un- | cts. |
|  |  |  |  |  | 10 | der | der | der | der | der | der | der | der | der | der | and |
|  |  |  |  |  | cts. | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 | 60 | over. |
|  |  |  |  |  |  | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. |  |
| Carriage men: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $(1907$ | 208 | 60.7 | \$0. 2184 |  | 3 | 12 | 16 | 20 | 13 | 68 | 62 | 14 |  |  |  |
| 41 establishments. | $\{1908$ | 201 | 60.8 | . 2074 |  | 3 | 18 | 15 | 28 | 22 | 60 | 42 | 13 |  |  |  |
|  | 1909 | 195 | 60.8 | . 2115 |  |  | 19 | 13 | 29 | 10 | 63 | 47 | 14 |  |  |  |
|  | (1910 | 215 | 60.7 | . 2196 |  |  | 18 | 13 | 19 | 10 | 78 | 64 | 13 |  |  |  |
| 245 establishments. | $\{1910$ | 1,327 | 61.4 | . 2088 | 1 | 27 | 173 | 116 | 192 | 73 | 349 | 244 | 151 | 1 |  |  |
|  | 1911 | 1,298 | 61.3 | . 2119 | 1 | 25 | 151 | 126 | 170 | 68 | 332 | 261 | 163 | 1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 80 |  |  |  | , | 14 | 128 |  |  |  |  |  |  |  |  |
| 334 establish- | f1912 | 973 | 61.4 | . 1810 |  | 31 | 154 | 152 | 174 | 73 | 315 | 72 | 2 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (1907 | 79 | 60.7 | . 2535 |  | 2 | 1 | 2 | 7 | 3 | 12 | 32 | 19 | 1 |  |  |
| 4 l establish- | 1908 | 78 | 60.7 | . 2457 |  | 2 |  | 4 | 8 | $\stackrel{2}{2}$ | 16 | 33 | 12 |  |  |  |
|  | 1909 | 77 | 60.7 | . 2481 |  | 2 | 2 |  | 6 | , | 15 | 31 | 14 |  |  |  |
|  | 1910 | 84 | 60.7 | . 2647 |  |  | 2 | 4 | 4 | 4 | 14 | 30 | 23 | 2 | 1 |  |
| 245 establish- | \{1910 | 585 | 61.2 | . 2553 |  | 2 | 17 | 26 | 17 | 33. | 114 | 217 | 151 |  | 1 |  |
|  | (1911 | 569 | 61.2 | . 2589 |  | 2 | 17 | 21 | 20 | 22 | 107 | 208 | 162 |  | 1 |  |
| 299 establish- | $\{1911$ | 684 | 61.3 | . 2599 |  | 5 | 16 | 23 | 21 | 31 | 199 | 257 | 185 | 17 | 1 |  |
|  | \{1912 | 686 | 61.2 | . 2601 |  | 2 | 16 | 25 | 19 | 34 | 124 | 264 | 184 | 17 | 1 |  |
| 361 establish- | $\{1912$ | 751 | 61.2 | . 2617 |  | 2 | 16 | 28 | 20 | 33 | 136 | 295 | 198 | 22 | 1 |  |
|  | $\{1913$ | 754 | 61.0 | . 2677 |  | 1 | 12 | 23 | 24 | 36 | 114 | 287 | 230 | 26 | 1 |  |
| Laborers: |  |  |  |  |  |  |  |  |  |  | 1,478 |  |  |  |  |  |
|  | $\{1907$ | 4,097 | 60.5 | . 1827 | ${ }^{77}$ | 163 | 392 | $\begin{aligned} & 440 \\ & 5 \rightarrow 0 \end{aligned}$ |  |  | 1,478 | 214 | 2 |  |  |  |
| 41 estas | $\{1908$ | 3,662 | 60.6 | . 1665 | 113 | 227 | 370 | $578$ | 1,280 | 426 | 612 | 54 | 2 |  |  |  |
|  | 1909 | 3,910 | 60.5 | . 1708 | 101 | 226 | 328 | 402 | 1,375 | 676 | 732 | 68 | 2 |  |  |  |
| nent | (1910 | 4,582 | 60.5 | . 1832 | 62 | 252 | 312 | 321 | 950 |  | 1,667 | 199 | 3 |  |  |  |
| 245 establish- | $\{1910$ | 20,327 | 61.3 | . 1660 |  | 2,822 | 2,600 | 2,522 | 3,760 | 2,162 | 5, 309 | 580 | 29 |  |  |  |
| ments. | (1911. | 19,256 | 61.3 | . 1655 |  | 2,664 | 2,638 | 2,566 | 3,963 | 2,072 | 4,440 | 574 | 40 |  |  |  |
| 299 establish-ments. | $\{1911$ | 26,784 | 61.4 | . 1821 |  | 3,649 | 4,238 | 4, $5^{1} 0$ | 5,312 | 2,274 | 5,469 | 746 | 67 |  |  |  |
|  | (1912 | 25,506 | 61.5 | . 1641 |  | 3,291 | 4,303 | 4,257 | 5,179 | 1,927 | 5, 121 | 911 | 153 | 16 |  | 2 |
| 361 establish- | ¢1912 | 29,365 | 61.5 | . 1639 | 397 | 3,809 | 5,084 | 4,993 | 5,757 | 2,130 | 5,895 | 1128 | 158 | 14 |  |  |
|  | ¢1913 | 28,835 | 61.1 | . 1708 | 199 | 2, 590 | 4,858 | 5,043 | 5,028 | 2,545 | 6,788 | 1532 | 235 | 17 |  |  |
| Machine feeders, planing mill: 178 establish- | f1911 | 1,156 | 61.3 | . 1792 |  | 48 | 152 | 203 | 288 | 84 | 240 | 122 | 18 |  |  |  |
| ments. | 11912 | 1,165 | 61.1 | . 1849 | 1 | 27 | 138 | 162 | 300 | 119 | 267 | 131 | 20 |  |  |  |
| 253 establish- | (1912 | 1,548 | 61.4 | . 1810 | 2 | 65 | 242 | 208 | 363 | 148 | 335 | 160 | 25 |  |  |  |
| mentss.Sawyers, band: | (1913 | 1,531 | 61.1 | . 1863 | , | 48 | 179 | 262 | 339 | 134 | 330 | 173 | 62 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34 esta | $\left(\begin{array}{l}1907 \\ 1908\end{array}\right.$ | 71 69 | 60.8 | . 4901 |  |  |  |  |  |  |  |  | 8 | 23 | 28 | 12 |
|  | $\left\{\begin{array}{l}1908 \\ 1909\end{array}\right.$ | 69 69 | 60.8 60.8 | .4807 .4894 |  |  |  |  |  |  |  |  | 10 | 19 | 28 | 11 |
| ments. | $\left\{\begin{array}{l}1909 \\ 1910\end{array}\right.$ | 69 73 | 60.8 | . 4894 |  |  |  |  |  |  |  |  | 10 9 | 19 | 25 25 | 15 |
| 203 establish- | 1910 | 429 | 61.2 | . 5431 |  |  |  |  |  |  | 1 | 2 | 29 | 89 | 146 | 162 |
| ments. | \{1911 | 432 | 61.2 | . 5535 |  |  |  |  |  |  | 2 | 1 | 28 | 83 | 140 | 178 |
| 243 establish | 1911 | 508 | 61.2 | 5503 |  |  |  |  |  |  | 3 | 3 | 35 | 88 | 179 | 200 |
| ments. | (1912 | 492 | 61.2 | . 5514 |  |  |  |  |  |  | 2 | 3 | 31 | 92 | 165 | 199 |
| 288 establish- | f1912 | 561 | 61.1 | . 5457 |  |  |  |  |  |  | 2 | 4 | 32 |  | 196 | 213 |
| ments. <br> Sawyers, circular: | \{1913 | 554 | 60.9 | . 5568 |  |  |  |  |  |  | 1 | 6 | 29 | 100 | 186 | 232 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 esta | $(1907$ | 14 | 61.3 | . 5448 |  |  |  |  |  |  |  |  | 1 | 3 | 6 | 4 |
|  | 1908 | 14 | 61.3 | . 5186 |  |  |  |  |  |  |  |  | 1 | 5 | 4 | 4 |
|  | 1909 | 13 | 61.3 | . 5254 |  |  |  |  |  |  |  |  | 1 | 4 | 5 | 3 |
|  | (1910 | 14 | 61.3 | . 5501 |  |  |  |  |  |  |  |  |  |  |  |  |

Table I.-AVERAGE and CLASSIfied Rates of Wages Per hour in THE UNITED STATES, BY YEARS, 1907 TO 1913-Continued.

NUMBER-Concluded


PER CENT.

table I.-AVERAGE AND Classified RATES of wages PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913-Continued.

PEIR CEN'T--Continued.

| Occupation, and number of establishments. | Year. | Num- <br> ber of <br> em- <br> ploy- <br> ees. | Average fulltime hours per week. | Aver- age <br> rate of wages per hour. | Employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $12$ | 14 | 16 | $18$ | $20$ | 25 | 30 | 40 | 50 |  |
|  |  |  |  |  | Un- | and | and | and | and | and | and | and | and | and | and | 60 |
|  |  |  |  |  | der | un- | un- | un- | un- | un- | un- | un- | un- | un- | un- | cts. |
|  |  |  |  |  | 10 | der | der | der | der | der | der | der | der | der | der | and |
|  |  |  |  |  | cts. | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 | 60 | over. |
|  |  |  |  |  |  | cts. | cts. | ets. | ets. | cts. | ets. | cts. | cts. | cts. | ets. |  |
| Edgermen: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (1907 | 79. | 60.7 | \$0.2535 |  | 2.5 | 1.3 | 2.5 | 8.9 | 3.8 | 15.2 | 40.5 | 24.1 | 1.3 |  |  |
| 41 establishments. | 1908 | 78 | 60.7 | . 2457 |  | 2.6 |  | 5.1 | 10.3 | 2. 6 | 20.5 | 42.3 | 15.4 | 1.3 |  |  |
|  | 1909 | 77 | 60.7 | . 2481 |  | 2.6 | 2.6 | 3.9 | 7.8 | 3.9 | 19.5 | 40.3 | 18.2 | 1.3 |  |  |
|  | 1910 | 84 | 60.7 | . 2647 |  |  | 2.4 | 4.8 | 4.8 | 4.8 | 16.7 | 35.7 | 27. 4 | 2.4 | 1.2 |  |
| 245 establishments. | $\{1910$ | 585 | 61.2 | . 2555 |  | . 3 | 2.9 | 4. 4 | 2.9 | 5.6 | 19.5 | 37.1 | 25.8 | 1.2 | 2 |  |
|  | \{1911 | 569 | 61.2 | . 2589 |  | . 4 | 3.0 | 3.7 | 3.5 | 3.9 | 18.8 | 36.6 | 28.5 | 1.6 | 2 |  |
| 299 establish- | $\{1911$ | 684 | 61.3 | . 2599 |  | . 7 | 2.3 | 3.4 | 3.1 | 4.5 | 18.9 | 37.6 | 27.0 | 2.3 | 1 |  |
|  | (1912 | 686 | 61.2 | . 2601 |  | . 3 | 2.3 | 3.6 | 2.8 | 5.0 | 18.1 | 38.5 | 26.8 | 2.5 | 1 |  |
| 301 establish- | \{1912 | 751 | 61.2 | . 2617 |  | . 3 | 2.1 | 3.7 | 2.7 | 4. 4 | 18.1 | 39.3 | 26. 4 | 2.9 | 1 |  |
| ments. | [1913 | 754 | 61.0 | . 2677 |  | . 1 | 1.6 | 3.1 | 3.2 | 4.8 | 15.1 | 38.1 | 30.5 | 3.4 | 1 |  |
| Laborers: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $(1907$ | 4,097 3,662 | 60.5 60.6 | .1827 .1665 | 1.9 | 4.0 | 9.6 10.1 | 10.7 15.8 | 23.1 35.0 | 11.6 | 16. 1 | 5.2 1.5 1.5 | . 2 |  |  |  |
| 41 establish- | 1909 | 3,910 | 60.5 | . 1708 | 2.6 | 5. 5 | 8.4 | 10.3 | 35. 2 | 17.3 | 18.7 | 1.7 | .1 |  |  |  |
|  | 1910 | 4,582 | 60.5 | . 1832 | 1.4 | 5.5 | 6.8 | 7.0 | 20.7 | 17.8 | 36. 4 | 4.3 | . 1 |  |  |  |
| 245 establishments. | $\{1910$ | 20,327 | 61.3 | . 1660 | 2.7 | 13.9 | 12.8 | 12. 4 | 18.5 | 10.6 | 26.1 | 2.9 | 1 |  |  |  |
|  | $\{1911$ | 19,256 | 61.3 | . 1655 | 1.6 | 13.8 | 13.7 | 13.3 | 20.6 | 10.8 | 23.1 | 3.0 | . 2 |  |  |  |
| 299 establishments. | $\{1911$ | 26,784 | 61.4 | . 1621 | 1.9 | 13.6 | 15.8 | 16.8 | 19.8 | 8.5 | 20.4 | 2.8 | . 3 |  |  |  |
|  | 11912 | 25,506 | 61.5 | . 1641 | 1.4 | 12.9 | 16.9 | 16.7 | 20.3 | 7.6 | 20.1 | 3.6 | . 6 | 1 |  | (1) |
| 361 establishments. | \{1912 | 29,365 | 61.5 | . 1639 | 1.4 | 13.0 | 17.3 | 17.0 | 19.6 | 7.3 | 20.1 | 3.8 | . 5 | (1) |  |  |
|  | \{1913 | 28,835 | 61.1 | .1708 | . 7 | 9.0 | 16.8 | 17. 5 | 17.4 | 8.8 | 23.5 | 5.3 | . 8 | . 1 |  |  |
| Machine feeders, planing mill: | (1911 | 1,156 | 61.3 | 1792 |  | 4.2 | 13.1 | 17.6 | 24.9 | 7.3 |  |  |  | 1 |  |  |
| ments. | $\{1912$ | 1,165 | 61.1 | . 1849 | 1 | 2.3 | 11.8 | 13.9 | 25.8 | 10.2 | 22.9 | 11.2 | 1. 7 | 1 |  |  |
| 253 establish- | ¢1912 | 1,548 | 61.4 | . 1810 | 1 | 4.2 | 15.6 | 13.4 | 23.4 | 9.6 | 21.6 | 10.3 | 1.6 |  |  |  |
| ments. | \1913 | 1,531 | 61.1 | .1863 | 2 | 3.1 | 11.7 | 17.1 | 22. 1 | 8.8 | 21.6 | 11.3 | 4. 0 | 1 |  |  |
| Sawyers, band: |  | 71 |  |  |  |  |  |  |  |  |  |  |  | . | . | 16.9 |
| 34 | 1908 | 69 | 60.8 | . 4801 |  |  |  |  |  |  |  |  | 14.5 | 29.0 | 40.6 | 15.9 |
|  | \{1909 | 69 | 60.8 | . 4894 |  |  |  |  |  |  |  |  | 14.5 | 27.5 | 36.2 | 21.7 |
|  | (1910 | 73 | 60.7 | . 5007 |  |  |  |  |  |  |  |  | 12.3 | 28.8 | 34.2 | 24.7 |
| 203 establish. | f1910 | 429 | 61.2 | . 5431 |  |  |  |  |  |  |  |  | 6.8 | 20.7 | 34.0 | 37.8 |
| ments. | ;1911 | 432 | 61.2 | . 5535 |  |  |  |  |  |  |  | . 2 | 6.5 | 19.2 | 32.4 | 41.2 |
| 243 establish- | f1911 | 508 | 61.2 | . 55013 |  |  |  |  |  |  |  |  | 6.9 | 17.3 | 35.2 | 39.4 |
| ments. | (1912 | 492 | 61.2 | . 5514 |  |  |  |  |  |  |  | . 6 | 6.3 | 18.7 | 33.5 | 40.4 |
| 285 establish- | !1912 | 561 | 61.1 | 5457 |  |  |  |  |  |  |  |  |  | 20.3 | 34.9 | 38.0 |
| ments. | (1913 | 554 | 60.9 | . 5056 |  |  |  |  |  |  | 2 | 1.1 | 5.2 | 18.1 | 33.6 | 41.9 |
| Sawyers, circular: |  | 14 |  | 15 |  |  |  |  |  |  |  |  |  |  | 29 | 28.6 |
| 12 men | $\{1908$ | 14 | 61.3 | . $51 \times 1{ }^{\text {a }}$ |  |  |  |  |  |  |  |  | 7.1 | 25. | 28.6 | 28.6 |
|  | . 1909 | 13 | 61.3 | . 5254 |  |  |  |  |  |  |  |  | 7.7 | 30.8 | 38.5 | 23.1 |
|  | 11910 | 14 | 61.3 | . 50501 |  |  |  |  |  |  |  |  |  | 35.7 | 28.6 | 35.7 |
| 58 onte | 11910 | 81 | 61.9 | 4964 |  |  |  |  |  |  |  | 2.5 | 8.6 | 32.1 | 39.5 | 17.3 |
|  | (1911 | is | 62.0 | . 4976 |  |  |  |  |  |  |  | 2.6 | 9.0 | 29.5 | 41.0 | 17.9 |
| 72 establish- | 11921 | 4 | (2. i | $50 \cdot 6$ |  |  |  |  |  |  |  | 3. 2 | S. + | 2 S .4 | 12.1 | 17.9 |
| monts. | 1012 | ct | i2. ${ }^{\text {a }}$ | . 50911 |  |  |  |  |  |  | 2.1 |  |  | 19.1 | 16.8 | 19.1 |
| 92 establish- | 1972 | 119 | 0 in , | $+9 i_{i} i^{\prime}$ |  |  |  |  |  |  | $2 .$ | 4, 2 | \%. |  | -1.2 | 20.2 |
| ments.Sawrers, gang: | (1923) | 12 | (i2. 0 | . $31: 4$ |  |  |  |  |  |  |  |  | 10.6 |  | 3.4 | 26.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 20.0 |
| $\overline{5}$ entia | $\int_{1904} 19$ | \% | [60. 0 | 2\% |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1960 |  | (6) 0 | 3-8, |  |  |  |  |  |  | 33.3 | 3:3.3 | 83. 3 |  |  |  |
|  | 11010 | 1 tit | (6). 1 ) | 2 i |  |  |  |  |  |  | 16. ${ }^{\text {a }}$ | 50 | . |  |  |  |

[^1]Table I.-dVERAGE AND GLASSTFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913-(oncluded.

PER CENT-Concluded.

| Occupation, and number of establishments. | Year. | $\begin{gathered} \text { Num- } \\ \text { ber of } \\ \text { em- } \\ \text { ploy- } \\ \text { ees. } \end{gathered}$ | Aver-agefull-timehoursperweek. | Average rate of wages per hour. | Employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | UnUn-der10cts. | $\begin{gathered} 10 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 12 \\ \text { cts. } \end{gathered}$ | 12 14 <br> and and <br> un- un- <br> der der <br> 14 16 <br> cts. ets. |  | $\begin{gathered} 16 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 18 \\ \text { cts. } \end{gathered}$ | $\begin{gathered} 18 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 20 \\ \text { ets. } \end{gathered}$ | $\begin{gathered} 20 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 25 \\ \text { ets. } \end{gathered}$ | $\begin{aligned} & 25 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & 30 \\ & \text { cts. } \end{aligned}$ | 30andun-der40cts. | 40 and under 50 cts. | 50andun-der60cts. | 60 cts. and over |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sawyers, gangConcluded. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 establish- | ¢1910 | 64 | 61.4 | 0.3092 |  |  | 1.6 | 1.6 |  | 1.6 | 17.2 | 21.9 | 32.8 | 20.3 | 3.1 |  |
| ments. | \{1911 | 60 | 61.6 | . 3006 |  |  | 1.7 | 1.7 |  | 1.7 | 18.3 | 23.3 | 33.3 | 20.0 |  |  |
| 66 establish- | ¢1911 | 74 | 61.6 | . 3061 |  |  | 2.7 | 1.4 |  | 2.7 | 12.2 | 27.0 | 31.1 | 23.0 |  |  |
| ments. | \{1912 | 75 | 61.6 | . 3058 |  |  | 1.3 | 5.3 |  | 2. 7 | 5.3 | 30.7 | 32.0 | 22.7 |  |  |
| 71 establish- | ¢1912 | 79 | 61.7 | . 3072 |  |  |  | 3.8 |  | 2.5 | 8.9 | 29.1 | 35. 4 | 19.0 | 1.3 |  |
| ments. | $\{1913$ | 80 | 61.4 | . 3109 |  |  |  | 2.5 | 1.3 | 2.5 | 7.5 | 27.5 | 38.8 | 17.5 | 2.5 |  |
| Sawyers, resaw: |  | 149 |  | 2515 |  |  |  |  |  | 5.4 |  |  |  | 7 |  |  |
| ments. | $\{1912$ | 147 | 60.7 | . 2555 |  |  |  |  | 5.4 | 4.1 | 27.2 | 31.3 | 27.9 | 7 |  |  |
| 138 establish- |  | 197 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 138 establish- | $\{1913$ | 192 | 60.7 | . 2607 |  |  | . .5 |  | 4.6 | 4.1 | 24.5 | 31.8 | 28. 6 | 2.5 |  |  |
| ments. <br> Setters: | 1913 | 192 | 60.7 | . 2607 |  |  | . 5 |  | 42 | 4.7 | 24.5 | 31.8 | 28.6 | 2.6 |  |  |
| 301 establish- | ¢1911 | 714 | 61.3 | . 2506 |  | 0.1 | 2.7 | 4. 6 | 4.9 | 3.5 | 22.4 | 34.2 | 27.5 | . 1 |  |  |
| ments. | (1912 | 713 | 61.3 | . 2518 |  | . 1 | 2.1 | 5.0 | 3.8 | 4.5 | 21.3 | 36.5 | 26.5 | . 1 |  |  |
| 361 establish- | $\{1912$ | 780 | 61.3 | . 2499 |  | . 1 | 2.1 | 4. 6 | 3.8 | 5.0 | 21.7 |  | 24.2 | -1 |  |  |
| ments. | \{1913 | 782 | 61.0 | . 2583 |  | . 1 | 1.7 | 2.9 | 4.5 | 3.5 | 20.7 | 38.0 | 26.0 | 2.7 |  |  |
| Trimmer tors: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (1907 | 72 | 60.7 | . 2070 |  | 2.8 | 6.9 | 1. 4 | 13.9 | 9.7 | 45.8 | 12.5 | 6.9 |  |  |  |
| 37 establish- | 1908 | 68 | 60.7 | . 1959 |  | 2.9 | 7.4 | 8.8 | 20.6 | 14. 7 | 26.5 | 13. 2 | 5.9 |  |  |  |
| ments. | 1909 | 72 | 60.7 | . 1971 |  | 2.8 | 5. 6 | 6.9 | 23.6 | 16.7 | 25.0 | 12.5 | 6.9 |  |  |  |
|  | 1910 | 74 | 60.7 | . 1969 |  | 2.7 | 5.4 | 4.1 | 16.2 | 12.2 | 36.5 | 12.2 | 10.8 |  |  |  |
| 228 establish- | \{1910 | 503 | 61.0 | . 2089 | 0.2 | 2.2 | 8.9 |  | 10.7 | 7.8 | 38.2 | 16.9 | 7.2 | 0 |  |  |
| ments. | $\{1911$ | 485 | 61.0 | . 2113 |  | 2.1 | 8.9 | 7.4 | 11.1 | 5.6 | 38.1 | 19.2 | 7.0 | . 6 |  |  |
| 294 establish. | $\{1911$ | 479 | 61.3 | . 2092 |  | 3.1 | 7.9 | 8.8 | 11.3 | 5.2 | 36.7 | 20.9 | 5. 2 | 8 |  |  |
| ments. | $\{1912$ | 441 | 61.3 | . 2104 |  | 3.4 | 7.0 | 10.0 | 10.9 | 5.4 | 37.4 | 19.0 | 5.7 | 1.1 |  |  |
| 346 establish- | (1912 | 511 | 61.2 | . 2088 |  | 2.9 | 7.4 | 11.2 | 11.4 | 5.7 | 37.2 | 16.6 | 6.5 | 1. 2 |  |  |
| ments. | \{1913 | 538 | 61.0 | . 2172 |  | 2.6 | 5.2 | 10.0 | 10.4 | 4.8 | 37.5 | 18.6 | 9.5 | 1.3 |  |  |

Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913.

DOGGERS.


## EDGERMIEN.



Table II.-AVERAGE AND CLASSIFIED RATES of WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

EDGERMEN-Concluded.


LABORERS.


Table II.-AVERAGE AND CLASSIFiEd Rates of wages PER HoUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

LABORERS-Concluded.


MACHINE FEEDERS, PLANING MILL.


Tabie II.--AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACII YEAR, BY STATES, 1912 AND 1913-Continued.

MACHINE FEEDERS, PLANING MILL-Concluded.


SAWYERS, BAND.


Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

SAWYELS, BAND--Concluded.

| Year and State. |  | Num- <br> ber of em-ployees. |  | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { rateof } \\ \text { wages } \\ \text { per } \\ \text { hour. } \end{gathered}$ | Number of employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 10 \\ & \text { ets. } \end{aligned}$ |  | $\begin{gathered} 12 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 14 \\ \text { cts. } \end{gathered}$ | 14 and under 16 cts. | 16 <br> and <br> un- <br> der <br> 18 <br> cts. | $\begin{gathered} 18 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 20 \\ \text { cts. } \end{gathered}$ | 20 and under 25 ets. | $\begin{gathered} 25 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 30 \\ \text { ets. } \end{gathered}$ | $\begin{array}{\|c\|c\|} \hline 30 & 40 \\ \text { and } & \text { and } \\ \text { un } & \text { un- } \\ \text { der } & \text { der } \\ 40 & 50 \\ \text { cts. cts. } \end{array}$ | $\begin{gathered} 50 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 60 \\ \text { cts. } \end{gathered}$ | 60 cts. and <br> over. |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1913. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alabama. | 6 | 7 | 65.1 | \$0.5677 |  |  |  |  |  |  |  |  |  | 5 |  |
| Arkansas. | 17 | 33 | 60.1 | . 6633 |  |  |  |  |  |  |  |  |  |  | 32 |
| California | 11 | 26 | 60.0 | . 5368 |  |  |  |  |  |  |  |  | . 8 | 12 |  |
| Florida. | 6 | 12 | 63.0 | . 6182 |  |  |  |  |  |  |  |  |  | 4 |  |
| Georgia........ | 11 | 17. | 63.1 | . 5761 |  |  |  |  |  |  |  |  |  | 9 | 8 |
| Iouisiana | 17 | 36 | 60.6 | . 6884 |  |  |  |  |  |  |  |  |  | 1 | 35 |
| Maine. | 13 | 28 | 61.2 | . 5172 |  |  |  |  |  |  |  |  | 6 | 17 |  |
| Michigan. | 28 | 59 | 60.0 | . 5099 |  |  |  |  |  |  |  |  | 212 | 34 | 11 |
| Minnesota. | 7 | 45 | 60.0 | .7311 |  |  |  |  |  |  |  |  |  |  | 45 |
| Mississippi...... | 9 | 18 | 60.0 | . 5944 |  |  |  |  |  |  |  |  |  | 6 | 12 |
| North Carolina. | 17; | 27 | 62.9 | . 4876 |  |  |  |  |  |  |  |  | 26 | 16 |  |
| Oregon......... | ${ }^{1}$ | 8 | 60.0 | . 6406 |  |  |  |  |  |  |  |  | . | 1 | $\frac{2}{7}$ |
| Pennsylvania.. | 16 | 23 | 61.6 | .3937 |  |  |  |  |  |  |  | 1 | 10 11 | 1 |  |
| South Carolina. | 8 | 17 | 61.9 | . $5800^{-1}$ |  |  |  |  |  |  |  |  | .. 2 | 7 |  |
| Tennessee. | 24 | 35 | 60.6 | . 4274 |  |  |  |  |  |  |  |  | $9 \quad 12$ | 7 | $4$ |
| Texas. | 10 | 20 | 59.9 | . 6159 |  |  |  |  |  |  |  |  |  | 4 | 16 |
| Virginia | 22 | 35 | 63.0 | . 4670 |  |  |  |  |  |  |  | 1 | $3{ }^{-16}$ | 15 |  |
| Washington. | 17 | 30 | 60.0 | . 5817 |  |  |  |  |  |  |  |  | .... 5 | 10 | 15 |
| West Virginia. | 20 | 31 | 62.2 | . 4440 |  |  |  |  |  |  |  | 1 | 3.18 | 8 | $1$ |
| Wisconsin...... | 19 | 47 | 60.0 | . 5589 |  |  |  |  |  |  |  |  | . 3 | 29 | 15 |
| Total | 288 | 554 | 60.9 | . 5568 |  |  |  |  |  |  |  |  | 29100 | 186 | 232 |

SAWYERS, CIRCULAR.


Table II.-AVERAGE and (lassified Rates of wages per hour IN EACH YEAR, BY STATES, 1912 AND .1913-Continued.

SAWYERS, CIRCULAR-Concluded.

| Year and State. | Number of estab-lishments | Num- <br> ber of em-ployees. | A ver-agefull-timehoursperweek. | A verage rate of wages per hour. | Number of employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 10 \\ & \text { cts. } \end{aligned}$ | $\begin{gathered} 10 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 12 \\ \text { cts. } \end{gathered}$ | $\begin{gathered} 12 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 14 \\ \text { cts. } \end{gathered}$ | 14 <br> and <br> un- <br> der <br> 16 <br> cts. | 16 <br> and <br> un- <br> der <br> 18 cts. | $\begin{gathered} 18 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 20 \\ \text { cts. } \end{gathered}$ | 20 <br> and <br> un- <br> der <br> 25 <br> cts. | $\begin{gathered} 25 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 30 \\ \text { cts. } \end{gathered}$ | $\left\|\begin{array}{c:c} 30 & 40 \\ \text { and } & \text { and } \\ \text { un } & \text { un- } \\ \text { der } & \text { der } \\ 40 & 50 \\ \text { cts. } & \text { cts. } \end{array}\right\|$ | 50 and under 60 cts. | $\begin{aligned} & 60 \\ & \text { cts. } \\ & \text { and } \\ & \text { over } \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1913-Concld. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oregon......... | 2 | 3 | 60.0 | \$0. 7333 |  |  |  |  |  |  |  |  |  | 1 | 2 |
| Pennsylvania.. | 4 | 5 | 60.6 | . 3477 |  |  |  |  |  |  |  |  | 3 |  |  |
| Texas......... | $4^{4}$ | 5 | 60.0 | . 5600 |  |  |  |  |  |  |  |  | . | 3 | 2 |
| Washington. | 11. | 13 | 60.0 | . 5962 |  |  |  |  |  |  |  |  | - 1 | 4. | 8 |
| Wisconsin.. | 2 | 2 | 60.0 | . 5375 |  |  |  |  |  |  |  |  | . .... | 2 |  |
| Other States. . . | 2 | 3 | 61.0 | . 4929 |  |  |  |  |  |  |  |  | 1 | 2 |  |
| Total. | 92 | 123 | 62.0 | . 5134 |  |  |  |  |  |  |  |  | $13 \quad 26$ | 46 | 32 |

SAWXERS, GANG.


TAble II. AVERAGE AND CLASSIPTED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATLS, 1912 AND 1913-Continued.

SAWYERS, RESAW.


SETTERS.


Table ir.-Average and glassified rates of wages per hour IN EACH YEAR, BY STATEES, 1912 AND 1913-Coutinued.

SETTERS-Concluded.


TRIMMER OPERATORS.


Table II.-AVERAGE aND CLASSIFIED Rates of Wages Per hour IN EACH YEAR, BY STATES, 1912 AND 1913-Concluded.

TRIMMER OPERATORS-Concluded.


## Table III.--AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]
DOGGERS.


Table III.-AVERAGE AND CLAssified Rates of Wages Per Hour IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

EDGERMEN.


## LA:3OLEAS.

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Ath.ita...:
1: matahushment

WAGES AND HOURS OF LABOR, 1907 TO 1913-LUMBER.
Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

LABORERS-Concluded.

machine feeders, planing mill.



Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

MACHINE FEEDERS, PLANING MILL-Concluded.


SAWYERS, BAND.


Table III.-average and classified Rates of wages per hour IN EACH. STATE, BY YEARS, 1912 AND 1913-Continued.

SAWYERS, BAND-Concluded.


SAWYERS, CIRCULAR.

table III.-AVERage and classified rates of wages per hour IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

SAWYERS, CIRCULAR-Concluded.


SAWYERS, GANG.


Table III.-AVERAGE AND CLASsIfied Rates of Wages PER HOUR IN EAOH STATE, BY YEARS, 1912 AND 1913-Continued.

SAWYERS, GANG-Concluded.

| State, and number of establishments. | Year. | Number of em-ployees. | Average fulltime hours per week. | Aver-age rate of wages per hour. | Number of employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 10 | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 |  |
|  |  |  |  |  | Un- | and | and | and | and | and | and | and | and | and | and | 60 |
|  |  |  |  |  | der | un- | un- | un- | un- | un- | un- | un- | un- | un- | un- | cts. |
|  |  |  |  |  | 10 | der | der | der | der | der | der | der | der | der | der | and |
|  |  |  |  |  | cts. | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 | 60 | over. |
|  |  |  |  |  |  | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. |  |
| Texas: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 establishments. . | $\{1912$ | 3 | 60.3 | \$0.4417 |  |  |  |  |  |  |  |  |  | , |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 establishments. | ¢1912 | 2 | 66.0 | . 3296 |  |  |  |  |  |  |  | 1 |  | 1 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 establishments. . | $\{1912$ | 2 | 60.0 | . 3375 |  |  |  |  |  |  |  |  | 2 |  |  |  |
| Wisconsin: 1013 |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |
| 8 establishments. . $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ |  | 11 | 60.0 | . 3023 |  |  |  |  |  |  |  | 6 | 3 | 2 |  |  |
|  |  | 11 | 60.0 | . 3105 |  |  |  |  |  |  | 2 | 4 | 3 | 2 | 1 |  |

SAWYERS, RESAW.


Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACI STATE, BY YEARS, 1912 AND 1913-Continued.

SETTERS.


## TRIMMER OPERATORS.



Table III.-AVERAGE AND OLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913-Concluded.

TRIMMER OPERATORS-Concluded.


Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
NUMBER.

| Occupation, and number of establishments. | Year. | Num ber of em-ployees. | Average fulltime hours per week. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Un- } \\ \text { der } \\ 54 \end{gathered}$ | $\begin{gathered} 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ \mathbf{6 0} \end{gathered}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \\ \text { and } \\ \text { under } \\ 63 \end{gathered}$ | $\begin{gathered} 63 \\ \text { and } \\ \text { under } \\ 66 \end{gathered}$ | 66 | $\begin{gathered} \text { Over } \\ 66 \end{gathered}$ |
| Carriage men: |  |  |  |  |  |  |  |  |  |  |  |
|  | [ 1907 | 208 | 60.7 |  | 2 | 6 | 169 | 4 | 9 | 11 | 7 |
| 41 establishments... | 1908 | 201 | 60.8 |  | 2 | 6 | 162 | 4 | 9 | 11 | 7 |
|  | 1909 | 195 | 60.8 |  | 2 | 7 | 155 | 4 | 9 | 11 | 7 |
|  | 1910 | 215 | 60.7 |  | 2 | 6 | 176 | 4 | 9 | 11 | 7 |
| 245 establishments.. | $\{1910$ | 1,327 | 61.4 |  | 6 | 22 | 967 | 12 | 50 | 261 | 9 |
|  | $\{1911$ | 1,298 | 61.3 |  | 6 | 22 | 959 | 12 | 51 | 239 | 9 |
| Doggers: <br> 273 establishments. - | f 1911 | 852 | 61.5 |  | 1 | 14 | 610 | 4 | 37 | 178 | 8 |
|  | $\{1912$ | 869 | 61.4 |  | 2 | 15 | 628 | 6 | 39 | 171 | 8 |
| 334 establishments.. | $\{1912$ | 973 | 61.4 |  |  | 18 | 702 | 11 | 37 | 193 | 12 |
| Edgermen: | , 1913 | 939 | 61.2 |  |  | 36 | 691 | 11 | 39 | 150 | 12 |
|  | ( 1907 | 79 | 60.7 |  | 1 | 1 | 65 | 2 | 3 | 5 | 2 |
| 41 establishments... | 1908 | 78 | 60.7 |  | 1 | 2 | 63 | 2 | 3 | 5 | 2 |
|  | 1909 | 77 | 60.7 |  | 1 | 2 | 62 | 2 | 3 | 5 | 2 |
|  | 1910 | 84 | 60.7 |  | 1 | 2 | 69 | 2 | 3 | 5 | 2 |
| 245 establishments.. | $\{1910$ | 585 | 61.2 |  | 3 | 8 | 442 | 5 | 25 | 99 | 3 |
|  | \{ 1911 | 569 | 61.2 |  | 3 | 8 | 433 | 5 | 26 | 91 | 3 |
| 299 establishments.- | $\left\{\begin{array}{l}1911 \\ 1912\end{array}\right.$ | 684 | 61.3 |  | 1 | 8 | 521 | 3 | 33 | 114 | 4 |
|  | \{ 1912 | 686 | 61.2 |  | 2 | 9 | 524 | 3 | 38 | 106 | 4 |
| 361 establishments.. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 751 | 61.2 |  |  | 13 | 569 | 8 | 35 | 120 | 6 |
| Laborers: | \{ 1913 | 754 | 61.0 |  | 1 | 29 | 581 | 8 | 36 | 93 | 6 |
|  | [ 1907 | 4,097 | 60.5 |  | 12 | 121 | 3,544 | 50 | 171 | 147 | 52 |
| 41 establishments.. | $\{1908$ | 3, 662 | 60.6 |  | 12 | 185 | 3,027 | 51 | 188 | 148 | 51 |
|  | 1909 | 3,910 | 60.5 |  | 12 | 171 | 3,278 | 52 | 193 | 152 | 52 |
|  | ( 1910 | 4,582 | 60.5 |  | 15 | 228 | 3,890 | 53 | 187 | 158 | 51 |
| 245 establishments.. | $\{1910$ | 20,327 | 61.3 |  | 47 | 556 | 15,008 | 207 | 801 | 3,596 | 112 |
|  | $\{1911$ | 19,256 | 61.3 |  | 46 | 450 | 14,176 | 226 | 801 | 3,443 | 114 |
| 299 establishments..- | $\{1911$ | 26,784 | 61.4 |  | 11 | 388 | 19,567 | 145 | 1,601 | 4,872 | 200 |
|  | ( 1912 | 25,506 | 61.5 |  | 25 | 355 | 18,336 | 145 | 1,531 | 4,851 | 263 |
| 361 establishments.. | $\{1912$ | 29, 365 | 61.5 |  |  | 483 | 21, 015 | 336 | 1,104 | 6,050 | 377 |
|  | \{ 1913 | 28,835 | 61.1 |  | 16 | 914 | 21,901 | 381 | 1,261 | 4,050 | 312 |
| Machine feeders, planing mill: |  |  |  |  |  |  |  |  |  |  |  |
| 178 establishments.- | $\{1911$ | 1,156 | 61.3 |  |  | 20 | 871 | 8 | 57 | 201 |  |
|  | ( 1912 | 1,165 | 61.1 |  |  | 8 | 918 | 8 | 61 | 170 |  |
| 253 establishments.. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 1,548 | 61.4 |  |  | 11 | 1,143 | 19 | 52 | 302 | 21 |
|  | $\{1913$ | 1,531 | 61.1 |  | 6 | 41 | 1,158 | 21 | 57 | 233 | 15 |
| Sawyers, band: | ( 1907 | 71 | 60.8 |  | 1 | 1 | 60 | 2 | 2 | 5 |  |
| 34 establishments... | 1908 | 69 | 60.8 |  | 1 | 1 | 59 | 1 | 2 | 5 |  |
|  | 1909 | 69 | 60.8 |  | 1 | 1 | 59 | 1 | 2 | 5 |  |
|  | ( 1910 | 73 | 60.7 |  | 1 | 1 | 63 | 1 | 2 | 5 |  |
| 203 establishments.. | $\{1910$ | 429 | 61.2 |  | 3 | 7 | 320 | 3 | 25 | 71 |  |
|  | $\{1911$ | 432 | 61.2 |  | 3 | 7 | 325 | 3 | 26 | 68 |  |
| 243 establishments. | \{ 1911 | 508 | 61.2 |  | 1 | 7 | 388 | 2 | 30 | 80 |  |
|  | 1912 | 492 | 61.2 |  | 2 | 8 | 379 | 3 | 27 | 73 |  |
| 288 establishments.. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 561 | 61.1 |  |  | 11 | 433 | 5 | 25 | 87 |  |
| Sawyers, circular: | $\{1913$ | 554 | 60.9 |  | 1 | 19 | 433 | 5 | 25 | 71 | ---...- |
|  | $\int 1907$ | 14 | 61.3 |  |  | 1 | 10 |  | 1 |  | 2 |
| 12 establishments. | $\{1908$ | 14 | 61.3 |  |  | 1 | 10 |  | 1 |  | 2 |
|  | $\{1909$ | 13 | 61.3 |  | . . . . . | 1 | 9 | ..... | 1 |  | 2 |
|  | ( 1910 | 14 | 61.3 | . |  | 1 | 10 |  | 1 |  | 2 |

Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913Continued.

