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## BUREAU OF LABOR STATISTICS

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WAGES AND HOURS OF LABOR SERIES

WAGES AND HOURS OF LABOR IN THE AUTOMOBILE TIRE INDUSTRY

1923


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

## WAGES AND HOURS OF LABOR IN THE AUTOMOBILE TIRE INDUSTRY, 1923.

## INTRODUCTION AND SUMMARY.

This report presents the results of a study of wages and hours of labor in the automobile tire industry in 1923.

The information compiled covers 22,535 male wage earners and 1,624 female wage earners working in 49 representative establishments located in Connecticut, Indiana, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Wisconsin.

Many of the establishments canvassed were engaged in the manufacture of various rubber products. Data from these establishments were confined to the automobile tire departments. Thus all of the information herein contained relates to conditions of employees engaged only in the manufacture of automobile tires and tubes.

The data were taken by agents of the bureau directly from the March pay rolls and other records of 33 establishments; the April records of 6 establishments; the May records of 6 establishments; and the June records of 4 establishments. The mass of information, therefore, shows average conditions as of March, 1923.

The tables show earnings per hour, full time or customary hours per week, hours and days actually worked, and earnings actually received in the representative pay period taken. These figures are shown by occupation, sex, and district.

The report also presents other pertinent information concerning the industry.

A summary of average full-time hours per week, average earnings per hour, average full-time earnings per week, and per cent of employees whose full-time hours per week fall under each classified group for each occupation and for all occupations combined are shown in Table 1. The group "Other employees" includes employees in occupations having too few in number to warrant a separate classification. It will be observed at the end of the table that the average earnings per hour are $\$ 0.741$ for males and $\$ 0.460$ for females; that the average full-time earnings per week are $\$ 36.75$ for males and $\$ 22.54$ for females; that the average full-time hours per week are 49.6 for males and 49 for females; and that the full-time hours of 36 per cent of all employees are 48 per week.

An inspection of the figures for the several occupations shows that the average earnings per hour of males range from $\$ 0.514$ for laborers to $\$ 0.912$ for calender men, and of females from $\$ 0.435$ for splicers of tubes to $\$ 0.563$ for finishers and treaders, cord tires.