NUMBER-Concluded.

| Occupation, and number of establishments. | Year. | Num. ber of em-ployees. | Average fulltime hours per week. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 54 | $\begin{array}{\|c\|} 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | Over 60 and under 63 | $\begin{gathered} 63 \\ \text { and } \\ \text { under } \\ 66 \end{gathered}$ | 66 | $\begin{aligned} & \text { Over } \\ & 66 \end{aligned}$ |
| Sawyers, circularConcluded. <br> 58 establishments... |  |  |  |  |  |  |  |  |  |  |  |
|  | $\{1910$ | 81 | 61.9 |  |  | 1 | 54 |  | 2 | 21 | 3 |
|  | ( 1911 | 78 | 62.0 |  |  | 1 | 51 |  | 2 | 21 | 3 |
| 72 establishments... | $\{1911$ | 95 | 62.6 |  |  | 1 | 54 |  | 4 | 33 | 3 |
|  | ( 1912 | 94 | 62.5 |  |  | 1 | 55 |  | 4 | 28 | 6 |
| 92 establishments... | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 119 | 62.4 |  |  | 3 | 69 | 1 | 8 | 30 | 8 |
| Sawrers, gang. | ( 1913 | 123 | 62.0 |  |  | 4 | 79 | 1 | 8 | 22 | 9 |
| 5 establishments. | ( 1907 | 6 | 60.0 |  |  |  | 6 |  |  |  |  |
|  | 1908 | 6 | 60.0 |  |  |  | 6 |  |  |  |  |
|  | 1909 | 6 | 60.0 |  |  |  | 6 |  |  |  |  |
|  | 1910 | 6 | 60.0 |  |  |  | 6 |  |  |  |  |
| 52 establishments... | \{ 1910 | 64 | 61.4 |  |  |  | 48 | 1 | 2 | 13 |  |
|  | 1911 | 60 | 61.6 |  |  |  | 43 | 1 | 2 | 14 |  |
| 66 establishments... | $\{1911$ | 74 | 61.6 |  |  |  | 53 |  | 2 | 19 |  |
|  | ( 1912 | 75 | 61.6 |  |  |  | 53 |  | 3 | 19 | .... |
| 71 establishments... | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 79 | 61.7 |  |  | 1 | 55 | 1 | 1 | 20 | 1 |
| Sawyers, resaw: 93 establishments... | ( 1913 | 80 | 61.4 |  |  | 4 | 55 | 1 | 1 | 18 | 1 |
|  | $\{1911$ | 149 | 60.7 |  |  | 2 | 128 |  | 7 | 12 |  |
|  | ( 1912 | 147 | 60.7 |  |  | 2 | 126 |  | 7 | 12 |  |
| 138 establishments.. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 197 | 60.7 |  |  | 2 | 168 | 1 | 7 | 19 |  |
|  | 1913 | 192 | 60.7 |  |  | 4 | 164 | 1 | 6 | 17 |  |
| Setters: 301 establishments. . | ¢ 1911 | 714 | 61.3 |  | 1 | 8 | 537 | 3 | 38 | 121 | 6 |
|  | \{ 1912 | 713 | 61.3 |  | 2 | 9 | 537 | 3 | 39 | 116 | 7 |
| 361 establishments. . | \{ 1912 | 780 | 61.3 |  |  | 14 | 588 | 6 | 37 | 126 | 9 |
| 361 establishments.. | \{ 1913 | 782 | 61.0 |  | 1 | 24 | 607 | 6 | 37 | 96 | 11 |
| Trimmer operators: | ( 1907 | 72 | 60.7 |  |  |  |  |  |  |  |  |
| 37 establishments..- | $\int 1908$ | 68 | 60.7 |  | 1 | 1 | 60 56 | 1 | 2 | $\begin{array}{r}5 \\ \hline 5\end{array}$ | 2 |
|  | 1909 | 72 | 60.7 |  | 1 | 1 | 60 | 1 | 2 | 5 | 2 |
|  | 1910 | 74 | 60.7 |  | 1 | 1 | 61 | 2 | 2 | 5 | 2 |
| 228 establishments.. | \{ 1910 | 503 | 61.0 |  | 4 | 5 | 397 | 5 | 12 | 77 | 3 |
|  | 1911 | 485 | 61.0 |  | 4 | 5 | 383 | 5 | 12 | 73 | 3 |
| 294 establishments. | \{ 1911 | 479 | 61.3 |  | 1 | 5 | 362 | 3 | 21 | 83 | 4 |
|  | 1912 | 441 | 61.3 |  | 2 | 6 | 331 | 2 | 21 | 75 | 4 |
| 346 establishments. - | ¢ 1912 | 511 | 61.2 |  |  | 11 | 387 | 5 | 17 | 86 | 5 |
|  | 1913 | 538 | 61.0 |  | 1 | 18 | 420 | 5 | 16 | 73 | $\checkmark$ |

PER CENT.

| Carriage men: |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ( 1907 | 208 | 60.7 |  | 1.0 | 2.9 | 81.2 | 1.9 | 4.3 | 5.3 | 3.4 |
| 41 establishments.. | 1908 | 201 | 60.8 |  | 1.0 | 3.0 | 80.6 | 2.0 | 4.5 | 5.5 | 3.5 |
|  | 1909 | 195 | 60.8 |  | 1.0 | 3.6 | 79.5 | 2.1 | 4.6 | 5.6 | 3.6 |
|  | 1910 | 215 | 60.7 |  | . 9 | 2.8 | 81.9 | 1.9 | 4.2 | 5.1 | 3.3 |
| 245 establishments. . | $\{1910$ | 1,327 | 61.4 |  | . 5 | 1.7 | 72.9 | . 9 | 3.8 | 19.7 | . 7 |
| 245 establishments.. | 1911 | 1,298 | 61.3 |  | . 5 | 1.7 | 73.9 | . 9 | 3.9 | 18.4 | . 7 |
| Doggers: |  |  |  |  |  |  |  |  |  |  | 9 |
| 273 establishments.. | $\left\{\begin{array}{l}1911 \\ 1912\end{array}\right.$ | 869 | 61.5 61.4 |  | .2 | 1.6 | 72.3 | . 7 | 4.3 4.5 | 19.7 | .9 |
| 334 establishments. - | f 1912 | 973 | 61.4 |  |  | 1.8 | 72.1 | 1.1 | 3.8 | 19.8 | 1.2 |
|  | 1913 | 939 | 61.2 |  |  | 3.8 | 73.6 | 1.2 | 4.2 | 16.0 | 1.3 |

Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913Continued.

PER CENT—Continued.

| Occupation, and number of establishments. | Year. | Number of em-ployees. | A verage fulltime hours per week. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 54 | $\begin{array}{\|c\|} 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | Over 60 and under 63 | $\begin{gathered} 63 \\ \text { and } \\ \text { under } \\ 66 \end{gathered}$ | 66 | $\begin{gathered} \text { Over } \\ 66 \end{gathered}$ |
| Edgermen: |  |  |  |  |  |  |  |  |  |  |  |
| 41 establishments. . | ( 1907 | 79 | 60.7 |  | 1.3 | 1.3 | 82.3 | 2.5 | 3.8 | 6.3 | 2.5 |
|  | 1903 | 78 | 60.7 |  | 1.3 | 2.6 | 80.8 | 2.6 | 3.8 | 6.4 | 2.6 |
|  | 1909 | 77 | 60.7 |  | 1.3 | 2.6 | 80.5 | 2.6 | 3.9 | 6.5 | 2.6 |
|  | 1910 | 84 | 60.7 |  | 1.2 | 2.4 | 82.1 | 2.4 | 3.6 | 6.0 | 2.4 |
| 245 establishments.. | $\{1910$ | 585 | 61.2 |  | . 5 | 1.4 | 75.6 | . 9 | 4.3 | 16.9 | 5 |
|  | \{ 1911 | 569 | 61.2 |  | . 5 | 1.4 | 76.1 | . 9 | 4.6 | 16.0 | . 5 |
| 299 establishments. . | $\{1911$ | 684 | 61.3 |  | . 1 | 1.2 | 76.2 | . 4 | 4.8 | 16.7 | . 6 |
|  | ( 1912 | 686 | 61.2 |  | . 3 | 1.3 | 76.4 | . 4 | 5.5 | 15.5 | . 6 |
| 361 establishments. . | $\{1912$ | 751 | 61.2 |  |  | 1.7 | 75.8 | 1.1 | 4.7 | 16.0 | 8 |
| Laborers: | \{ 1913 | 754 | 61.0 |  | . 1 | 3.8 | 77.1 | 1.1 | 4.8 | 12.3 | . 8 |
|  | ( 1907 | 4,097 | 60.5 |  | . 3 | 3.0 | 86.5 | 1.2 | 4.2 | 3.6 | 1.3 |
| 41 establishments. | 1908 | 3,662 | 60.6 |  | . 3 | 5.1 | 82.7 | 1.4 | 5.1 | 4.0 | 1.4 |
|  | 1909 | 3,910 | 60.5 |  | . 3 | 4.4 | 83.8 | 1.3 | 4.9 | 3.9 | 1.3 |
|  | 1910 | 4,582 | 60.5 |  | . 3 | 5.0 | 84.9 | 1.2 | 4.1 | 3.4 | 1.1 |
| 245 establishments. . | $\{1910$ | 20,327 | 61.3 |  | . 2 | 2.7 | 73.8 | 1.0 | 3.9 | 17.7 | . 6 |
|  | \{ 1911 | 19,256 | 61.3 |  | . 2 | 2.3 | 73.6 | 1.2 | 4.2 | 17.9 | . 6 |
| 299 establishments. . | $\{1911$ | 26,784 | 61.4 |  | (1) | 1.4 | 73.1 | . 5 | 6.0 | 18.2 | . 7 |
|  | \{ 1912 | 25,506 | 61.5 |  | . 1 | 1.4 | 71.9 | . 6 | 6.0 | 19.0 | 1.0 |
| 361 establishments. . | $\{1912$ | 29,365 | 61.5 |  |  | 1.6 | 71.6 | 1.1 | 3.8 | 20.6 | 1.3 |
| 361 establishments.. | $\{1913$ | 28,835 | 61.1 |  | .1 | 3.2 | 76.0 | 1.3 | 4.4 | 14.0 | 1.1 |
| Machine feeders, planing mill: <br> 178 establishments. |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1,156 | 61.3 |  |  | 1.7 | 75.3 | .6 | 4.9 | 17.4 |  |
|  | ( 1912 | 1,165 | 61.1 |  |  | . 7 | 78.8 | . 7 | 5.2 | 14.6 |  |
| 253 establishments.. | \{ 1912 | 1,548 | 61.4 |  |  | . 7 | 73.8 | 1.2 | 3.4 | 19.5 | 1.4 |
| Sawyers, band: | ( 1913 | 1,531 | 61.1 |  | . 4 | 2.7 | 75.6 | 1.4 | 3.7 | 15.2 | 1.0 |
|  | ( 1907 | 71 | 60.8 |  | 1.4 | 1.4 | 84.5 | 2.8 | 2.8 | 7.0 |  |
| 34 establishments. | 1908 | 69 | 60.8 |  | 1.4 | 1.4 | 85.5 | 1.4 | 2.9 | 7.2 |  |
|  | $\{1909$ | 69 | 60.8 |  | 1.4 | 1.4 | 85.5 | 1.4 | 2.9 | 7.2 |  |
|  | 1910 | 73 | 60.7 |  | 1.4 | 1.4 | 86.3 | 1.4 | 2.7 | 6.8 |  |
| 203 establishments.. | $\{1910$ | 429 | 61.2 |  | . 7 | 1.6 | 74.6 | . 7 | 5.8 | 16.5 |  |
|  | $\{1911$ | 432 | 61.2 |  | .7 | 1.6 | 75.2 | . 7 | 6.0 | 15.7 |  |
| 243 establishments. . | \{ 1911 | 508 | 61.2 |  | .2 | 1.4 | 76.4 | . 4 | 5.9 | 15.7 |  |
|  | $\{1912$ | 492 | 61.2 |  | . 4 | 1.6 | 77.0 | . 6 | 5.5 | 14.8 |  |
| 288 establishments. - | ¢ 1912 | 561 | 61.1 |  |  | 2.0 | 77.2 | . 9 | 4.5 | 15.5 |  |
|  | \{ 1913 | 554 | 60.9 |  | . 2 | 3.4 | 78.2 | . 9 | 4.5 | 12.8 |  |
| Sawyers, circular: | $1907$ | 14 | 61.3 |  |  | 7.1 | 71.4 |  | 7.1 |  | 14.3 |
| 12 establishments.. | 1908 | 14 | 61.3 |  |  | 7.1 | 71.4 |  | 7.1 |  | 14.3 |
|  | $\{1909$ | 13 | 61.3 |  |  | 7.7 | 69.2 |  | 7.7 |  | 15.4 |
|  | 1910 | 14 | 61.3 |  |  | 7.1 | 71.4 |  | 7.1 |  | 14.3 |
| 58 establishments... | $\{1910$ | 81 | 61.9 |  |  | 1.2 | 66.7 |  | 2.5 | 25.9 | 3.7 |
|  | $\{1911$ | 78 | 62.0 |  |  | 1.3 | 65.4 |  | 2.6 | 26.9 | 3.8 |
| 72 establishments... | \{ 1911 | 95 | 69.6 |  |  | 1.1 | 56.8 |  | 4.2 | 34.7 | 3.2 |
|  | $\{1912$ | 94 | 62.5 |  |  | 1.1 | 58.5 |  | 4.3 | 29.8 | 6. |
| 92 establishments... | \{ 1912 | 119 | 62.4 |  |  | 2.5 | 58.0 | . 8 |  | 25.2 | 6.7 |
|  | $\{1913$ | 123 | 62.0 |  |  | 3.3 | 64.2 | . 8 | 6.5 | 17.9 | 7. |
| Sawyers, gang: |  |  |  |  |  |  |  |  |  |  |  |
| 5 establishments. | $\left\{\begin{array}{l}1907 \\ 1908\end{array}\right.$ | 6 | 60.0 60.0 |  |  |  | 100.0 100.0 |  |  |  |  |
|  | 1909 | 6 | 60.0 |  |  |  | 100.0 |  |  |  |  |
|  | ' 1910 | 6 | 60.0 |  |  |  | 100.0 |  |  |  |  |

${ }^{1}$ Less than one-tenth of 1 per cent.

Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913Concluded.

PER CENT-Concluded.

| Occupation, and number of establishments. | Year. | Num- <br> ber <br> of em- <br> ploy- <br> ees. | A verage fulltime hours per week. | Employees whose fill-time hours per week were- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 54 | $\begin{gathered} 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | Over 60 and under 63 | $\begin{gathered} 63 \\ \text { and } \\ \text { under } \\ 66 \end{gathered}$ | 66 | $\begin{gathered} \text { Over } \\ 66 \end{gathered}$ |
| Sawyers, gang-Con. <br> 52 establishments... <br> 66 establishments..- | $\left\{\begin{array}{l}1910 \\ 1911\end{array}\right.$ | 64 | 61.4 |  |  |  | 75.0 | 1.6 | 3.1 | 20.3 |  |
|  | $\{1911$ | 74 | 61.6 |  |  |  | 71.6 |  | 2.7 | 25.7 |  |
| 66 establishments.-- | ( 1912 | 75 | 61.6 |  |  |  | 70.7 |  | 4.0 | 25.3 |  |
| 71 establishments... | $\{1912$ | 79 | 61.7 |  |  | 1.3 | 69.6 | 1.3 | 1.3 | 25.3 | 1.3 |
| 71 establishments... | $\{1913$ | 80 | 61.4 |  |  | 5.0 | 68.8 | 1.3 | 1.3 | 22.5 | 1.3 |
| Sawyers, resaw: 98 establishments... | \{ 1911 | 149 | 60.7 |  |  | 1.3 | 85.9 |  | 4.7 | 8.1 |  |
|  | 1912 | 147 | 60.7 |  |  | 1.4 | 85.7 |  | 4.8 | 8.2 |  |
| 138 establishments. . | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 197 | 60.7 |  |  | 1.0 | 85.3 | . 5 | 3.6 | 9.6 |  |
|  | 1913 | 192 | , 60.7 |  |  | 2.1 | 85.4 | . 5 | 3.1 | 8.9 | ....... |
| Setters: 301 establishments. | $\{1911$ | 714 | 61.3 |  | 0.1 | 1.1 | 75.2 | . 4 | 5.2 | 16.9 | . 8 |
|  | $\{1912$ | 713 | 61.3 |  | . 3 | 1.3 | 75.3 | . 4 | 5.5 | 16.3 | 1.0 |
| 361 establishments. - | \{ 1912 | 780 | 61.3 |  |  | 1.8 | 75.4 | . 8 | 4.7 | 16.2 | 1.2 |
|  | \{ 1913 | 782 | 61.0 |  | .1 | 3.1 | 77.6 | . 8 | 4.7 | 12.3 | 1.4 |
| Trimmer operators: | ( 1907 | 72 | 60.7 |  | 1.4 | 1.4 | 83.3 | 1.4 | 2.8 | 6.9 | 2.8 |
| 37 establishments... | 1908 | 68 | 60.7 |  | 1.5 | 1.5 | 82.4 | 1.5 | 2.9 | 7.4 | 2.9 |
|  | 1909 | 72 | 60.7 |  | 1.4 | 1.4 | 83.3 | 1.4 | 2.8 | 6.9 | 2.8 |
|  | 1910 | 74 | 60.7 |  | 1.4 | 1.4 | 82.4 | 2.7 | 2.7 | 6.8 | 2.7 |
| 228 establishments. . |  | 503 | 61.0 |  | . 8 | 1.0 | 78.9 | 1.0 | 2.4 | 15.3 | 6 |
|  | $\{1911$ | 485 | 61.0 |  | . 8 | 1.0 | 79.0 | 1.0 | 2.5 | 15.1 | . 6 |
| 294 establishments. . | \{ 1911 | 479 | 61.3 |  | . 2 | 1.0 | 75.6 | . 6 | 4.4 | 17.3 | . 8 |
|  | ( 1912 | 441 | 61.3 |  | . 5 | 1.4 | 75.1 | . 5 | 4.8 | 17.0 | . 9 |
| 346 establishments. . | \{ 1912 | 511 | 61.2 |  |  | 2.2 | 75.7 | 1.0 | 3.3 | 16.8 | 1.0 |
|  | \{ 1913 | 538 | 61.0 |  | . 2 | 3.3 | 78.1 | . 9 | 3.0 | 13.6 | . 9 |

Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913.

DOGGERS.


## EDGERMEN.



Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

EDGERMEN-Concluded.

| Year and State. | Number of estab-lishments. | Number of em-ployees. | Aver-agefull-timehoursperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\begin{gathered} \text { Over } \\ \text { 54 } \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\left\|\begin{array}{c} 57 \\ \text { and } \\ \text { under } \\ 60 \end{array}\right\|$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| 1912-Concluded. |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana. | 23 | 62 | 61.0 |  |  |  |  |  |  |  | 51 | 1 |
| Maine.. | 19 | 33 | 62.0 |  |  |  |  |  |  |  | 19 | 14 |
| Michigan. | 30 | 75 | 60.0 |  |  |  |  |  |  |  | 75 |  |
| Minnesota. |  | 60 | 60.0 |  |  |  |  |  |  |  | 60 |  |
| Mississippi. | 16 | 36 | 64.0 |  |  |  |  |  |  |  | 12 | 24 |
| North Carolina. | 23 | 35 | 62.2 |  |  |  |  |  |  | 2 | 19 | 14 |
| Oregon. | 6 | 12 | 59.9 |  |  |  |  |  |  | 2 | 10 |  |
| Pennsylvania | 19 | 25 | 61.9 |  |  |  |  |  |  | 3 | 13 |  |
| South Carolina | 9 | 20 | 61.8 |  |  |  |  |  |  |  | 12 |  |
| Tennessee.. | 29 | 34 | 60.6 |  |  |  |  |  |  | 3 | 27 |  |
| Texas.. | 12 | 33 | 60.1 |  |  |  |  |  |  |  | 29 |  |
| Virginia... | 23 | 35 | 63.0 |  |  |  |  |  |  | 3 | 12 | 20 |
| Washington | 25 | 33 | 60.0 |  |  |  |  |  |  |  | 33 |  |
| West Virginia. | 20 | 31 | 61.9 |  |  |  |  |  |  |  | 21 | 10 |
| Wisconsin. | 19 | 77 | 60.0 |  |  |  |  |  |  |  | 77 |  |
| Total. | 361 | 751 | 61.2 | ..... |  |  |  |  |  | 13 | 569 | 169 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alabama.. | 14 | 22 | 65.1 |  |  |  |  |  |  |  |  |  |
| Arkansas. | 19 | 53 | 59.9 |  |  |  |  |  |  | 7 | 45 |  |
| California | 14 | 33 | 60.2 |  |  |  |  |  |  |  | 32 |  |
| Florida. | 12 | 18 | 63.3 |  |  |  |  |  |  |  | 8 | 10 |
| Georgia..... | 22 | 25 | 64.0 |  |  |  |  |  |  |  | 9 | 16 |
| Louisiana. | 23 | 65 | 60.8 |  |  |  |  |  |  |  | 48 | 11 |
| Maine. | 19 | 35 | 61.7 |  |  |  |  |  |  | 1 | 21 | 13 |
| Michigan. | 30 | 77 | 60.0 |  |  |  |  |  |  |  | 77 |  |
| Minnesota. | 7 | 60 | 60.0 |  |  |  |  |  |  |  | 60 |  |
| Mississippi. | 16 | 37 | 60.0 |  |  |  |  |  |  |  | 37 |  |
| North Carolina. | 23 | 35 | 62.2 |  |  |  |  |  |  | 2 | 19 | 14 |
| Oregon... | 6 | 10 | 60.0 |  |  |  |  |  |  |  | 10 |  |
| Pennsylvania. | 19 | 25 | 61.4 |  |  |  |  |  |  | 3 | 15 |  |
| South Carolina. | 9 | 19 | 61.9 |  |  |  |  |  |  |  | 11 |  |
| Tennessee... | 29 | 36 | 60.9 |  |  |  |  |  |  | 3 | 25 |  |
| Texas.. | 12 | 30 | 60.0 |  |  |  |  |  |  | 2 | 24 |  |
| Virginia.... | 23 | 39 | 62.9 |  |  |  |  |  |  | 3 | 14 | 22 |
| Washington..- | 25 20 | 32 31 | $6{ }_{62.0}$ |  |  |  |  |  |  | 2 | 18 | 11 |
| Wisconsin.... | 19 | 72 | 60.0 |  |  |  |  |  |  |  | 72 |  |
| Total | 361 | 754 | 61.0 |  |  |  |  |  | 1 | 29 | 581 | 143 |

LABORERS.


Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

LABORERS-Concluded.

| Year and State. | Number of estab-lishments. | Number of em-ployees. | Aver- | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | full- <br> time hours per week. | Under 48 | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{gathered}\right.$ | $\left\|\begin{array}{c} 51 \\ \text { and } \\ \text { under } \\ 54 \end{array}\right\|$ | 54 | $\left\|\begin{array}{c} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | $\begin{gathered} \\ 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| 1912 -Concluded. |  |  |  |  |  |  |  |  |  |  |  |  |
| North Carolina. | 23 | 1,732 | 61.7 |  |  |  |  |  |  | 101 | 1,105 | 526 |
| Oregon.. | 6 | 767 | 59.9 |  |  |  |  |  |  | 124 | 643 |  |
| Pennsylvania | 19 | 834 | 61.8 |  |  |  |  |  |  | 92 | 454 | 288 |
| South Carolina. | 9 | 1,037 | 61.4 |  |  |  |  |  |  |  | 704 | 333 |
| Tennessee... | 29 | 992 | 60.7 |  |  |  |  |  |  | 55 | 810 | 127 |
| Texas. |  | 1,380 | 60.1 |  |  |  |  |  |  |  | 1,228 | 152 |
| Virginia. | 23 | i 289 | 63.6 |  |  |  |  |  |  | 111 | 457 | 721 |
| Washington | 25 | 2,bi | f6. 0 |  |  |  |  |  |  |  | 2,594 |  |
| West Virginia. | 20 | - 907 | 62.2 |  |  |  |  |  |  |  | 568 | 339 |
| Wisconsin.. | 19 | 1,618 | 60.0 |  |  |  |  |  |  |  | 1,018 |  |
| Total. | 361 | '29,365 | 61.5 |  |  |  |  |  |  | 483 | 21,015 | 7,867 |
| 1913. |  |  |  |  |  |  |  |  |  |  |  |  |
| Alabama. | 14 | 1,038 | 65.2 |  |  |  |  |  |  |  | 173 | 865 |
| Arkansas. | 19 | 2,205 | 60.0 |  |  |  |  |  |  | 205 | 1,949 | 51 |
| California. | 14 | 1,389 | 60.1 |  |  |  |  |  |  |  | 1,369 | 20 |
| Florida. | 12 | 1,072 | 63.3 |  |  |  |  |  |  |  | 477 | 595 |
| Georgia. | 22 | 1,379 | 63.9 |  |  |  |  |  |  |  | 531 | 848 |
| Louisiana. | 23 | 2,368 | 60.9 |  |  |  |  |  |  | 219 | 1,707 | 442 |
| Maine..... | 19 | 1,000 | 61.8 |  |  |  |  |  |  | 31 | - 566 | 403 |
| Michigan.. | 30 | 2,080 | 60.0 |  |  |  |  |  |  |  | 2,080 | . |
| Minnesota. | 7 | 1,418 | 60.0 |  |  |  |  |  |  |  | 1,418 |  |
| Mississippi | 16 | 1,587 | 60.2 |  |  |  |  |  |  |  | 1,535 | 52 |
| North Carolina. | 23 | 1,868 | 61.7 |  |  |  |  |  |  | 76 | 1,214 | 578 |
| Oregon.. | 6 | 842 | 60.0 |  |  |  |  |  |  |  | 842 |  |
| Tennsylvania. | 19 | 751 | 61.5 |  |  |  |  |  |  | 113 | 411 | 227 |
| South Carolina. | 9 | 957 | 61.3 |  |  |  |  |  |  |  | 656 | 301 |
| Tennessee. | 29 | 1,002 | 61.1 |  |  |  |  |  | 16 | 54 | 717 | 215 |
| Texas. | 12 | 1,362 | 60.1 |  |  |  |  |  |  | 60 | 1,106 | 196 |
| Virginia.... | 23 | 1, 434 | 63.2 |  |  |  |  |  |  | 113 | , 445 | 876 |
| Washington. | 25 | 2,211 | 60.0 |  |  |  |  |  |  |  | 2,211 |  |
| West Virginia | 20 | 882 | 62.2 |  |  |  |  |  |  | 43 | 1 504 | 335 |
| Wisconsin. | 19 | 1,990 | 60.0 |  |  |  |  |  |  |  | 1,980 |  |
| Total. | 361 | 28,835 | 61.1 |  |  |  |  |  | 16 | 914 | \|21,901 | 6,004 |

MACHINE FEEDERS, PLANING MILL.

| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama. | 12 | 77 | 65.9 |  |  |  |  |  |  |  | 5 | 72 |
| Arkansas. | 18 | 205 | 60.4 |  |  |  |  |  |  | . | 190 | 15 |
| California. | 9 | 36 | 60.0 |  |  |  |  |  |  |  | 36 |  |
| Florida. | 11 | 45 | 63.5 |  |  |  |  |  |  |  | 19 | 26 |
| Georgia. | 16 | 60 | 64.1 |  |  |  |  |  |  |  | 20 | 40 |
| Louisiana. | 22 | 169 | 60.9 |  |  |  |  |  |  |  | 142 | 27 |
| Maine. | 15 | 34 | 63.0 |  |  |  |  |  |  |  | 12 | 22 |
| Michigan. | 10 | 117 | 60.0 |  |  |  |  |  |  |  | 117 |  |
| Minnesota. | 5 | 59 | 60.0 |  |  |  |  |  |  |  | 59 |  |
| Mississippi. | 16 | 92 | 64.4 |  |  |  |  |  |  | - | 24 | 68 |
| North Carolina. | 19 | 120 | 61. 2 |  |  |  |  |  |  | 1 | 92 | 27 |
| Oregon..... | 6 | 53 | 59.9 |  |  |  |  |  |  | 7 | 46 |  |
| Pennsylvania. | 9 | 16 | 63.4 |  |  |  |  |  |  | 2 | 4 | 10 |
| South Carolina. | 7 | 35 | 63.3 |  |  |  |  |  |  |  | 11 | 24 |
| Tennessee. | 6 | 17 | 62.5 |  |  |  |  |  |  |  | 10 | 7 |

Table $\boldsymbol{V}^{-}$-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913 -Continued.

MACHINE FEEDERS, PLANING MILL-Concluded.


SAWYERS, BAND.

| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama. | 6 | 7 | 65.1 |  |  |  |  |  |  |  | 1 | 6 |
| Arkansas. | 17 | 33 | 60.9 |  |  |  |  |  |  |  | 28 | 5 |
| California. | 11 | 26 | 60.0 |  |  |  |  |  |  |  | 26 |  |
| Florida. | 6 | 12 | 63.0 |  |  |  |  |  |  |  | 6 | 6 |
| Georgia. | 11 | 16 | 62.9 |  |  |  |  |  |  |  | 8 | 8 |
| Louisiana. | 17 | 35 | 60.8 |  |  |  |  |  |  |  | 30 | 5 |
| Maine. . | 13 | 27 | 61.5 |  |  |  |  |  |  |  | 19 | 8 |
| Michigan. | 28 | 62 | 60.0 |  |  |  |  |  |  |  | 62 |  |
| Minnesota. | 7 | 45 | 60.0 |  |  |  |  |  |  |  | 45 |  |
| Mississippi. | 9 | 18 | 64.0 |  |  |  |  |  |  |  | 6 | 12 |
| North Carolina. | 17 | 27 | 62.9 |  |  |  |  |  |  | 2 | 11 | 14 |
| Oregon.. | 5 | 8 | 59.9 |  |  |  |  |  |  | 1 | 7 |  |
| Pennsylvania. | 16 | 23 | 62.1 |  |  |  |  |  |  | 2 | 12 | 9 |
| South Carolina. | 8 | 17 | 61.9 |  |  |  |  |  |  |  | 10 | 7 |
| Tennessee. | 29 | 35 | 60.4 |  |  | - |  |  |  | 3 | 28 | 4 |
| Texas. | 10 | 21 | 60.1 |  |  |  |  |  |  |  | 19 | 2 |
| Virginia. | 22 | 35 | 63.0 |  |  |  |  |  |  | 3 | 12 | 20 |
| Washington. | 17 | 33 | 60.0 |  |  |  |  |  |  |  | 33 |  |
| West Virginia. | 20 | 31 | 62.1 |  |  |  |  |  |  |  | 20 | 11 |
| Wisconsin.. | 19 | 50 | 60.0 |  |  |  |  |  |  |  | 50 |  |
| Total. | 288 | 561 | 61.1 |  |  |  |  |  |  | 11 | 433 | 117 |

Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

SAWYERS, BAND-Concluded.

| Year and State. | Number of estab-lishments. | Num- <br> ber of <br> em- <br> ploy- <br> ees. | Arer- | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | fulltime hours per week. | Under 48 | 48 | $\left\|\begin{array}{c} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{array}\right\|$ | $\left.\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered} \right\rvert\,$ | 54 | Over 54 and under 57 | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{gathered} \mathrm{Over} \\ 60 \end{gathered}$ |
| 1913. |  |  |  |  |  |  |  |  |  |  |  |  |
| Alabama. | 6 | 7 | 65.1 |  |  |  |  |  |  |  | 1 | 0 |
| Arkansas. | 17 | 33 | 60.1 |  |  |  |  |  |  | 2 | 30 | 1 |
| California. | 11 | 26 | 60.0 |  |  |  |  |  |  |  | 26 |  |
| Florida. | 6 | 12 | 63.0 |  |  |  |  |  |  |  | 6 | 6 |
| Georgia. | 11 | 17 | 63.1 |  |  |  |  |  |  |  | 8 |  |
| Louisiana. | 17 | 36 | 60.6 |  |  |  |  |  |  | 3 | 28 | 5 |
| Maine.. | 13 | 28 | 61.2 |  |  |  |  |  |  | 1 | 20 | 7 |
| Michigan. | 28 | 59 | 60.0 |  |  |  |  |  |  |  | 59 |  |
| Minnesota. | 7 | 45 | 60.0 |  |  |  |  |  |  |  | 45 |  |
| Mississippi | 9 | 18 | 60.0 |  |  |  |  |  |  |  | 18 | . |
| North Carolina. | 17 | 27 | 62.9 |  |  |  |  |  |  | 2 | 11 | 14 |
| Oregon.. | 5 | 8 | 60.0 |  |  |  |  |  |  |  | 8 |  |
| Pennsylvania. | 16 | 23 | 61.6 |  |  |  |  |  |  | 2 | 14 |  |
| South Carolina. | - 8 | 17 | 61.9 |  |  |  |  |  |  |  | 10 |  |
| Tennessee. | 29 | 35 | 60.6 |  |  |  |  |  | 1 | 3 | 26 |  |
| Texas.. | 10 | 20 | 59.9 |  |  |  |  |  |  | 2 | 16 |  |
| Virginia. | 22 | 35 | 63.0 |  |  |  |  |  |  | 3 | 12 | 20 |
| Washington. | 17 | 30 | 60.0 |  |  |  |  |  |  |  | 30 |  |
| West Virginia. | 20 | 31 | 62.2 |  |  |  |  |  |  | 1 | 18 |  |
| Wisconsin.... | 19 | 47 | 60.0 |  |  |  |  |  |  |  | 47 |  |
| Total. | 288 | 554 | 60.9 |  |  |  |  |  | 1 | 19 | 433 | 101 |

SAWYERS, CIRCULAR.


Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

SAWYERS, CIRCULAR-Concluded.

| Year and Stato. | Number of estab-lishments. | Num- <br> ber of em-ployees. | Average fulltime hours per week. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Un. der 48 | 48 | $\left\|\begin{array}{c} \text { O ver } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{array}\right\|$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\|\begin{array}{c} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| 1913-Concluded |  |  |  |  |  |  |  |  |  |  |  |  |
| Oregon. | 2 | 3 | 60.0 |  |  |  |  |  |  |  | 3 |  |
| Pennsylvania | 4 | 5 | 60.6 |  |  |  |  |  |  | 2 | 2 | 1 |
| Texas... | 4 | 5 | 60.0 |  |  |  |  |  |  |  | 5 |  |
| Washington. | 11 | 13 | 60.0 |  |  |  |  |  |  |  | 13 |  |
| Wisconsin.. | 2 | 2 | 60.0 |  |  |  |  |  |  |  | 2 | -..... |
| Other States. | 2 | 3 | 61.0 |  |  |  |  |  |  |  | 2 | 1 |
| Total. | 82 | 123 | 62.0 |  |  |  |  |  |  | 4 | 79 | 40 |

SAWYERS, GANG.

| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama. | 6 | 8 | 66.1 |  |  |  |  |  |  |  |  | 8 |
| Arkansas | 8 | 8 | 60.0 |  |  |  |  |  |  |  | 8 |  |
| California | 2 | 2 | 60.0 |  |  |  |  |  |  |  | 2 |  |
| Florida. | 5 | 5 | 64. 8 |  |  |  |  |  |  |  | 1 | 4 |
| Georgia. | 4 | 4 | 64.5 |  |  |  |  |  |  |  | 1 | 3 |
| Louisiana. | 9 | 9 | 60.6 |  |  |  |  |  |  |  | 8 | 1 |
| Michigan.. | 3 | 3 | 60.0 |  |  |  |  |  |  |  | 3 |  |
| Minnesota. | 3 | 5 | 60.0 |  |  |  |  |  |  |  | 5 |  |
| Mississippi | 6 | 6 | 63.0 |  |  |  |  |  |  |  | 3 | 3 |
| Oregon..... | 4 | 4 | 60.0 |  |  |  |  |  |  |  | 4 |  |
| Pennsylvania | 2 | 2 | 62.5 |  |  |  |  |  |  | 1 |  | 1 |
| Texas........ | 3 | 3 | 60.3 |  |  |  |  |  |  |  | 2 | 1 |
| Virginia. | 2 | 2 | 66.0 |  |  |  |  |  |  |  |  | 2 |
| Washington. | 2 | 2 | 60.0 |  |  |  |  |  |  |  | 2 |  |
| Wisconsin... | 8 | 11 | 60.0 |  |  |  |  |  |  |  | 11 | ....... |
| Other States | 4 | 5 | 60.0 |  |  |  |  |  |  |  | 5 |  |
| Total | 71 | 79 | 61.7 |  |  |  |  |  |  | 1 | 55 | 23 |
| Alabama. | 6 | 8 | 66.1 |  |  |  |  |  |  |  |  | 8 |
| Arkansas. | 8 | 8 | 59.6 |  |  |  |  |  |  | 2 | 6 |  |
| California | 2 | 2 | 60.0 |  |  |  |  |  |  |  | 2 |  |
| Florida. | 5 | 6 | 65.0 |  |  |  |  |  |  |  | 1 | 5 |
| Georgia. | 4 | 4 | 64.5 |  |  |  |  |  |  |  | 1 | 3 |
| Louisiana. | 9 | 9 | 60.4 |  |  |  |  |  |  | 1 | 7 | 1 |
| Michigan.. | 3 | 3 | 60.0 |  |  |  |  |  |  |  | 3 |  |
| Minnesota. | 3 | 5 | 60.0 |  |  |  |  |  |  |  | 5 |  |
| Mississippi | 6 | 6 | 60.0 |  |  |  |  |  |  |  | 6 |  |
| Oregon... | 4 | 4 | 60.0 |  |  |  |  |  |  |  | 4 |  |
| Pennsylvania. | 2 | 2 | 59.5 |  |  |  |  |  |  | 1 | 1 |  |
| Texas......... | 3 | 3 | 60.3 |  |  |  |  |  |  |  | 2 | 1 |
| Virginia. | 2 | 2 | 66.0 |  |  |  |  |  |  |  |  | 2 |
| Washington. | 2 | 2 | 60.0 |  |  |  |  |  |  |  | 2 |  |
| Wisconsin... | 8 | 11 | 60.0 |  |  |  |  |  |  |  | 11 |  |
| Other States | 4 | 5 | 61.2 |  |  |  |  |  |  |  | 4 | 1 |
| Total. | 71 | 80 | 61.4 |  |  |  |  |  |  | 4 | 55 | 21 |

Table V.-AVERAGE AND GLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

SAWYERS, RESAW.

| Yrar and State. | Number of estab-lishments. | Number of em-plovees. | Aver-arefull-timehoursperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\begin{array}{\|c} \text { Over } \\ \text { and } \\ \text { and } \\ \text { under } \\ 51 \end{array}$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\lvert\, \begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} 57 \\ \text { and } \\ \text { nender } \\ 60 \end{gathered}\right.$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| Arkansas.. | 3 | 4 | 61.5 |  |  |  |  |  |  |  |  |  |
| California. | 7 | 13 | 60.0 |  |  |  |  |  |  |  | 13 |  |
| Georgia. | 2 | 2 | 62.8 |  |  |  |  |  |  |  | 2 | $i$ |
| Louisiana. | 4 | 4 | 63.0 |  |  |  |  |  |  |  | 2 |  |
| Maine. | 5 | 6 | 60.8 |  |  |  |  |  |  |  | 5 | 1 |
| Michigan. | 20 | 30 | 60.0 |  |  |  |  |  |  |  | 30 |  |
| Minnesota.. | 5 | 13 | 60.0 |  |  |  |  |  |  |  | 13 |  |
| Mississippi. | 2 | 2 | 66.0 |  |  |  |  |  |  |  |  |  |
| North Carolina.. | 11 | 11 | 62.6 |  |  |  |  |  |  |  | 6 |  |
| Oregon | 6 | 10 | 60.0 |  |  |  |  |  |  | 1 | 9 |  |
| Pennsylvania. | 5 | 9 | 63.0 |  |  |  |  |  |  |  | 4 |  |
| South Carolina. | 6 | 7 | 61.1 |  |  |  |  |  |  |  | 5 |  |
| Tennessee... | 5 | 6 | 60.0 |  |  |  |  |  |  |  | 6 |  |
| Virginia.. | 11 | 12 | 62.6 |  |  |  |  |  |  | 1 | 5 |  |
| Washington. | 23 | 32 | 60.0 |  |  |  |  |  |  |  | 32 |  |
| West Virginia. | 7 | 7 | 61.7 |  |  |  |  |  |  |  | 5 |  |
| W isconsin.. | 13 | 26 | 60.0 |  |  |  |  |  |  |  | 26 |  |
| Other States. | 1 | 1 | 60.0 |  |  |  |  |  |  |  | 1 |  |
| Total. | 138 | 197 | 60.7 | ..... |  | ..... | ...... |  |  | 2 | 168 | 27 |
| Arkansas.. | 3 |  | 60.0 |  |  |  |  |  |  |  |  |  |
| California. | 7 | 14 | 60.0 |  |  |  |  |  |  |  | 14 |  |
| Florida. | 2 | 2 | 60.0 |  |  |  |  |  |  |  | 2 |  |
| Georgia. | 2 | d | 62.8 |  |  |  |  |  |  |  | 1 |  |
| Louisiana. | 4 | 4 | 63.0 |  |  |  |  |  |  |  | 2 |  |
| Maine.. | 5 | 7 | 60.6 |  |  |  |  |  |  | 1 | 5 | 1 |
| Michigan. | 20 | 25 | 60.0 |  |  |  |  |  |  |  | 25 |  |
| Minnesota. |  | 13 | $60.0$ |  |  |  |  |  |  |  | 13 |  |
| Mississippi ${ }_{\text {North }}$ | ${ }_{11}^{2}$ | 11 | 60.0 62.6 |  |  |  |  |  |  |  | ${ }_{6}^{2}$ |  |
| Oregon. | 6 | 11 | 60.0 |  |  |  |  |  |  |  | 11 |  |
| Pennsylvania. | 5 | 8 | 62.8 |  |  |  |  |  |  |  | 4 |  |
| South Carolina | 6 | 7 | 61.1 |  |  |  |  |  |  |  | 5 |  |
| Tennessee. | 5 | 6 | 60.0 |  |  |  |  |  |  |  | 6 |  |
| Virginia.. | 11 | 14 | 62.6 |  |  |  |  |  |  | 2 | 5 |  |
| Washington | 23 | 31 | 60.0 |  |  |  |  |  |  |  | 31 |  |
| West Virginia. | 7 | 7 | 61.6 |  |  |  |  |  |  | 1 | 4 |  |
| W isconsin... | 13 | 23 | 60.0 |  |  |  |  |  |  |  | 23 |  |
| Other States. | 1 | 1 | 60.0 |  |  |  |  |  |  |  | 1 |  |
| Total. | 138 | 192 | 60.7 |  |  |  |  |  |  | 4 | 164 | 24 |

SETTERS.


TAble V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

SETTERS-Concluded.

| Year and State. | Number of establish ments. | Num- <br> ber of em-ployees. | Aver-agefull-timehoursperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\begin{array}{\|c} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{array}$ | $\left.\begin{array}{\|c} 51 \\ \text { and } \\ \text { under } \\ 54 \end{array} \right\rvert\,$ | 54 | $\begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\left\|\begin{array}{c} 57 \\ \text { and } \\ \text { under } \\ 60 \end{array}\right\|$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| 1912-Concluded. |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana. | 23 | 55 | 61.1 |  |  |  |  |  |  |  | 44 | 11 |
| Maine.. | 19 | 42 | 61.6 |  |  |  |  |  |  |  | 28 | 14 |
| Michigan. | 30 | 81 | 60.0 |  |  |  |  |  |  |  | 81 |  |
| Minnesota. | 7 | 78 | 60.0 |  |  |  |  |  |  |  | 78 |  |
| Mississippi... | 16 | 33 | 64.4 |  |  |  |  |  |  |  | 9 | 24 |
| North Carolina. | 23 | 42 | 62.1 |  |  |  |  |  |  | 2 | 24 | 16 |
| Oregon... | 6 | 10 | 59.9 |  |  |  |  |  |  | 2 | 8 |  |
| Pennsylvania. | 19 | 32 | 61.6 |  |  |  |  |  |  | 4 | 18 | 10 |
| South Carolina | 9 | 19 | 62.2 |  |  |  |  |  |  |  | 10 | 9 |
| Tennessee.. | 29 | 36 | 60.6 |  |  |  |  |  |  | 3 | 29 | 4 |
| Texas. | 12 | 32 | 60.1 |  |  |  |  |  |  |  | 30 | 2 |
| Virginia. | 23 | 37 | 62.9 |  |  |  |  |  |  | 3 | 14 | 20 |
| Washington. | 25 | 51 | 60.0 |  |  |  |  |  |  |  | 51 |  |
| West Virginia. | 20 | 35 | 62.0 |  |  |  |  |  |  |  | 23 | 12 |
| Wisconsin..... | 19 | 60 | 60.0 |  |  |  |  |  |  |  | 60 |  |
| Total. | 361 | 780 | 61.3 |  |  |  |  |  |  | 14 | 588 | 178 |
| Alabama. | 14 | 21 | 65.1 |  |  |  |  |  |  |  | 4 | 17 |
| Arkansas. | 19 | 35 | 60.0 |  |  |  |  |  |  | 3 | 31 | 1 |
| Calilornia | 14 | 29 | 60.2 |  |  |  |  |  |  |  | 28 | 1 |
| Florida. | 12 | 21 | 63.4 |  |  |  |  |  |  |  | 9 | 12 |
| Georgia | 22 | 31 | 64.5 |  |  |  |  |  |  |  | 10 | 21 |
| Louisiana. | 23 | 54 | 81.0 |  |  |  |  |  |  | 4 | 39 | 11 |
| Maine.... | 19 | 44 | 61.4 |  |  |  |  |  |  | 1. | 30 | 13 |
| Michigan. | 30 | 77 | 60.0 |  |  |  |  |  |  |  | 77 |  |
| Minnesota. | 7 | 88 | 60.0 |  |  |  |  |  |  |  | 88 |  |
| Mississippi........... | 16 | 32 | 60.0 |  |  |  |  |  |  |  | 32 |  |
| North Carolina. | 23 | 41 | 62.0 |  |  |  |  |  |  | 2 | 24 | 15 |
| Oregon.. | 6 | 12 | 60.0 |  |  |  |  |  |  |  | 12 |  |
| Pennsylvania. | 19 | 32 | 61.2 |  |  |  |  |  |  | 4 | 20 | 8 |
| South Carolina | 9 | 19 | 62.2 |  |  |  |  |  |  |  | 10 | 9 |
| Tennessee.. | 29 | 38 | 60.8 |  |  |  |  |  | 1 | 3 | 27 | 7 |
| Texas. | 12 | 28 | 59.9 |  |  |  |  |  |  | 3 | 23 | 2 |
| Virginia. | 23 | 37 | 62.9 |  |  |  |  |  |  | 3 | 14 | 20 |
| Washington.... | 25 | 48 | 60.0 |  |  |  |  |  |  |  | 48 |  |
| West Virginia. | 20 | 35 | 62.1 |  |  |  |  |  |  | 1 | 21 | 13 |
| Wisconsin...... | 19 | 60 | 60.0 |  |  |  |  |  |  |  | 60 |  |
| Total | 361 | 782 | 61.0 |  |  |  |  |  | 1 | 24 | 607 | 150 |

## TRIMMER OPERATORS.



Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Concluded.

TRIMMER OPERATORS-Concluded.

| Year and State. | Number of estab-lishments. | $\left\lvert\, \begin{gathered} \text { Num- } \\ \text { ber of } \\ \text { em- } \\ \text { ploy. } \\ \text { ees. } \end{gathered}\right.$ | Aver-agefull-timehoursperweek. | Number of employees whose full-time hours per weekwere- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\left\|\begin{array}{c} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{array}\right\|$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\|\begin{array}{c} \text { Over } \\ \text { 54 } \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | $\left\lvert\, \begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}\right.$ | 60 | $\begin{aligned} & 0 \mathrm{Over} \\ & 60 \end{aligned}$ |
| 1912-Concluded. |  |  |  |  |  |  |  |  |  |  |  |  |
| North Carolina. | 23 | 28 | 62.2 |  |  |  |  |  |  | 1 | 16 | 11 |
| Oragon....... | 6 | 12 | 60.0 |  |  |  |  |  |  | 1 | 11 |  |
| Pennsylvania. | 19 | 26 | 61.5 |  |  |  |  |  |  | 4 | 14 | 8 |
| South Carolina. | 9 | 13 | 61.7 |  |  |  |  |  |  |  | 8 | 5 |
| Tennessee...... | 29 | 29 | 60.3 |  |  |  |  |  |  | 3 | 24 | 2 |
| Texas.. | 12 | 18 | 60.1 |  |  |  |  |  |  |  | 16 | 2 |
| Virginia. | 23 | 25 | 62.5 |  |  |  |  |  |  | 2 | 11 | 12 |
| Washington. | 23 | 36 | 60.0 |  |  |  |  |  |  |  | 36 |  |
| West Virginia. | 20 | 21 | 62.2 |  |  |  |  |  |  |  | 13 | 8 |
| Wisconsin... | 19 | 37 | 60.0 |  |  |  |  |  |  |  | 37 |  |
| Total. | 346 | 511 | 61.2 | ..... |  |  | ...... |  |  | 11 | 387 | 113 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alabama.. | 14 | 17 | 64.5 |  |  |  |  |  |  |  | 4 |  |
| Arkansas. | 19 | 27 | 59.9 |  |  |  |  |  |  | 4 | 22 |  |
| California | 14 | 26 | 60.2 |  |  |  |  |  |  |  | 25 |  |
| Florida. | 12 | 16 | 64.1 |  |  |  |  |  |  |  | 5 | 11 |
| Georgia. | 20 | 21 | 64.0 |  |  |  |  |  |  |  | 8 | 13 |
| Louisiana. | 23 | 30 | 61.0 |  |  |  |  |  |  | 2 | 22 | 6 |
| Maine.... | 8 | 23 | 60.0 |  |  |  |  |  |  |  | 22 | 1 |
| Michigan.. | 30 | 58 | 60.0 |  |  |  |  |  |  |  | 58 |  |
| Minnesota. |  | 49 | 60.0 |  |  |  |  |  |  |  | 49 |  |
| Mississippi. | 16 | 21 | 60.0 |  |  |  |  |  |  |  | 21 |  |
| North Carolina. | 23 | 28 | 62.2 |  |  |  |  |  |  | 1 | 16 | 11 |
| Oregon..... | ${ }^{6}$ | 13 | 60.0 |  |  |  |  |  |  |  | 13 |  |
| Pennsylvania. | 19 | 26 | 61.3 |  |  |  |  |  |  | 1 | 15 |  |
| South Carolina | 9 | ${ }_{31}^{13}$ | 61.7 |  |  |  |  |  |  |  | 8 | 5 5 |
| 'Tennessee.. | 29 | 31 | 60.6 |  |  |  |  |  | 1 | 3 | 22 |  |
| Texas. | 12 | 17 | 60.0 |  |  |  |  |  |  | 1 | 14 |  |
| Virginia. | 23 | 26 | 62.6 |  |  |  |  |  |  | 2 | 11 | 13 |
| Washington.. | 23 | 37 | 60.0 |  |  |  |  |  |  |  | 17 |  |
| West Virginia. | 20 19 | $\stackrel{22}{ }$ | 62.6 60.0 |  |  |  |  |  |  | 1 | 11 | 10 |
| W isconsin..... | 19 | 37 | 60.0 |  |  |  |  |  |  |  | 37 |  |
| Total. | 346 | 538 | 61.0 |  |  |  |  |  | 1 | 18 | 420 | 99 |

## Table VI.-AVERAGE AND CLASSIFIED FULL-Time hours of work PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]
DOGGERS.


## EDGERMEN.

| Alabama: |  |  |  |  |  |  |  | + |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 establishments. | $\{1912$ | 21 | 65.1 |  |  | -... |  | 4 | 17 |
| Arizansas: | (1913 | 22 | 65.1 |  |  |  |  | 4 | 18 |
| 19 establishments. | $\{1912$ | 52 | 60.6 |  |  |  |  | 47 | 5 |

Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE. BY YEARS, 1912 AND 1913-Continued.

EDGERMEN-(oncluded.

| State, and number of estahlishments. | Year. |  | Aver-argefull-timehoursperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { amder } \\ 51 \end{gathered}\right.$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\{\begin{array}{c} \text { Over } \\ \text { 54 } \\ \text { and } \\ \text { under } \\ 57 \end{array}\right.$ | $\begin{array}{\|c\|} 57 \\ \text { and } \\ \text { under } \\ 60 \end{array}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| California: |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 establishments. | $\{1912$ | 32 | 60.2 |  |  |  |  |  |  |  | 31 |  |
| Florida: | 1913 | 33 | 60.2 |  |  |  |  |  |  |  | 32 |  |
| 12 establishments | 11912 | 19 | 63.5 |  |  |  |  |  |  |  | 8 | 1 |
|  | 1913 | 18 | 63.3 |  |  |  |  |  |  |  | 8 | 10 |
| Georgia: <br> 22 establishment | 1912 | 26 | 64.1 |  |  |  |  |  |  |  | 9 | 17 |
| 22 establishment | (1913 | 2.5 | 64.0 |  |  |  |  |  |  |  | 9 | 6 |
| Louisiana: |  | 62 | 01.0 |  |  |  |  |  |  |  | 51 | 1 |
| 23 establishment | 1913 | 6.5 | 60.8 |  |  |  |  |  |  | 6 | 48 | 11 |
| Maine: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments. | $\{1912$ | 33 | ${ }_{6}^{62.0}$ |  |  |  |  |  |  | 1 | 19 21 | 14 |
| Michigan: |  |  | 60.0 |  |  |  |  |  |  |  | 75 |  |
| 30 establishments. | $\{1913$ | 77 | 64.0 |  |  |  |  |  |  |  | 77 |  |
| Minnesota: |  |  | 60.0 |  |  |  |  |  |  |  | 60 |  |
| Mississippi: | 1913 | 60 | 60.0 |  |  |  |  |  |  |  | 60 | . |
|  |  |  | 64.0 |  |  |  |  |  |  |  |  | 24 |
|  | $\{1913$ | 37 | 60.0 |  |  |  |  |  |  |  | 37 |  |
|  | 11912 | 35 | 62.2 |  |  |  |  |  |  | 2 | 19 | 14 |
| Oregon: | [1913 | 35 | 62.2 |  |  |  |  |  |  | 2 | 19 | 4 |
|  |  |  | 59.9 |  |  |  |  |  |  |  |  |  |
| 6 establishm | $\{1913$ | 10 | 60.0 |  |  |  |  |  |  |  | 10 |  |
| Pennsylvania: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | $\begin{gathered} 25 \\ 25 \end{gathered}$ | $\begin{aligned} & 61.9 \\ & 61.4 \end{aligned}$ |  |  |  |  |  |  | 3 3 | 15 |  |
| South Carolina: |  |  | 61.8 |  |  |  |  |  |  |  |  |  |
| 9 establishments | \{1913 | 19 | 61.9 |  |  |  |  |  |  |  | 11 |  |
| Tennessee: |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 establishments. | $\{1913$ | 38 | 60.9 |  |  |  |  |  | 1 | ${ }_{3}^{3}$ | 25 |  |
| Texas: |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 establishments. | $\{1912$ | $\begin{aligned} & 33 \\ & 30 \end{aligned}$ | $\begin{array}{r} \text { G0. } 1 \\ 60.0 \end{array}$ |  |  |  |  |  |  | 2 | 24 |  |
| Virginia: |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 establishments. | $\{1912$ | 35 | 63.0 62.9 |  |  |  |  |  |  | 3 | 14 | 22 |
| Washington: |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 establishments. | $\{1912$ | 33 | 60.0 |  |  |  |  |  |  |  | 33 |  |
| West Virginia: | 1913 | 32 | 60.0 |  |  |  |  |  |  |  | 32 |  |
| 20 establishmen | 1912 | 31 | 61.9 |  |  |  |  |  |  |  | 21 | 10 |
| Wisconsin: | 1913 | 31 | 62.0 |  |  |  |  |  |  | 2 | 18 | 11 |
| 19 establishments |  |  | 60.0 |  |  |  |  |  |  |  | 77 |  |
|  | 1913 | 72 | 60.0 |  |  |  |  |  |  |  | 72 |  |

## LABORERS.

| Alabama: |  |  |
| :---: | :---: | :---: |
| 14 establishments. | $\{1912$ | 1,574 |
| Arkansas: | (1913 | 1,038 |
| Arkansas. | 1912 | 2,141 |
| 19 establishments | $\{1913$ | 2,205 |
| California: |  |  |
| 14 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 1,311 |
| Florida: |  |  |
| 12 estabjishments. | $\{1912$ | 1,208 |
| 12 establishments. | 11913 | 1,072 |



Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

LABORERS-Concluded

| State, and number of establishments. | Year. | Numberofom-eloy-ees. | $\begin{gathered} \text { A ver- } \\ \text { age } \\ \text { fulll- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{gathered}$ | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\begin{gathered} \text { O rer } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\left\lvert\, \begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}\right.$ | 54 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { and } \\ \text { and } \\ \text { under } \\ 57 \end{gathered}\right.$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| Georgia: |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 establishments | 1913 | 1,379 | 63.9 |  |  |  |  |  |  |  | 531 | 848 |
| Louisiana: | 1912 | 2,519 | 61.0 |  |  |  |  |  |  |  | 2,057 | 62 |
| 23 establishment | 1913 | 2,368 | 60.9 |  |  |  |  |  |  | 219 | 1,707 | 442 |
| Maine: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishmen | $\{1913$ | 1,000 | 61.8 |  |  |  |  |  |  | 31 | 566 | 403 |
| Michigan: |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 establishments | $\{1913$ | 2,080 | 60.0 |  |  |  |  |  |  |  |  |  |
| Minnesota: 7 establishments | $\{1912$ | 1,337 | 60.0 |  |  |  |  |  |  |  | 1, 337 |  |
| Mississippi: ${ }^{\text {a }}$ (,18 0.0 ........... |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 establishments | $\{1912$ | 1,730 | 64.6 |  |  |  |  |  |  |  | 412 | 1,318 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 establishments. | $\{1912$ | 1,732 | 61.7 |  |  |  |  |  |  | 101 | 1,105 | 526 |
| Oregon: |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 establishments. | 1912 | 767 | 59.9 |  |  |  |  |  |  | 124 | 643 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishmen | 1913 | 751 | 61.5 |  |  |  |  |  |  | 113 | 411 | 227 |
| South Carolina: |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 establishments. | 1912 | ${ }_{1}^{1,037} 9$ | ${ }_{61.4}^{61.4}$ |  |  |  |  |  |  |  | ${ }_{656} 704$ | 333 301 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 11912 | 992 | 60.7 |  |  |  |  |  |  | 55 | 810 | 127 |
| 29 establishments | 1913 | 1,002 | 61.1 |  |  |  |  |  | 16 | 54 | 717 | 215 |
| Texas: |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 establishments | 11913 | 1,362 | 60.1 |  |  |  |  |  |  | 60 | 1,106 | 196 |
| Virginia: |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 establishments. | 1913 | 1, 434 | 63.2 |  |  |  |  |  |  | 113 | 445 | 876 |
| Washington: $\quad 10$ l |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 establishments. | $\{1912$ | 2, 2 ,211 | $60.0$ |  |  |  |  |  |  |  | 2,594 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 establishments | 1912 | 907 | 62.2 |  |  |  |  |  |  |  | 568 | 339 |
| W isconsin: |  |  |  |  |  |  |  |  |  |  | 504 | 335 |
| 19 establishm | 1912 | 1,618 | 60.0 |  |  |  |  |  |  |  | 1,618 |  |
|  | 1913 | 1,990 | 60.0 |  |  |  |  |  |  |  | 1,990 |  |

MACHINE FEEDERS, PLANING MILL.


Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

MACHINE FEEDERS, PLANING MILL-Concluded.

| State, and number of establishments. | Year. | $\begin{aligned} & \text { Num- } \\ & \text { ber } \\ & \text { of } \\ & \text { em- } \\ & \text { ploy- } \\ & \text { ees. } \end{aligned}$ | Aver-agefull-timehonrsperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\|\begin{array}{c} \text { over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | 57 and under 60 | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| Maine: |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 establishments. | 1912 | 34 | 63.0 |  |  |  |  |  |  |  | 12 | 22 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 establishments | \{1912 | 117 | 60.0 |  |  |  |  |  |  |  | 117 |  |
|  | 1913 | 83 | 60.0 |  |  |  |  |  |  |  | 83 |  |
| Minnesota: ; | 1912 | 59 | 60.0 |  |  |  |  |  |  |  | 59 |  |
| 5 establishments. | \{1913 | 47 | 60.0 |  |  |  |  |  |  |  | 47 |  |
| Mississippi: |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 establishments. | $\left\{\begin{array}{l} 1912 \\ 1913 \end{array}\right.$ | $\begin{array}{r} 92 \\ 104 \end{array}$ | $\begin{aligned} & 64.4 \\ & 60.4 \end{aligned}$ |  |  |  |  |  |  |  | ${ }_{104}^{24}$ | 68 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments | $\{1912$ | 120 | 61.2 |  |  |  |  |  |  | 1 | 92 | 27 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 establishmen | $\{1912$ | 53 | 59.9 |  |  |  |  |  |  | 7 | 46 |  |
| Pennsylvania: |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 establishments | [1912 | 16 | 63.4 |  |  |  |  |  |  | 2 | 4 | 10 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 establishments | 1912 | 35 | 63.3 |  |  |  |  |  |  |  | 11 |  |
| Tennessee: | (1913 | 40 | 62.7 |  |  |  |  |  |  |  | 14 | 26 |
|  | (1912 |  |  |  |  |  |  |  |  |  |  |  |
| 6 establishments. | \{1913 | 15 | 64.5 |  |  |  |  |  | 1 |  | 2 | 12 |
| Texas: |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 estabishments | $\{1912$ | 99 | 60.1 |  |  |  |  |  |  |  | 90 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 establishments. | $\{1912$ | 52 | 63.8 |  |  |  |  |  |  | 1 | 16 | 35 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 establishments | 1912 | 160 | 60.0 |  |  |  |  |  |  |  | 160 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 establishments. | 1912 | 36 | 61.9 |  |  |  |  |  |  |  | 24 |  |
|  |  |  |  |  |  |  |  |  |  | 2 |  | 15 |
| 11 establishments...... $\{1912$ |  | 66 | 60.0 |  |  |  |  |  |  |  | 66 |  |
|  |  | 76 | 60.0 |  |  |  |  |  |  |  | 76 |  |

SAWYERS, BAND.


Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

SAWYERS, BAND-Concluded.

| State, and number of establishments. | Year. | $\begin{aligned} & \text { Num- } \\ & \text { ber } \\ & \text { of } \\ & \text { em- } \\ & \text { ploy- } \\ & \text { ees. } \end{aligned}$ | Aver-agefull-timehoursperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ |  | Over 48 and under 51 | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\|\begin{array}{c} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | $\begin{array}{\|c} 57 \\ \text { and } \\ \text { under } \\ 60 \end{array}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| Michigan: |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 establishments. | $\{1912$ | 62 59 | 60.0 60.0 |  |  |  |  |  |  |  | 62 59 |  |
| Minnesota: |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 establishments | $\{1912$ | 45 | 60.0 |  |  |  |  |  |  |  | 45 |  |
| Mississippi: |  |  |  |  |  |  |  |  |  |  | 45 | ..... |
| 9 establishments. | $\{1912$ | 18 | 64.0 |  |  |  |  |  |  |  | 6 | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 establishments. | $\{1912$ | 27 | 62.9 |  |  |  |  |  |  | 2 | 11 | 14 |
| 17 establishments. | (1913 | 27 | 62.9 |  |  |  |  |  |  | 2 | 11 | 14 |
| Oregon: |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 8 | 59.9 60.0 |  |  |  |  |  |  | 1 | 7 8 |  |
| Pennsylvania: |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 23 | 62.1 |  |  |  |  |  |  | 2 | 12 | 9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 establishments | $\{1912$ | 17 | 61.9 |  |  |  |  |  |  |  | 10 | 7 |
| 8 estabishments | \{1913 | 17 | 61.9 |  |  |  |  |  |  |  | 10 | 7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 establishments. | $\{1912$ | 35 | 60.4 |  |  |  |  |  |  | 3 | 28 | 4 |
| 29 establishments. | $\{1913$ | 35 | 60.6 |  |  |  |  |  |  | 3 | 26 | 5 |
| Texas: |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 establishments. | $\{1912$ | 21 | 60.1 |  |  |  |  |  |  |  | 19 | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 establishments. | $\{1913$ | 35 | 63.0 |  |  |  |  |  |  | 3 | 12 | 20 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 establishments. | $\{1912$ | 33 | 60.0 |  |  |  |  |  |  |  | 33 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 establishments | $\{1913$ | 31 | 62.2 |  |  |  |  |  |  | i | 18 | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments. | $\{1912$ | 50 | 60.0 |  |  |  |  |  |  |  | 50 |  |
| 10 establishments. | \{1913 | 47 | 60.0 |  |  |  |  |  |  |  | 47 |  |

SAWYERS, CIRCULAR.


Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, ]BY YEARS, 1912 AND 1913-Continued.

SAWYFRS, CIRCULAR-Concluded.

| State, and number of establishments. | Year. | Numberofem-ploy.ees. | a ver- <br> age <br> full- <br> time <br> hours <br> per <br> week. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { ander } \\ 51 \end{gathered}\right.$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\|\begin{array}{c} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | $\left.\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered} \right\rvert\,$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| North Carolina: 7 establishments. $\qquad$ | $[1912$ | 8 | $\begin{gathered} 60.0 \\ 60.0 \end{gathered}$ |  |  |  |  |  |  |  | 8 |  |
| Oregon: <br> 2 establishment | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 2 | 59.8 |  |  |  |  |  |  | 1 | 1 |  |
| Pennsylvania: 4 establishments |  |  | 60.0 60.6 |  |  |  |  |  |  | 2 | 2 |  |
| Texas: 4 establishment | $\{1913$ | 5 | 60.6 |  |  |  |  |  |  | 2 | 2 |  |
|  | $\{1912$ | 5 | 60.0 |  |  |  |  |  |  |  | 5 |  |
| Washington: |  |  | 60.0 |  |  |  |  |  |  |  | 5 |  |
| 11 establishments. | $\{1912$ | 12 | 60.0 60.0 |  |  |  |  |  |  |  | 12 |  |
| Wisconsin: | \|1912 |  | 60.0 |  |  |  |  |  |  |  | 2 |  |
| 2 establishments | 1913 | 2 | 60.0 |  |  |  |  |  |  |  | 2 |  |

SAWYERS, GANG.


Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

SAWYERS, RESAW.

| State, and number of establishments. | Year. | $\begin{aligned} & \text { Num- } \\ & \text { ber } \\ & \text { of } \\ & \text { em- } \\ & \text { ploy- } \\ & \text { ees. } \end{aligned}$ | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{gathered}$ | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\lvert\, \begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}\right.$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| Arkansas: |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 4 | 61.5 60.0 |  |  |  |  |  |  |  | 3 | 1 |
| California: |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 establishments. | 1912 | 13 | 60.0 |  |  |  |  |  |  |  | 13 |  |
| Florida: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 establishments | \{1912 | 2 | 60.0 |  |  |  |  |  |  |  | 2 |  |
| Georgia: | 1913 | 2 | 60.0 |  |  |  |  |  |  |  | 2 | ...... |
| 2 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 2 | 62.8 62.8 |  |  |  |  |  |  |  | 1 | 1 |
| Louisiana: |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 establishments. | $\{1912$ | 4 | 63.0 |  |  |  |  |  |  |  | 2 | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 establishments. | $\{1912$ | 6 | 60.8 |  |  |  |  |  |  |  | 5 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 establishment | ¢1912 | 30 | 60.0 |  |  |  |  |  |  |  | 30 |  |
| 20 establishments | $(1913$ | 25 | 60.0 |  |  |  |  |  |  |  | 25 | ... |
| Minnesota: |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 establishments. | 1913 | 13 | 60.0 |  |  |  |  |  |  |  | 13 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 2 | 66.0 60.0 |  |  |  |  |  |  |  |  | 2 |
| North Carolina: |  |  |  |  |  |  |  |  |  |  | 2 | .... |
| 11 establishments. | $\{1912$ | 11 | 62.6 |  |  |  |  |  |  |  | 6 | 5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 establishments. | $\{1913$ | 11 | 60.0 |  |  |  |  |  |  |  | 11 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 establishments | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 8 | 63.0 62.8 |  |  |  |  |  |  |  | 4 | 5 4 |
| South Carolina: $\quad \begin{gathered}19 \\ 19012\end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 7 | 61.1 |  |  |  |  |  |  |  | 5 | 2 |
| Tennessee: |  |  |  |  |  |  |  |  |  |  | 5 | 2 |
| 5 establishment | $\{1912$ | 6 | 60.0 |  |  |  |  |  |  |  | 6 |  |
| Vestablishment | 1913 | 6 | 60.0 |  |  |  |  |  |  |  | 6 |  |
| Virginia: |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 establishments. | $\{1913$ | 14 | 62.6 |  |  |  |  |  |  | 2 | 5 | 7 |
| Washington: |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 32 | 60.0 60.0 |  |  |  |  |  |  |  | 32 |  |
| West Virginia: |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 7 | 61.7 61.6 |  |  |  |  |  |  | 1 | 5 4 | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \{1912 | 26 | 60.0 |  |  |  |  |  |  |  | 26 |  |
| 13 establishme | (1913 | 23 | 60.0 |  |  |  |  |  |  |  | 23 |  |

Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EAOH STATE, BY YEARS, 1912 AND 1913-Continued.

SETTERS.

| State, and number of establishments. | Year. | Num <br> ber of em-ployees. | Average fulltime hours per week. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | 51 and under 54 | 54 | $\left\lvert\, \begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}\right.$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | Over 60 |
| Alabama: |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 establishments | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 21 | 65.1 65.1 |  |  |  |  |  |  |  | 4 | 17 |
| Arkansas: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments | $\{1912$ | 35 | 60.9 |  |  |  |  |  |  |  | 30 | 5 |
|  |  |  |  |  |  |  |  |  |  | 3 | 31 | 1 |
| California: 14 establishments | $\{1912$ | 29 | 60.2 |  |  |  |  |  |  |  | 28 | 1 |
| 14 establishments | \{1913 | 29 | 60.2 |  |  |  |  |  |  |  | 28 | 1 |
| Florida: |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 establishments | 1913 | 21 | 63.4 |  |  |  |  |  |  |  | 9 | 12 |
| Georgia: |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 establishments | $\{1913$ | 31 | 64.5 |  |  |  |  |  |  |  | 10 | 21 |
| Louisiana: |  |  |  |  |  |  |  |  |  |  | 44 | 11 |
| 23 establishments. | 1913 | 54 | 61.0 |  |  |  |  |  |  | 4 | 39 | 11 |
| Maine: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 42 | 61.6 |  |  |  |  |  |  | 1 | 28 30 | 14 |
| Michigan: |  | 44 | 61.4 |  |  |  |  |  |  | 1 | 30 | 13 |
| 30 establishments | $\{1912$ | 81 | 60.0 |  |  |  |  |  |  |  | 81 |  |
| Minnesota: |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 78 | 60.0 |  |  |  |  |  |  |  | 78 |  |
|  | (1913 | 88 | 60.0 |  |  |  |  |  |  |  | 88 | -. |
| 16 establishments | $\{1912$ | 33 | 64.4 |  |  |  |  |  |  |  | 9 | 24 |
| North Carolina: | 1913 | 32 | 60.0 |  |  |  |  |  |  |  | 32 | .. |
| 23 establishments | $\left\{\begin{array}{l}1912 \\ 1013\end{array}\right.$ | 42 | 62.1 |  |  |  |  |  |  | 2 | 24 | 16 |
| Oregon: |  |  |  |  |  |  |  |  |  | 2 | 24 | 15 |
|  |  |  |  |  |  |  |  |  |  |  | 8 |  |
| 6 establishments. | 1913 | 12 | 60.0 |  |  |  |  |  |  |  | 12 | ...... |
| PennsyIvania: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 32 | 61.6 61.2 |  |  |  |  |  |  | 4 | 18 20 | 10 8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 establishments. | $\{1912$ | 19 | 62.2 |  |  |  |  |  |  |  | 10 | 9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 establishments | 1913 | 38 | 60.8 |  |  |  |  |  | 1 | 3 | 27 | 7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 establishment | $\{1912$ | 32 | 60.1 |  |  |  |  |  |  |  | 30 | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 establishments | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 37 37 | 62.9 |  |  |  |  |  |  | 3 3 | 14 | 20 20 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 establishments | $\{1912$ | 51 | 60.0 |  |  |  |  |  |  |  | 51 |  |
| West Virginia: |  |  | 60.0 | -...... |  |  |  |  |  |  | 48 |  |
|  |  |  | 62.0 |  |  |  |  |  |  |  | 23 | 12 |
| 20 establishments | \{1913 | 35 | 62.1 |  |  |  |  |  |  | 1 | 21 | 13 |
| Wisconsin: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments. | $\{1912$ | 60 | 60.0 |  |  |  |  |  |  |  | 60 |  |
| 19 establishments. | 1913 | 60 | 60.0 |  |  |  |  |  |  |  | 60 |  |

WAGES AND HOURS OF LABOR, 1907 TO 1913-LUMBER.
Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Concluded.

TRIMMER OPERATORS.

| State, and number of establishments. | Year. | $\begin{gathered} \text { Num- } \\ \text { ber } \\ \text { of } \\ \text { em- } \\ \text { ploy- } \\ \text { ees. } \end{gathered}$ | Averagefull-timehoursperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 48 \end{aligned}$ | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}\right.$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\begin{gathered} \text { Over } \\ \text { 54 } \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { ander } \\ 60 \end{gathered}$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| Alabama: | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 17 | $\begin{aligned} & 64.8 \\ & 64.5 \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| 14 establishments...... |  |  |  |  |  |  |  |  |  |  | 4 | 13 13 |
| Arkansas: | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments. |  | 26 27 | $\begin{gathered} 60.7 \\ 50 \end{gathered}$ |  |  |  |  |  |  | 4 | 23 22 | 1 |
| California: |  |  |  |  |  |  |  |  |  | 4 | 22 |  |
| 14 establishments...... | $\{1912$ | 27 | 60.2 |  |  |  |  |  |  |  | 26 | 1 |
| Florida: |  | 26 | 60.2 |  |  |  |  |  |  |  | 25 | 1 |
|  | 1912 | 16 | 64.1 |  |  |  |  |  |  |  | 5 | 11 |
| 12 establishmenGeorgia: | 11913 | 16 | . 64.1 |  |  |  |  |  |  |  | 5 | 11 |
|  | $\left\{\begin{array}{l} 1912 \\ 1913 \end{array}\right.$ | 21 | 64.0 |  |  |  |  |  |  |  |  | 13 |
| 20 establishmentLouisiana: |  | 21 | 64.0 |  |  |  |  |  |  |  | 8 | 13 |
|  | (1913 |  |  |  |  |  |  |  |  |  |  |  |
| 23 establishmentsMaine: | $\{1912$ | $\begin{aligned} & 31 \\ & 30 \end{aligned}$ | $\begin{aligned} & 61.1 \\ & 61.0 \end{aligned}$ |  |  |  |  |  |  | 2 | 25 22 | 6 6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 establishments. | $\{1912$ | 23 | 60.5 60.0 |  |  |  |  |  |  |  | $\stackrel{17}{22}$ | 1 |
| Michigan: |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 establishments. | $\left\{\begin{array}{l} 1912 \\ 1913 \end{array}\right.$ | 61 58 | 60.0 60.0 |  |  |  |  |  |  |  | 61 58 |  |
| Minnesota: |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 establishments. | $\left\{\begin{array}{c} 1912 \\ 1913 \end{array}\right\}$ | 26 | 60.0 |  |  |  |  |  |  |  | 26 |  |
| Mississippi:16 establishments | $\{1913$ | 49 | 60.0 |  |  |  |  |  |  |  |  |  |
|  | $\left\{\begin{array}{l} 1912 \\ 1913 \end{array}\right.$ | 21 | 64.3 |  |  |  |  |  |  |  | 6 | 15 |
| North Carolina: 23 establishm |  | 21 | 60.0 |  |  |  |  |  |  |  | 21 |  |
|  | $\left\{\begin{array}{\|l\|l\|} 1912 \\ 1913 \end{array}\right.$ | 28 | 62.2 |  |  |  |  |  |  | 1 | 16 | 11 |
|  |  | 28 | 62.2 |  |  |  |  |  |  | 1 | 16 | 11 |
| Oregon: | $\left\{\begin{array}{l} 1912 \\ 1913 \end{array}\right.$ | 12 | 60.0 |  |  |  |  |  |  | 1 | 11 |  |
| Pennsylvania: 19 establishme |  | 13 | 60.0 |  |  |  |  |  |  |  | 13 |  |
|  | $\left\{\begin{array}{l} 1912 \\ 1913 \end{array}\right.$ |  | 61.5 |  |  |  |  |  |  |  |  |  |
|  |  | 26 | 61.3 |  |  |  |  |  |  | 4 | 15 | 7 |
| South Carolina: |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 establishments. | $\{1912$ | $\begin{aligned} & 13 \\ & 13 \end{aligned}$ | $\begin{array}{\|l} 61.7 \\ 61.7 \end{array}$ |  |  |  |  |  |  |  | 8 | 5 |
| 29 establishments. | (1913 | 31 | 60.6 |  |  |  |  |  | 1 | 3 | 22 | 5 |
| Texas: |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 establishments. | 1913 | 18 | 60.1 60.0 |  |  |  |  |  |  | 1 | 16 | $\underset{2}{2}$ |
| Virginia:23 establishments. |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1912 | 25 | 62.5 |  |  |  |  |  |  | 2 | 11 | 12 |
| Washington: | (1913 | 26 | 62.6 |  |  |  |  |  |  | 2 | 11 | 13 |
|  | 1912 | 36 | 60.0 |  |  |  |  |  |  |  | 36 |  |
| West Virginia:20 establishment | 1913 | 37 | 60.0 |  |  |  |  |  |  |  | 37 |  |
|  | [1912 | 21 | 62.2 |  |  |  |  |  |  |  | 13 |  |
|  | 1913 | 22 | 62.6 |  |  |  |  |  |  | $i$ | 11 | 10 |
| W isconsin: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments. . . . . | ${ }_{1912} 1913$ | 37 37 | 60.0 60.0 |  |  |  |  |  |  |  | 37 37 |  |

'Table VII.--AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913.