| Occupation and sex. | Esstab-lishments. | Em- | Average earmings hour. | $\begin{gathered} \text { Avergag } \\ \text { full- } \\ \text { time } \\ \text { earn- } \\ \text { ings } \\ \text { per } \\ \text { week. } \end{gathered}$ | Averagefull-timehoursperweek. | Per cent of employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 40 . \end{aligned}$ |  | Over 40 and under 45. | 45 | 0 Over 45 and ander 48. | 48 |  | 50 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { so } \\ \text { and } \\ \text { under } \\ 54 . \end{gathered}\right.$ | 54 | 55 | Over 55 and unde. 60. | 60 | Over 60. |
| Air baggers: Male | 42 | 292 | \$0.843 | \$41. 56 | 49.3 |  | 18 |  | 5 | 4 | 42 | (1) | 2 | 2 | (1) | 12 | 3 | 7 | 5 |
| Assembers: | 44 | 763 | . 670 | 33.57 | 50.1 | 2 | 3 |  | 10 | 1 | 16 | 8 | 28 | 4 |  | 23 | 5 | 2 | (1) |
| Female.: | 22 | 396 | . 488 | 24.10 | 48.4 |  |  | 2 | 34 |  | 26 | 7 |  | 3 | 3 |  |  |  |  |
| Bescrent Male..... | 42 | 204 | . 636 | 32.31 | 50.8 |  | 5 | 2 | 7 |  | 26 | 2 | 14 | 6 | (1) | 34 | (2) | -.. | 2 |
| Female. | 16 | 96 | .466 | 22. 69 | 48.7 |  |  |  | 18 |  | 49 | 4 | 11 |  |  |  |  |  |  |
| Beads, other employeos: | 43 | 466 | . 649 | 32.77 | 50.5 | (1) | 6 | 1 | 2 | 4 | 32 | 3 | 9 | 5 | (1) | 31 | 5 | (1) | 1 |
| Female. | 10 | 78 | . 513 | 24.37 | 47.5 |  |  | 6 | 27 |  | 35 | 21 | 10 |  | 1 |  |  |  |  |
| Bias-cutter operators: Male | 49 | 149 | . 732 | 36.60 | 50.0 | 4 | 4 |  | 5 | 3 | 19 | 7 | 18 | 3 | 1 | 28 | 4 | 1 | 2 |
| Bias cutters' helpers: Male | 47 | 1342 | . 608 | 30.64 | 50.4 | 2 | 3 | $\cdots$ | 5 | 4 | $\stackrel{27}{ }$ | 2 | 19 | ${ }^{6}$ | 1 | 25 | 2 | 1 | 3 |
| Bufters, tubes: Male.. ${ }^{\text {Buld }}$ - | 35 | 140 1,043 | . 8393 | 36.92 43.13 | 50.3 48 | 2 | 5 3 | 7 | $\begin{array}{r}4 \\ 15 \\ \hline\end{array}$ |  | 29 46 | ${ }_{3}^{6}$ | 15 7 | 4 |  | 13 | 3 |  |  |
| Builders or makers, cord tires: Mal | 35 | 1,056 | . 900 | 43.38 | 48.3 | 2 | 13 |  | 4 | 8 | 28 | 8 | 16 | 2 |  | 15 | 3 | . |  |
| Builders or makers, labric tires: Ma | 31 | ${ }^{+} 404$ | . 874 | 42.39 | 48.5 |  | 13 |  | 10 | 4 | 19 | 7 | 26 | 2 |  | 15 | 2 |  |  |