DOGGERS.

| State. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { establish- } \\ & \text { ments. } \end{aligned}$ | 1912 |  |  | 1913 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of employees. | Average full-tine hours per week. | Average full-time weekly earnings. | Number of employees. | A verage full-time hours per week. | Average full-time weekly earnings. |
| Alabama. | 14 | 42 | 65.2 | \$8.81 | 43 | 65.1 | 89.17 |
| Arkansas. | 19 | 74 | 60.8 | 10.34 | 72 | 60.0 | 10.42 |
| California. | 13 | 33 | 60.2 | 13.63 | 33 | 60.2 | 13.77 |
| Florida. | 12 | 49 | 63.3 | 9.62 | 49 | 63.3 | 9.76 |
| Georgia. | 18 | 43 | 63.5 | 8.85 | 45 | 63.6 | 9.21 |
| Louisiana. | 23 | 93 | 60.5 | 11.24 | 95 | 60.3 | 11.42 |
| Maine.. | 14 | 25 | 62.8 | 13.45 | 27 | 62.8 | 13.16 |
| Michigan. | 30 | 91 | 60.0 | 12.31 | 88 | 60.0 | 12.74 |
| Minnesota | 4 | 30 | 60.0 | 13.88 | 12 | 60.0 | 14.78 |
| Mississippi. | 16 | 59 | 64.0 | 9.36 | 60 | 60.0 | 9.22 |
| North Carolina. | 20 | 47 | 62.2 | 8.57 | 46 | 62.4 | 8.99 |
| Oregon... | 6 | 20 | 59.9 | 14. 77 | 20 | 60.0 | 15.30 |
| Pennsylvania. | 14 | 19 | 62.3 | 11.96 | 19 | 61.6 | 12.12 |
| South Carolina | 8 | 34 | 61.8 | 8.29 | 34 | 61.8 | 8.34 |
| Tennessee. | 28 | 43 | 60.5 | 9.96 | 45 | 60.8 | 9.97 |
| Texas | 12 | 44 | 60.1 | 11.02 | 42 | 60.0 | 11.23 |
| Virginia. | 23 | 59 | 63.3 | 9.00 | 62 | 63.1 | 9.21 |
| Washington | 25 | 79 | 60.0 | 13.78 | 67 | 60.0 | 14.71 |
| West Virginia | 18 | 28 | 61.9 | 12. 60 | 29 | 62.0 | 13.00 |
| Wisconsin.. | 17 | 61 | 60.0 | 12.60 | 52 | 60.0 | 13.10 |
| Total. | 334 | 973 | 61.4 | 11.06 | 939 | 61.2 | 11.22 |

EDGERMEN.


## LABORERS.

| Alabama. | 14 | 1,574 | 65.4 | \$7.84 | 1,038 | 65.2 | \$8.09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arkansas. | 19 | 2,141 | 60.6 | 9.35 | 2,205 | 60.0 | 9.33 |
| California. | 14 | 1,311 | 60.1 | 12.12 | 1,389 | 60.1 | 12. 45 |
| Florida. | 12 | 1,208 | 63.5 | 8.44 | 1,072 | 63.3 | 8.59 |
| Georgia. | 22 | 1,529 | 64.0 | 8.06 | 1,379 | 63.9 | 8.33 |
| Louisiana. | 23 | 2,519 | 61.0 | 9.84 | 2,368 | 60.9 | 9.92 |
| Maine. | 19 | 865 | 61.9 | 11.41 | 1,000 | 61.8 | 11. 44 |
| Michigan | 30 | 2,001 | 60.0 | 10.55 | 2,080 | 60.0 | 10.76 |
| Minnesota | 7 | 1,337 | 60.0 | 13.22 | 1,418 | 60.0 | 14.24 |
| Mississipp | 16 | 1,730 | 64.6 | 8.41 | 1,587 | 60.2 | 8.39 |

Table VII.-AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913-Continued.

LABORERS-Concluded.

| State. | ```Number of establish- ments.``` | 1912 |  |  | 1913 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of employees. | A verage full-time hours per week. | A verage full-tine weekly earnings. | Number of employees. | A verage full-time hours per week. | A verage full-time weekly carnings. |
| North Carolina. | 23 | 1,732 | 61.7 | \$7.56 | 1,868 | 61.7 | \$7.85 |
| Oregon. | 6 | 767 | 59.9 | 13.52 | 842 | 60.0 | 14.11 |
| Pennsylvania. | 19 | 834 | 61.8 | 11.67 | 751 | 61.5 | 12. 14 |
| South Carolina | 9 | 1,037 | 61.4 | 7.09 | 957 | 61.3 | 7.04 |
| Tennessee. | 29 | 992 | 60.7 | 8.88 | 1,002 | 61.1 | 9.10 |
| Texas. | 12 | 1,380 | 60.1 | 9.97 | 1,362 | 60.1 | 10.32 |
| Virginia. - | 23 | 1,289 | 63.0 | 8.47 | 1,434 | 63.2 | 8.66 |
| W ashington | 25 | 2,594 | 60.0 | 12.74 | 2,211 | 60.0 | 13.73 |
| West Virginia | 20 | -907 | 62.2 | 11.97 | 882 | 62.2 | 12.18 |
| Wisconsin.. | 19 | 1,618 | 60.0 | 11.11 | 1,990 | 60.0 | 11. 49 |
| Total. | 361 | 29,365 | 61.5 | 10.03 | 28,835 | 61.1 | 10.40 |

MACHINE FEEDERS, PLANING MILL.


## SAWYERS, BAND.

| Alabama. | 6 | 7 | 65.1 | \$35. 27 | 7 | 65.1 | \$37.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arkansas | 17 | 33 | 60.9 | 39.44 | 33 | 60.1 | 39.79 |
| California. | 11 | 26 | 60.0 | 31.87 | 26 | 60.0 | 32.21 |
| Florida. | 6 | 12 | 63.0 | 38. 50 | 12 | 63.0 | 39.00 |
| Georgia. | 11 | 16 | 62.9 | 35.83 | 17 | 63.1 | 36.22 |
| Louisiana. . . . . . . . . . . . . . . . . . | 17 | 35 | 60.8 | 40.34 | 36 | 60.6 | 41.67 |
| Maine. | 13 | 27 | 61.5 | 31.50 | 28 | 61.2 | 31.64 |
| Michigan. | 28 | 62 | 60.0 | 30.29 | 59 | 60.0 | 30.59 |
| Minnesota | 7 | 45 | 60.0 | 43.60 | 45 | 60.0 | 43.87 |
| Mississippi. | 9 | 18 | 64.0 | 36.50 | 18 | 60.0 | 35.67 |
| North Carolina. | 17 | 27 | 62.9 | 30.49 | 27 | 62.9 | 30.66 |
| Oregon........ | 5 | 8 | 59.9 | 36. 75 | 8 | 60.0 | 38.44 |
| Pennsylvania. | 16 | 23 | 62.1 | 23.78 | 23 | 61.6 | 24.18 |
| South Carolina. | 8 | 17 | 61.9 | 36.18 | 17 | 61.9 | 36.35 |
| Tennessee. | 29 | 35 | 60.4 | 25.74 | 35 | 60.6 | 25.95 |
| Texas | 10 | 21 | 60.1 | 36.49 | 20 | 59.9 | 36.89 |
| Virginia... | 22 | 35 | 63.0 | 29.49 | 35 | 63.0 | 29.45 |
| W ashington. | 17 | 33 | 60.0 | 33.81 | 30 | 60.0 | 34.90 |
| West Virginia. | 20 | 31 | 62.1 | 27.77 | 31 | 62.2 | 27.56 |
| Wisconsin.... | 19 | 50 | 60.0 | 31.03 | 47 | 60.0 | 33.53 |
| Total. | 288 | 561 | 61.1 | 33.47 | 554 | 60.9 | 33.90 |

Table VII.-AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913-Continued.

SAWYERS, CIRCULAR.

| State. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { establish- } \\ & \text { ments. } \end{aligned}$ | 1912 |  |  | 1913 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of employees. | Average full-time hours per week. | Average full-time weekly earnings. | Number of employees. | Averaga full-time hours per week. | Average full-time weekly earnings. |
| Alabama. | 10 | 14 | 65.1 | \$32.57 | 14 | 65.1 | \$31. 66 |
| Arkansas. | 2 | 2 | 60.0 | 32.60 | 2 | 59.3 | 32.65 |
| California. | 3 | 3 | 62.0 | 33.42 | 3 | 62.0 | 32.42 |
| Florida. | 6 | 9 | 64.0 | 34.22 | 9 | 64.0 | 34.05 |
| Georgia. | 11 | 13 | 66.0 | 26. 77 | 14 | 66.3 | 29.84 |
| Louisiana. | 9 | 9 | 61.2 | 36.17 | 10 | 61.0 | 36.33 |
| Maine. . . | 6 | 6 | 64.3 | 27.50 | 6 | 64.3 | 27.31 |
| Michigan. | 6 | 17 | 60.0 | 31.24 | 16 | 60.0 | 32.19 |
| Mississippi | 7 | 10 | 64.8 | 33.60 | 10 | 60.0 | 33.30 |
| North Carolina | 7 | 8 | 60.0 | 19.50 | 8 | 60.0 | 21.30 |
| Oregon... | 2 | 2 | 59.8 | 48.00 | 3 | 60.0 | 44.00 |
| Pennsylvania. | 4 | 5 | 60.6 | 20.70 | 5 | 60.6 | 21.00 |
| Texas....- | 4 | 5 | 60.0 | 33.00 | 5 | 60.0 | 33.60 |
| Washington | 11 | 12 | 60.0 | 34.50 | 13 | 60.0 | 35.77 |
| W isconsin.. | 2 | 2 | 60.0 | 32. 25 | 2 | 60.0 | 32.25 |
| Other States. | 2 | 2 | 61.5 | 29.25 | 3 | 61.0 | 30.00 |
| Total. | 92 | 119 | 62.4 | 31.03 | 123 | 62.0 | 31.71 |

SAWYERS, GANG.


## SAWYERS, RESAW.

| Arkansas. | 3 | 4 | 61.5 | \$14.70 | 4 | 60.0 | \$14.70 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| California. | 7 | 13 | 60.0 | 14.31 | 14 | 60.0 | 14.89 |
| Flórida. | 2 | 2 | 60.0 | 12.00 | 2 | 60.0 | 13.50 |
| Georgia. | 2 | 2 | 62.8 | 13. 52 | 2 | 62.8 | 13.50 |
| Louisiana | 4 | 4 | 63.0 | 13.87 | 4 | 63.0 | 13.12 |
| Maine. | 5 | 6 | 60.8 | 14.25 | 7 | 60.6 | 14.53 |
| Michigan | 20 | 30 | 60.0 | 14.75 | 25 | 60.0 | 15.26 |
| Minnesota | 5 | 13 | 60.0 | 16.50 | 13 | 60.0 | 16.96 |
| Mississippi. | 2 | 2 | 66.0 | 12.75 | 2 | 60.0 | 13.05 |
| North Carolina | 11 | 11 | 62.6 | 11.15 | 11 | 62.6 | 11.73 |
| Oregon. | 6 | 10 | 60.0 | 19.50 | 11 | 60.0 | 18.82 |
| Pennsylvania. | 5 | 9 | 63.0 | 14.83 | 8 | 62.8 | 14.44 |
| South Carolina | 6 | 7 | 61.1 | 12.43 | 7 | 61.1 | 13.07 |
| Tennessee. | 5 | 6 | 60.0 | 13.25 | 6 | 60.0 | 14.00 |
| Virginia..... | 11 | 12 | 62.6 | 11.60 | 14 | 62.6 | 12.06 |

Table VII.-AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913- oncluded.

SAWYERS, RESAW-Concluded.

| State. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { establish- } \\ \text { ments. } \end{gathered}$ | 1912 |  |  | 1913 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of employees. | Average full-time hours per week. | Average full-time weekly earnings. | Number of employees. | A verage full-time hours per week. | Average full-time weekly earnings. |
| Washington. | 23 | 32 | 00.0 | \$19.43 | 31 | 60.0 | \$20.32 |
| West Virginia | 7 | 7 | 61.7 | 17. 57 | 7 | 61.6 | 16.50 |
| Wisconsin.... | 13 | 26 | 60.0 | 15. 39 | 23 | 60.0 | 15.99 |
| Other States. | 1 | 1 | 60.0 | 15.00 | 1 | 60.0 | 15.00 |
| Total.. | 138 | 197 | 60.7 | 15.41 | 192 | 60.7 | 15.77 |

SETTEXS.

| Alabama. | 14 | 21 | 65.1 | \$12.04 | 21 | 65.1 | \$12.64 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arkansas. | 19 | 35 | 60.9 | 15.19 | 35 | 60.0 | 15.12 |
| California. | 14 | 29 | 60.2 | 16.02 | 29 | 60.2 | 16.39 |
| Florida. | 12 | 21 | 63.4 | 13.70 | 21 | 63.4 | 13.52 |
| Georgia. | 22 | 31 | 64.5 | 12.52 | 31 | 64.5 | 12.59 |
| Louisiana. | 23 | 55 | 61.1 | 15.89 | 54 | 61.0 | 15.66 |
| Maine . | 19 | 42 | 61.6 | 16.88 | 44 | 61.4 | 17.17 |
| Michigan. | 30 | 81 | 60.0 | 16.12 | 77 | 60.0 | 16.69 |
| Minnesota | 7 | 78 | 60.0 | 19.70 | 88 | 60.0 | 20.75 |
| Mississippi | 16 | 33 | 64.4 | 13.49 | 32 | 60.0 | 13.31 |
| North Carolina . | 23 | 42 | 62.1 | 10.94 | 41 | 62.0 | 11.49 |
| Oregon...... | 6 | 10 | 59.9 | 17.10 | 12 | 60.0 | 17.88 |
| Pennsylvania. | 19 | 32 | 61.6 | 14.97 | 32 | 61.2 | 15.81 |
| South Carolina. | 9 | 19 | 62.2 | 11.92 | 19 | 62.2 | 12.39 |
| Tennessee. | 29 | 36 | 60.6 | 12.44 | 38 | 60.8 | 12. 69 |
| Texas | 12 | 32 | 60.1 | 15.06 | 28 | 59.9 | 15.34 |
| Virginia. | 23 | 37 | 62.9 | 12.35 | 37 | 62.9 | 12.76 |
| Washington | 25 | 51 | 60.0 | 16.85 | 48 | 60.0 | 17.41 |
| West Virginia | 20 | 35 | 62.0 | 15.92 | 35 | 62.1 | 16.19 |
| Wisconsin | 19 | 60 | 60.0 | 16.59 | 60 | 60.0 | 16.48 |
| Total. | 361 | 780 | 61.3 | 15.29 | 782 | 61.0 | 15.71 |

TRIMIMER ORERATORS.


## MILLWORK (SASH, DOORS, BLINDS, FRAMES, FIXTURES, AND TRIM).

## SUMMARY.

This report, based on information obtained from representative establishments, shows the full-time weekly earnings, the full-time hours of labor per week, and the rates of wages per hour in the principal occupations of the millwork industry of the United States. Figures relating to full-time hours of labor per week, and rates of wages per hour are presented for the years 1907 to 1913, inclusive, and for full-time weekly earnings for the years 1910 to 1913, inclusive.

Earlier reports ${ }^{1}$ of this Bureau have presented wages and hours of labor in the industry from 1890 to 1912.

Full-time hours of labor per week in this industry in 1913 were 0.4 per cent lower than in 1912 and 0.9 per cent lower than in each of the years 1910 and 1911. Rates of wages per hour in 1913 were 2.4 per cent higher than in 1912, 4.9 per cent higher than in 1911, and 6.2 per cent higher than in 1910, while the full-time weekly earnings were 2 per cent higher in 1913 than in 1912, 4 per cent higher than in 1911, and 5.4 per cent higher than in 1910. The slight reduction in full-time hours of labor makes the changes in rates of wages per hour somewhat different from the changes in full-time weekly earnings.

The most significant facts concerning the several occupations corered by this report are summarized in the table below. The data for the years 1907 to 1911 were secured in 1911. Owing to the difficulty of finding establishments having records extending back for a period of years and also owing to the amount of work involved, data for 1907 to 1909 were secured from a smaller number of establishments, some of them perhaps less representative than those that have furnished data for the later years.

According to the plan of the table, direct comparisons, which are indicated by the grouping of the years within braces, can be made properly only between two or more successive years where the data are for identical establishments.

[^2]AVERAGE AND CLASSIFLED FULL-TIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN THE MILL-WORK INDUSTRY, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]


- Not computed.

2 Including 0.1 per cent working over 60 hours.
3 Including 0.9 per cent. working over 60 hours.
4 Including 0.2 per cent working over 60 hours.
The data are for one pay-roll period in each year, the period ending nearest May 15 being selected, except in a very few establishments in which conditions in May were abnormal.

$$
45410^{\circ}-\text { Bull. } 153-14-6
$$

The figures for the years from 1907 to the first presentation for 1912 are reproduced from Bulletin No. 129, except the average fulltime weekly earnings for 1910 to 1912, which figures have been computed for this Bulletin from data gathered for those years., The average full-time weekly earnings have not been computed for the period 1907 to 1910 , owing to the lack of funds. It will be observed that the average full-time weekly earnings generally are not exactly the same as the product of the average rate of wages per hour and the average full-time hours per week. This difference is explained and illustrated on page 16.

In 1913 the average full-time weekly earnings in the three occupations were: Laborers, $\$ 10.47$; bench hands, $\$ 16.90$; and machinehands, $\$ 15.57$. The full-time hours of labor per week in 1913 varied in the several establishments from less than 48 to 60 , the average being for laborers, 56.7 ; for bench hands, 54.5 ; and for machine hands, 55.5 hours per week.

All of the employees for whom figures are given in this report are males.

Wages and hours of labor vary materially in different establishments, hence the inclusion or exclusion of an establishment in a group, if it differs greatly from the average, may raise or lower the average for the group. Thus, referring to the table on page 81, it is seen that the average full-time weekly earnings of bench hands in 267 establishments decreased from $\$ 16.76$ in 1911 to $\$ 16.74$ in 1912. In 343 establishments there was an increase from $\$ 16.68$ in 1912 to $\$ 16.90$ in 1913. The inclusion of 76 more establishments, therefore, changed the average weekly earnings for 1912 from $\$ 16.74$ to $\$ 16.68$. Consequently it would not be a correct comparison to state that the increase was only from $\$ 16.76$ in 1911 to $\$ 16.90$ in 1913. The movement from one year to another is indicated with a greater degree of certainty by the figures for identical establishments. The difference between $\$ 16.76$ and $\$ 16.74$ represents the change between 1911 and 1912 and the difference between $\$ 16.68$ and $\$ 16.90$ represents the increase from 1912 to 1913, as nearly as can be determined from the data available. In the table the comparable data for identical establishments are bracketed together.

Owing to the change in the number of establishments from year to year, it is difficult to make a comparison of the actual data over a period of several years, or to get an exact measure of the changes. To aid in the making of such a comparison, relative (or index) numbers have been computed from the averages in the preceding table, for fulltime hours per week, rates of wages per hour, and full-time weekly earnings for each occupation for the years 1910 to 1913, inclusive. These relative or index numbers are simply percentages in which the figures for 1913 are taken as the base, or 100 per cent. The relative for
each year is the per cent that the average in that year is of the average for 1913, as determined by the method explained on page 18. Thus in the table below the full-time weekly earnings of bench hands in 1910 were 97.5 per cent of the full-time weekly earnings in 1913.

It will be observed that the general tendency of each occupation is toward a reduction of working hours and an increase in rates of wages per hour and of earnings per full week. No data are available to show the amount of work afforded employees each year or the variation from year to year. The relative full-time hours per week indicate the change in the hours of labor of employees working full time, but do not reflect in any way the greater or less amount of full-time work afforded. This point is further discussed on page 15.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULLTIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS IN THE MILLWORK INDUSTRY, 1910 TO 1913.
$(1913=100.0$.

| Year. | Bench hands. |  |  | Laborers. |  |  | Machine hands. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative full-time hours per week. | Relative rate of wages per hour. | Relative full-time weekly earnings. | Relative full-time hours per week. | Relative rate of wages per hour. | Relative full-time weekly earnings. | Relative full-time hours per week. | Relative rate of wages per hour. | Relative full-time weekly earnings. |
| 1910. | 100.6 | 97.8 | 97.5 | 100.9 | 92.9 | 93.6 | 101.8 | 91.1 | 92.8 |
| 1911 | 100.7 | 98.2 | 98.8 | 100.9 | 93.3 | 94.2 | 101.4 | 93.0 | 94.5 |
| 1912. | 100.2 | 98.6 | 98.7 | 100.5 | 96.5 | 96.9 | 100.5 | 95.6 | 96.2 |
| 1913. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

A like table of relative numbers is next shown for the industry as a whole, as determined by a combination of the data for the several occupations. Data were obtained for the principal occupations of the industry but not for all occupations. The method of computing this table is explained on page 19.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULLTIME WEEKLY EARNINGS.IN THE MILLWORK INDUSTRY, 1910 TO 1913.
(1913=100.0.)

| Year. | Relative full-time hours per week. | Relative rates of wages per hour. | Relative full-time weekly earnings. |
| :---: | :---: | :---: | :---: |
| 1910.. | 100.9 | 94.2 | 94.9 |
| 1911 | 100.9 | 95.3 | 96.2 |
| 1912. | 100.4 | 97.7 | 98.0 |
| 1913.... | 100.0 | 100.0 | 100.0 |

From the table it is seen that the relative or index number for full-time hours per week decreased from 100.9 in 1910 to 100 in 1913, or, in other words, full-time hours per week in 1910 were 100.9 per cent of what they were in 1913. The relative or index
number for rates of wages per hour increased from 94.2 in 1910 to 100 in 1913. Owing to the reduction of hours, the increase in fulltime weekly earnings was slightly less than the increase in wages per hour, the increase being from an index of 94.9 in 1910 to 100 in 1913.

In examining the relative or index numbers for the several occupations, and for the industry as a whole in the two tables above, it will be observed that they have been computed with 1913 taken as the base, or 100 per cent. In the preceding reports of the Bureau relating to this industry, relative numbers for rates of wages per hour and for hours of labor per week were presented back to 1890 and the base, or 100 per cent, was not the average rate of wages per hour or the average full-time hours per week in any one year, but the average rate of wages per hour and the average full-time hours per week for the 10 -year period 1890-1899. The table of such relative numbers for the years 1890 to 1912 appears on page 156.

The reasons for changing the base of the relative numbers to the most recent year are stated on pages 11 and 16. The relative numbers for the occupations shown in the new series here presented differ from those of the old series shown in preceding reports because of the change of the base, but the ratio existing between any two years is the same in both series. The relative numbers for the industry as a whole have likewise been recomputed with 1913 as the base.

In addition to making a change of the base year, a change has also been made in the method of computing the industry relatives, and because of this change the relatives here presented not only differ from the relatives computed by the old method, but shows a slightly different ratio of change from year to year. In Bulletin No. 129, the relative numbers for the industry were averages of the relative numbers of the several occupations. For each year, for example, the relative rate of wages per hour of each occupation was multiplied (weighted) by the number of employees in that occupation, the products thus computed for the several occcupations were added, and the sum of the products for all occupations divided by the total employees in all occupations.

In computing the relative numbers from 1910 to 1913 for the industry as a whole as presented in this Bulletin, a combination was made, not of the relative numbers for the several occupations, but of the actual hours and wages of the several occupations. For each year the average hours and wages were computed for all employees in all ocupations, and the average for each preceding year was compared with the average for 1913 to determine the index. It was deemed necessary to make this change in method because a change
in the industry is not always reflected by the relative computed by averaging the occupation relatives. This reason is more fully explained on page 19.

In addition to the relative numbers shown for the several occupations and for the industry, three tables are here presented showing the per cent of increase or decrease in the full-time hours of labor per week, rates of wages per hour, and full-time weekly earnings in 1913 as compared with each preceding year back to 1910. The figures of these tables are computed from the relative numbers shown on page 83, and simply reverse the method of comparison. Each of these tables also shows the per cent of increase or decrease in 1912 as compared with 1911, and in 1911 as compared with 1910. Referring to the first line of the first table, it is seen that the fulltime hours of bench hands in 1913 were 0.2 per cent lower than in 1912, 0.7 per cent lower than in 1911, and 0.6 per cent lower than in 1910. Further, it is seen that the full-time hours of labor in this occupation were 0.5 per cent lower in 1912 than in 1911, and 0.1 per cent higher in 1911 than in 1910. The figures of the several tables are read in like manner.

PER CENT OF INCREASE OR DECREASE IN FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL TIME WEEKLY EARNINGS, 1913 COMPARED WITH EACH OF THE THREE YEARS PRECEDING, 1912 COMPARED WITH 1911, AND 1911 COMPARED WITH 1910.

FULL-TIME HOURS PER WEEK.

| Occupation. | Per cent higher ( + ) or lower ( - ) in 1913 than in- |  |  | Por cent higher ( + ) or lower ( - ) in- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1910 | 1911 | 1912 | $\begin{aligned} & 1912 \text { than } \\ & \text { in } 1911 \end{aligned}$ | $\begin{aligned} & 1911 \text { than } \\ & \text { in } 1910 \end{aligned}$ |
| Bench hands. . | -0.6 | -0.7 | -0.2 | -0.5 | ${ }^{+0.1}$ |
| Laborers......̈. | -1.9 | -1.9 | 二.5 | 二. 4 |  |
| The industry. | -. 9 | $-.9$ | -. 4 | -. 5 | ( ${ }^{1}$ |

RATES OF WAGES PER HOUR.

| Bench hands.Laborers....-Machine hand | +2.2 | +1.8 | $+1$ | +0.4 | $\begin{aligned} & +0.4 \\ & +.4 \\ & +2.1 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | +7.6 | +7.2 | +3.6 | +3.4 |  |
|  | +9.8 | +7.5 | +4.6 | +2.8 |  |
| The industry | +6.2 | +4.9 | +2.4 | +2.5 | +1.2 |

FULLTIME WREKLY EARNINGS.

${ }^{1}$ No change.

## EXPLANATION OF SCOPE AND METHOD.

This report on millwork includes establishments engaged in the manufacture of sash, doors, blinds, frames, fixtures, and building trim. The information was secured from pay rolls of the various establishments by the agents of the Bureau. The number of establishments from which data were secured has varied considerably during the period included in this report, as follows:

```
1907 to 1910. . . . . . . . . . . . . . . . . . . . . . . . . . 62 identical establishments.
1910 and 1911.................. . . . . . . . . . . . . . . }232\mathrm{ identical establishments.
1911 and 1912................................ . . . . . }269\mathrm{ identical establishments.
1912 and 1913.. . . . . . . . . . . . . . . . . . . . . . . . . }344\mathrm{ identical establishments.
```

The data for 1907 to 1911 were secured in 1911 and the number of establishments included in the full period from 1907 to 1910, inclusive, was limited owing to the difficulty of finding establishments that had preserved records for those years, and adso to the large amount of work involved. The establishments vary from year to year, as establishments go out of business or cease to be representative, and new establishments must be substituted in the wage study. Occasionally occupations are dispensed with in a mill, or new occupations are introduced, and sometimes data are not available for all occupations desired from a mill.

Data for a group of establishments in any year will not be precisely the same as for a different group of establishments in the same year, even though most of the establishments may be identical in both groups. In using the actual figures in this report, comparison from year to year should be made only between data coming from identical establishments. In the tables the data from identical establishments are bracketed together. Data from an establishment are not included in the report unless the information covers at least two years.

In selecting establishments from which to secure data, the Bureau undertook to represent all States in which millwork is of material importance, the measure of importance being the number of employees as reported by the United States Census of Manufactures. The table which follows shows by States the number of employees in this industry as reported by the United States Census Office for 1910; the total number on the pay roll in the establishments from which the Bureau secured data for 1913; and the number in the selected occupations for whom data for 1913 are shown.

TOTAL NUMBER OF EMPLOYEES IN THE MILLWORK INDUSTRY AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1913.

| State | Number of employees reported by United States census of 1910.1 | Establishments for which data are shown by the Bureau of Labor Statistics for 1913. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number of establishments. | Number of employees- |  |
|  |  |  | On pay roll. | For whom data are shown. |
| New York. | 15,126 | 62 | 4,167 | 2,913 |
| Pennsylvania. | 9,267 | 86 | 3,112 | 1,977 |
| Illinois.. | 8,710 | 36 | 2,443 | 1,718 |
| Ohio... | 5,846 | 38 | 2,005 | 1,388 |
| Michigan. | 6,793 | 33 | 1,803 | 1,130 |
| California. | 6,341 | 19 | 1,996 | 1,242 |
| W isconsin. | 6,673 | 15 | 4,173 | 2,702 |
| Georgia. | 3,410 | 12 | 1,110 | 666 |
| Massachusetts. | 3,296 | 21 | 1,015 | 724 |
| Minnesota. | 3,154 | 9 | 981 | 684 |
| Iowa. | 3,440 | 13 | 1,811 | 1,107 |
| Other States ${ }^{2}$. | 40,336 |  |  |  |
| Total. | 112,392 | 344 | 24,616 | 16,251 |

${ }^{1}$ The designation used by the United States census is "Lumber, planing mill products," inclading sash, doors, and blinds.
${ }_{2}$ Including States having less than 3,000 each.
According to the census of 1910 , more than 64 per cent of the total number of employees in the industry are found in the States in which the establishments furnishing information to the Bureau of Labor Statistics are located. The number of employees in the establishments from which the Bureau secured 1913 data was equal to 21.9 per cent of the total in the industry in 1910, and the number for which the Bureau presents detailed information for 1913 was equal to 14.5 per cent of the total in the industry in 1910. The pay rolls copied were for one week, half month, or a month, according to the custom of the establishment, and for the pay-roll period nearest May 15, except in a few establishments where abnormal conditions made it necessary to take a pay roll for some other time of the year.

The full-time hours of labor per week shown in the tables of the report are the regular hours of work of the occupations under normal conditions in the establishments. The working time is the hours on duty, including intervals of waiting for work. The full-time hours per week and the relatives 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 as presented in this Bulletin.

The rates of wages per hour appearing in the tables are the wages of time workers; no pieceworkers were found in the establishments
visited. The time rates by the day or week have been reduced to rates per hour in order to place all rates on a uniform basis.

The full-time weekly earnings are the earnings per week of employees working full time, or they are the earnings of broken time converted into assumed earnings for a full week. In considering changes in full-time earnings per week notice should also be taken of full-time hours of labor per week.

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.

In studying the tables, it will be observed that the average fulltime weekly earnings are not exactly the same as the result that would be obtained by multiplying the average rate per hour by the average hours per week, owing to the change in the relative weight of the items. This point is illustrated on page 16.

The change in the basis of comparison in computing the relative numbers from the average of 1890-1899 to 1913 is referred to on page 11. A more extended explanation is also given on pages 16 to 18. The relative rates of wages per hour and the relative full-time hours per week from 1890 to 1912 on the basis of 1890-1899 equals 100, published in Bulletin No. 129, are reproduced in this Bulletin on page 156 .

The method used in computing the relative or index numbers for the several occupations can best be explained by an illustration. Such an illustration is given on page 18.

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 years. Thus, as shown in the table on page 83, the relative full-time weekly earnings in the millwork industry increased from 94.9 in 1910 to 98 in 1912, an increase of 3.1 in the relative for 1912 over the relative for 1910, which number (3.1) is 3.3 per cent of 94.9 , thus making the increase in full-time earnings per week of 3.3 per cent in 1912 over 1910.

The base for the computation of the relative numbers of the several occupations, as stated above, has been changed from the average of 1890-1899 to 1913. The same change of base has been made in computing the relative numbers for the industry as a whole. In addition to the change of base in computing the relative numbers for the industry, a change has been made in the method of computation. The relative numbers for the industry here presented, covering 1910 to 1913, are computed directly from the average hours of labor, rates of wages per hour, and weekly earnings of all employees in all occupations combined. In other words, the relatives for the industry as a whole have been computed for this report in the same manner as the
relatives for each occupation. This change of method is explained and illustrated on pages 18 to 23 .

In addition to the text tables presented in the summary, seven general tables are given, namely:

Table I.-Average and classified rates of wages per hour in the United States, by years, 1907 to 1913.

Table II.-Average and classified rates of wages per hour in each year, by States, 1912 and 1913.

Table III.-Average and classified rates of wages per hour in each State, by years, 1912 and 1913.

Table IV.-Average and classified full-time hours of work per week in the United States, by years, 1907 to 1913.

Table V.-Average and classified full-time hours of work per week in each year, by States, 1912 and 1913.

Table VI.-A verage and classified full-time hours of work per week in each State, by years, 1912 and 1913.

Table VII.-Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913.

In Tables I and IV, in addition to actual data, percentages computed therefrom are given. The data from these two tables are summarized in the text table on page 81.

Tables III and VI repeat the data for the several States given in Tables II and V, rearranged for the convenience of the reader.

## DESCRIPTION OF PRINCIPAL PRODUCTIVE OCCUPATIONS.

This industry as used in this report includes establishments engaged in the manufacture of sash, doors, blinds, window frames, doorframes, moldings, stair material, newels, mantels, store fixtures, and all kinds of builders' trim or finish.

A large number of the establishments are comparatively small and confine their operations wholly to custom work. Many of them are operated in connection with a retail lumber business. Some are run by contractors who carry on large building operations, and manufacture trim mostly for their own use. Some custom mills in the larger cities are quite extensive and employ a large number of workmen.

A few establishments manufacture for the general market. Such establishments, as a rule, employ a larger number of workmen than the custom mills or factories, have their work better systematized, and pay somewhat lower wages. The latter fact may be accounted for by the greater division of labor whereby an employee, while being expert in the operation of a particular machine or in perform-
ing certain work, is not a skilled workman generally, and so can not command as high wages as an all-round skilled mechanic.

There is hardly such a thing as a typical factory in this industry in the sense that there is a typical sawmill or cotton factory. The work may be done in a part of a building, the power being rented with the room; or the factory may consist of one or more large buildings with so much machinery that a considerable force of machinists will be regularly employed to keep the machines in order. Neither is there any regular or established ratio between the number of employees in different, occupations. One establishment may have an approximately equal number of benchmen, machine woodworkers, and laborers; another will have three or four times as many benchmen as machine men; and in another the proportion will be reversed, depending on the particular class of work the factory turns out. The arrangement of the factory and machines will depend upon the class of work done, the space at the disposal of the management, and the latter's ideas as to convenience and economy. The differences that are found are between establishments rather than between different sections of the country or different localities.

The work in these factories resolves itself into three general classes, bench work, common labor, and machine work, and the occupational terms used in this report are bench hands, laborers, and machine hands. The work is practically all done by males. A few females are employed in a limited number of establishments, but the extent of their work is so insignificant that data relating to females are omitted from this report. A brief description of the terms used follows.

## BENCH HANDS.

The men engaged in this occupation are known also as benchmen, bench carpenters, shop carpenters, inside carpenters, and cabinetmakers. Most of the work is done at a bench, as distinguished from building or outside carpentering work. These employees make doors, sash, blinds, window frames, cabinets, etc., fitting and putting together the parts that have previously been prepared by machine hands. They also shape and form such articles as can not be made by machines. In some shops work is done by hand that in other establishments is done by machinery. In some establishments men are employed who are able to work interchangeably at the bench and at the machines. Carpenters or bench hands differ greatly in ability, some being able to do all kinds of difficult work, while others can do only the simpler kinds of work or, perhaps, only one or, at most, a few kinds. As a rule, the more skilled mechanics who can do all kinds of work are found in the smaller establishments.

## LABORERS.

The work of those engaged in this occupation about the factory is of a miscellaneous character, such as handling lumber, material, and the finished product, and assisting other workmen, particularly machine hands. They bring material to the machines and take it away after it has been worked, assemble parts that are to be put together, pack goods in storehouse or load on wagons or in cars for shipment, and do any other common or unskilled work about the factory or yard. The number of laborers as compared with the other employees is usually larger in establishments employing a large number of machine hands.

## MACHINE HANDS.

By the use of various machines, employees in this occupation plane the lumber, saw it into lengths, widths, and shapes, mortise and tenon the parts of doors, sash, blinds, etc., make moldings, turn spindles, posts, and balusters, sandpaper or smooth material or finished product, etc. A first-class machine hand is able to operate any of the machines usually found in a factory, and is supposed also to be able to keep his machines in order. In the smaller establishments, and in the shops doing a high grade of work, the machine hands often, if not generally, actually use different machines, as the character of their work may require, one man doing all the machine work on a given piece of work. In larger establishments, when there is a greater division of labor, a man will be employed continuously on one machine and may know nothing about the operation of any other. It has been found impracticable to separate these two classes of machine hands.

Table I.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
NUMBER.


PER CENT.

| Bench hands: | 1007 | 1,076 | 55.6 | \$0. 2976 |  |  |  | 1.3 | 5.9 | 1.8 | 18.2 | 31.2 | 27.3 | 3.9 | 10.0 | 0.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 62 establish- | 1908 | ${ }^{1} 945$ | 55.6 | . 2945 |  |  |  | 1.1 | 5.7 | 2.6 | 19.6 | 29.3 | 27.7 | 4.9 | 9.1 |  |
| ments. | 1909 | 1,041 | 55.7 | . 2944 |  |  |  | . 7 | 4.8 | 3.0 | 20.4 | 30.2 | 27.5 | 6.1 | 7.5 |  |
|  | 1910 | 1,083 | 55.5 | . 3047 |  |  |  | . 5 | 3.9 | 3.2 | 17.4 | 26.9 | 33.9 | 6.8 | 7.3 | 2 |
| 226 establis h- | J1910 | 3,695 | 55.1 | . 3072 |  |  |  | . 4 | 3.2 | 1.9 | 19.4 | 24.6 | 39.0 | 6.3 | 4.4 | 8 |
| ments. | \{1911 | 3,553 | 55.2 | . 3085 |  |  |  | .3 | 3.2 | 1.8 | 18.4 | 23.7 | 41.1 | 7.4 | 3.3 | . 7 |
| 267 establ is h - | 1911 | 4,131 | 55.1 | . 3096 |  |  |  | . 4 | 3.6 | 1.8 | 17.7 | 22.4 | 42.9 | 7.2 | 3.5 | ${ }^{6}$ |
| ments. | $\{1912$ | 4,148 | 54.8 | .3107 |  | 0.1 | (1) | . 6 | 3.8 | 2.2 | 17.1 | 20.9 | 43.6 | 7.3 | 4.2 | ${ }^{(1)}$ |
| 343 establ is h | \{1912 | 4,947 | 54.6 | . 3108 |  |  |  | . 6 | 3.6 | 1.9 | 16.7 | 20.2 | 44.9 | 8.0 | 3.9 | (1) |
| ments. <br> Laborers: | $\{1913$ | 5,033 | 54.5 | . 3153 |  | $\cdots$ | (1) | . 3 | 2.8 | 1.9 | 17.3 | 19.8 | 37.3 | 15.5 | 4.8 | . 1 |
|  | 1907 | 1,578 | 58.5 | . 1555 |  | 10.0 | 19.2 | 26.4 | 31.4 | 4.2 | 6.3 | 1.3 | 1.3 |  |  |  |
| 60 esta blis h - | 1908 | 1,300 | 58.2 | . 1550 |  | 13.3 |  |  | 26.3 | 5.4 | 6.5 | 2.2 | 1.9 |  |  |  |
| ments. | 1909 | 1, 451 | 58.0 | . 1589 |  | 11.2 | 20.2 | 20.4 | 29.4 | 7.6 | 6.5 | 2.0 | 2.7 |  |  |  |

1 Less than one-tenth of 1 per cent.

Table 1.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913-Concluded.