| Calander men: Male. | 47 | 222 | . 972 | ${ }^{46} 93$ | 50.8 |  | 3 | 1 | 5 | 1 | $\stackrel{32}{32}$ | 6 | 13 | 2 | 1 | ${ }_{28}^{28}$ | 4 | ${ }_{3}^{4}$ | $1$ |
| Calender men frrst: Male | 45 | ${ }_{682}^{231}$ | . 776 | ${ }_{31}^{39} 27$ | 50.6 | (1) | 3 <br> 3 |  | 7 | 1 | 33 <br> 35 | ${ }_{3}^{6}$ | 13 9 | 1 | (1) | 26 28 |  | 3 4 4 | 1 |
| Calender men's helpers:. Male | 47 | 662 33 | . 674 | 33.77 34.73 | 50.7 | (1) |  | ${ }_{3}^{6}$ | 4 | 3 | 53 | (1) ${ }^{3}$ | 4 | 2 | 1 | ${ }_{22}$ | 2 | 4 | 2 |
| Curpors, beads: Male | 43 | ${ }_{298}^{333}$ | . 780 | 34.73 40.17 | 51.5 | (i) | 3 | (1) | $\stackrel{4}{1}$ | 3 | 41 | ${ }_{3}$ | 10 | 2 | , | 16 |  | 15 | 3 |
| Curers, tires: Male. | 49 | 1,651 | . 869 | 42.75 | 49.2 |  | 14 |  | 7 | 12 | 41 | 1 | 2 | 2 |  | 5 | 3 | 7 | 7 |
| Curers, tubes: Male. | 34 | 108 | . 709 | 35.88 | 50.6 |  | 8 |  | 10 | 1 | 25 | 2 | 12 |  |  | 32 | 5 | 2 | 3 |
| Flnishens and treaders, cord tires: Male....................... | 37 | 1,406 | . 868 | 41.31 | 47.7 | 2 | 13 |  | 8 | 9 | 35 | 6 | 12 | 2 |  | 10 | 4 |  |  |
| Female. | 3 | 27 | . 563 | 28.15 | 50.0 |  |  |  |  |  |  |  | 100 |  |  |  |  |  |  |
| Finishers and treeders, fabric tires: | 29 | 599 | . 840 | 41.08 | 48.9 |  | 12 |  | 7 | B | 24 | 9 | 23 | 2 |  | 15 | 4 | (1) |  |
| Finishers, tubes: | 28 | 209 | . 786 | 38.75 | 49.3 |  | 2 | (1) | 4 | 12 | 44 | 8 | 8 | (1) |  | 21 |  |  |  |
| Femaie. | 10 | 45 | . 439 | 22.83 | 52.0 |  |  | 7 |  |  | 24 |  | 7 |  | 13 | 47 |  |  |  |
| Laborers: Male. | 49 | 1,604 | . 513 | 28.52 | 51.6 |  |  | 2 |  |  | $\stackrel{27}{5}$ | 1 | 18 | 5 | 1 | 28 |  |  |  |
| Millmen: Male... | 43 |  | . 735 | 36.97 <br> 40.28 | 50.3 48.3 |  |  |  | 4 |  | 50 53 5 | 1 | 7 3 |  | 1 |  |  | 6 2 2 | ${ }_{3}^{2}$ |
| Rimmers: Male. | 38 28 | $\begin{array}{r}313 \\ 57 \\ \hline\end{array}$ | . 700 | 40.28 35.07 | 58.1 |  | 7 | 7 | 2 | 4 | 32 |  | 9 |  |  | 33 | 7 |  | 3 |
| Splicers, tubes: |  |  |  |  |  |  | 6 | 3 | 3 | 8 |  | 8 |  | 1 |  | 12 | 4 |  |  |
| Female.. | $\stackrel{3}{2}$ | ${ }_{\mathbf{9}}^{\mathbf{9}}$ | . 435 | ${ }_{21.58}^{36.82}$ | 49.6 |  |  |  |  |  | 22 |  | 78 |  |  |  |  |  |  |



1 Less than 1 per cent.

Table 2 shows for each of 10 representative occupations, the number of establishments and employees, average earnings per hour, and the per cent of employees whose earnings per hour fall in each classified group.

Data are shown for males in all, and for females in 2, of the 10 selected occupations. The males in these particular occupations represent 45 per cent of the total number of males covered by the study, and the females represent 26 per cent of the total number of females. The males and females combined represent 44 per cent of all employees $(24,159)$ covered.

TABLE 2.-AVERAGE AND CLASSIFIED EARNINGS PER HOUR OF EMPLOYEES IN SELECTED OCCUPATIONS, BY SEX, 1923.

| Occupation and sex. | $\left\lvert\, \begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments. } \end{aligned}\right.$ | $\begin{aligned} & \text { Em- } \\ & \text { ploy- } \\ & \text { ees. } \end{aligned}$ | $\begin{gathered} \text { Aver } \\ \text { age } \\ \text { earn } \\ \text { ings } \\ \text { per } \\ \text { hour. } \end{gathered}$ | Per cent of employees whose earnings per hour were- |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Un- der 30 cts. | $\left\|\begin{array}{c} 30 \\ \text { and } \\ \text { un } \\ \text { der } \\ 35 \\ \text { cts. } \end{array}\right\|$ | 35 and un- der 40 cts. | 40 and un- der 50 cts. | 50 and un der 60 cts. | $\begin{aligned} & 60 \\ & \text { and } \\ & \text { un } \\ & \text { der } \\ & 70 \\ & \text { cos. } \end{aligned}$ | 70 and un der 80 cts. | $\begin{aligned} & 80 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & 90 \\ & \text { cts. } \end{aligned}$ | 90 cts. and un- \%1. | $\begin{aligned} & \$ 1 \\ & \text { and } \\ & \text { un- } \\ & \text { der } \\ & \$ 1.25 \end{aligned}$ |  |
| Assemblers: Male. |  | 763 | \$0.670 | (1) | 2 | 2 | 14 | 20 | 15 | 21 | 21 | 4 | 2 |  |
| Female. | 22 | 396 | . 498 | 4 | 10 | 9 | 21 | 39 | 14 | 1 | 1 | (1) |  |  |
| Builders and finishers: Male.... | 31 | 1,043 | . 893 |  |  |  | (1) | 3 | 8 | 16 | 24 | 24 | 24 |  |
| Builders or makers, cord tires: Male. | 35 | 1,056 | . 900 |  |  |  | 1 | 2 | 8 | 14 | 18 | 36 | 18 | 2 |
| Builders or makers, fabric tires: | 31 | 404 | . 874 |  | (1) |  | (1) |  | 10 | 16 |  | 36 | 11 |  |
| Curers, tires: Male................. | 49 | 1,651 | .869 |  | ( $)$ | (1) | 2 | 5 | 11 | 25 | ${ }_{14} 1$ | 16 | $\stackrel{11}{25}$ |  |
| Finishers and treaders, cord tires: <br> Male............................ | 37 |  |  |  | (1) |  |  |  |  |  | 18 | 35 | 15 |  |
| Female................. | 3 | 1, 27 | . 563 |  |  | 4 | 15 | 44 | 30 | 7 |  |  |  |  |
| Finishers and treaders, fabric |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| tires: Male.............. | 29 | 599 | . 840 |  |  | (1) | 1 |  |  |  |  | 27 | 14 | 1 |
| Laborers: Male.... | 49 | 1, 1,397 | . 514 | (1) |  | 11 | 4 | 18 | 12 | 18 | $\stackrel{4}{48}$ | ${ }_{3}$ | ${ }^{1}$ |  |
| Tube rollers: Male. | 38 | 1,260 | . 733 | (i) | (1) | 1 | 6 | 14 | 28 | 13 | 21 | 10 | 7 |  |

1 Less than 1 per cent.

## IMPORTANCE OF THE INDUSTRY.

The automobile tire industry, like the automobile industry, is comparatively new. It has been less than 25 years since the first automobile was sold, and as the automobile industry is the controlling factor of the tire industry they both have experienced phenomenal growth. Indeed, the first "cultivated rubber," consisting of 4 tons, was marketed in 1900. Before 1900 the rubber industry of the whole world depended on "wild rubber," which averages about 40,000 tons annually. In 1922 approximately 320,000 tons of "cultivated" and 17,000 tons of "wild rubber" were imported into the United States, which indicates the enormous expansion of the industry in this country.

No definite figures are available to show the actual changes for automobile tires alone. However, the United States Census of Manufactures, 1919, shows figures for the industrial group "rubber tires, tubes, and other rubber goods" in which the value of rubber tires and tubes produced was 65 per cent in 1914 and 76 per cent in 1919 of the value of products for the total group. The above group
does not include establishments whose principal products are rubber belting, hose, and boots and shoes. The importance of the automobile tire industry is necessarily dependent upon the automobile industry, and according to the United States Census of Manufactures it is shown that between 1909 and 1914 there was a 68 per cent increase in the number of wage earners in the automobile industry while there was an 89 per cent increase in the number in the census group "rubber tires, tubes, and other rubber goods." Between 1914 and 1919 there was an increase in the number of wage earners of 170 per cent in the automobile industry, while in "rubber tires, tubes, and other rubber goods" the number increased 139 per cent.

This report is compiled from data from the records of establishments manufacturing cord tires, fabric tires, solid tires, and tubes, and covers the wage earners through all the processes of manufacture from those unloading the material and supplies to those loading the finished product for shipment, and excepts only executive employees, clerks, power-house employees, and employees engaged in the construction and repair of buildings.

Data for a few large establishments are for only a part of the total number of wage earners in such establishments because inclusion of the total number would tend to give undue weighting to those establishments and therefore would impair the representative character of the averages, especially for the districts in which such similar large establishments are located.

In selecting establishments from which to obtain data the bureau undertook to represent all geographical districts in which the automobile tire industry is of material importance, the measure of importance being the number of wage earners as reported by the United States Census of Manufactures for the group of establishments whose principal products were rubber tires, tubes, and other rubber goods.