PER CENT-Concluded.

| Occupation, and number of establishments. | Year. | Number of em. ployees. | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{gathered}$ | Aver-agerate ofwagesperhour. | Employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 9 and un- der 10 cts. | $\left\|\begin{array}{c} 10 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 12 \\ \text { cts. } \end{array}\right\|$ | $\left\|\begin{array}{c} 12 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 14 \\ \text { cts. } \end{array}\right\|$ | $\begin{array}{\|l\|} 14 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 16 \\ \text { cts. } \end{array}$ | $\begin{gathered} 16 \\ \text { and } \\ \text { un- } \\ \text { der } \\ \text { 18 } \\ \text { cts. } \end{gathered}$ | $\begin{array}{\|c\|} \hline 18 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 20 \\ \text { cts. } \end{array}$ | 20 and un- der 25 cts. | 25 <br> and <br> un- <br> der <br> 30 <br> ets. | $\begin{gathered} 30 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 40 \\ \text { cts. } \end{gathered}$ | $\begin{array}{\|l\|l} 40 \\ \text { and } \\ \text { un } \\ \text { der } \\ \vdots 0 \\ \text { cts. } \end{array}$ | $\left\|\begin{array}{c} 50 \\ \text { and } \\ \text { un- } \\ \text { der } \\ \text { er } \\ \text { cts. } \end{array}\right\|$ | - $\begin{aligned} & 60 \\ & \text { cts. } \\ & \text { and } \\ & \text { over. }\end{aligned}$ |
| Laborers-Concld. 223 establishments. | $\{1910$ | $\begin{aligned} & 4,885 \\ & 4,762 \end{aligned}$ |  | $\begin{array}{\|l\|l\|} \hline 170.1705 \\ \hline \end{array}$ | $\ldots$ | 5.810 .620 .2 |  |  | 32.8 | 9.7 | 14.8 | $\begin{aligned} & 4.7 \\ & 4.9 \end{aligned}$ | 1.3 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 253 establ is hments. | f1911 | 4,456 | $\begin{aligned} & 57.6 \\ & 57.4 \end{aligned}$ | $\begin{array}{r} .1722 \\ .1781 \end{array}$ | (1) | 4.8 | 9.6,20.2 |  | $\begin{aligned} & 33.5 \\ & 36.3 \end{aligned}$ | $11.0$ | 15.1 | 4.5 | 1.7 | 0.2 | . |  |
|  | 1912 | 4,121 |  |  |  |  |  | 17.0 |  |  |  |  |  |  |  |  |
| 319 establ is h- | 1912 | 4,641 | 57.056.7 | $\begin{array}{r} .1793 \\ .1859 \end{array}$ | 0.1 | $\left\|\begin{array}{l} 2.3 \\ 1.7 \end{array}\right\|$ | 5.5117 .23.810 .8 |  | 36.7 <br> 35.513 .8 <br> 14.0 |  | $\begin{aligned} & 17.0 \\ & 26.1 \end{aligned}$ | $\begin{aligned} & 5.7 \\ & 6.2 \end{aligned}$ | 1.6 | . 3 |  |  |
| ments. | 1913 | 5,144 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Machine hands: <br> 62 establishments. |  |  | 56.9 | . 2527 | .... |  | .4 6.7 |  | 15.6 | $\begin{gathered} 4.4 \\ 6.4 \end{gathered}$ | 25.3 |  | 14.8 | 2.5 | 4.7 | 0.5 |
|  | 1907 | 1,508 |  |  | .... |  |  |  | $\begin{aligned} & 25.1 \\ & 25.1 \\ & 24.5 \end{aligned}$ |  |  |  |  |  |  |  |
|  | $\left\{\begin{array}{l}1908 \\ 1909\end{array}\right.$ | 1, 1,488 | 57.2 | . 25214 |  |  | . 4 |  |  |  | $\begin{aligned} & 6.6 \\ & 7.8 \end{aligned}$ | $\begin{array}{r} 23.3 \\ 25.3 \end{array}$ |  | 3.9  <br> 4.8  <br>  3.0 |  | .0 <br> .8 <br> 8 |
|  | 1910 | 1,580 |  |  |  |  |  | 4.4 | 12.5 | 7.9 | 25.1 | 24.2 | 17.7 | 3.4 | 3.9 | .7 <br> .6 <br> 6 |
| 232 establis h- | 1910 | 5,438 | $\begin{aligned} & 57.0 \\ & 56.8 \end{aligned}$ | $.2551$ | .... | . 1 | .5 4.2 <br> .5 4.3 |  | $\begin{aligned} & 15.4 \\ & 14.1 \end{aligned}$ | $\begin{aligned} & 7.3 \\ & 5.7 \end{aligned}$ | $\begin{gathered} 23.2 \\ 23.6 \end{gathered}$ | $\begin{aligned} & 21.3 \\ & 21.2 \end{aligned}$ | $\begin{aligned} & 22.1 \\ & 23.7 \end{aligned}$ | $\begin{aligned} & 3.7 \\ & 4.5 \end{aligned}$ | 1.6 | . 5 |
| ments. | 1911 | 5,363 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 268 establ is h- | 1911 | 5,615 | $\begin{aligned} & 56.7 \\ & 56.2 \end{aligned}$ | $.2665$ | .... | . 1 | .5 4.3 <br> .4 3.9 |  | $\begin{aligned} & 14.4 \\ & 11.1 \end{aligned}$ | $\begin{aligned} & 5.6 \\ & 5.3 \end{aligned}$ | $\begin{aligned} & 22.8 \\ & 22.1 \end{aligned}$ | $\begin{aligned} & 20.5 \\ & 20.7 \end{aligned}$ | $\begin{array}{r} 24.8 \\ 28.5 \end{array}$ | $\begin{aligned} & 4.5 \\ & 5.1 \end{aligned}$ | 1.9 | . 6 |
| ments. | 1912 | 5,054 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 342 establ is h - | 1912 | 5,970 | $\begin{aligned} & 55.8 \\ & 55.5 \end{aligned}$ | . 2371 |  | . 1 | . 4 | 3.1 | $\begin{aligned} & 9.9 \\ & 7.0 \end{aligned}$ | 4.8 | 21.420.5 | 20.2 | $\begin{aligned} & 31.8 \\ & 30.9 \end{aligned}$ | 5.19.1 | 2.0 | . 6 |
| en | 1913 | 6,074 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Less than one-tenth of 1 per cent.

Table II.-AVERAGE AND GLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, PY STATES, 1912 AND 1913.

BENCH HANDS.


LABORERS.


Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Concluded.

MACHINE HANDS.


Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
BENCH HANDS.


LABORERS.


Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913-Concluded.

LABORERS-('oncluded.

| State, and number of establishments. | Year. | Number of em. ployees. | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{gathered}$ | Average rate of wages per hour. | Number of employees earning each ciassified rate of wages per hour. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 10 | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 |  |
|  |  |  |  |  | Un- | and | and | and | and | and | and | and | and | and | and | 60 |
|  |  |  |  |  | der | un- | un- | un- | un- | un- | un- | un- | un- | un- | un- | cts. |
|  |  |  |  |  |  | der | der | der | der | der | der | der | der | der | der | and |
|  |  |  |  |  | cts. | 12 | 14 | 16 | 18 | 20 | 25 | 30 | 40 | 50 | 60 | over. |
|  |  |  |  |  |  | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. | cts. |  |
| Pennsylvania: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 69 establish- | ¢1912 | 377 | 55.9 | \$0.1721 |  | 3 | 21 | 89 | 128 | 84 | 52 |  |  |  |  |  |
| ments. | \{1913 | 365 | 55.8 | . 1791 |  | 2 | 18 | 47 | 138 | 73 | 84 | 3 |  |  |  |  |
| W isconsin: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 establish- | 1912 | 1,166 | 60.0 | . 1621 |  |  | 65. | 345 | 621 | 95 | 40 |  |  |  |  |  |
| ments. | \{1913 | 1,278 | 59.9 | . 1676 |  | 4 | 21 | 234 | 768 | 174 | 75 | 2 |  |  |  |  |

MACHINE HANDS.

$45410^{\circ}-$ Bull. $153-14-7$

Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
NUMBER.


## PER CENT.

| Bench hands: |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ( 1907 | 1,076 | 55.6 | 7.6 | 5.7 | 7.2 |  | 26.3 | 2.0 | 10.7 | 40.5 |  |
|  | 1908 | , 945 | 55.6 | 7.6 | 6.3 | 6.2 |  | 28.1 |  | 10.1 | 41.6 |  |
| 62 establishments.... | 1909 | 1,041 | 55.7 | 6.6 | 6.0 | 7.2 |  | 28.6 |  | 10.0 | 41.6 |  |
|  | 1910 | 1,083 | 55.5 | 6.9 | 5.0 | 9.6 | 1.0 | 25.7 | 1.5 | 9.1 | 41.2 |  |
| 226 establishments... | \{ 1910 | 3,695 | 55.1 | 4.4 | 8.0 | 7.8 | 2.3 | 28.6 | 9.2 | 11.9 | 27.8 |  |
|  | $\{1911$ | 3,553 | 55.2 | 3.6 | 10.2 | 5.4 | 3.2 | 28.0 | 8.2 | 12.5 | 28.9 |  |
| 267 establishments. . . | $\{1911$ | 4, 131 | 55.1 | 3.0 | 10.6 | 8.0 | 2.7 | 29.4 | 6.9 | 11.4 | 27.0 | 0.9 |
|  | $\{1912$ | 4,148 | 54.8 | 3.7. | 11.1 | 6.1 | 10.1 | 23.5 | 8.0 | 9.2 | 28.3 |  |
| 343 establishments... | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 4,947 | 54.6 | 3.4 | 13.5 | 6.5 | 8.2 | 24.0 | 9.6 | 10.4 | 24.4 |  |
|  | $\{1913$ | [5,033 | 54.5 | 2.1 | 14.8 | 6.8 | 10.2 | 22.4 | 8.7 | 12.0 | 23.1 |  |
| Laborers: |  |  |  |  |  |  |  |  |  |  |  |  |
| 60 establishments. | $\left(\begin{array}{l}1907 \\ 1008\end{array}\right.$ | 1,578 | 58.5 | .2 | 3.4 | 3.0 | . 9 | 7.5 |  | 14.4 | 70.6 |  |
|  | 1908 | 1,300 | 58.2 | .2 | 5.0 | 2.5 | 1.0 | 9.4 |  | 15.8 | 66.1 |  |
|  | 1909 | 1, 451 | 58.0 | .3 | 5.2 3.7 | 2.1 | 1.2 | 10.1 |  | 16. 1 | 64.9 |  |
|  | ( 1910 | [1,522 | 58.3 | . 5 | 3.7 | 2.5 | 2.3 | 9.2 |  | 15.7 | 66.1 | , |

Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913-Concluded.

PER CENT-Concluded.

| Occupation, and number of establishments. | Year. | $\begin{array}{\|l\|} \text { Num- } \\ \text { ber of } \\ \text { em- } \\ \text { eloy- } \\ \text { ees. } \end{array}$ | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{gathered}$ | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Un- } \\ \text { der } \\ 48 \end{gathered}$ | 48 | $\left\|\begin{array}{c} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{array}\right\|$ | $\begin{array}{\|c\|} 51 \\ \text { and } \\ \text { under } \\ 54 \end{array}$ | 54 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { 54d } \\ \text { and } \\ \text { under } \\ 57 \end{gathered}\right.$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| Laborers-Concluded. 223 establishments. | ( 1910 | 4,885 | 57.6 |  | 4.2 | 4.8 | 1.3 |  | 7.7 |  | 55.5 |  |
|  | $\{1911$ | 4, 4, | 57.6 | . 2 | 4.8 | 3.4 | 1.2 | 12.5 | 8.1 | 13.3 | 56.4 |  |
| 253 establishments... | ) 1911 | 4,456 | 57.6 | . 1 | 4.4 | 1.8 | 2.0 | 14.4 | 8.3 | 12.5 | 56.4 | 0.1 |
|  | ( 1912 | 4, 121 | 57.4 | . 1 | 4.3 | 2.3 | 4.5 | 17.1 | 7.8 | 9.4 | 54.5 |  |
| 319 establishments... | 1912 | 4,641 | 57.0 |  | 5.7 | 2.7 | 5.2 | 18.1 | 8.1 | 12.7 | 47.4 |  |
|  | 1913 | 5,144 | 56.7 |  | 6.3 | 4.1 | 6.9 | 17.1 | 7.6 | 12.3 | 45.7 |  |
| Machine hands: |  |  |  |  |  |  |  |  |  |  |  |  |
| 62 establishments.... | ( 1907 | 1,508 | 56.9 | 3.4 | 8.2 | 2.5 |  | 19.7 | 1.0 | 10.4 | 54.8 |  |
|  |  | 1,372 1,488 | 57.1 57.2 | 2.9 2.7 | 7.9 7.6 | 2.4 |  | 19.9 |  | 9.9 10.5 | 57.0 |  |
|  | 1910 | I',580 | 57.3 | 2.7 | 7.0 | 2.1 | . 4 | 18.6 |  | 9.7 | 59.6 |  |
| 232 establishments... | \{ 1910 | 5,438 | 57.0 | 1.0 | 5.4 | 5.3 | 1.5 | 18.3 | 7.2 | 11.4 | 49.9 |  |
|  | 1911 | 5,363 | 56.8 | . 7 | 8.8 | 4.3 | 1.9 | 15.8 | 7.2 | 11.9 | 49.4 |  |
| 268 establishments... | ¢ 1911 | 5,615 | 56.7 | . 7 | 8.9 | 4.4 | 1.8 | 16.6 | 8.2 | 11.1 | 48.0 | . 2 |
|  | 1912 | 5,054 | 56.2 | 1.1 | 10.5 | 3.8 | 5.9 | 16.4 | 9.1 | 9.9 | 43.1 |  |
| 342 establishments... | f 1912 | 5,970 | 55.8 | . 8 | 13.4 | 5.3 | 4.8 | 17.2 | 9.1 | 12.3 | 37.2 |  |
|  |  | 6,074 | 55.5 | . 8 | 13.6 | 5.6 | 6.6 | 17.9 | 9.6 | 13.0 | 33.0 |  |

Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913.

BENCH HANDS.

| Year and State. | $\begin{array}{\|c} \text { Num- } \\ \text { ber } \\ \text { of } \\ \text { eftab- } \\ \text { lish- } \\ \text { ments. } \end{array}$ | $\begin{gathered} \text { Num- } \\ \text { ber } \\ \text { of em- } \\ \text { ploy- } \\ \text { ees. } \end{gathered}$ | Average fulltime hours week. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\left\lvert\, \begin{gathered} \text { Under } \\ 48 \end{gathered}\right.$ | 48 | $\begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\begin{gathered} \text { and } \\ \text { ander } \\ 54 \end{gathered}$ | 54 | $\begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | Over 60. |
| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| California. | 18 | 316 | 51.2 |  | 160 | 12 |  | 121 |  |  | 23 |  |
| Georgia. | 12 | 160 | 58.0 |  |  |  |  | 23 | 38 |  | 99 |  |
| mlinois. | 36 | 675 | 54.1 |  |  | 27 | 327 | 206 | 4 | 28 | 83 |  |
| Iowa...... | 13 | 248 | 57.9 |  |  |  |  | 75 |  | 71 | 102 |  |
| Massachusetts.. | 21 | 256 | 51.2 |  | 67 | 90 |  | 56 | 43 |  |  |  |
| Michigan........ | 33 | 353 | 55.1 |  |  | 71 |  | 83 | 91 | 31 | 77 |  |
| Minnesota. | 9 | 174 | 59.2 |  |  |  |  |  | 34 |  | 140 |  |
| New York..... | 62 | 1,092 | 52.6 | 168 | 328 | 41 |  | 94 | 54 | 251 | 156 |  |
| Ohio........... | 38 | 406 | 55.1 |  | 8 | 13 | 24 | 204 | 60 | 54 | 43 |  |
| Pennsylvania.. | 86 | 846 | 53.9 |  | 107 | 70 | 54 | 323 | 151 | 67 13 | 74 |  |
| W isconsin. | 15 | 421 | 60.0 |  |  |  |  |  |  | 13 | 408 |  |
| Total. | 343 | 4,947 | 54.6 | 168 | 670 | 324 | 405 | 1,185 | 475 | 515 | 1,205 |  |
| California. |  |  |  |  | 195 |  |  |  |  |  |  |  |
| Georgia......... | 12 | 178 | 57.7 |  |  |  |  | 31 | 45 |  | 102 |  |
| Illinois.. | 36 | 639 | 53.2 |  |  | 37 | 363 | 130 |  | 81 | 28 |  |
| Iowa............ | 13 | 283 | 57.9 |  |  |  |  | 80 |  | 86 | 117 |  |
| Massachusetts.. | 21 | 250 | 51.0 |  | 65 | 81 | 23 | 81 |  |  |  |  |
| Michigan....... | 33 | 351 | 54.8 |  |  | 80 |  | 73 | 107 | 34 | 57 |  |
| Minnesota.. |  | 176 | 59.8 |  |  |  |  |  |  | 33 | 143 |  |
| New York..... | 62 | 1,066 | 52.7 | 104 | 373 | 40 |  | 109 | 64 | 247 | 129 |  |
| Ohio........... | 38 86 | ${ }_{824}^{451}$ | 54.8 54.1 |  |  | 26 51 | 71 55 | 206 312 | $\begin{array}{r}57 \\ 149 \\ \hline\end{array}$ |  | 53 |  |
| Pennsylvania.. W isconsin..... | 86 15 | 824 465 | 54.1 <br> 59.8 |  | 110 | 51 | 55 | 312 | 149 16 | 71 13 | $\begin{array}{r}76 \\ 436 \\ \hline\end{array}$ |  |
| Total. | 343 | 5,033 | 54.5 | 104 | 743 | 344 | 512 | 1,127 | 438 | 603 | 1,162 |  |

LABORERS.


WAGES AND HOURS OF LABOR, 1907 TO 1913-MILLWORK. 101
Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Concluded.

MACHINE HANDS.

| Year and State. | $\left.\begin{array}{\|c\|} \text { Num- } \\ \text { ber } \\ \text { of } \\ \text { estab- } \\ \text { lish- } \\ \text { ments. } \end{array} \right\rvert\,$ | Num ber of em-ployees. | Average fulltime hours per week. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{array}{\|c\|} \hline \text { Under } \\ 48 \end{array}$ | 48 | $\begin{gathered} \text { Over } \\ \text { and } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \end{gathered}$ | $\begin{array}{\|c} 57 \\ \text { and } \\ \text { under } \\ 60 \end{array}$ | 60 | $\begin{aligned} & \text { Over } \\ & \text { 60 } \end{aligned}$ |
| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| Celifornia. | 19 | 432 | 51.6 |  | 221 | 32 |  | 110 |  |  | 69 |  |
| Georgia. | 12 | 232 | 57.7 |  |  |  |  | 33 | 68 |  | 131 |  |
| Illinois. | 36 | 509 | 55.0 |  |  | 13 | 175 | 170 | 6 | 74 | 71 |  |
| Iowa.... | 13 | 363 | 58.7 |  |  |  |  | 64 |  | 104 | 195 |  |
| Massachusetis.. | 21 | 309 | 51.2 |  | 83 | 110 |  | 44 | 72 |  |  |  |
| Michigan....... | 33 | 422 | 56.9 |  |  | 38 |  | 60 | 90 | 91 | 143 |  |
| Minnesota. | 9 | 255 | 59.6 |  |  |  |  |  | 24 |  | 231 |  |
| New York. | 62 | 1,109 | 53.7 | 48 | 404 | 26 |  | 82 | 64 | 275 | 210 |  |
| Ohio...... | 38 | 495 | 55.1 |  | 18 | 40 | 63 | 170 | 50 | 82 | 72 |  |
| Pennsylvania.- | 84 | 822 | 54.6 |  | 72 | 56 | 46 | 295 | 172 | 95 | 86 |  |
| W isconsin.. | 15 | 1,023 | 60.0 |  |  |  |  |  |  | 11 | 1,011 |  |
| Total. | 342 | 5,970 | 55.8 | 48 | 798 | 315 | 284 | 1,028 | 546 | 732 | 2,219 |  |
| California. | 19 | 422 | 51.5 |  | 222 | 19 |  | 124 |  |  | 57 |  |
| Georgia. | 12 | 237 | 57.3 |  |  |  |  | 51 | 69 |  | 117 |  |
| Illinois. | 36 | 538 | 54.0 |  |  | 20 | 255 | 125 |  | 102 | 36 |  |
| Iowa.... | 13 | 425 | 58.6 |  |  |  |  | 72 |  | 138 | 215 |  |
| Massachusetts.. | 21 | 300 | 50.6 |  | 89 | 111 | 21 | 79 |  |  |  |  |
| Michigan ...... | 33 | 428 | 56.6 |  |  | 41 |  | 56 | 115 | 89 | 127 |  |
| Minnesota. | 9 | 247 | 59.8 |  |  |  |  |  |  | 45 | 202 |  |
| New York...... | 62 | 1,161 | 53.1 | 48 | 448 | 45 | 11 | 103 | 91 | 257 | 158 |  |
| Ohio........... | 38 | 569 | 54.9 |  |  | ${ }_{45}^{58}$ | 71 | 184 | 116 | 61 | 79 |  |
| Pennsylvania.. $W$ isconsin.... | $\begin{aligned} & 84 \\ & 15 \end{aligned}$ | 788 959 | $\begin{aligned} & 54.6 \\ & 59.9 \end{aligned}$ |  | 65 | 45 | 42 | 294 | 172 18 | 88 11 | 82 930 |  |
| Total. | 342 | 6,074 | 55.5 | 48 | 824 | 339 | 400 | 1,088 | 581 | 791 | 2,003 |  |

Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
BENCH HANDS.

| State, and number of establishments. | Year. | $\begin{gathered} \text { Num } \\ \text { ber } \\ \text { of } \\ \text { em- } \\ \text { ploy- } \\ \text { ees. } \end{gathered}$ | $\left(\begin{array}{c} \text { Aver- } \\ \text { age } \\ \text { full- } \\ \text { fime } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{array}\right.$ | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Un- } \\ \text { der } \\ 48 \end{gathered}$ | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}\right.$ | $\begin{gathered} \text { 51 } \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { ander } \\ \text { f.0 } \end{gathered}$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| California: 18 establishments. | 1912 | 316 | 51.2 |  | 160 | 12 |  | 121 |  |  | 23 |  |
|  | 1913 | 250 | 50.7 |  | 195 | 29 |  | 105 |  |  | 21 |  |
| Georgia: <br> 12 estahlishments. | 1912 | 160 | 58.0 |  |  |  |  | 23 | 38 |  | 99 |  |
|  | 1913 | 178 | 57.7 |  |  |  |  | 31 | 45 |  | 102 |  |
| Illingis:36 esta | 1912 | 675 | 54.1 |  |  | 27 | 327 | 206 | 4 | 28 | 83 |  |
|  | 11913 | 639 | 53.2 |  |  | 37 | 363 | 130 |  | 81 | 28 |  |
| Lowa:13 establishm | 1912 | 248 | 57.9 |  |  |  |  | 75 |  | 71 | 102 |  |
|  | 1913 | 283 | 57.9 |  |  |  |  | 80 |  | 86 | 117 |  |
| Massachusetts: 21 establishments. | 1912 | 256 | 51.2 |  | 67 | 90 |  | 56 | 43 |  |  |  |
|  | 1913 | 250 | 51.0 |  | 65 | 81 | 23 | 81 |  |  |  |  |
| Michigan: 33 establishments. | 1912 | 353 | 55.1 |  |  | 71 |  | 83 | 91 | 31 | 77 |  |
|  | 1913 | 351 | 54.8 |  |  | 80 |  | 73 | 107 | 34 | 57 |  |
| Minnesota: 9 establishments. | 1912 | 174 | 59.2 |  |  |  |  |  | 34 |  | 140 |  |
|  | 1913 | 176 | 59.8 |  |  |  |  |  |  | 33 | 143 |  |
| New York: 62 establishments. | 1912 | 1,092 | 52.6 | 168 | 328 | 41 |  | 94 | 54 | 251 | 156 |  |
|  | 1913 | 1,066 | 52.7 | 104 | 373 | 40 |  | 109 | 64 | 247 | 129 |  |
| Ohio: | 1912 | 406 | 55.1 |  | 8 | 13 | 24 | 204 | 60 | 54 | 43 |  |
|  | 1913 | 451 | 54.8 |  |  | 26 | 71 | 206 | 57 | 38 | 53 |  |
| Pennsylvania: 86 establishments. | [1912 | 846 | 53.9 |  | 107 | 70 | 54 | 323 | 151 | 67 | 74 |  |
|  | 1913 | 824 | 54.1 |  | 110 | 51 | 55 | 312 | 149 | 71 | 76 |  |
| Wisconsin:15 | 1912 | 421 | 60.0 |  |  |  |  |  |  | 13 | 408 |  |
|  | 1913 | 465 | 59.8 |  |  |  |  |  | 16 | 13 | 436 |  |

LABORERS.

| California: 19 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 441 | 53.6 52.8 |  | 98 148 | 16 |  | 248 |  |  | 79 68 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Georgia: | 1912 | 231 | 57.6 |  |  |  |  | 17 | 89 |  | 125 |  |
|  | (1913 | 251 | 57.1 |  |  |  |  | 40 | 96 |  | 115 |  |
| Illinois: | 1912 | 434 | 56.3 |  |  | 12 | 113 | 89 | 1 | 116 | 103 |  |
| 33 establishments | \{1913 | 541 | 55.5 |  |  | 31 | 183 | 69 |  | 151 | 107 |  |
| Towa: | 1912 | 284 | 58.5 |  |  |  |  | 53 |  | 94 | 137 |  |
|  | \1913 | 399 | 58.7 |  |  |  |  | 73 |  | 87 | 239 |  |
| Massachusetts: 19 establishm | $\{1912$ | 161 | 51.5 |  | 43 | 37 | 5 | 61 | 16 |  |  |  |
| 19 establishm | $\backslash 1913$ | 174 | 51.0 |  | 44 | 61 | 5 | 64 |  |  |  |  |
| Michigan: | 1912 | 359 | 57.6 |  |  | 8 |  | 52 | 64 | 100 | 135 |  |
|  | $\backslash 1913$ | 351 | 57.4 |  |  | 7 |  | 47 | 86 | 99 | 112 |  |
| Minnesota: | 1912 | 166 | 59.6 |  |  |  |  |  | 16 |  | 150 |  |
| 9 establishments. | 1913 | 261 | 59.7 |  |  |  |  |  |  | 62 | 199 |  |
| New York: | 1912 | 697 | 55.5 |  | 105 | 4 | 89 | 99 | 64 | 186 | 150 |  |
| 60 establishment | (1913 | 686 | 545 |  | 131 | 26 | 100 | 112 | 57 | 149 | 111 |  |
| Ohio: 38 establishmen | $\{1912$ | 325 | 55.5 |  | 14 | 22 | 26 | 109 | 40 | 53 | 61 |  |
| 38 establishment | $\{1913$ | 368 | 54.8 |  |  | 43 | 56 | 120 | 53 | 42 | 54 |  |

Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913 -Concluded.

LABORERS-Concluded.


MACHINE HANDS.


Table VM.-AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913.

BENCH HANDS.

| State. |  | 1912 |  |  | 1913 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | of estab-lishments. | Number of employees. | Average full-time hours per week. | Average full-tims weekly earnings. | Number of employees. | Average full-time hours per week. | Average full-time weekly earnings. |
| California. | 18 | 316 | 51.2 | \$21.88 | 350 | 50.7 | \$23.35 |
| Georgia. . | 12 | 160 | 58.0 | 14.44 | 178 | 57.7 | 15.12 |
| Illinois. | 36 | 675 | 54.1 | 19.61 | 139 | 53.2 | 19.52 |
| Iowa. | 13 | 248 | 57.9 | 15.26 | 283 | 57.9 | 15.03 |
| Massachusetts | 21 | 256 | 51.2 | 17.39 | 250 | 51.0 | 17.27 |
| Michigan. | 33 | 353 | 55.1 | 16.63 | 351 | 54.8 | 17.45 |
| Minnesota. | 9 | 174 | 59.2 | 15.29 | 176 | 59.8 | 15.68 |
| New York. | 62 | 1,092 | 52.6 | 16.57 | 1,066 | 52.7 | 16. 32 |
| Ohio.. | 38 | 406 | 55.1 | 15.90 | 451 | 54.8 | 16. 31 |
| Pennsylvania | 86 | 846 | 53.9 | 15.85 | 824 | 54.1 | 16. 14 |
| Wisconsin. | 15 | 421 | 60.0 | 12.63 | 465 | 59.8 | 13.39 |
| Total. | 343 | 4,947 | 54.6 | 16.68 | 5,033 | 54.5 | 16.90 |

LABORERS.

| California. | 19 | 441 | 53.6 | \$13.36 | 470 | 52.8 | \$13.54 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Georgia. | 12 | 231 | 57.6 | 6.91 | 251 | 57.1 | 7.05 |
| Tlinois. | 33 | 434 | 56.3 | 10.46 | 541 | 55.5 | 10.51 |
| Towa. | 13 | 284 | 58.5 | 10.50 | 399 | 58.7 | 10.55 |
| Massachusetts | 19 | 161 | 51.5 | 9.97 | 174 | 51.0 | 9.78 |
| Michigan. | 32 | 359 | 57.6 | 10.14 | 351 | 57.4 | 10.83 |
| Minnesota. | 9 | 166 | 59.6 | 10.84 | 261 | 59.7 | 11. 15 |
| New York | 60 | 697 | 5.5 | 9.95 | 686 | 54.5 | 10. 18 |
| Ohio.. | 38 | 325 | 55.5 | 9.77 | 368 | 54.8 | 10.71 |
| Pennsylvania | 69 | 377 | 55.9 | 9.62 | 365 | 55.8 | 10.00 |
| W isconsin. | 15 | 1,166 | 60.0 | 9.73 | 1,278 | 59.9 | 10.05 |
| Total. | 319 | 4,641 | 57.0 | 10.15 | 5, 144 | 56.7 | 10.47 |

MACHINE HANDS.


## FURNITURE MANUFACTURING.

## SUMMARY.

This report, based on information obtained from representative establishments, shows the full-time weekly earnings, the full-time hours of labor per week, and the rate of wages (or earnings) per hour in the principal occupations of the furniture industry of the United States. Figures relating to full-time hours of labor per week, and rates of wages (or earnings) per hour are presented for the years 1907 to 1913, inclusive, and for full-time weekly earnings for the years 1910 to 1913, inclusive.

Earlier reports ${ }^{1}$ of this Bureau have presented wages and hours of labor in the industry from 1890 to 1912.

Full-time hours of labor per week in this industry in 1913 were 1.6 per cent lower than in 1912, 2.1 per cent lower than in 1911, and 2.7 per cent lower than in 1910. Rates of wages per hour in 1913 were 3.6 per cent higher than in 1912, 5.8 per cent higher than in 1911, and 7.9 per cent higher than in 1910, while the full-time weekly earnings were 1.8 per cent higher in 1913 than in 1912, 2.8 per cent higher than in 1911, and 4.1 per cent higher than in 1910.

The reduction in full-time hours of labor makes the changes in rates of wages per hour somewhat different from the changes in fulltime weekly earnings.

The most significant facts concerning the several occupations covered by this report are summarized in the table below. The data for the years 1907 to 1911 were secured in 1911. Owing to the difficulty of finding establishments having records extending back for a period of years and also owing to the amount of work involved, data for 1907 to 1909 were secured from a smaller number of establishments, some of them perhaps less representative than those that have furnished data for the later years.

According to the plan of the table, direct comparisons, which are indicated by the grouping of the years within braces, can be made properly only between two or more successive years where the data are for identical establishments.

[^3]The data are for one pay-roll period in each year, the period ending nearest May 15 being selected, except in a very few establishments in which conditions in May were abnormal.

The figures for the years from 1907 to the first presentation for 1912 are reproduced from Bulletin No. 129, except the average fulltime weekly earnings for 1910 to 1912, which figures have been computed for this Bulletin from data gathered for those years. The average full-time weekly earnings have not been computed for the period 1907 to 1910, owing to the lack of funds. It will be observed that the average full-time weekly earnings are not exactly the same as the product of the average rate of wages per hour and the average full-time hours per week. This difference is explained and illustrated on page 16.

In 1913 the average full-time weekly earnings in the seven principal occupations were: Cabinetmakers, $\$ 13.30$; carvers, $\$ 17.41$; chair assemblers, $\$ 11.32$; finishers, $\$ 11.81$; machine hands, $\$ 12.50$; upholsterers, $\$ 16.42$; veneerers, $\$ 12.45$. The average full-time hours of labor per week in 1913 in the various establishments were: For cabinetmakers, 57.2 ; for carvers, 55.1; for chair assemblers, 57.3 ; for finishers, 57.2 ; for machine hands, 57.6 ; for upholsterers, 55.8; for veneerers, 57.2.

All employees for whom figures are given in this report are males.
AVERAGE FULL-TIME HOURS OF WORK PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]

| Occupation, and number of establishments. | Year. | Number of employees. | Avèrage full-time hours per week. | Average rate of wages per hour. | Average full-time weekly earnings. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cabinetmakers: |  |  |  |  |  |
| 50 establishments. | 1907 | 890 | 56.7 | \$0. 2350 | (1) |
|  | 1908 | 632 | 57.1 | . 2285 | (1) |
|  | 1909 | 771 | 56.9 | . 2279 | (1) |
|  | 1910 | 862 | 56.7 | . 2374 | (1) |
| 112 establishments. | 1910 | 1,801 | 58.0 | . 2310 | \$13.28 |
|  | 1911 | 1,846 | 57.7 | . 2324 | 13.29 |
| 169 establishments. | 1911 | 2,455 | 58.3 | . 2327 | 13.46 |
|  | 1912 | 2,427 | 58.1 | . 2324 | 13.43 |
| 199 establishments. | 1912 | 2,939 | 58.1 | . 2284 | 13.20 |
| 199 establishments. | 1913 | 3,184 | 57.2 | . 2339 | 13.30 |
| Carvers, hand: $\mathrm{Cl}^{\text {a }}$ (1907 |  |  |  |  |  |
| 25 establishments. | 1907 | 169 | 54.2 | . 3111 | (1) |
|  | 1908 | 127 | 54.5 | . 3139 | (1) |
|  | 1909 | 151 | 53.0 | . 3264 | (1) |
|  | 1910 | 148 | 52.7 | . 3380 | (1) |
| 65 establishments........................ | 1910 | 315 | 56.1 | . 3133 | 17.36 |
|  | 1911 | 345 | 55.5 | . 3222 | 17.57 |
| 76 establishments. | 1911 | 367 | 56.2 | . 3120 | 17.28 |
|  | 1912 | 334 | 56.3 | . 3152 | 17.52 |
| 82 establishments. | 1912 | 350 | 56.3 | . 3133 | 17.44 |
|  | 1913 | 355 | 55.1 | . 3195 | 17.41 |
| 1 Not computed. |  |  |  |  |  |

AVERAGE FULL-TIME HOURS OF WORK PER WEEK, RATES OF WAGES PER EOUR, AND FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1907 TO 1913—Concluded.

${ }^{1}$ Not computed.
Wages and hours of labor vary materially in different establishments, hence the inclusion or exclusion of an establishment in a group, if it differs greatly from the average, may raise or lower the average for the group. Thus, referring to the table above, it is seen that the average full-time weekly earnings of cabinetmakers in 169 establishments decreased from $\$ 13.46$ in 1911 to $\$ 13.43$ in 1912. In 199 esteblishments there was an increase from $\$ 13.20$ in 1912 to $\$ 13.30$
in 1913. The inclusion of the 30 additional establishments, therefore, changed the average weekly earnings for 1912 from $\$ 13.43$ to $\$ 13.20$. Consequently it would not be a correct comparison to state that the decrease was from $\$ 13.46$ in 1911 to $\$ 13.30$ in 1913. The movement from one year to another is indicated with the greatest degree of certainty by the figures for identical establishments. The difference between $\$ 13.46$ and $\$ 13.43$ represents the decrease from 1911 to 1912 , and the difference between $\$ 13.20$ and $\$ 13.30$ represents the increase from 1912 to 1913, as nearly as can be determined from the data available. In the table the comparable data for identical establishments are bracketed.

Owing to the change in the number of establishments from year to year it is difficult to make a comparison of the actual data over a period of several years, or to get an exact measure of the changes. To aid in the making of such a comparison, relative (or index) numbers have been computed from the averages in the preceding table for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation for the years 1910 to 1913, inclusive. These relative numbers are simply percentages in which the figures for 1913 are taken as the base, or 100 per cent. The relative for each year is the per cent that the average in that year is of the average for 1913, as determined by the method explained on page 18. Thus in the table below the full-time weekly earnings of cabinetmakers in 1910 were 99.4 per cent of the full-time weekly earnings in 1913.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULLTIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1910 TO 1913.
(1913=100.0.)

| Year. | Cabinetmakers. |  |  | Carvers, hand. |  |  | Chair assemblers. |  |  | Finishers. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative fulltime hours per week. | Relative rates of wages per hour. | Relative fulltime weekly earnings. | ICelative fulltime hours per week. | Relative rates of wages per hour. | Relaz tive fulltime weekly earnings. | Relative fulltime hours per week. | Relative rates of wages per hour. | Relative fulltime weekly earnings. | Relative fulltime hours per week. | Relative rates of wages per hour. | Rela tive fulltime weekly earnings. |
| 1910.. | 102.5 | 97.2 | 99.4 | 103.1 | 94.4 | 97.6 | 101.2 | 91.0 | 92.6 | 103.3 | 91.3 | 94.6 |
| 1911.. | 101.9 | 97.8 | 99.5 | 102.0 | 97.1 | 98.8 | 101.7 | 95.2 | 97.3 | 102.5 | 92.4 | 94.9 |
| 1912.. | 101.6 | 97.7 | 99.3 | 102.2 | 98.1 | 100.2 | 100.9 | 97.1 | 98.1 | 101.8 | 95.2 | 96.9 |
| 1913.. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|  | Machine hands. |  |  | Upholsterers. |  |  | $V$ Venerers. |  |  |  |  |  |
| 1910.. | 103.0 | 92.4 | 96.8 | 102.2 | 91.4 | 93.6 | 103.3 | 90.5 | 93.8 |  |  |  |
| 1911.. | 102.3 | 94.3 | 98.1 | 101.6 | 96.1 | 97.7 | 102.6 | 91.7 | 94.3 |  |  |  |
| 1912. | 101.6 | 96.8 | 98.4 | 101.1 | 98.4 | 99.5 | 101.9 | 97.3 | 99.3 |  |  |  |
| 1913.. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |  |  |

It will be observed that the general tendency of each occupation is toward a reduction of working hours and an increase in rates of wages per hour and ef earnings per full week. No data are available to show the amount of work afforded employees each year or the variation from year to year. The relative full-time hours per week indicate the change in the hours of labor of employees working full time, but do not reflect in any way the greater or less amount of fulltime work afforded. This point is further discussed on page 15.

A like table of relative numbers is next shown for the industry as a whole, as determined by a combination of the data for the several occupations. Data were obtained for the principal occupations of the industry but not for all occupations. The method of computing this table is explained on page 19.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL TIME W EEKLY EARNINGS IN FURNITURE MANUFACTURING, 1910 TO 1913.
(1913 $=100.0$.

| Year. | Relative full-time hours per week. | Relative rates of wages per hour. | Relative full-time weekly earnings. |
| :---: | :---: | :---: | :---: |
| 1910. | 102.8 | 92.7 | 96.1 |
| 1911. | 102.1 | 94.5 | 97.3 |
| 1912. | 101.6 | 96.5 | 98.2 |
| 1913. | 100.0 | 100.0 | 100.0 |

From the table it is seen that the relative or index number for full-time hours per week decreased from 102.8 in 1910 to 100 in 1913, or, in other words, full-time hours per week in 1910 were 102.8 per cent of what they were in 1913. The relative or index number for rates of wages per hour increased from 92.7 in 1910 to 100 in 1913. Owing to the reduction of hours, the increase in full-time weekly earnings was somewhat less than the increase in wages per hour, the increase being from an index of 96.1 in 1910 to 100 in 1913.

In examining the relative or index numbers for the several occupations, and for the industry as a whole in the two tables above, it will be observed that they have been computed with 1913 taken as the base, or 100 per cent. In the preceding reports of the Bureau relating to this industry, relative numbers for rates of wages per hour and for hours of labor per week were presented back to 1890 and the base, or 100 per cent, was not the average rate of wages per hour or the average full-time hours per week in any one year, but the average rate of wages per hour and the average full-time hours per week for the 10 -year period 1890-1899. The table of such relative numbers for the years 1890 to 1912 appears on page 158 .

The reasons for changing the base of the relative numbers to the most recent year are stated on pages 11 and 16. The relative num-
bers for the occupations shown in the new series here presented differ from those of the old series shown in preceding reports because of the change of the base, but the ratio existing between any two years is the same in both series. The relative numbers for the industry as a whole have likewise been recomputed with 1913 as the base.

In addition to making a change in the base period, a change has also been made in the method of computing the industry relatives, and because of this change the relatives here presented not only differ from the relatives computed by the old method, but show a slightly different ratio of change from year to year. In Bulletin No. 129, relative numbers for this industry were averages of the relative numbers of the several occupations. For each year, for example, the relative rate of wages per hour for each occupation was multiplied (weighted) by the number of employees in that occupation, the products thus computed for the several occupations were added, and the sum of the products for all occupations divided by the total employees in all occupations.

In computing the relative numbers from 1910 to 1913 for the industry as a whole as presented in this Bulletin, a combination was made, not of the relative numbers for the several occupations, but of the actual hours and wages of the several occupations. For each year the average hours and wages were computed for all employees in all occupations and the average for each preceding year was compared with the average for 1913 to determine the index. It was deemed necessary to make this change in method because a change in the industry is not always reflected by the relative computed by averaging the occupation relatives. This reason is more fully explained on page 19.

In addition to the relative numbers shown for the several occupations and for the industry, three tables are here presented stating the per cent of increase or decrease in the full-time hours of labor per week, rates of wages per hour, and full-time weekly earnings in 1913 as compared with each preceding year back to 1910. The figures of these tables are computed from the relative numbers shown on pages 108 and 109 , and simply reverse the method of comparison. Each of these tables also shows the increase or decrease in 1912 as compared with 1911, and in 1911 as compared with 1910. Referring to the first line of the first table, it is seen that the full-time hours of cabinetmakers in 1913 were 1.6 per cent lower than in 1912, 1.9 per cent lower than in 1911, and 2.4 per cent lower than in 1910. Further, it is seen that the full-time hours of labor in this occupation were 0.3 per cent lower in 1912 than in 1911 and 0.6 per cent lower in 1911 than in 1910. The figures of the several tables are read in like manner.

PER CENT OF INCREASE OR DECREASE IN FULLTIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1913 COMPARED WITH EACH OF THE 3 YEARS PRECEDING, 1912 COMPARED WITH 1911, AND 1911, COMPARED WITH 1910.

FULL-TIME HOURS PER WEEK.

| Occupation. | Per cent higher (+) or lower ( - ) in 1913 than in- |  |  | Per cent higher ( + ) or lower (-) in- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1910 | 1911 | 1912 | $\begin{aligned} & 1912 \text { than } \\ & \text { in } 1911 \end{aligned}$ | $\begin{aligned} & 1911 \text { than } \\ & \text { in } 1910 \end{aligned}$ |
| Cabinetmakers. | $-2.4$ | -1.9 | -1.6 | -0.3 | $-0.6$ |
| Carvers, hand. | - 3.0 | -2.0 | -2.2 | + . 2 | -1.1 |
| Chair assemblers. | - 1.2 | $-1.7$ | -. 9 | -.8 | - +.5 |
| Finishers..... | - 3.2 | -2.4 | -1.8 | $-.7$ | $-.8$ |
| Machine hands. | - 2.9 | -2.2 | -1.6 | $-.7$ | -. 7 |
| Upholsterers.. | - 2.2 | $-1.6$ | $-1.1$ | -. 5 | - 6 |
| Veneerers.. | -3.2 | -2.5 | -1.9 | $-.7$ | -. |
| The industry | $-2.7$ | -2.1 | -1.6 | $-.5$ | $-.7$ |

RATES OF WAGES PER HOUR.

| Cabinetmakers. | $+2.9$ | +2.2 | +2.4 | -0.2 | $+0.7$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Carvers, hand. | + 5.9 | +3.0 | +1.9 | $+1.0$ | +2.9 |
| Chair assemblers. | $+9.9$ | +5.0 | $+3.0$ | $+2.0$ | $+4.6$ |
| Finishers. | $+9.5$ | +8.2 | $+5.0$ | +3.0 | +1.2 |
| Machine hands. | +8.2 | $+6.0$ | $+3.3$ | +2.7 | +2.1 |
| Upholsterers. | +9.4 | +4.1 | +1.6 | +2.4 | $+5.1$ |
| Veneerers.. | $+10.5$ | +9.1 | +2.8 | +6.1 | $+1.3$ |
| The industry | $+7.9$ | $+5.8$ | +3.6 | +2.1 | +1.9 |

FULL-TIME WEEKLY EARNINGS.


## EXPLANATION OF SCOPE AND METHOD.

This report includes establishments engaged in manufacturing household and office furniture. All information was secured from pay rolls of the various establishments by the agents of the Bureau. The number of establishments from which data were secured has varied considerably during the period in this report, as follows:

|  | s. |
| :---: | :---: |
| 1910 and 1911. | 128 identical establishments. |
| 1911 and 19 | 199 identical establishments |
|  | 231 identical establishments. |

The data for 1907 to 1911 were secured in 1911, and the number of establishments included in the full period from 1907 to 1910, inclusive, was limited, owing to the difficulty of finding establishments
that had preserved records for those years and also to the amount of work involved. The establishments vary from year to year, as establishments go out of business or cease to be representative and new establishments must be substituted in the wage study. Occasionally occupations are dispensed with in a factory or new occupations are introduced, and sometimes data are not available for all occupations in a factory.

Data for a group of establishments in any year will not be precisely the same as for a different group of establishments in the same year, even though nearly all of the establishments may be common to both groups. In using the actual figures in this report, comparison from year to year should be made only between data coming from identical establishments. In the tables the data from identical establishments are bracketed. Data from an establishment are not included in the report unless the information for at least two years is available.

In selecting establishments from which to secure data the Bureau undertook to represent all States in which furniture manufacturing is of material importance, the measure of importance being the number of employees as reported by the United States Census of Manufactures. The table which follows shows by States the number of employees in this industry as reported by the United States Census Office for 1910; the total number on the pay roll in the establishments from which the Bureau secured data for 1913; and the number in selected occupations for whom data for 1913 are shown.

TOTAL NUMBER OF EMPLOYEES IN FURNITURE MANUFACTURING AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1913.

| State. | Number of employees reported by United States census of 1910. | Establishments for which data are shown by the Bureau of Labor Statistics for 1913. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number of estab-lishments. | Number of employees- |  |
|  |  |  | On pay | For whom data are shown. |
| New Yoik. | ${ }^{19} 9,619$ | 44 | 4,814 | 2,932 |
| Michigan. | 15, 171 | 20 | 4,818 | 2,751 |
| Illimois. | 13,310 | 23 | 3,427 | 2,169 |
| Indiana. | 10,745 | 25 | 3,486 | 1,826 |
| Wisconsin. | 10,583 | 16 | 3,089 | 1,629 |
| Ohio. | 8,019 | 27 | 1,991 | 1,241 |
| Pennsylvania. | 9,733 | 28 | 3,287 | 1,838 |
| Massachusetts. | 7,148 | 12 | 2,878 | 934 |
| North Carolina. | 5,533 | 13 | 1,393 | 831 |
| Missouri....... | 3,368 | 9 | 658 | 439 |
| Tennessee.. | 2,303 | 6 | 601 | 313 |
| Maryland.. | 1,856 | 8 | 803 | 412 |
| Other States ${ }^{\text {I }}$. | 16,038 |  |  |  |
| Total. | 123,426 | 231 | 31,245 | 17,378 |

[^4]According to the census of 1910 , more than 87 per cent of the total number of employees in the industry are found in the States in which the establishments furnishing information to the Bureau of Labor Statistics are located. The number of employees in the establishments from which the Bureau secured 1913 data was equal to 25.3 per cent of the total in the industry in 1910, and the number for which the Bureau presents detailed information for 1913 was equal to 14.1 per cent of the total in the industry in 1910. The pay rolls copied were for one week, half month, or a month, according to the custom of the establishment. The pay roll taken each year was that nearest May 15, except in a very few establishments where abnormal conditions made it necessary to take a pay roll for some other time of the year.

The full-time hours of labor per week shown in the tables of the report are the regular hours of work in the occupations under normal conditions in the establishments. The working time is the hours on duty, including intervals of waiting for work. The full-time hours per week and the relatives 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 as presented in this Bulletin.

The rates of wages per hour appearing in the tables include the wages of time workers and the earnings of pieceworkers. All time rates by the day or week have been reduced to rates per hour, and the earnings of pieceworkers or of persons working at both time and piece rates have been reduced to earnings per hour by dividing the earnings by the hours worked. The time workers and pieceworkers of each occupation are combined as one group. For the majority of the establishments the pay-roll records were in such shape that it was possible to secure data in such detail that classified rates of wages could be shown, but for a part of the establishmonts included this was not possible.

A change in the earnings per hour of pieceworkers does not of necessity indicate a change in piece rates. Without a change in piece rates a change in methods or of machinery, a speeding up or more steady work resulting from 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 of waiting for work while on duty may also affect hourly 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 changes in fulltime earnings per week, notice should also be taken of changes in $45410^{\circ}$-Bull. 153-14-8
full-time hours of labor per week. 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 week worker will, if his weekly rate remains the same, increase his rate per hour.

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 the several employees and dividing the total by the number of em-ployees.

In studying the tables it will be observed that the average fulltime weekly earnings are not exactly the same as the result that would be obtained by multiplying the average rate per hour by the average hours per week, owing to the change in the relative weight of the items. This point is illustrated on page 16.

The change in the basis of comparison in computing the relative numbers from the average of $1890-1899$ to 1913 is referred to on page 11. A more extended explanation is also given on pages 16 to 18. The relative rates of wages per hour and the relative full-time hours per week from 1890 to 1912 on the basis of 1890-1899 equals 100, published in Bulletin No. 129, are reproduced in this Bulletin on page 158.

The method used in computing the relative or index numbers for the several occupations can best be explained by an illustration. Such an illustration is given on page 18.

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 year. Thus, as shown in the table on page 109, the relative full-time weekly earnings in the furniture industry increased from 96.1 in 1910 to 98.2 in 1912, an increase of 2.1 in the relative for 1912 over the relative for 1910, which number (2.1) is 2.2 per cent of 96.1 , thus making an increase in 1912 of 2.2 per cent for 1910.

The base for the computation of the relative numbers of the several occupations, as stated above, has been changed from the average of 1890-1899 to 1913. The same change of base has been made in computing the relative numbers for the industry as a whole. In addition to the change of base in computing the relative numbers for the industry, a change has been made in the method of computation. The relative numbers for the industry here presented, covering 1910 to 1913, are computed directly from the average hours of labor, rates of wages per hour, and weekly earnings of all employees in all occupations combined. In other words, the relatives for the industry as a whole have been computed for this report in the same manner as the relatives for each occupation. This change of method is explained and illustrated on pages 18 to 23.

In addition to the text tables presented in the summary, seven general tables are given, namely:

Table I.-Average and classified rates of wages per hour in the United States, by years, 1907 to 1913.

Table II.-Average and classified rates of wages per hour in each year, by States, 1912 and 1913.

Table III.-Average and classified rates of wages per hour in each State, by years, 1912 and 1913.

Table IV.-Average and classified full-time hours of work per week in the United States, by years, 1907 to 1913.

Table V.-Average and classified full-time hours of work per week in each year, by States, 1912 and 1913.

Table VI.-Average and classified full-time hours of work per week in each State, by years, 1912 and 1913.
Table VII.-Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913.
In Tables I and IV, in addition to actual data, percentages computed therefrom are given. The data from these two tables are summarized in the text table on page 106.

When sufficient data for a State are available to warrant presentation, such data are presented by States in Tables II, III, V, and VI. Tables III and VI repeat the data for the several States given in Tables II and V, rearranged for the convenience of the reader.

## DESCRIPTION OF PRINCIPAL PRODUCTIVE OCCUPATIONS.

This report includes only data from establishments manufacturing household furniture, including bedroom, dining-room, and parlor suites, library and hall pieces, tables, chairs, etc., and in a few instances from those making office desks, tables, and chairs. Establishments manufacturing metallic furniture and those which make a specialty of expensive made-to-order articles have not been included.

Apart from the varying character of the output, which is influenced to some extent by local conditions as to timber and labor supply as well as by local market demands, few differences are found in furni-ture-manufacturing establishments in different sections of the country. Much the same processes and much the same kinds of machinery are employed everywhere. A workman from a furniture factory in one of the North Atlantic or North Central States would find little difficulty in adapting himself to conditions in a similar establishment located in a South Central or South Atlantic State, and vice versa. The occupation terms and the operations embraced under such terms are practically identical in all sections.

The work of furniture making, as observed everywhere, falls roughly into three principal divisions-machine work, cabinetmaking, and finishing. Upholstering forms another division of work in many establishments, while the increasing amount of veneered furniture being turned out has led to the creation of distinct veneer departments in some of the larger plants.
in the machine department the rough lumber is cut and dressed and the various parts which enter into the completed piece are fashioned. Employees in this department are classed either as machine hands or helpers, in many cases the line of demarcation between the two classes being a very vague one, since it is often the practice gradually to promote helpers to positions as machine operators as they develop sufficient skill for the work. In addition to the helpers on machines there are usually a number of common laborers, whose work consists in handling heavy materials, sweeping floors, and making themselves generally useful. Regarding the pay of machine woodworkers it has been observed that length of service with the establishment and general proficiency are usually more important factors in determining the wages of a workman than is the mere fact that he happens to be operating a particular kind of machine. For this reason a classification of machine hands according to machines operated would be of little, if any, value.
In the cabinetmaking department the pieces of furniture are assembled or set up. This is often designated as "bench work." It is necessarily done by hand, though in some cases clamps or other devices are used for forcing joints up tight. In some lines of product, as in the manufacture of extension tables of the cheaper grades, the work of the cabinetmaker is quite simple and requires little skill, consisting merely in fitting together the parts of tops, pedestals, etc. Men engaged in this kind of work, while not cabinetmakers in the strict sense of the term, are generally so designated in the trade. In some localities the term "case fitters" is applied to men doing cabinetwork. In chair factories the duties of the chair assembler correspond in a general way to those of the cabinetmaker in case-goods establishments. This work consists in gluing and fitting together the different parts of the chair, a frame being used to hold the parts in proper shape until the glue is dry. A variety of terms, such as "framers," "stoolers," "chair makers," "drivers up," etc., is used to describe this class of workmen in different establishments. In many factories, particularly those making the heavier and more expensive grades of chairs, as at Grand Rapids, the designation cabinetmakers, instead of chair assemblers, is in common use. It should be emphasized in this connection that few all-round skilled cabinetmakers, as the term was formerly employed, are now found in furniture-manufacturing establishments, the introduction of improved
labor-saving machinery and the modern tendency toward specialization in industry, with the desire to effect a lowering of the cost of production, having caused such to be replaced in large measure by a cheaper type of labor.
The finishing department, as the term implies, is where the assembled piece of furniture is given its final treatment before being packed for shipment. The finishing process includes staining, filling, sanding, varnishing, and, in furniture of the better grades, rubbing and polishing. In a few establishments there has been noticed a tendency to restrict the term "finisher" to the men doing varnish work only, but in the vast majority of furniture plants it is now used to include all persons in the finishing department except those classed as "common labor." In several factories located in the North Central States women and girls have been found among the workers in the varnishing room, but in other sections this work is usually performed by males exclusively.

The work of the other occupations is practically all done by males. So few females are employed that data relating to females are omitted from this report.

The Bureau has compiled data as to full-time hours per week, rates of wages per hour, and full-time weekly earnings for seven occupations. Brief descriptions of these occupations and processes follow:

## CABINETMAKERS.

These men assemble the parts that have been cut and dressed in the machine department. Their work is necessarily done by hand and often requires considerable skill, though in some establishments, as table factories, the work is simple and admits of much specialization. As has already been stated, few all-round cabinetmakers, in the sense in which the term was formerly used, are found in the modern furniture factory, owing to the extent to which specialization is now carried. In general, the work consists merely in fitting together the parts that form the complete piece of furniture. In a few establishments the term "bench hands," "case fitters," or "carpenters," instead of "cabinetmakers," is used.

## CARVERS, HAND.

This occupation is being largely superseded by machine carving, though in establishments producing high-grade furniture many hand carvers are still employed. It requires a high degree of skill and some artistic ability. It consists in carving or fashioning designs in wood for ornamental purposes, as the arms and backs of chairs, the posts and headboards of beds, the feet of cabinets, panels in sideboards, etc. The work is done with highly tempered steel tools or knives. Carved work is often roughed out on the machine and finished by hand. Hand carvers usually command good wages.

## CHAIR ASSEMBLERS.

In the manufacture of chairs the work of the chair assembler corresponds in a general way to that of the cabinetmaker in case goods. In many of the factories producing the finer grades of chairs this work is called cabinetmaking, and such employees have been so classified in this report. "Chair assembling," as applied to lower grade chairs, is an appropriate term to indicate the kind of work done, although this term is not in common use. Most of the shaping operations on the different parts of the chair are performed in the machine department. The chair assembler, however, usually does some machine work, as boxing, mortising, etc., the amount of which depends on the extent to which division of labor is carried. Ordinarily chair assembling is done by a group of several men working together. When all parts of the chair have been finally shaped and fitted, the dowel pins are glued in and the different pieces are put together and placed in a press or clamp, which holds them firmly in place until the glue has had time to harden. In the case of flush joints the chair assembler shaves or trims the parts forming the joint until it is quite smooth. Frame makers, who may be included with chair assemblers, fit up and put together the frames for chair seats. Much of their work, as sawing, boring, mortising, etc., is done on machines.

## FINISHERS.

The term "finisher," as used in this report, includes all classes of skilled or semiskilled workmen in the finishing department. Ordinarily the first operation in finishing is staining, which is done by dipping the piece in a vat of stain or, if the piece is large, rubbing the stain in with a brush or rag. The piece is next filled to close up the pores. This is done by rubbing in the mineral filling with a rag. Staining and filling are usually regarded as semiskilled occupations, although in many establishments the work is done largely by unskilled help. After filling, the article is sanded to make it smooth. This is generally done by boys or unskilled men. It is next treated with shellac and then sanded again, after which it is ready for the varnisher. Usually from one to three coats of varnish are applied, depending on the degree of "finish" desired. Between coats of varnish it is rubbed with oil or water and rotten stone, or is sandpapered. Polishers or rubbers who do the final finishing are often highly skilled men and are well paid. In some establishments rubbing of flat surfaces is done by machines. The rubbing or polishing device has a rapid back-and-forth movement and may be shifted at will by the operator. It makes the work much easier than when done by hand. Spraying machines for applying varnish by means of compressed air have been found in use in a few fac-
tories. The above operations, with some variations, comprise the finishing work in all furniture establishments. In the treatment of chairs and tables of the cheaper grades the varnish is usually applied by dipping. Enamelers and gilders, found in a few establishments, are classed with varnishers. Grain printing, which may be considered a finishing process, is done by running the piece to be grained, if it is flat, between two rollers, one of which is made of gelatin, with its surface so prepared that it prints an imitation grain upon the part coming in contact with it. Irregular surfaces and edges are grained by being held against the roller. An inking device keeps the gelatin roller constantly inked. Usually the parts that have been grained are shellacked and allowed to dry thoroughly before being put together. Hand sanders and all other unskilled employees have been excluded from finishers in the present report.

## MACHINE HANDS.

These men operate various types of power-driven machines and often shift from one machine to another, according to the exigencies of their work. The principal machines used in furniture manufacture are the boring machine, carver, dovetailer, jointer or facer, molding machine, mortiser, planer, router, sander (belt or drum), saw (band, cut-off, jig, miter, rip, etc.), scraper, shaper, sticker, tenoner, and turning lathe. A machine called the "universal woodworker," built on the plan of a planer or jointer, is used in some factories. This machine is adapted to a number of different uses, as grooving, rabbeting, crosscutting, ripping, dadoing, routing, panel raising, etc.

In the collection of data on the wages and hours of labor of machine hands for inclusion in the present report care was taken to confine the information entirely to men engaged in the actual operation of machines; persons classed as helpers, learners, unskilled laborers, etc., being omitted in all cases.

## UPHOLSTERERS.

There is much specialization in this occupation at the present time, and few all-round upholsterers are now found. In many establishments the work is divided into processes, all more or less simple, in which much unskilled labor can be employed. Thus, spring setting, pad making, sewing, etc., represent distinct subdivisions of upholstering in many chair and lounge factories. The persons doing this work, usually boys or women, can not be regarded as upholsterers in the strict sense of the term and are not included as such in this report. The all-round upholsterer cuts the materials, puts in the springs and fillings, makes the tufts, and performs all the other operations of upholstering. He is usually assisted by one or more
helpers. Only men of this class rank as regular upholsterers. In many lounge factories a tufting device is now used which enables this work to be done much more quickly and easily than by hand.

## VENEERERS.

The work of veneering is that of overlaying or facing wood of a less expensive quality with a thin piece of a finer or more beautiful kind.

The processes in the veneer department include the cutting, matching, and jointing of the veneer, the spreading of the glue either by hand or by machine (usually a roller of gelatin revolving in a glue tank) on the piece, the laying on of the veneer, and the placing of the veneered pieces in a press which forces the veneer down tight against the solid wood, and finally the shifting of the press load to a retainer where it is left until the glue is thoroughly dried. Owing to the growing scarcity of woods and the improvement in methods of veneering, this occupation is becoming a very important one in the furniture industry. Many establishments now have distinct veneering departments, employing a considerable number of men at good wages. Cutting and matching the veneer is considered highly skilled work and is usually done by a man who does nothing else. Common laborers employed solely to handle materials are not regarded as veneerers and have not been included.

Table I.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
NUMBER.


Table I.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN
NUMBER-Continued.


WAGES AND HOURS OF LABOR, 1907 TO 1913-FURNITURE. 123
Table I.-AVERAGE AND CLASSIFIED Rates of Wages PER HOUR in THE UNITED STATES, BY YEARS, 1907 TO 1913-Continued.

NUMEER-Concluded.

| Occupation, and number of establishments. | Year. | Num ber of em-ployees. | Aver age time hours per week. | Average rate of wages hour. | Employees earning each classified rate of wages per hour. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 8 and un- der 12 cts. | $\begin{aligned} & 12 \\ & \text { and } \\ & \text { mur } \\ & \text { der } \\ & 14 \\ & \text { cts. } \end{aligned}$ | $\begin{aligned} & 14 \\ & \text { and } \\ & \text { un } \\ & \text { der } \\ & 16 \\ & 16 \\ & \text { cts. } \end{aligned}$ | $\begin{gathered} 16 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 18 \\ \text { cts. } \end{gathered}$ | $\begin{gathered} 18 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 20 \\ \text { cts. } \end{gathered}$ | $\begin{gathered} 20 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 25 \\ \text { cts. } \end{gathered}$ | $\begin{aligned} & 25 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & 30 \\ & \text { cts. } \end{aligned}$ | $\begin{gathered} 30 \\ \text { and } \\ \text { un- } \\ \text { der } \\ \text { 40 } \\ \text { cts. } \end{gathered}$ | 40 and un- der 50 ets. | 50 and un- der 70 70 cts. |
| All establishments reported: 1907 1,347 58.2 80.211 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 51 establishments | 1908 | 1,047 | 58.1 | . 2116 |  |  |  |  |  |  |  |  |  |  |
|  | 1909 | 1,153 | 57.9 | . 2138 |  |  |  |  |  |  |  |  |  |  |
|  | 1910 | 1,239 | 57.4 | . 2189 |  |  |  |  |  |  |  |  |  |  |
| 121 establishments. | 1910 | 3,151 | 58.7 | . 2118 |  |  |  |  |  |  |  |  |  |  |
|  | 1911 | 3,107 | 58.3 | . 2161 |  |  |  |  |  |  |  |  |  |  |
| 192 establishment | 1911 | 4,855 | 58.8 | . 2108 |  |  |  |  |  |  |  |  |  |  |
|  | 1912 | 4,797 | 58.4 | . 2164 |  |  |  |  |  |  |  |  |  |  |
| 226 establishment | 1912 | 6,212 | 58.5 | . 2111 |  |  |  |  |  |  |  |  |  |  |
| UPHOLSTERERS. | 1913 | 6,700 | 57.6 | . 2181 |  |  |  |  |  |  |  |  |  |  |
| Establishments showing complete data: |  | 336 | 53.0 | . 3082 |  |  | 3 | 8 | 7 | 57 | 107 | 119 | 18 |  |
| 15 establishments | 1908 | 271 | 53.0 | . 3029 |  |  | 11 |  | 5 | 34 | 75 | 113 | 19 | 17 |
|  | 1909 | 272 | 53.2 | . 2996 |  |  | 1 | 7 | 14 | 27 | 86 | 114 | 16 | 7 |
|  | 1910 | 279 | 53.4 | . 3172 |  |  | 1 | 4 | 8 | 39 | 74 | 108 | 38 | 7 |
| 32 establishments. | $\{1910$ | 433 | 55.0 | . 2989 | 2 | 7 | ${ }_{6}^{6}$ |  | 15 |  | 123 | 161 | 39 |  |
|  | 1911 | 454 | 54.5 | . 3157 |  | 3 | 6 | 7 | 8 | 51 | 131 | 176 | 62 | 10 |
| 35 establishments | $\{1911$ | 384 | 55.6 | . 3054 |  | 5 | ${ }^{6}$ | ${ }_{4}$ | 9 | 49 | 110 | 159 | 32 | 10 |
|  | 1912 | 394 | 54.7 | . 3164 |  | 2 | 2 | 9 | - | 51 | 101 | 153 | 59 | 8 |
| 37 establishments | 1912 | 300 | 56.1 | . 2886 | 1 | 1 | 3 | 13 | 14 | 51 | 82 | 112 | 23 |  |
| All establishments reported: |  |  | 55.4 |  |  | 1 |  | 13 | 12 | 59 | 78 | 123 | 38 |  |
| 19 establishmen | 1907 | 383 | 53.6 | . 3004 |  |  |  |  |  |  |  |  |  |  |
|  | 1908 | 310 | 53.5 | . 2976 |  |  |  |  |  |  |  |  |  |  |
|  | 1909 | 307 | 53.8 | . 2962 |  |  |  |  |  |  |  |  |  |  |
|  | 1910 | 325 | 53.8 | . 3110 |  |  |  |  |  |  |  |  |  |  |
| 38 establishments. | 1910 | 501 | 55.0 | . 2971 |  |  |  |  |  |  |  |  |  |  |
|  | (1911 | 518 | 54.7 | . 3123 |  |  |  |  |  |  |  |  |  |  |
| 49 establishmen | 1911 | 558 | 55.8 | . 2996 |  |  |  |  |  |  |  |  |  |  |
|  | (1912 | 552 | 55.5 | . 3068 |  |  |  |  |  |  |  |  |  |  |
| 54 establishments. | $\{1912$ | 583 | 56.4 | . 2913 |  |  |  |  |  |  |  |  |  |  |
| venembers. | (1913 | 635 | 55.8 | . 2961 |  |  |  |  |  |  |  |  |  |  |
| Establishments showing complete data: | (1910 | 288 | 58.7 | . 1973 | 2 | 18 | 26 | 55 | 35 | 124 | 20 | 9 |  |  |
| 44 establishments. . . . . . . | 1911 | 267 | 58.2 | . 2002 |  | 15 | 24 | 52 | 31 | 107 | 30 | 8 |  |  |
| 79 establishments. | 1911 | 369 | 58.5 | . 2066 |  | 13 | 30 | 61 | 39 | 158 | 56 | 12 |  |  |
|  | 11912 | 343 | 58.0 | . 2181 |  |  | 15 | 48 | 32 | 165 | 65 | 18 |  |  |
| 122 establishments. | 1912 | 551 | 58.3 | . 2123 |  |  | 56 | 78 | 56 | 241 | 91 | 28 | 1 |  |
| All establishments reported 58 establishments..... | 11913 | 685 | 57.2 | . 2182 |  |  | 64 | 90 | 70 | 268 | 149 | 41 |  |  |
|  | 1910 | 333 | 58.8 | . 1999 |  |  |  |  |  |  |  |  |  |  |
|  | 1911 | 317 | 58.4 | . 2024 |  |  |  |  |  |  |  |  |  |  |
| 94 establishments. | 1911 | 430 | 58.7 | . 2063 |  |  |  |  |  |  |  |  |  |  |
| 123 establishments. | 1912 | 407 | 58.3 | . 2190 |  |  |  |  |  |  |  |  |  |  |
|  |  | 563 | 58.3 | . 2125 |  |  |  |  |  |  |  |  |  |  |
|  | 1913 | 698 | 57.2 | . 2184 |  |  |  |  |  |  |  |  |  |  |

Table I.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS. 1907 TO 1913-Continued.

PER CENT. 1


[^5]WAGES AND HOURS OF LABOR, 1907 TO 1913-FURNITURE. 125
Table I.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913-Concluded.

PER CENT-Concluded.


Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913.

CABINETMAKERS.


Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

CABINETMAKERS-Concluded.


CARVERS, HAND.


Table IT.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

CARVERS, HAND-Concluded.


Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR; BY STATES, 1912 AND 1913 -Continued.

CHAIR ASSEMBLEES.


FINISHERS.


Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

FINISBERS-Continued.

| Year and State. | $\left\|\begin{array}{c} \text { Num- } \\ \text { ber of } \\ \text { estab- } \\ \text { lish- } \\ \text { ments. } \end{array}\right\|$ | Num-berofem-ploy-ees. | $\begin{gathered} \text { Aver } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \end{gathered}$ | A ver. age rate of wages per hour. | Number of employees earning each classifled rate of wages per hour. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 88ndun-der12cts. | $\left(\begin{array}{c} 12 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 14 \\ \text { cts. } \end{array}\right.$ | $\left\lvert\, \begin{gathered} 14 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 16 \\ \text { cts. } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} 16 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 18 \\ \text { cts. } \end{gathered}\right.$ | $\begin{gathered} 18 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 20 \\ \text { cts. } \end{gathered}$ | $\left\lvert\, \begin{gathered} 20 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 25 \\ \text { cts. } \end{gathered}\right.$ | $\begin{array}{\|c\|} \hline 25 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 30 \\ \text { cts. } \end{array}$ | $\begin{gathered} 30 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 40 \\ \text { cts. } \end{gathered}$ | 40andun-dercocts. | $\left\lvert\, \begin{aligned} & 50 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & 70 \\ & \text { cts. } \end{aligned}\right.$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1912-Concluded. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All establishments reported. | 25 |  |  | . 2003 |  |  |  |  |  |  |  |  |  |  |
| Maryland.................... |  | 139 | 58.8 | . 1669 | 10 | 10 | 43 | 27 |  | 26 | 4 |  |  |  |
| Massachusetts................ | 12 | 223 | 54.0 | 2314 |  | 9 | 25 | 24 | 21 | 58 | 37 | 49 |  |  |
| Michigan..................... | 20 | 1,064 | 57.8 | . 1963 |  |  | 62 | 221 | 246 | 500 | 35 |  |  |  |
| Missouri: <br> Establishments showing complete data. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 96 | 60.0 | . 1929 |  |  | 18 | 20 | 7 | 38 | 8 | 1 |  |  |
| All establishments reported. |  | 126 | $60.0$ | . 1939 |  |  |  |  |  |  |  |  |  |  |
| New York: Establishments showing complete data. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 36 | 718 | 56.8 | . 2140 | 2 | 18 | 54 | 130 | 81 | 277 | 110 | 46 |  |  |
| All establishments reported | 44 <br> 4 | 864 | 56.8 | $.2152$ |  |  |  |  |  |  |  |  |  |  |
| North Carolina. | 12 | 244 | 59.4 | . 1275 | 108 | 62 | 48 | 15 | 6 | 5 |  |  |  |  |
| Ohio: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Establishments showing complete data. | 25 | 292 | 59.3 | . 1821 | 2 | 21 | 48 | 65 | 55 | 87 | 12 | 2 |  |  |
| All establishments reported. |  | 358 |  |  |  |  |  |  |  |  |  |  |  |  |
| Pennsylvania: <br> Establishments showing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 25 | 545 | 58.6 | . 1810 | 1 | 31 | 141 | 137 | 71 | 131 | 30 | 3 |  |  |
| All establishments reported. | 26 | 571 | 58.6 | $\text { . } 1834$ |  |  |  |  |  |  |  |  |  |  |
| Tennessee.................... | 6 | 80 | 59.4 | . 1489 | 14 | 26 | 13 | 9 | 5 | 10 | 3 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wisconsin: <br> Establishments showing complete data. . | 14 | 431 | 59.6 | . 1735 | 3 | 31 | 95 | 143 | 65 | 90 |  |  |  |  |
| All establishments re- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 16 | 447 | 59.6 | . 1768 |  |  |  |  |  |  |  |  |  |  |
| Total establishments showing complete data. | 200 |  |  |  | 142 | 219 | 644 | 920 |  | 1,517 | 431 | 147 |  |  |
| Total estabiis |  | $5,290$ |  | $.1973$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hlinois: 1913. | $\begin{aligned} & 16 \\ & 23 \end{aligned}$ |  | $57.6$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Establishments showing complete data. |  |  |  |  |  |  |  | 47 | 61 | 185 | 140 | 49 |  |  |
| complete data. <br> All establishments reported |  |  |  | $2366$ |  |  |  |  |  |  |  |  |  |  |
| Indiana:Establishments showingcomplete data......... | 1925 | 436 |  | . 2067 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 75 |  |  | 140 |  |  |  |  |
| All establishments reported. |  | 535 |  | . 2091 |  | 11 |  | 77 | 45 |  | 60 | 20 |  |  |
| Maryland.................... | 12 | 129190 | 57.1 | 1826 | . | 4] | $4 \begin{array}{r} 32 \\ 5 \end{array}$ | 2433 |  | 4364 | $\left.{ }_{40}\right\|_{3}$ |  |  |  |
| Massachusetts. |  |  | 54.5 |  |  |  |  |  |  |  |  |  |  |  |

Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

FINISHERS-Concluded.


MACHINE HANDS.

| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Illinois. | 21 | 584 | 59.0 | 80. 2506 |  |  | 1 | 28 | 19 | 216 | 222 | 94 | 4 |  |
| Indiana. | 25 | 780 | 58.8 | . 2097 | 1 | 4 | 48 | 144 | 77. | 365 | 107 | 31 | 1 | 2 |
| Maryland. | 8 | 175 | 59.1 | . 1843 | 1 | 13 | 39 | 53 | 8 | 39 | 17 | 4 |  |  |
| Massachusetts. | 12 | 434 | 56.5 | . 2136 |  | 9 | 58 | 113 | 32 | 121. | 43 | 43 | 14 | 1 |
| Michigan. | 20 | 749 | 57.4 | . 2472 |  |  | 2 | 27 | 48 | 286 | 273 | 110 | 3 | .... |
| Missouri. | 9 | 206 | 59.6 | . 2155 |  |  | 10 | 37 | 26 | 87 | 37 | 9 |  |  |
| New York: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Establishments showing complete data. | 42 | 950 | 57.2 | . 2210 |  | 10 | 66 | 132 | 98 | 345 | 255 | 42 | 2 |  |
| All establishments reported. | 43 | $954$ | 57.2 | . 2211 |  |  |  |  |  |  |  |  |  | $\ldots$ |
| North Carolina | 13 | 329 | 59.5 | . 1496 | 26 | 113 | 93 | 47 | 19] | 24 |  |  |  |  |

Table II.-AVERAGE and CLASSIFIED Rates OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

MACHINE HANDS-Concluded.


UPHOLSTERERS.


Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

UPHOLSTERERS-Continued.

${ }^{1}$ Including 1 establishm nt in a State shown above.

Table II.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

UPHOLSTERERS-Concluded.


VENEERERS.

${ }^{1}$ Including 1 establishment in a State shown above.

Table II.-AVERAGE AND CLASSIfied Rates of Wages per hour in EACH YEAR, BY STATES, 1912 AND 1913-Concluded.

VENEERERS-Concluded.


Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
CABINETMAKERS.


Table III.-AV*RAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913 -Continued.

CARVERS, HAND.


CHAIR ASSEMBLERS.

| Massachusetts: 4 establishments. | $\{1912$ | 138 | 57.1 | \$0. 1911 |  | 6 |  | 38 | 22 | 49 | 7 | 4 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Michigan: | 1913 | 161 | 57.1 | . 1906 |  | 5. |  | 38 | 19 | 72 |  |  |  |
| $4 \text { establis }$ | 1912 | 127 | 57.1 | . 2150 |  |  | 6 | 25 | 24 | 39 | 26 |  |  |
|  | 11913 | 126 | 55.2 | . 2323 |  |  | 2 | 14 | 22 | 39 | 34 | 14 | 1 |
| New York: |  | 63 | 58.0 | . 1879 | 1 |  |  | 17 | 1 | - 7 | 9 |  |  |
| 3 establishme | $\{1913$ | 84 | 58.3 | . 1886 |  | 13 | 17 | 24 | 7 | 8 | 9 | 6. |  |
| North Carolina: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 estab | [1913 | 36 | 57.3 | . 1406 | 3 | 15 | 11. | 7 |  |  |  |  |  |
| Ohio: 2 establishments showing |  | 10 |  |  |  |  |  |  |  |  |  |  |  |
| complete data........... | 1913 | 10 | 59.6 | .1315 | 2 | 5 | 3 |  |  |  |  |  |  |
|  | 1912 | 20 | 59.9 | . 1631 |  |  |  |  |  |  |  |  |  |
| 3 establishments reported.. | \{1913 | 19 | 59.8 | . 1659 |  |  |  |  |  |  |  |  |  |
| Wisconsin: | 1912 |  |  | . 1709 |  |  |  |  | 11 |  |  |  |  |
| 3 establishments. | $\{1913$ | 62 | 59.5 | . 1839 |  |  | 14 | 23 | 5 | 19 | 1 |  |  |

Table III.--AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

FINISERRS.


MACHINE HANDS.

| Illinois: <br> 21 establishments. | $\{1912$ | 584 | 59.0 | \$0.2506 |  |  | 1 | 28 | 19 | 216 | 222 | 94. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana: | [1913 | 684 |  | . 2556 |  |  |  | 24 | 17 |  |  | 137 |  |  |
| 25 establishmen | $\{1912$ | 780 | 58.8 | . 2097 | 1 | 4 | 48 | 144 | 77 | 365 | 107 | 31 | 1 |  |
|  | \{1913 | 804 | 57.7 | . 2112 |  |  |  | 114 | 65 | 410 | 120 |  |  |  |

WAGES AND HOURS OF LABOR, 1907 TO 1913-FURNITURE. 139
Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

MACHINE HANDS-Concluded.


## UPHOLSTERERS.

| Illinois: <br> 6 establishments showing | (1912 | 78 | 53.6 | \$0. 3240 |  |  |  |  | 1. | 10 | 16 | 41 | 10 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| complete data........... | 1913 | 74 | 53.5 | . 3332 |  |  |  |  | 1 | 7 | 16 | 39 | 11 |  |
|  | 1912 | 215 | 55.1 | . 3083 |  |  |  |  |  |  |  |  |  |  |
| 8 establishments reported. | 1913 | 212 | 54.2 | . 3113 |  |  |  |  |  |  |  |  |  |  |
| Tndiana: |  | 37 |  | . 2736 |  |  |  |  |  |  |  |  |  |  |
| 4 establishm | $\{1913$ | 35 | 57.4 | . 2743 |  |  |  |  |  |  |  |  |  |  |
| Massachusetts: <br> 4 establishments showing |  | 18 |  |  |  |  |  |  |  |  |  |  |  |  |
| complete data.. | 1913 | 25 | 50.0 | .3996 |  |  |  |  |  | 1 |  | 7 | 17 |  |
| 5 establishments reported.. | [1912 | 19 | 50.5 | . 3874 |  |  |  |  |  |  |  |  |  |  |
| Michigan: | 1913 | 26 | 50.3 | . 3946 |  |  |  |  |  |  |  |  |  |  |
| 6 establishments showing complete data | ${ }_{1912}$ | 35 44 | 58.5 54.5 | . 27441 |  |  |  | 2 | 2 | 5 4 | 13 | ${ }_{23}^{13}$ |  |  |
|  |  |  |  | . 3001 |  |  |  |  |  |  |  |  |  |  |
| 7 establishments reported. | 1913 | 52 | 54.4 | . 3160 |  |  |  |  |  |  |  |  |  |  |
| New York: <br> 5 establishments showing | [1912 | 34 |  | . 3031 |  |  |  |  |  |  |  | 18 |  |  |
| complete data............ | 1913 | 42 | 55.0 | . 3093 |  |  |  | 1 | 1 | 7 | 7 | 20 |  |  |
| 10 establishments reported | 1912 | 108 | 57.0 | . 2980 |  |  |  |  |  |  |  |  |  |  |
| Ohio: | 1913 | 136 |  | . 3033 |  |  |  |  |  |  |  |  |  |  |
|  | $\left.\right\|_{1913} ^{1912}$ | $\begin{aligned} & 30 \\ & 32 \end{aligned}$ | $\begin{aligned} & 58.5 \\ & 58.4 \end{aligned}$ | $\begin{array}{r} 2564 \\ .2598 \end{array}$ |  |  |  |  |  |  |  |  |  |  |

Table III.-AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913-Concluded.

UPHOLSTERERS-Concluded


VENEERERS.

| Illinois: 17 establishments. | $\{1912$ | 69 103 | ${ }_{59}^{59.5}$ | 0. 2279 |  |  | $\stackrel{2}{2}$ |  | $\stackrel{7}{7}$ | 38 | 15 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1913 | 103 | 59.4 |  |  |  | 2 |  | 2 |  | 28 | 6. |  |  |
| Indiana: | 1912 | 45 | 59.1 | . 2102 |  |  | 5 |  |  | 19 | 10 |  |  |  |
| 14 establishments | 1913 | 60 | 58.4 | . 2117 |  |  | 4 | 10 | 6 | 27 | 9 |  |  |  |
| Massachusetts: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 establishments | ${ }_{1912}^{1912}$ | ${ }^{6} 10$ | 51.4 50.8 | . 2800 |  |  |  |  |  | 2 | 1 |  |  |  |
| Michigan |  | 10 |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 establishmen | 1912 | 158 | 57.1 | . 2259 |  |  |  |  |  | 97 | 31 | 7 |  |  |
|  | 1913 | 170 | 54.1 | . 2365 |  |  |  |  |  | 76 | 59 | 10. |  |  |
| Missouri: | 1912 | 7 | 60.0 | . 2190 |  |  |  |  |  | 3 | 2 |  |  |  |
| 3 establishments | 1913 | 7 | 60.0 | . 2252 |  |  |  |  |  | 2 | 3 |  |  |  |
| New York: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 establishments | 1912 | 88 | 55.5 | . 22262 |  |  | 3 | 8 | 19 | ${ }_{30}^{26}$ | 24 | 5 |  |  |
| Ohio: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 establishm | 1912 | 54 | 59.5 | . 2040 |  |  |  |  |  | 26 | ${ }^{6}$ |  |  |  |
| Pennsylvania: | 1913 | 56 | 58.8 | . 2170 |  |  |  |  |  |  |  |  |  |  |
| 17 establishments | 1912 | 62 | 59.1 | . 2054 |  |  | 3 | 22 |  | 21 | 3 |  |  |  |
|  | 1913 | 91 | 58.4 | . 2025 |  |  | 11 | 25 | 11 | 29 |  |  |  |  |
| 3 establishment | 1912 | 8 | 60.0 | . 1811 |  |  | , | 4 | 1 | 1. |  |  |  |  |
| Wisconsin: | 1913 | 14 | 60.0 | . 1850 |  |  |  |  |  |  |  |  |  |  |
| 11 establishments showing | [1912 | 69 | 59.6 | . 1672 |  |  | 38 | 14 | 6 | 8 | 2 |  |  |  |
| complete data.......... | 1913 | 83 | 59.6 | . 1697 |  |  | 40 | 24 | 6 | 8 | 4 | 1 |  |  |
|  | \{1912 | 81 | 59.3 | .1751 |  |  |  |  |  |  |  |  |  |  |
| 12 establishments reported | \{1913 | 96 | 59.4 | . 1776 |  |  |  |  |  |  |  |  |  |  |

Table IV.-AVERAGE and CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913.
[The figures set opposite each bracketed group of years are for identical establishments.]
NCMBER.


Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913Continued.

NUMBER-Concluded.

| Occupation, and number of establishments. | Year. | $\begin{gathered} \text { Num- } \\ \text { ber } \\ \text { of } \\ \text { em- } \\ \text { ploy- } \\ \text { ees. } \end{gathered}$ | age fulltime hours per week. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 51 \end{gathered}$ | 51 and under 54 | 54 | $\begin{aligned} & \text { Over } \\ & 54 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & 57 \end{aligned}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 60 \end{gathered}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| Upholsterers: |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 establishments. | (1907 | 383 | 53.6 | 17 | 16 | 49 | 19 | 204 | 18 | 28 | 32 |  |
|  | $\{1908$ | 310 | 53.5 | 7 | 21 | 37 | 19 | 163 | 16 | 37 | 10 |  |
|  | 1909 | 307 | 53.8 | 7 | 4 | 52 | 18 | 161 | 16 | 39 | 10 |  |
|  | 1910 | 325 | 53.8 | 7 | 2 | 52 | 14 | 174 | 28 | 33 | 15 |  |
| 38 establishments. | $\{1910$ | 501 | 55.0 | 7 | 2 | 52 | 14 | 216 | 79 | 33 | 98 |  |
|  | \{1911 | 518 | 54.7 | 9 | 3 | 49 | 48 | 231 | 43 | 56 | 79 | ...... |
| 49 establishments. | $\{1911$ | 558 | 55.8 | 9 | 3 | 16 | 20 | 233 | 68 | 98 | 111 |  |
|  | (1912 | 552 | 55.5 | 8 | 29 | 15. | 24 | 192 | 87 | 97 | 100 |  |
| 54 establishments...... | $\{1912$ | 583 | 56.4 |  |  | 18 | 24 | 184 | 88 | 182 | 87 |  |
|  | (1913 | 635 | 55.8 |  |  | 25 | 18 | 279 | 71 | 183 | 59 | ...... |
| Veneerers: 58 establishments. | (1910 | 333 | 58.8 |  |  |  |  | 1 | 67 | 68 | 186 | 11 |
| 58 establishments. | \{1911 | 317 | 58.4 |  |  |  |  | 1 | 84 | 76 | 140 | 16 |
| 94 establishments. | f1911 | 430 | 58.7 |  |  | 1 |  | 1 | 89 | 98 | 225 | 16 |
|  | \{1912 | 407 | 58.3 |  |  | 1 | 3 | 2 | 133 | 49 | 210 | 9 |
| 123 establishments. | ¢1912 | 563 | 58.3 |  |  | 5 | 6 | 6 | 155 | 94 | 288 | 9 |
|  | $\{1913$ | 698 | 57.2 |  |  | 9 | 11 | 218 | 62 | 111 | 274 | 13 |

PER CENT.

| Cabinetmakers: |  |  |  |  |  |  | 3.0 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left(\begin{array}{l}1907 \\ 1908\end{array}\right.$ | 890 | 56.7 57.1 | 6.5 4.7 |  | 6.0 6.6 | 3.0 1.7 | 17.5 15.7 | 11.5 | 8.7 20.6 | 46.9 43.5 |  |
| 50 establishments | $\left\{\begin{array}{l}1908 \\ 1909\end{array}\right.$ | 632 | 57.1 56.9 | 4.7 3.2 |  | 6.6 9.7 | 1.7 | 15.7 15.7 | 7.1 11.0 | 20.6 17.9 | 43.5 41.8 |  |
| , establishments | $\left\{\begin{array}{l}1909 \\ 1910\end{array}\right.$ | 771 862 | 56.9 56.7 | 3.2 5.0 |  | 9.7 4.9 | . 6 | 15.7 17.9 | 11.0 16.2 | 17.9 18.0 | 41.8 37.2 |  |
| 115 | (1910 | 1,801 | 58.0 | 2.4 |  | 4.1 | .4 | 8.9 | 11.6 | 15.0 | 56.6 | 0.9 |
|  | 1911 | 1,846 | 57.7 | 2.4 |  | 3.7 | 1.6 | 6.2 | 16.4 | 20.6 | 47.8 | 1.3 |
| 169 establishmen | ¢1911 | 2.455 | 58.3 | 1.8 |  | 3.3 | . 8 | 4.4 | 12.1 | 19.5 | 57.2 | 1.0 |
| 169 establishment | \{1912 | 2,427 | 58.1 | 1.1 |  | 3.0 | 1.5 | 4.4 | 19.8 | 13.6 | 55.7 | . 9 |
| 199 establishments | \{1912 | 2,939 | 58.1 | . 9 |  | 4.3 | 1.2 | 3.6 | 18.3 | 16.6 | 54.3 | . 8 |
| Carvers, hand: |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 establishments. | (1907 | 169 | 54.2 | 13.0 |  | 15.4 | 1.2 | 29.0 | 2.4 | 15.4 | 23.7 |  |
|  | 1908 | 127 | 54.5 | 11.0 |  | 15.7 | 1.6 | 26.0 | 3.1 | 25.2 | 17.3 |  |
|  | 1909 | 151 | 53.0 | 20.5 |  | 13.9 | . 7 | 31.8 | 2.0 | 19.9 | 11.3 |  |
|  | 1910 | 148 | 52.7 | 16.9 |  | 20.9 | 1.4 | 32.4 | 2.7 | 14.9 | 10.8 |  |
| 65 establishments | $\{1910$ | 315 | 55.7 | 7.9 |  | 9.8 | . 6 | 16.5 | 8.6 | 19.4 | 36.8 | . 3 |
|  | (1911 | 345 | 55.5 | 11.0 |  | 9.9 | 1.4 | 13.0 | 13.0 | 18.0 | 33.3 | . 3 |
| 76 establishments. | $\{1911$ | 367 | 56.2 | 10.4 |  | 1.4 | 1.4 | 17.4 | 12.3 | 18.8 | 38.1 | . 3 |
|  | \|1912 | 334 | 56.3 | 7.5 |  | 1.8 | 8.7 | 12.0 | 19.2 | 11.4 | 39.2 | . 3 |
| 82 establishment | $\{1912$ | 350 | 56.3 | 7.1 |  | 1.7 | 8.6 | 11.4 | 18.6 | 15.7 | 36.9 |  |
| 82 establishment | $\{1913$ | 355 | 55.1 | 6.2 |  | 1.4 | 5.4 | 50.7 | 2.8 | 18.0 | 15.5 |  |
| Chair assemblers: | (1910 | 165 | 57.7 |  |  |  |  |  | 51.5 | 24.2 | 24.2 |  |
| 6 establishments | $\{1911$ | 141 | 58.0 |  |  |  |  |  | 45.4 | 22.0 | 32.6 |  |
| 15 establishments. | $\{1911$ | 227 | 58.3 |  |  | 2.2 |  |  | 31.3 | 18.1 | 48.5 |  |
|  | 11912 | 237 | 57.8 |  |  | 2.1 | 4.6 |  | 34.2 | 17.3 | 41.8 |  |
| 23 establishments. | $\{1912$ | 453 | 57.8 |  |  | 4.9 | 2.4 | $1 .^{2}$ | 20.1 | 44.4 | 28.0 |  |
|  | 1913 | 519 | 57.3 |  |  | 3.9 |  | 14.1 | 14.6 | 56.5 | 11.0 |  |

Table IV.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913Concluded.

PER CENT-Concluded.

| Occupation, and number of establishments. | Year. | $\begin{aligned} & \text { Num- } \\ & \text { ber } \\ & \text { of } \\ & \text { em- } \\ & \text { ploy- } \\ & \text { ees. } \end{aligned}$ | A ver-agefull-timehoursperweek. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 51 \end{gathered}$ | 51 and under 54 | 54 | $\begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 57 \end{gathered}$ | $\begin{aligned} & 57 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & 60 \end{aligned}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| Finishers: |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (1907 | 1,217 | 57.3 | 1.7 |  | 1.7 | 0.5 | 21.0 | 16.5 | 18.3 | 40.2 |  |
| 52 establishments. | 1908 | , 927 | 57.5 | 2.0 |  | 1.5 | . 3 | 17.7 | 17.2 | 21.6 | 39.7 |  |
|  | 1909 | 1,127 | 57.3 | 1.4 |  | 2.4 |  | 17.7 | 19.5 | 20.4 | 38.5 |  |
|  | 1910 | 1,164 | 57.3 | 1.6 |  | 1.9 |  | 18.0 | 18.0 | 24.4 | 36.0 |  |
| 128 establishments. | $\{1910$ | 3.132 | 58.5 | . 6 |  | 1.4 |  | 6.8 | 14.1 | 18.6 | 57.1 | 1.3 |
|  | $\{1911$ | 3,206 | 58.0 | . 5 |  | 1.6 | .7 | 7.0 | 20.6 | 22.4 | 45.9 | 1.2 |
| 192 establishments. | ¢1911 | 4,407 | 58.5 | . 4 |  | 1.1 | . 4 | 4.6 | 14.7 | 20.1 | 57.9 | . 9 |
|  | 11912 | 4,357 | 58.1 | . 4 |  | 1.1 | 2.2 | 4.8 | 24.2 | 14.8 | 51.7 | . 8 |
| 228 establishments | $\{1912$ | 5,290 | 58.2 | . 3 |  | 1.6 | 1.8 | 3.6 | 20.6 | 22.0 | 49.4 | . 7 |
| Machine hands: | (1913 | 5,287 | 57.2 | . 1 |  | 1.3 | . 9 | 29.1 | 10.5 | 24.1 | 33.5 | . 5 |
|  | \{1907 | 1,347 | 58.2 | . 7 |  | 2.5 | . 5 | 10.0 | 14.3 | 18.3 | 53.7 |  |
| 51 establishments. | 1908 | 1,047 | 58.1 | .9 |  | 3.4 | . 8 | 9.3 | 11.1 | 26. 1 | 48.5 |  |
|  | 1909 | 1,153 | 57.9 | .9 |  | 3.3 | . 3 | 10.1 | 12.9 | 25.9 | 46.6 |  |
|  | 1910 | 1,239 | 57.4 | . 7 |  | 3.1 | . 2 | 10.3 | 17.3 | 29.8 | 38.7 |  |
| 121 establishme | $\{1910$ | 3,151 | 58.7 | .3 |  | 1.6 | . 1 | 4.3 | 13.4 | 20.6 | 57.7 | 2.2 |
|  | 11911 | 3,107 | 58.3 | .3 |  | 1.6 | 1.1 | 3.5 | 16.9 | 25.4 | 48.8 | 2.5 |
| 192 establishments | $\{1911$ | 4,855 | 58.8 | . 2 |  | 1.4 | . 4 | 2.2 | 13.1 | 20.5 | 60.7 | 1.6 |
|  | (1912 | 4,797 | 58.4 | .1 |  | 1.0 | 1.3 | 3.2 | 20.6 | 15.9 | 56.2 | 1.7 |
| 226 establishments. | $\{1912$ | 6,212 | 58.5 | .1 |  | 1.5 | 1.0 | 2.7 | 17.1 | 25.6 | 50.7 | 1.3 |
| 226 establishments. | $\{1913$ | 6,700 | 57.6 | .1 |  | 1.2 | 1.5 | 20.9 | 9.9 | 27.5 | 37.9 | . 9 |
| Upholsterers: |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 383 | 53.6 | 4.4 2.3 | 4.2 | 12.8 | 5. 0 | 53.3 | 4. 7 | 7.3 | 8.4 |  |
| 15 establishme | $\{1908$ | 310 | 53.5 | 2.3 | 6.8 | 11.9 | 6. 1 | 52.6 | 5.2 | 11.9 | 3.2 |  |
|  | 1909 | 307 | 53.8 | 2.3 | 1.3 | 16.9 | 5.9 | 52.4 | 5.2 | 12.7 | 3.3 |  |
|  | (1910 | 325 | 53.8 | 2.2 | . 6 | 16.0 | 4.3 | 53.5 | 8.6 | 10.2 | 4.6 | ...... |
| 38 establishments. | $\{1910$ | 501 | 55.0 | 1.4 | . 4 | 10.4 | 2.8 | 43.1 | 15.8 | 6.6 | 19.6 |  |
|  | 1911 | 518 | 54.7 | 1.7 | . 6 | 9.5 | 9.3 | 44.6 | 8.3 | 10.8 | 15.3 | -.... |
| 49 establishments. | $\{1911$ | 558 | 55.8 | 1.6 | . 5 | 2.9 | 3.6 | 41.8 | 12.2 | 17.6 | 19.9 |  |
|  | 1912 | 552 | 55.5 | 1.4 | 5.3 | 2.7 | 4.3 | 34.8 | 15.8 | 17.6 | 18.1 |  |
| 54 establishments. | $\{1912$ | 583 | 56.4 |  |  | 3.1 | 4.1 | 31.6 | 15.1 | 31.2 | 14.9 |  |
| 54 establishments. | 1913 | 635 | 55.8 |  |  | 3.9 | 2.8 | 43.9 | 11.2 | 28.8 | 9.3 |  |
| Veneerers: |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\{1910$ | 333 | 58.8 |  |  |  |  | .3 | 20.1 | 20.4 | 55.9 | 3.3 |
|  | 1911 | 317 | 58.4 |  |  |  |  | .3 | 26.5 | 24.0 | 44.2 | 5.0 |
| 94 establishm | $\{1911$ | 430 | 58.7 |  |  | . 2 |  | . 2 | 20.7 | 22.8 | 52.3 | 3.7 |
|  | 11912 | 407 | 58.3 |  |  | .2 | . 7 | . 5 | 32.7 | 12.0 | 51.6 | 2.2 |
| 123 establishments. | $\{1912$ | 563 | 58.3 |  |  | . 9 | 1.1 | 1.1 | 27.5 | 16.7 | 51.2 | 1.6 |
|  | 11913 | 698 | 57.2 |  |  | 1.3 | 1.6 | 31.2 | 8.9 | 15.9 | 39.3 | 1.9 |

Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913.

CABINETMAKERS.

| Year and State. | Number of estab-lishments. | Number of em-ployees. | A ver-agefull-timehoursperweek. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\left\|\begin{array}{c} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{array}\right\|$ | $\begin{array}{\|c} 51 \\ \text { and } \\ \text { under } \\ 54 \end{array}$ | 54 | Over 54 and under 57 | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | Over 60 |
| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| Illinois. | 21 | 368 | 58.4 |  |  | 12 |  | 61 |  | 49 | 246 |  |
| Indiana | 25 | 350 | 59.0 |  |  |  |  |  | 39 | 112 | 176 | 23 |
| Maryland . | 5 | 61 | 58.6 |  |  |  |  |  | 21 | 4 | 36 |  |
| Massachusetts | 8 | 152 | 49.9 | 26 |  | 113 | 8 |  |  | 5 |  |  |
| Michigan | 16 | 475 | 57.8 |  |  |  |  |  | 209 | 8 | 258 |  |
| Missouri. | 8 | 83 | 60.0 |  |  |  |  |  |  |  | 83 |  |
| New York. | 40 | 479 | 57.3 |  |  |  | 28 | 45 | 186 | 85 | 135 |  |
| North Carolina. | 11 | 114 | 59.6 |  |  |  |  |  |  | 33 | 81 |  |
| Ohio. | 23 | 235 | 59.3 |  |  |  |  |  | 23 | 26 | 186 |  |
| Pennsylvania. | 23 | 327 | 58.8 |  |  |  |  |  | 55 | 122 | 150 |  |
| Tennessee.. | 6 | 74 | 59.7 |  |  |  |  |  | 4 |  | 70 |  |
| Wisconsin. | 13 | 221 | 59.7 |  |  |  |  |  |  | 45 | 176 |  |
| Total | 199 | 2,939 | 58.1 | 26 |  | 125 | 36 | 106 | 537 | 489 | 1,597 | 23 |
| Mlinois. | 21 | 384 | 58.2 |  |  | 14 |  | 70 |  | 74 | 226 |  |
| Indiana. | 25 | 360 | 58.3 |  |  |  | 12 | 6 | 73 | 78 | 171 | 20 |
| Maryland | 5 | 64 | 56.6 |  |  |  |  | 24 | 15 | 3 | 22 |  |
| Massachusetts | 8 | 146 | 50.4 | 14 |  | 113 | 13 |  |  | 6 |  |  |
| Michigan. | 16 | 485 | 54.2 |  |  |  |  | 411 | 74 |  |  |  |
| Missouri. | 8 | 85 | 60.0 |  |  |  |  |  |  |  | 85 |  |
| New York. | 40 | 566 | 56.2 |  |  |  | 33 | 290 |  | 170 | 73 |  |
| North Carolina. | 11 | 167 | 59.9 |  |  |  |  |  |  | 15 | 152 |  |
| Ohio. | 23 | 244 | 59.0 |  |  |  |  |  | 25 | 65 | 154 |  |
| Pennsylvania | 23 | 347 | 58.3 |  |  |  |  |  | 81 | 136 | 130 |  |
| Tennessee. | 6 | 87 | 59.8 |  |  |  |  |  | 4 |  | 83 |  |
| Wisconsin. | 13 | 249 | 59.8 |  |  |  |  |  |  | 41 | 208 |  |
| Total. | 199 | 3,184 | 57.2 | 14 |  | 127 | 58 | 801 | 272 | 588 | 1,304 | 20 |

CARVERS, HAND.


Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

CHAIR ASSEMBLERS.

| Year and State. | $\left\|\begin{array}{l} \text { Num- } \\ \text { ber of } \\ \text { estab- } \\ \text { lish- } \\ \text { ments. } \end{array}\right\|$ | Num ber of em-ployees. | Aver-agefull-timehoursperweek. | Number of employees whose full-time hours yer week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Un- } \\ \text { der } \\ 48 \end{gathered}$ | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}\right.$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | $\left\|\begin{array}{c} \text { Over } \\ \text { 54 } \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| Massachusetts. | 4 | 138 | 57.1 |  |  | 22 |  |  |  | 94 | 22 |  |
| Miehigan. | 4 | 127 | 57.1 |  |  |  |  |  | 91 |  | 36 |  |
| New York. | 3 3 3 | ${ }_{3}^{63}$ | 58.0 |  |  |  | 11 |  |  | 44 | 8 |  |
| North Carolina. | 3 | 28 | 59.2 |  |  |  |  |  |  | 13 | 15 |  |
| Ohio. | 3 | 20 | 59.9 |  |  |  |  |  |  | 3 | 17 |  |
| Wisconsin. | 3 | 52 | 59.3 |  |  |  |  |  |  | 23 | 29 |  |
| Other States | 3 | 25 | 57.6 |  |  |  |  | 1 |  | 24 |  |  |
| Total. | 23 | 453 | 57.8 |  |  | 22 | 11 | 1 | 91 | 201 | 127 |  |
| 1913. |  |  |  |  |  |  |  |  |  |  |  |  |
| Massachusetts. | 4 | 161 | 57.1 |  |  | 20 |  |  |  | 141 |  |  |
| Michigan. | 4 | 126 | 55.2 |  |  |  |  | 61 | 65 |  |  |  |
| New York. | 3 | 84 | 58.3 |  |  |  |  | 11 |  | 73 |  |  |
| North Carolina. | 3 | 36 | 57.3 |  |  |  |  |  | 11 | 25 |  |  |
| Ohio. | 3 | 19 | 59.8 |  |  |  |  |  |  | 4 | 15 |  |
| Wisconsin | 3 | 62 | 59.5 |  |  |  |  |  |  | 20 | 42 |  |
| Other States. | 3 | 31 | 57.7 |  |  |  |  | 1 |  | 30 |  |  |
| Total | 23 | 519 | 57.3 |  |  | 20 |  | 73 | 76 | 293 | 57 |  |

FINISHERS.


Table V.-AVERAGE and CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Continued.

MACHINE HANDS.

| Year and State. | Number of estab-lishments. | Number of em-ployees. | Average filltime hours per week. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\begin{array}{\|c} 51 \\ \text { and } \\ \text { under } \\ 54 \end{array}$ | 54 | $\left\|\begin{array}{c} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{array}\right\|$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| 1912. |  |  |  |  | * |  |  |  |  |  |  |  |
| Illinois. | 21 | 584 | 59.0 |  |  | 8 |  | 66 |  | 71 | 439 |  |
| Indiana | 25 | 780 | 58.8 |  |  |  |  |  | 92 | 283 | 324 | 81 |
| Maryland. | 8 | 175 | 59.1 |  |  |  |  |  | 37 | 11 | 127 |  |
| Massachusetts. | 12 | 434 | 56.5 | 7 |  | 85 | 16 |  |  | 267 | 59 |  |
| Michigan. | 20 | 749 | 57.4 |  |  |  |  |  | 406 | 11 | 332 |  |
| Missouri. | 9 | 206 | 59.6 |  |  |  |  | 14 |  |  | 152 |  |
| New York | 43 | 954 | 57.2 |  |  |  | 47 | 88 | 384 | 190 | 245 |  |
| North Carolina. | 13 | 329 | 59.5 |  |  |  |  |  |  | 125 | 204 |  |
| Ohio. | 26 | 481 | 59.6 |  |  |  |  |  | 19 | 81 | 381 |  |
| Pennsylvania | 28 | 685 | 58.7 |  |  |  |  |  | 112 | 280 | 243 |  |
| Tennessee... | 6 | 152 | 59.6 |  |  |  |  |  | 12 |  | 140 |  |
| Wisconsin. | 15 | 683 | 59.4 |  |  |  |  |  |  | 270 | 413 |  |
| Total | 220 | i, 212 | 58.5 | 7 |  | 93 | 63 | 168 | 1,062 | 1,589 | 3,149 | 81 |
| 1913. |  | - |  |  |  |  |  |  |  |  |  |  |
| Tllinors. | 21 | 684 | 58.7 |  |  | 7 |  | 96 |  | 139 | 442 |  |
| Indiana. | 25 | 804 | 57.7 |  |  | ...-. | 45 | 25 | 205 | 194 | 277 | 58 |
| Maryland. | 8 | 206 | 58.1 |  |  |  |  | 33 | 38 | 16 | 119 |  |
| Massachusetts. | 12 | 436 | 56.3 | 8 |  | 75 | 24 |  |  | 329 |  |  |
| Michigan. | 20 | 879 | 54.3 |  |  |  |  | 699 | 180 |  |  |  |
| Missouri | 9 | 214 | 59.6 |  |  |  |  | 14 |  |  | 200 |  |
| New York | 43 | 1,066 | 50.4 |  |  |  | 31 | 534 | 19 | 309 | 173 |  |
| North Carolina. | 13 | 379 | 59.3 |  |  |  |  |  | 38 | 69 | 272 |  |
| Ohio. | 26 | 503 | 59.3 |  |  |  |  |  | 13 | 160 | 330 |  |
| Pennsylvania | 28 | 721 | 58.1 |  |  |  |  |  | 164 | 344 | 213 |  |
| Tennessee. | 6 | 117 | 59.7 |  |  |  |  |  | 8 |  | 109 |  |
| Wisconsin. | 15 | 691 | 59.4 |  |  |  |  |  |  | 284 | 407 |  |
| Total. | 226 | 10,700 | 57.6 | 8 |  | 82 | 100 | 1,401 | 665 | 1,844 | 2, 542 | 58 |

CPHOLSTERERS.


WAGES AND HOURS OF LABOR, 1907 TO 1913-FURNITURE. 147
Table V.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913-Concluded.

VENEERERS.

| Year and State. | $\left\|\begin{array}{l} \text { Num- } \\ \text { ber of } \\ \text { estab- } \\ \text { lish- } \\ \text { ments. } \end{array}\right\|$ | Num ber or em. ployees. | Average time hours per week. | Number of employees whose full-time hours per weekwere- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & \mathbf{4 8} \end{aligned}$ | 48 | $\begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 | 0 ver 54 and under 57 | $\left.\begin{array}{\|c} 57 \\ \text { and } \\ \text { under } \\ 60 \end{array} \right\rvert\,$ | 60 | Over |
| 1912. |  |  |  |  |  |  |  |  |  |  |  |  |
| Illinois... | 17 | 69 | 59.5 |  |  |  |  | 5 |  | 6 | 58 |  |
| Indiana........ | 14 | 45 | 59.1 |  |  |  |  |  | 4 | 14 | 18 |  |
| Massachusetts. | 3 | ${ }^{6}$ | 51.4 |  |  | 5 |  |  |  | 1 |  |  |
| Missouri.. | $\begin{array}{r}15 \\ 3 \\ \hline\end{array}$ | 158 | 60.0 |  |  |  |  |  | 96 | 2 | 6 |  |
| New York.. | 25 | 72 | 56.6 |  |  |  | - | 1 | 44 | 13 | 8 |  |
| Ohio. | 13 | 54 | 59.5 |  |  |  |  |  | 4 | 4 | 46 |  |
| Pennsylvania | 17 | 62 | 59.1 |  |  |  |  |  | 7 | 23 | 32 |  |
| Tennessee. | 3 | 8 | 60.0 |  |  |  |  |  |  |  |  |  |
| Wisconsin. | 12 | 81 | 59.3 |  |  |  |  |  |  | 31 | 50 |  |
| Other States | 1 | 1 | 60.0 |  |  |  |  |  |  |  | 1 |  |
| Total. | 123 | 563 | 58.3 |  |  | 5 | 6 | 6 | 155 | 94 | 288 | 9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Illinois... | 17 | 103 | 59.4 |  |  |  |  | 8 |  | 11 | 84 |  |
| Indiana ...... | 14 | 60 | 58.4 |  |  |  | 6 | 3 | 2 | 18 | 18 | 13 |
| Massachusetts. | 3 | 10 | 50.8 |  |  | 9 |  |  |  | 1 |  |  |
| Michigan. | 15 | 170 | 54.1 |  |  |  |  | 152 | 18 |  |  |  |
| Missouri. | 3 | 7 | 60.0 |  |  |  |  |  |  |  | 7 |  |
| New York. | 25 | 89 | 55.5 |  |  |  | 5 | 55 | 7 | 5 | 17 |  |
| Ohio.. | 13 | 50 | 58.8 |  |  |  |  |  | 8. | 17 | 31 |  |
| Pennsylvania | 17 | 91 | 58.4 |  |  |  |  |  | 25 | 23 | 43 | ..... |
| Tennessee. | 3 | 14 | 60.0 |  |  |  |  |  |  |  | 14 |  |
| Wisconsin.... Other States. | 12 | 90 | 59.4 |  |  |  |  |  |  | 36 | 60 |  |
| Other States | 1 | 2 | 55.0 |  |  |  |  |  | 2 |  |  |  |
| Tota | 123 | 698 | 57.2 |  |  |  | 11 | 218 | 62 | 111 | 274 | 13 |

## Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]
CABINETMAKERS.

| State, and number of establishments. | Year. | $\begin{gathered} \text { Num- } \\ \text { bur of } \\ \text { em- } \\ \text { ploy- } \\ \text { ees. } \end{gathered}$ | $\begin{gathered} \Lambda \text { ver } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{gathered}$ | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & \text { 48- } \end{aligned}$ | 48 | $\begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \end{gathered}$ | $\begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}$ | 54 |  | $\begin{array}{\|c\|} 57 \\ \text { and } \\ \text { under } \\ 60 \end{array}$ | 60 | $\begin{aligned} & 0 \text { ver } \\ & 60 \end{aligned}$ |
| Illinois: | \{ 1912 | 368 | 58.4 |  |  | 12 |  | 61 |  | 49 | 246 |  |
| Indiana: | ( 1913 | 384 | 58.2 |  |  | 14 |  | 70 |  | 74 | 226 |  |
| Ind 25 establishm | ( 1912 | 350 | 59.0 |  |  |  |  |  | 39 | 112 | 176 | 23 |
| Maryland: <br> 5 establishm | ( 1913 | 360 | 58.3 |  |  |  | 12 | 6 | 73 | 78 | 171 | 20 |
|  | ( 1912 | 61 | 58.6 |  |  |  |  |  | 21 | 4 | 36 |  |
| Massachusetts: | ¢ 1913 | 64 | 56.6 |  |  |  |  | 24 | 15 | 3 | 22 |  |
| 8 establishmen | ( 1912 | 152 | 49.9 | 26 |  | 113 | 8 |  |  | 5 |  |  |
| Michigan: | - 1913 | 146 | 50.4 | 14 |  | 113 | 13 |  |  | 6 |  |  |
|  |  | 475 |  |  |  |  |  |  | 209 | 8 | 258 |  |
| Missouri: | \{ 1913 | 485 | 54.2 |  |  |  |  | 411 | 74 |  |  |  |
|  |  | 83 | 60.0 |  |  |  |  |  |  |  |  |  |
| New York: | \{ 1913 | 85 | 60.0 |  |  |  |  |  |  |  | 85 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 establishments | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 479 586 | 57.3 56.2 |  |  |  | $\begin{aligned} & 28 \\ & 33 \end{aligned}$ | $\begin{array}{r} 45 \\ 290 \end{array}$ | 186 | 85 170 | 135 73 |  |
| North Carolina: |  |  |  |  |  |  |  |  |  |  | 73 |  |
| 11 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 114 | 59.6 59.9 |  |  |  |  |  |  | 33 | 81 |  |
| Ohio: | ( 1913 | 167 | 59.9 |  |  |  |  |  |  | 15 | 152 |  |
| 23 establishments | ( 1912 | 235 | 59.3 |  |  |  |  |  | 23 | 26 | 186 |  |
| Pennsylvania: | ( 1913 | 244 | 59.0 |  |  |  |  |  | 25 | 65 | 154 |  |
| 23 establishmen | \{ 1912 | 327 | 58.8 |  |  |  |  |  | 55 | 122 | 150 |  |
| Tennessee: |  | 347 | 58.3 |  |  |  |  |  | 81 | 136 | 130 |  |
|  | \{ 1912 | 74 | 59.7 |  |  |  |  |  | 4 |  | 70 |  |
| Wisconsin:13 establishments | (1913 | 87 | 59.8 |  |  |  |  |  | 4 |  | 83 |  |
|  | $\{1912$ | 221 | 59.7 |  |  |  |  |  |  | 45 | 176 |  |
| 13 establishmen | \{1913 | 249 | 59.8 |  |  |  |  |  |  | 41 | 208 |  |

CARVERS, HAND.


Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Continued

CHAIR ASSEMBLERS.

| State, and number of establishments. | Year. | Number of em-ployees. | A verage fulltime hours per week. | Number of employees whose full-time hours per week Were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Under 48 | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{gathered}\right.$ | $\begin{array}{\|c} 51 \\ \text { and } \\ \text { under } \\ 54 \end{array}$ | 54 | Over 54 and under 57 | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{gathered} \text { Over } \\ 60 \end{gathered}$ |
| Massachusetts: |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 establishments. | $\{1912$ | 138 | 57.1 |  |  | 22 |  |  |  | 94 | 22 |  |
|  | ( 1913 | 161 | 57.1 |  |  | 20 |  |  |  | 141 | .... |  |
| Michigan: | \% 1912 | 127 | 57.1 |  |  |  |  |  | 91 |  | 36 |  |
| 4 establishments. | $\{1913$ | 126 | 55.2 |  |  |  |  | $\underline{61}$ | 65 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 63 84 | 58.0 |  |  |  | 11 | 11 |  | 44 | 8 |  |
| North Carolina: |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 establishments | \{ 1912 | 28 | 59.2 |  |  |  |  |  |  | 13 | 15 |  |
| Ohio: ${ }^{\text {a }}$ (1012 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 establishments. | \{ 1912 | 20 | 59.9 |  |  |  |  |  |  | 3 | 17 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 establishments. | $\{1913$ | 62 | 59.5 |  |  |  |  |  |  | 20 | 42 |  |

FINISHERS.

| Illinois: |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 establishments. | $\{1912$ | 672 702 | 58.5 58.3 |  |  |  | 28 | 92 |  | 152 | 400 |  |
| Indiana: | (1913 | 702 | 58.3 |  |  |  |  | 154 | --. | 175 | 373 |  |
| 25 establishment | $\{1912$ | 502 | 58.8 |  |  |  |  |  | 58 | 189 | 218 | 37 |
| 25 establishment | (1913 | 535 | 57.8 |  |  |  | 19 | 23 | 138 | 133 | 193 | 29 |
| Maryland: | (1912 |  |  |  |  |  |  |  | 40 |  |  |  |
| 8 establishments. | $\{1912$ | 139 | 58.8 57.1 |  |  |  |  | 30 | 40 40 | $\begin{array}{r}9 \\ 13 \\ \hline\end{array}$ | 90 46 |  |
| Massachusetts: |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 establishments | $\{1912$ | 223 190 | 54.0 54.5 | 17 |  | 83 68 | 20 17 |  |  | 87 99 | 16 |  |
| Michigan: |  | 1,064 |  |  |  |  |  |  |  |  |  |  |
| 20 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 1,064 | 57.8 54.2 |  |  |  |  | $76{ }^{\circ}$ | 483 166 | 6 | 575 |  |
| Missouri: |  |  | 54.2 |  |  |  |  | 760 | 160 |  |  |  |
| 9 establishments....... | (1912 | 126 | 60.0 |  |  |  |  |  |  |  | 126 |  |
| New York: | (1913 | 133 | 60.0 |  |  |  |  |  |  |  | 133 |  |
| 44 establishments. | 1912 | 864 | 56.8 |  |  |  | 49 | 101 | 394 | 129 | 191 |  |
| North Carolina: | (1913 | 909 | 55.8 |  |  |  | 13 | 564 | 36 | 183 | 113 |  |
| 12 establishments. | 1912 | 244 | 59.4 |  |  |  |  |  |  | 92 | 152 |  |
| hio: | -1913 | 240 | 59.0 |  |  |  |  |  | 18 | 88 | 134 |  |
| hio: | f1912 | 358 | 59.5 |  |  |  |  |  | 20 | 78 | 260 |  |
| 27 establishmen | $\{1913$ | 380 | 59.1 |  |  |  |  |  | 29 | 132 | 219 |  |
| Pennsylvania: |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 establishments | $\{1912$ | 571 610 | 58.6 |  |  |  |  |  | 83 | 287 | 201 |  |
| Tennessee: | 11913 | 610 | 58.2 |  |  |  |  |  | 119 | 311 | 180 |  |
| Tennessee: 6 establishment | $\{1912$ | 80 | 59.4 |  |  |  |  |  | 10 |  | 70 |  |
| 6 establishment | $\{1913$ | 91 | 59.6 |  |  |  |  |  | 8 |  | 83 |  |
| Wisconsin: |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 establishments. . . . . | $\{1912$ | 447 | 59.6 |  |  |  |  |  |  | 135 | 312 |  |
|  | 1913 | 437 | 59.5 |  |  |  |  |  |  | 139 | 298 |  |

Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Continued.

MACBINE HANDS.

| State, and number of establishments. | Year. | Num ber of em-ployees. | age <br> full- <br> time <br> hours <br> per <br> week. | Number of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Un- der 48 | 48 | $\begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 51 \end{gathered}$ | $\left\lvert\, \begin{gathered} 51 \\ \text { and } \\ \text { under } \\ 54 \end{gathered}\right.$ | 54 | $\begin{gathered} \text { Over } \\ 54 \\ \text { and } \\ \text { under } \\ 57 \end{gathered}$ | $\begin{gathered} 57 \\ \text { and } \\ \text { under } \\ 60 \end{gathered}$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 \end{aligned}$ |
| Illinois: |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 establishments | $\{1912$ | 584 | 59.0 |  |  | 8 |  | 66 |  | 71 | 439 |  |
| Indiana: | 1913 | 684 | 58.7 |  |  | 7 |  | 96 |  | 139 | 442 |  |
| 25 establishments | \{1912 | 780 | 58.8 |  |  |  |  |  | 92 | 283 | 324 | 81 |
| 25 establishments | $(1913$ | 804 | 57.7 |  |  |  | 45 | 25 | 205 | 194 | 277 | 58 |
| Maryland: |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 establishments | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 175 206 | 59.1 |  |  |  |  | 33 | 37 38 | 116 | 127 |  |
| Massachusetts: | (1913 | 206 | 58.1 |  |  |  |  | 33 | 38 | 10 | 119 |  |
| 12 establishments | $\{1912$ | 434 | 56.5 | 7 |  | 85 | 16 |  |  | 267 | 59 |  |
| Midestablshments. | \{1913 | 436 | 56.3 | 8 |  | 75 | 24 |  |  | 329 |  |  |
| Michigan: | 1912 | 749 | 57.4 |  |  |  |  |  | 406 | 11 | 332 |  |
| 20 establishments. | $\{1913$ | 879 | 54.3 |  |  |  |  | 699 | 180 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 establishments. | $\{1912$ | 206 | 59.6 |  |  |  |  | 14 |  |  | 192 |  |
| New York: |  |  |  |  |  |  |  |  |  |  |  |  |
| 43 establishments | $\{1912$ | 954 | 57.2 |  |  |  | 47 | 88 | 384 | 190 | 245 |  |
| 43 establishments | \{1913 | 1,066 | 56.4 |  |  |  | 31 | 534 | 19 | 309 | 173 |  |
| North Carolina: |  |  |  |  |  |  |  |  |  | 125 |  |  |
| 13 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 329 379 | 59.5 59.3 |  |  |  |  |  | 38 | 125 | 272 |  |
| Ohio: |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 establishments | $\{1912$ | 481 | 59.6 |  |  |  |  |  | 19 | 81 | 381 |  |
| 26 establishments. | 1913 | 503 | 59.3 |  |  |  |  |  | 13 | 160 | 330 |  |
| Pennsylvania: |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 establishments. | $\left\{\begin{array}{l}1912 \\ 1913\end{array}\right.$ | 685 721 | 58.7 58.1 |  |  |  |  |  | 112 | 280 | 293 213 |  |
| Tennessee: |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 establishments | $\{1912$ | 152 | 59.6 |  |  |  |  |  | 12 |  | 140 |  |
| Wiscontabishments | (1913 | 117 | 59.7 |  |  |  |  |  | 8 |  | 109 |  |
| Wisconsin: <br> 15 establishments | $\{1912$ | 683 | 59.4 |  |  |  |  |  |  | 270 | 413 |  |
| 15 establishments. | $\{1913$ | 691 | 59.4 |  |  |  |  |  |  | 284 | 407 |  |

UPHOLSTERERS.


WAGES AND HOURS OF LABOR, 1907 TO 1913-FURNITURE. 151

Table VI.-AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913-Concluded.

VENEERERS.


Table VII.-AVERAGE FLll-Time hours of work Per week and AVERAGE FULL-TIME WEE KLY EARNINGS, BY STATES, 1912 AND 1913.

CABINETMAKERS.

| State. | Number of establish. ments. | 1912 |  |  | 1913 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of employees. | Average full-time hours per week. | A verage full-time weekly oarnings. | Number of employees. | Average full-time hours per week. | Average full-time weekly earnings. |
| Illinois. | 21 | 368 | 58.4 | \$15.47 | 384 | 58.2 | \$15.56 |
| Indiana. | 25 | 350 | 59.0 | 12.84 | 360 | 58.3 | 13.38 |
| Maryland. | 5 | 61 | 58.6 | 10.88 | 64 | 56.6 | 11.41 |
| Massachusetts | 8 | 152 | 49.9 | 15. 49 | 146 | 50.4 | 15.30 |
| Michigan. | 16 | 475 | 57.8 | 14.00 | 485 | 54.2 | 13.91 |
| Missouri. | 8 | 83 | 60.0 | 13.59 | 85 | 60.0 | 13.79 |
| New York. | 40 | 479 | 57.3 | 13. 42 | 566 | 56.2 | 13.44 |
| North Carolina | 11 | 114 | 59.6 | 8.84 | 167 | 59.9 | 8.89 |
| Ohio. | 23 | 235 | 59.3 | 13.17 | 244 | 59.0 | 13.64 |
| Pennsylvania. | 23 | 327 | 58.8 | 11.87 | 347 | 58.3 | 12.76 |
| Tennessee. | 6 | 74 | 59.7 | 11.39 | 87 | 59.8 | 11.12 |
| Wisconsin. | 13 | 221 | 59.7 | 11.52 | 249 | 59.8 | 11.54 |
| Total. | 199 | 2,939 | 58.1 | 13.20 | 3,184 | 57.2 | 13.30 |

CARVERS, HAND.

| Illinois. | 17 | 79 | 57.0 | \$17.67 | 83 | 56.7 | \$17.66 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana. | 6 | 8 | 58.7 | 16.69 | 11 | 57.6 | 17.48 |
| Massachusett | 5 | 28 | 45.1 | 20.44 | 25 | 45.2 | 19.29 |
| Michigan | 14 | 104 | 58.0 | 18.13 | 108 | 54.0 | 18.05 |
| New York. | 21 | 82 | 56.4 | 16.30 | 82 | 56.2 | 16.54 |
| Ohio. | 4 | 7 | 59.4 | 14.59 | 7 | 59.4 | 15.28 |
| Pennsylvania | 11 | 30 | 56.9 | 16.00 | 26 | 56.8 | 15.86 |
| Wisconsin. | 3 | 11 | 58.9 | 16.94 | 11 | 58.9 | 17.03 |
| Other States. | 1 | 1 | 59.5 | 13.00 | 2 | 59.5 | 13.63 |
| Total. | 82 | 350 | 56.3 | 17.44 | 355 | 55.1 | 17.41 |

CHAIR ASSEMBLERS.

| Massachusetts. | 4 | 138 | 57.1 | \$10.89 | 161 | 57.1 | \$10.86 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Michigan. | 4 | 127 | 57.1 | 12.29 | 126 | 55.2 | 12.81 |
| New York. | 3 | 63 | 58.0 | 10.81 | 84 | 58.3 | 10.92 |
| North Carolina. | 3 | 28 | 59.2 | 8.02 | 36 | 57.3 | 8.07 |
| Ohio. | 3 | 20 | 59.9 | 9.76 | 19 | 59.8 | 9.92 |
| Wisconsin. | 3 | 52 | 59.3 | 10.14 | 62 | 59.5 | 10.95 |
| Other States. | 3 | 25 | 57.6 | 13.42 | 31 | 57.7 | 14.16 |
| Total. | 23 | 453 | 57.8 | 11.10 | 519 | 57.3 | 11.32 |

FINISHERS.

| Illinois. | 23 | 672 | 58.5 | \$13.53 | 702 | 58.3 | \$13.79 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana | 25 | 502 | 58.8 | 11.75 | 535 | 57.8 | 12.06 |
| Maryland. | 8 | 139 | 58.8 | 9.79 | 129 | 57.1 | 10.36 |
| Massachusetts | 12 | 223 | 54.0 | 12.32 | 190 | 54.5 | 12.56 |
| Michigan. | 20 | 1,064 | 57.8 | 11.34 | 931 | 54.2 | 11.62 |
| Missouri. | 9 | 126 | 60.0 | 11.64 | 133 | 60.0 | 12.03 |
| New York | 44 | 864 | 56.8 | 12.21 | 909 | 55.8 | 12.59 |
| North Carolina | 12 | 244 | 59.4 | 7.57 | 240 | 59.0 | 7.92 |
| Ohio. | 27 | 358 | 59.5 | 11.03 | 380 | 59.1 | 11.53 |
| Pennsylvania. | 26 | 571 | 58.6 | 10.74 | 610 | 58.2 | 11.18 |
| Tennessee. | ${ }^{6}$ | 80 | 59.4 | 8.86 | 91 | 59.6 | 9.33 |
| Wisconsin | 16 | 447 | 59.6 | 10.52 | 437 | 59.5 | 10.97 |
| Total. | 228 | 5,290 | 58.2 | 11.44 | 5,287 | 57.2 | 11.81 |

Table VII.-AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND aVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913-Concluded.

MACHINE HANDS.

| State. | Number of estab-lishments. | 1912 |  |  | 1913 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number of employees. | Average full-time hours per week. | Average full-time weekly earnings. | Number of employees. | A verage full-time hours per week. | Average full-time weekly earnings. |
| Illinois. | 21 | 584 | 59.0 | \$14.74 | 684 | 58.7 | \$14.96 |
| Indiana. | 25 | 780 | 58.8 | 12.32 | 804 | 57.7 | 12.16 |
| Maryland. | 8 | 175 | 59.1 | 10.87 | 206 | 58.1 | 11.08 |
| Massachusetts | 12 | 434 | 56.5 | 11.90 | 436 | 56.3 | 12.22 |
| Michigan. | 20 | 749 | 57.4 | 14.18 | 879 | 54.3 | 14.21 |
| Missouri. | 9 | 200 | 59.6 | 12.83 | 214 | 59.6 | 12.76 |
| New York. | 43 | 954 | 57.2 | 12.62 | 1,066 | 56.4 | 12.78 |
| North Carolina. | 13 | 329 | 59.5 | 8.90 | 379 | 59.3 | 8.89 |
| Ohio. | 26 | 481 | 59.6 | 11.89 | 503 | 59.3 | 12. 16 |
| Pennsylvania. | 28 | 685 | 58.7 | 12.18 | 721 | 58.1 | 12. 42 |
| Tennessee. | 6 | 152 | 59.6 | 11.14 | 117 | 59.7 | 11.53 |
| W isconsin | 15 | 683 | 59.4 | 10.44 | 691 | 59.4 | 10.83 |
| Total. | 226 | 6,212 | 58.5 | 12.30 | 6,700 | 57.6 | 12.50 |

UPHOLSTERERS.

| nlinois . . . . . . . . . . . . . . . . . . . | 8 | 215 | 55.1 | \$16.91 | 212 | 54.2 | \$16.83 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana. | 4 | 37 | 56.9 | 15.56 | 35 | 57.4 | 15.75 |
| Massachusetts. | 5 | 19 | 50.5 | 19.48 | 26 | 50.3 | 19.82 |
| Michigan | 7 | 41 | 57.8 | 17.28 | 52 | 54.4 | 17.18 |
| New York. | 10 | 108 | 57.0 | 16.95 | 136 | 56.8 | 17.19 |
| Ohio. | 4 | 30 | 58.5 | 14.96 | 32 | 58.4 | 15.18 |
| Pennsylvania. | 5 | 41 | 57.3 | 15.68 | 34 | 57.2 | 16.38 |
| Wisconsin.. | 8 | 75 | 57.9 | 14.42 | 83 | 58.0 | 14.48 |
| Other States. | 3 | 17 | 59.2 | 13.40 | 25 | 56.6 | 12.64 |
| Total. | 54 | 583 | 56.4 | 16.33 | 635 | 55.8 | 16. 42 |

## VENEERERS.

| Ilinois. | 17 | 69 | 59.5 | \$13.54 | 103 | 59.4 | \$13.90 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indiana | 14 | 45 | 59.1 | 12.41 | 60 | 58.4 | 12.34 |
| Massachusetts | 3 | 6 | 51.4 | 14.28 | 10 | 50.8 | 14.47 |
| Michigan. | 15 | 158 | 57.1 | 12.90 | 170 | 54.1 | 12.81 |
| Missouri. | 3 | 7 | 60.0 | 13.14 | 7 | 60.0 | 13.51 |
| New York. | 25 | 72 | 56.6 | 12.44 | 89 | 55.5 | 12.52 |
| Ohio. | 13 | 54 | 59.5 | 12. 14 | 56 | 58.8 | 12.75 |
| Pennsylvania. | 17 | 62 | 59.1 | 12.11 | 91 | 58.4 | 11.82 |
| Tennessee. | 3 | 8 | 60.0 | 10.86 | 14 | 60.0 | 11.10 |
| Wisconsin. | 12 | 81 | 59.3 | 10.38 | 96 | 59.4 | 10.53 |
| Other States. | 1 | 1 | 60.0 | 20.00 | 2 | 55.0 | 17.00 |
| Total. | 123 | 563 | 58.3 | 12.36 | 698 | 57.2 | 12.45 |

## APPENDIX.

In order that the summary figures in regard to rates of wages and hours of labor in the three industries covered in this Bulletin, heretofore published for the years 1890 to 1912, may be available for reference, the following tables are reproduced from Bulletin No. 129.

TABLE 1.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN LUMBER MANUFACTURING, 1890 TO 1912.
[Data are included from 56 establishments, 1890-1903; 49 establishments, 1903, 1904; 69 establishments, 1904, 1905; 68 establishments, 1905, 1906; 75 establishments, 1906, 1907; 40 establishments, 1907-1910; 245 establishments, 1910, 1911; and 301 establishments, 1911, 1912.]

| Year. | Relative full-time hours per week. | Relative rate of wages per hour. |
| :---: | :---: | :---: |
| Average, 1890-1899. | 100.0 | 100.0 |
| 1890. | 100.4 | 101.9 |
| 1891. | 100.2 | 101.4 |
| 1892. | 100.2 | 101.5 |
| 1893. | 100.0 | 99.9 |
| 1894. | 100.0 | 96.7 |
| 1895. | 99.9 | 97.0 |
| 1896. | 100.1 | 97.4 |
| 1897. | 99.9 | 97.7 |
| 1898. | 99.6 | 101.5 |
| 1899. | 99.8 | 104.5 |
| 1900. | 99.5 | 105.4 |
| 1901. | 99.3 | 108.6 |
| 1902. | 98.7 | 112.1 |
| 1903. | 98.3 | 114.2 |
| 1904. | 97.8 | 112.3 |
| 1905. | 97.6 | 116.3 |
| 1906. | 96.6 | 124.4 |
| 1907. | 96.4 | 129.6 |
| 1908. | 96.6 | 118.7 |
| 1909. | 96.5 | 121.6 |
| 1910. | 96.5 | 130.0 |
| 1911. | 96.5 | 129.9 |
| 1912 | 96.6 | 131.5 |

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TABLE 2.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1890 TO 1912.
[Data are included from 56 establishments, 1890-1903; 49 establishments, 1903, 1904; 69 establishments, 1904, 1905; 68 establishments, 1905, 1906; 75 establishments, 1906, 1907; 40 establishments, 1907-1910; 245 establishments, 1910, 1911; and 301 establishments, 1911, 1912.]

| Year. | Carriage men. ${ }^{1}$ |  | Doggers. ${ }^{2}$ |  | Setters. ${ }^{2}$ |  | Choppers and sawyers in woods. |  | Edgermen. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative fulltime hours per week. | Relative rate of wages hour. | Relative fulltime hours per week. | Relative rate of wages per hour. | Relar tive fulltime hours per week. | Relative rate of wages per hour. | Relative fulltime hours per week. | Relative rate of wages hour. | Relative fulltime hours per week. | Relative rate of wages per hour. |
| Average, 1890-1899.. | 100.0 | 100.0 |  |  |  |  | 100.0 | 100.0 | 100.0 | 100.0 |
| 1890. | 100.4 | 100.2 |  |  |  |  | 100.4 | 98.6 | 100.8 | 104.8 |
| 1891. | 100.2 | 101.7 |  |  |  |  | 100.4 | 97.8 | 100.3 | 104.9 |
| 1892. | 100.2 | 102.1 |  |  |  |  | 100.0 | 99.3 | 100.3 | 106.1 |
| 1893. | 99.6 | 101.1 |  |  |  |  | 99.9 | 95.9 | 93.3 | 104.4 |
| 1894. | 99.5 | 98.1 |  |  |  |  | 99.9 | 94.7 | 99.3 | 97.7 |
| 1895. | 100.1 | 96.6 |  |  |  |  | 99.8 | 98.5 | 100.4 | 94.6 |
| 1896. | 100.1 | 97.7 |  |  |  |  | 100.0 | 98.3 | 100.3 | 97.6 |
| 1897. | 99.9 | 97.8 |  |  |  |  | 99.8 | 101.0 | 100.0 | 95.5 |
| 1898. | 100.0 | 99.4 |  |  |  |  | 99.6 | 106.5 | 99.8 | 96.2 |
| 1899.................. | 99.9 | 103.1 |  |  |  |  | 100.2 | 109.4 | 99.5 | 98.3 |
| 1900. | 99.6 | 104.2 |  |  |  |  | 100.0 | 109.5 | 99.2 | 102.9 |
| 1901. | 98.5 | 106.1 |  |  |  |  | 99.9 | 113.2 | 98.9 | 105.8 |
| 1902. | 98.1 | 111.1 |  |  |  |  | 100.0 | 115.7 | 98.4 | 105.9 |
| 1903. | 98.3 | 115.0 |  |  |  |  | 99.8 | 116.3 | 98.7 | 110.2 |
| 190. | 98.0 | 117.3 |  |  |  |  | 99.4 | 109.9 | 98.2 | 110.5 |
| 1905. | 97.8 | 122.4 |  |  |  |  | 99.4 | 115.4 | 98.1 | 112.9 |
| 1306. | 96.8 | 128.6 |  |  |  |  | 99.3 | 120.8 | 97.1 | 117.3 |
| 1907. | 96.4 | 135.5 |  |  |  |  | 99.4 | 125.7 | 96.8 | 120.5 |
| 1908. | 96.6 | 128.7 |  |  |  |  | ${ }^{(8)}$ | ${ }^{8}$ ) | 96.8 | 116.8 |
| 1909. | 96.6 | 131.2 |  |  |  |  |  |  | 96.8 | 117.9 |
| 1910. | 96.4 | 136. 2 |  |  |  |  |  |  | 96.6 | 125.8 |
| 1911. | 96.2 | 138.2 | 4100.0 | 4100.0 | 4100.0 | 4100.0 |  |  | 96.6 | 127.6 |
| 1912. |  |  | 499.8 | ${ }^{4} 100.7$ | 499.8 | ${ }^{4} 100.5$ |  |  | 96.4 | 127.7 |
|  | Filers. |  | Cant setters, gang. ${ }^{5}$ |  | Laborers. ${ }^{\text {b }}$ |  | Planer feeders. |  | Sawyers, band. |  |
| Average, 1890-1899.. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |  | 100.0 | 100.0 |
| 1890. | 100.5 | 100.6 | 100.2 | 101.3 | 100.3 | 104.8 |  |  | 100.3 | 101.0 |
| 1891. | 100.2 | 101.2 | 100.2 | 101.4 | 100.1 | 104.4 |  |  | 99.9 | 101.9 |
| 1892. | 100. 1 | 100.1 | 100.2 | 101.6 | 100.3 | 103.3 |  |  | 100.1 | 101.5 |
| 1893. | 99.5 | 102.0 | 100.2 | 101.5 | 100.1 | 102.8 |  |  | 100.2 | 102.5 |
| 1894. | 99.4 | 97.6 | 100.2 | 101.4 | 100.2 | 98.1 |  |  | 100.1 | 97.8 |
| 1895. | 100.2 | 96.4 | 100.2 | 99.6 | 100.0 | 95.6 |  |  | 100.0 | 99.8 |
| 1896. | 100.3 | 98.9 | 100.0 | 95.4 | 100.1 | 96.7 |  |  | 99.9 | 98.6 |
| 1897. | 100.1 | 98.8 | 100.0 | 95.4 | 100.0 | 94.8 |  |  | 99.9 | 99.5 |
| 1898. | 100.0 | 100.4 | 99.4 | 99.2 | 99.4 | 97.9 |  |  | 99.8 | 98.6 |
| 1899 | 99.9 | 104.1 | 99.4 | 103.4 | 99.5 | 101.2 |  |  | 99.9 | 101.0 |
| 1900. | 99.7 | 107.0 | 99.4 | 104.3 | 99.1 | 102.3 |  |  | 99.5 | 105.0 |
| 1901. | 99.5 | 108.2 | 99.4 | 104.7 | 98.8 | 105.8 |  |  | 99.5 | 107.7 |
| 1902. | 98.8 | 108.2 | 97.8 | 106.7 | 97.5 | 110.6 |  |  | 98.8 | 114.8 |
| 1903. | 98.4 | 112.8 | 95.8 | 113.1 | 96.8 | 113.1 |  |  | 98.7 | 122.0 |
| 1904. | 98.7 | 114.8 | 96.1 | 113.7 | 97.0 | 113.2 |  |  | 98.0 | 119.9 |
| 1905. | 98.6 | 117.8 | 96.1 | 116.6 | 96.9 | 116.6 |  |  | 97.9 | 123.7 |
| 1906. | 97.6 | 121.0 | 94.7 | 122.1 | 95.5 | 126.1 |  |  | 97.1 | 129.7 |
| 1907. | 97.2 | 127.1 | 94.7 | 126.6 | 795.2 | ${ }^{7} 131.6$ |  |  | 96.8 | 133.0 |
| 1908. | (3) | ${ }^{(8)}$ |  |  | 95.4 | 119.9 |  |  | 96.8 | 130.4 |
| 1909. |  |  |  |  | 95.4 | 123.0 |  |  | 96.8 | 132.8 |
| 1910. |  |  |  |  | 95.2 | 131.9 |  |  | 96.6 | 135.9 |
| 1911. |  |  |  |  | 95.2 | 132.3 | 4100.0 | 4100.0 | 96.6 | 138.5 |
| 1912. |  |  |  |  | 95.4 | 133.9 | 499.7 | 4103.2 | 96.6 | 138.7 |

[^6]TABLE 2.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1890 TO 1912-Concluded.

| Year. | Sawyers, circular. |  | Sawyers, gang. |  | Sawyers, resaw. |  | Trimmer operators. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative full-time hours per week. | Relative rate of wages per hour. | Relative full-time hours per week. | Relative rate of wages perhour. | Relative full-time hours per week. | Relative rate of wages per hour. | Relative full-time hours per week. | Relative rate of wages per hour. |
| Average, 1890-1899.. | 100.0 | 100.0 | 100.0 | 100.0 |  |  | 100.0 | 100.0 |
| 1890. | 101.0 | 104.9 | 100.0 | 97.7 |  |  | 100.4 | 113.7 |
| 1891. | 100.6 | 105.4 | 100.0 | 97.7 |  |  | 100.3 | 108.9 |
| 1892. | 100.8 | 102.8 | 100.0 | 98.5 |  |  | 100.1 | 106.1 |
| 1893. | 98.6 | 102.9 | 100.2 | 98.3 |  |  | 100.2 | 107.2 |
| 1894. | 98.6 | 101.2 | 100.2 | 93.5 |  |  | 100.1 | 97.2 |
| 1895. | 100.6 | 100.0 | 100.0 | 95.2 |  |  | 100.1 | 97.4 |
| 1896. | 100.5 | 99.5 | 100.0 | 95.5 |  |  | 99.9 | 90.5 |
| 1897. | 100.1 | 95.0 | 99.9 | 107.0 |  |  | 99.7 | 88.9 |
| 1898. | 99.7 | 94.9 | 99.9 | 106.7 |  |  | 99.7 | 94.5 |
| 1899. | 99.4 | 93.7 | 99.9 | 110.0 |  |  | 99.7 | 95.5 |
| 1900. | 98.6 | 96.3 | 99.5 | 113.6 |  |  | 99.7 | 98.9 |
| 1901. | 98.2 | 99.6 | 99.5 | 115.4 |  |  | 93.7 | 99.2 |
| 1902. | 96.9 | 103.5 | 98.8 | 119.3 |  |  | 99.7 | 96.2 |
| 1903. | 96.9 | 107.2 | 99.1 | 122. 1 |  |  | 100.7 | 98.1 |
| 1904. | 97.8 | 113.9 | 98.7 | 120.1 |  |  | 99.8 | 104.4 |
| 1905. | 97.7 | 118.0 | 98.8 | 119.7 |  |  | 99.7 | 106.0 |
| 1906. | 97.0 | 128.0 | 97.2 | 124.4 |  |  | 98.9 | 109.7 |
| 1907. | 96.8 | 126.9 | 96.7 | 129.8 |  |  | 93.9 | 110.2 |
| 1903. | 96.8 | 120.8 | 96.7 | 122.6 |  |  | 98.9 | 104.3 |
| 1909................... | 96.8 | 122.4 | 96.7 | 123.8 |  |  | 98.9 | 104.9 |
| 1910.................. | 96.8 | 128.2 | 96.7 | 126.6 |  |  | 98.9 | 104.8 |
| 1911. | 97.0 | 128.5 | 97.0 | 123.1 | 1100.0 | 1100.0 | 98.9 | 105.0 |
| 1912. | 97.0 | 129.9 | 97.0 | 123.0 | 1100.0 | 1101.6 | 98.9 | 106.6 |

${ }^{1}$ Data for 1890 to 1910 not available; computed with $1911=100.0$.
TABLE 3.-RELATIVE FULL-TLME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE MILLWORK INDUSTRY, 1890 TO 1912.
[Data are included from 94 establishments, 1890-1903; 112 establishments, 1903, 1904; 113 establishments, 1904,$1905 ; 116$ establishments, 1005, 1906; 120 establishments, 1906, 1907; 62 establishments, 1907-1910; 232 establishments, 1910, 1911; and 269 establishments, 1911, 1912.]

| Year. | Relative full-time hours per week. | Relative rate of wages per hour. |
| :---: | :---: | :---: |
| Average, 1890-1899. | 100.0 | 100.0 |
| 1890. | 101.3 | 99.2 |
| 1891. | 100.6 | 100.4 |
| 1892. | 100.7 | 100.1 |
| 1893. | 100.1 | 100.0 |
| 1894. | 100.3 | 97.0 |
| 1895. | 99.7 | 98.1 |
| 1896. | 99.0 | 99.3 |
| 1897. | 99.6 | 100.0 |
| 1898. | 99.4 | 101.7 |
| 1899. | 99.2 | 104.1 |
| 1900. | 98.9 | 105.9 |
| 1901. | 98.7 | 108.6 |
| 1902. | 97.7 | 112.5 |
| 1903. | 97.2 | 116.5 |
| 1904. | 97.9 | 115.7 |
| 1905. | 98.1 | 116.7 |
| 1906. | 96.9 | 120.6 |
| 1907. | 96.7 | 124.5 |
| 1908. | 96.7 | 123.4 |
| 1909. | 96.7 | 124.9 |
| 1910. | 96.9 | 127.8 |
| 1911. | 96.8 | 129.0 |
| 1912. | 96.2 | 132.3 |

TABLE 4.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS OF THE MILLWORK INDUSTRY, 1890 TO 1912.
Data are included from 94 establishments, 1890-1903; 112 establishments, 1903, 1904; 113 establishments, 1904, 1905; 116 establishments, 1905, 1906; 120 establishments, 1906, 1907; 62 establishments, 1907-1910; 232 establishments, 1910, 1911; and 269 establishments, 1911, 1912.]


[^7]TABLE E.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN FURNITURE MANUFACTURING, 1890 TO 1912.
[Data are included from 58 establishments, 1890-1903; 61 establishments, 1903, 1904; 63 establishments, 1904, 1905; 63 establishments, 1905, 1906; 67 establishments, 1906, 1907; 52 establishments, 1907-1910; 128 éstablishments, 1910, 1911; and 199 establishments, 1911, 1912.]

| Year. | Relative full-time hours per week. | Relative rate of. wages per hour. |
| :---: | :---: | :---: |
| Average, 1890-1899. | 100.0 | 100.0 |
| 1890. | 101.3 | 100.5 |
| 1891. | 100.7 | 101.5 |
| 1892. | 99.8 | 102.5 |
| 1893. | 99.9 | 101.1 |
| 1894. | 98.2 | 99.4 |
| 1895. | 99.8 | 97.9 |
| 1896. | 100.0 | 97.7 |
| 1897. | 99.6 | 100.2 |
| 1898. | 100.4 | 98.0 |
| 1899. | 100.3 | 102.0 |
| 1900. | 100.2 | 102.4 |
| 1901. | 99.3 | 107.3 |
| 1902. | 98.3 | 114.1 |
| 1903. | 98.1 | 115.2 |
| 1904. | 97.3 | 117.5 |
| 1905. | 96.6 | 121.0 |
| 1906. | 95.8 | 125.7 |
| 1907. | 95.7 | 127.3 |
| 1908. | 95.9 | 127.5 |
| 1909. | 95.5 | 126.7 |
| 1910. | 95.1 | 130.5 |
| 1911. | 94.5 | 132.1 |
| 1912. | 93.9 | 135.1 |

TABLE 6.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1800 TO 1912.
[Data are included from 58 establishments, 1890-1903; 61 establishments, 1903, 1904; 63 establishments, $1904,1: 00$; 63 establishments, 1905, 1906; 67 establishments, 1906,$1907 ; 52$ establishments, 1907-1910; 128 establishments, 1910, 1911; and 199 establishments, 1911, 1912.]

| Year. | Cabinetmakers. |  | Carvers, hand. |  | Chair assemblers. |  | Finishers. |  | Varmishers. ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative fulltime hours per week. | Relative rate of wages per hour. | Relative fulltime hours per week. | Relan tive rate of wages per hour. | Relative fulltime hours per week week. | Relative rate of wages per hour. | Relative fulltime hours per week. | Relative rate of wages per hour. | Relative fulltime hours per week. | Relative rate of wages per hour. |
| Average, 1890-1898.. | 100.0 | 100.0 | 100.0 | 100.0 |  |  | 100. 0 | 100.0 | 100.0 | 100.0 |
| 1890. | 101.2 | 101.8 | 103.1 | 97.0 |  |  | 100.8 | 97.6 | 101.5 | 97.7 |
| 1891. | 100.5 | 102.3 | 99.8 | 103.2 |  |  | 100.5 | 104.6 | 100.8 | 99.2 |
| 1892. | 99.7 | 104.5 | 96.0 | 113. 7 |  |  | 99.4 | 100.9 | 100.3 | 98.3 |
| 1893. | 99.4 | 103.6 | 102.6 | 97.7 |  |  | 98.8 | 102.1 | 99.8 | 99.2 |
| 1894. | 98.4 | 100.1 | 99.2 | 95.6 |  |  | 98.3 | 99.4 | 97.6 | 100.2 |
| 1895. | 99.8 | 98.2 | 102.2 | 84.6 |  |  | 98.5 | 96.8 | 100.2 | 97.3 |
| 1896. | 99.8 | 97.2 | 101.6 | 95.2 |  |  | 100.7 | 100.1 | 100.3 | 94.6 |
| 1897. | 99.8 | 98.1 | 99.5 | 101.0 |  |  | 100.5 | 100.3 | 99.3 | 105.5 |
| 1898. | 100.7 | 95.7 | 99.8 | 99.7 |  |  | 100.7 | 98.3 | 100.5 | 98.1 |
| 1899. | 100.4 | 98.6 | 96.4 | 112.3 |  |  | 101.7 | 99.9 | 99.7 | 109.9 |
| 1900. | 99.9 | 100.4 | 101.2 | 102.2 |  |  | 100.2 | 102.3 | 99.9 | 106.3 |
| 1901. | 98.3 | 107.2 | 99.4 | 112.3 |  |  | 98.0 | 115.8 | 99.5 | 109.7 |
| 1902. | 96.8 | 115.1 | 97.2 | 119.0 |  |  | 95.4 | 127.7 | 98.3 | 117.1 |
| 1903. | 96.7 | 116.9 | 99.8 | 112.7 |  |  | 94.1 | 141.3 | 98.6 | 112.4 |
| 1904. | 95.9 | 119.0 | 97.3 | 115.9 |  |  | 94.8 | 137.9 | 97.7 | 114.4 |
| 1905. | 95.3 | 122.2 | 97.2 | 116.7 |  |  |  |  |  |  |
| 1906. | 93.4 | 128.5 | 97.3 | 120.7 |  |  |  |  |  |  |
| 1907. | 93.7 | 128. 5 | 98.4 | 120.7 |  |  |  |  |  |  |
| 1908. | 94.4 | 125.5 | 98.9 | 121.8 |  |  |  |  |  |  |
| 1909. | 94.1 | 124.6 | 96.2 | 126.7 |  |  |  |  |  |  |
| 1910. | 93.8 | 129.8 | 95.7 | 131.2 | 2100.0 | 2100.0 |  |  |  |  |
| 1911. | 93.3 | 130.6 | 94.6 | 134.9 | 2100.5 | 2104.7 |  |  |  |  |
| 1912. | 93.0 | 130.4 | 94.8 | 136.3 | 299.6 | 2 106.7 |  |  |  |  |

[^8]Table 6.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1890 TO 1912-Continued.

| Year. | Finishers ${ }^{1}$ (including varnishers). |  | Machine woodworkers. ${ }^{2}$ |  | Sawyers, band. ${ }^{3}$ |  | Sawyers, circular. 4 |  | Sawyers, jig. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative fulltime hours per week. | $\begin{gathered} \text { Rela- } \\ \text { tive } \\ \text { rate of } \\ \text { wages } \\ \text { por } \\ \text { hour. } \end{gathered}$ | Relative fulltime hours per week. | Rela rate of wages hour. | Relative fulltime hours week. | Relative rate of wages per hour. | Relative fulltime hours per week. | Relarate of wages per | Relative fulltime hours per week. | $\begin{aligned} & \text { Rela- } \\ & \text { tive } \\ & \text { rate of } \\ & \text { wages } \\ & \text { per } \\ & \text { hour. } \end{aligned}$ |
| Average, 1890-1899.. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1890. |  |  | 101.4 | 100.7 | 101.4 | 105.2 | 100.5 | 101.7 | 100.4 | 92.9 |
| 1881. |  |  | 101.0 | 101.1 | 100.3 | 102.6 | 100.4 | 102.2 | 100.1 | 100.5 |
| 1802. |  |  | 100.0 | 101.4 | 99.5 | 102.7 | 100.3 | 102.6 | 100.1 | 98.6 |
| $18 \times 3$. |  |  | 100.0 | 99.8 | 100.5 | 101.2 | 100.3 | 102.0 | 100.1 | 100.9 |
| 1894. |  |  | 98.0 | 98.6 | 96.3 | 99.1 | 96.2 | 97.9 | 100.1 | 100.9 |
| 1895. |  |  | 99.4 | 98.6 | 99.3 | 98.8 | 100.4 | 98.7 | 100.1 | 100.3 |
| 1836. |  |  | 99.9 | 99.2 | 100.8 | 97.7 | 100.3 | 98.0 | 100.1 | 98.6 |
| 1837. |  |  | 99.3 | 100.4 | 100.0 | 98.4 | 100.5 | 99.4 | 100.1 | 101.9 |
| 1898. |  |  | 100.2 | 99.5 | 100.0 | 97.1 | 100.3 | 98.4 | 100.1 | 100.9 |
| 1899. |  |  | 100.8 | 101.1 | 101.9 | 97.5 | 100.8 | 99.2 | 98.9 | 104.4 |
| 1900. |  |  | 100.8 | 102.1 | 101.3 | 100.5 | 99.9 | 102.9 | 95.7 | 107.6 |
| 1901 |  |  | 101.1 | 103.0 | 100.8 | 103.7 | 99.3 | 107.1 | 94.6 | 113.8 |
| 1903. |  |  | 100.6 | 108.7 | 100.8 | 104.4 | 98.9 | 111.4 | 93.1 | 124.1 |
| 1903. |  |  | 100.3 | 112.2 | 100.7 | 103.8 | 99.1 | 113.4 | 93.1 | 124. 1 |
| 1904 | 596.4 | ; 124.6 | 99.7 | 111.1 | 99.6 | 109.5 | 98.5 | 113.9 | 92.3 | 132.5 |
| 1905. | 96.2 | 127.1 | 99.6 | 114.5 | 99.4 | 111.7 | 98.4 | 117.6 | 92.0 | 133.1 |
| 1906 | 95.7 | 130.5 | 99.1 | 119.0 | 99.4 | 114.1 | 98.0 | 122.1 | 91.0 | 131.2 |
| 1907. | 95.5 | 131.0 | 99.1 | 122.1 |  |  |  |  |  |  |
| 1908. | 95.8 | 133.7 |  |  |  |  |  |  |  |  |
| 1909. | 95.5 | 129.8 |  |  |  |  |  |  |  |  |
| 1910. | 95.5 | 132.5 |  |  |  |  |  |  |  |  |
| 1911. | 94.7 | 134.0 |  |  |  |  |  |  |  |  |
| 1912. | 94.1 | 138.0 |  |  |  |  |  |  |  |  |

[^9]Table 6.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFAC゙ TURING, 1890 TO 1912-Concluded.

| Year. | Sawyers, ${ }^{1}$ |  | Machine hands. ${ }^{2}$ |  | Upholsterers. |  | Veneerers. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Relative fulltime hours per week. | Relative rate of wages per hour. | Relative fulltime hours per week. | Relar tive rate of wages per hour. | Relative full$\operatorname{tim} \theta$ hours per week. | Relative rate of wages per hour. | Relative fulltime hours per week. | Relative rate of wages per hour. |
| Average, 1830-1899.. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |  |
| 1800 |  |  |  |  | 100.5 | 99.4 |  |  |
| 181. |  |  |  |  | 100.3 | 101. 4 |  |  |
| 1832 |  |  |  |  | 99.9 | 100.2 |  |  |
| 1803. |  |  |  |  | 100.3 | 98.2 |  |  |
| 1804. |  |  |  |  | 100.2 | 100.6 |  |  |
| 1895. |  |  |  |  | 100.1 | 99.9 |  |  |
| 1836. |  |  |  |  | 99.7 | 98.1 |  |  |
| 1537. |  |  |  |  | 99.7 | 97.6 |  |  |
| 1808. |  |  |  |  | 99.7 | 100.6 |  |  |
| 1809. |  |  |  |  | 99.6 | 104.0 |  |  |
| 1900. |  |  |  |  | 98.3 | 106.0 |  |  |
| 1901. |  |  |  |  | 94.4 | 121.1 |  |  |
| 1902. |  |  |  |  | 94.9 | 125.2 |  |  |
| 1903. |  |  |  |  | 92.1 | 125.3 |  |  |
| 1904. |  |  |  |  | 91.3 | 125.1 |  |  |
| 1907. |  |  |  |  | 91.7 | 126.2 |  |  |
| 190. |  |  |  |  | 91.5 | 130.0 |  |  |
| $190 \%$ | 06.0 | 125.6 | 898.2 | ${ }^{3} 123.1$ | 91.3 | 131.8 |  |  |
| 1903. |  |  | 98.0 | 123.2 | 91.1 | 130.6 |  |  |
| 1909. |  |  | 97.7 | 124.5 | 91.6 | 130.0 |  |  |
| 1910. |  |  | 96.9 | 127.5 | 91.6 | 136.5 | ${ }^{4} 100.0$ | 1100.0 |
| 1911. |  |  | 96.2 | 130.1 | 91.1 | 143.5 | 499.3 | ${ }^{1} 101.3$ |
| 1912. |  |  | 95.5 | 133.6 | 90.6 | 146.9 | ${ }^{4} 98.6$ | ${ }^{1} 107.5$ |

[^10]
[^0]:    ${ }^{1}$ Previous reports of wages and hours of labor in the lumber manufacturing industry have been published by the Bureau as follows: Nineteenth Annual Report, covering 1890 to 1903; Bulletin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bulletin No. 71 (July, 1907), covering 1905 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907; and Bulletin No. 129 (August, 1913), covering 1907 to 1912.

[^1]:    i fess than one-teith oil per pent.

[^2]:    ${ }^{1}$ Previous reports of wages and hours of labor in the millwork (sash, doors, blinds, frames, fixtures, and trim) industry hare been published by the Bureau, as follows: Nineteenth Annual Peport, covering 1890 to 1903; Bulietin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bu'.etin No. 71 (July, 1907), covering 1505 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907; and Bulletin 129 (August, 1913), covering 1907 to 1912.

[^3]:    ${ }^{1}$ Previous reports of wages and hours of labor in furniture manufacturing have been published by the Bureau as follows: Nineteenth Annual Report, covering 1890 to 1903; Bulletin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bulletin No. 71 (July, 1907), covering 1905 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907: Bulletin No. 129 (Aug., 1913), covering 1907 to 1912.

[^4]:    ${ }^{1}$ Including States having less than 1,700 each in 1910.

[^5]:    1 This section of the table includes only those employees whose rates of wages per hour could be classified in the section of this tahle appearing on pages 121-123. See also explanation on page 113.
    ${ }^{2}$ Less than one-tenth of 1 per cent.

[^6]:    1 Employees reported as carriage men for 1890 to 1911 are reported as doggers or setters for subsequent years.
    ${ }^{2}$ The occupations doggers and setters include employees reported as carriage men for 1890 to 1911 .
    8 Discontinued.
    4 Data for 1890 to 1910 not available; computed with 1911=100.0.
    ${ }^{5}$ Employees reported in this occupation for 1890 to 1907 are reported as laborers for subsequent years.
    6 This occupation includes employees reported as cant setters, gang, for 1890 to 1907.
    ${ }^{7}$ Average of relatives of laborers and cant setters, gang, computed by weighting the relatives for each of those occupations according to the number of employees reported in 1907

[^7]:    ${ }^{1}$ Employees reported as carpenters and framers for 1890 to 1907 are reported as bench hands for subsequent years.
    ${ }_{2}$ This occupation includes employees reported as carpenters and framers for 1890 to 1907.
    3 A verage of relatives of carpenters and framers, computed by weighting the relative for each of those occupations according to the number of employees reported in 1907.

    4 Discontinued.
    ${ }^{5}$ Employees reported as machine woodworkers and sawyers for 1890 to 1907 are reported as machine hands for subsequent years.
    6 This occupation includes employees reported as machine woodworkers and sawyers for 1890 to 1907.
    7 A verage of relatives of machine wood workers and sawyers, computed by weighting the relative for each of those occupations according to the number of employees reported in 1907.

[^8]:    1 Employees reported separately as finishers and varnishers for 1890 to 1904 are reported as finishers for subsequent years.
    ${ }^{2}$ Data for 1890 to 1909 not available; computed with $1910=100.0$.

[^9]:    1 This occupation includes employees reported separately as finishers and varmishers for 1890 to 1904.
    ${ }^{2}$ Employees reported as machme woodworkers for 1890 to 1907 are reported as machine hands for subsequent years.
    s Employees reported as band sawyers for 1890 to 1906 are reported as sawyers for 1907 and as machine hands for subsequent years.
    ${ }_{4}^{4}$ Employees reported as circular sawyers and jig sawyers for 1890 to 1906 are reported as sawyers for 1907 and as machine hands for subsequent years
    ${ }^{5}$ A verage of relatives of finishers and varnishers, computed by weighting the relatives for each of those occupations according to the number of employees reported in 1904.

[^10]:    ${ }^{1}$ This occupation includes employees reported as band sawyers, circular sawyers, and jig sawyers, 1890 to 1906.
    ${ }_{2}$ This occupation includes employees reported as machine woodworkers, band sawyers, circular sawyers, and jig sawyers, 1890 to 1906, and as machine woodworkers and sawyers for 1907.
    3 A verage of relatives of machine woodworkers and sawyers, computed by weighting the relatives for each of those occupations according to the number of employees reported in 1907.
    4 Data for 1890 to 1909 not a arailable; computed with $1910=100.0$.