The data are presented in this report by districts because the figures compiled for several States were of such a nature as would reveal the identity of the establishments from which they were obtained. It was found that, by grouping the States, those whose averages were nearly coincident formed geographical units, and in so doing the resultant district averages are approximately the same as the average for each State included in the district. Table 3 shows the number of establishments in each district from which the data were obtained in 1923, the number of wage earners in such establishments, average earnings per hour, average full-time earnings, and average full-time hours per week for all wage earners in each district.

Average full-time hours per week were computed by dividing the total full-time hours of all employees in the occupation by the number of employees in the occupation during the pay period covered. The full-time hours of each employee were considered in arriving at this average, even though some employees worked more or less than full time on account of overtime, sickness, disability, or some other cause.

Average full-time earnings per pay period for employees of each occupation were computed by multiplying the average earnings per hour of all employees in the occupation by the average full-time hours per pay period. This assumes that the earnings for full time would have been at the same average rate per hour as during the time that was actually worked in the pay period covered.

## REGULAR OR CUSTOMARY HOURS OF OPERATION.

The regular or customary full-time hours per pay period are the hours during which, under normal conditions, employees may expect work.

The extent to which employees avail themselves of this opportunity is indicated in the comparison of "average full-time hours per pay period" with "average hours actually worked in one pay period," which averages are shown in parallel columns in General Table B, pages 26 to 39 , for all occupations in the industry. The average in one column shows the possible hours of work in one pay period under normal conditions, while the other column shows the average of the hours actually worked.

While Table 1, pages 2 and 3, shows the per cent of employees in each classified group of regular or customary full-time hours per week, Table A, pages 16 to 25 , shows the number of employees within each district and in all districts combined. Data on line 1 are for Akron, Ohio, and the other districts follow in the order of importance as determined by the number of wage earners.

Average full-time hours per week, by districts, range from 48.2 for the 9,746 wage earners covered in Akron to 55.1 for the 2,010 wage earners covered in Indiana and Wisconsin. Average earnings per hour range from $\$ 0.567$ for the 2,010 wage earners covered in Indiana and Wisconsin to $\$ 0.835$ for the 9,746 wage earners covered in Akron, and average full-time earnings per week range from $\$ 31.24$ in Indiana and Wisconsin to $\$ 40.25$ in Akron.

TABLE 3- NUMBER OF ESTABLISEMENTS AND OF WAGE EARNERS IN THE AUTOMO-
BILE TIRE INDUSTRY FOR WHICH 1日Z DATA ARE PRESENTED IN THIS REPORT, AVERAGE EARNINGS, AND AVERAGE FULL-TIME HOURS, BY DISTRICTS.

| District. | Estab-lishments. | Wage earners. | Average earnings per hour. | Average full-time earnings per week | Average full-time hourspor week. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Akron (Ohio) | 7 | 9,746 | \$0. 835 | \$40.25 | 48.2 |
| Connecticut, Massachusetts, and New | 12 | 4,376 | . 649 | 31. 87 | 49.1 |
| New Jersey and Pennsylvaria..... | 12 | 4,017 4,010 | . 709 | 34.88 31.25 | 49.2 50.9 |
| Indiana and Wisconsin. | 7 | 2,010 | . 567 | 31.24 | 55.1 |
| All districts combined. | 49 | 24, 159 | . 722 | 35.74 | 49.5 |

These figures are for wage earners in representative establishments. It is therefore assumed that the averages at least approximate averages as they would have been had data been taken for all employees in the industry in each district and in all districts combined.

The majority of wage earners in this industry are pieceworkers, with their average earnings per hour dependent upon the number of jobs or pieces they complete in a specified time. The industry has not yet passed the experimental stage, hence there are many methods used in building and curing the tires. Each method is constantly being improved, mainly by use of better machinery. Each improvement as a rule results in decreased piece rates. These decreases, however, seldom reduce the average hourly earning capacity of the individual. Indeed, a well-known tire manufacturer stated that,
"due to the refinements in the industry, employees are able to earn more than ever before."

The average earnings per hour for employees of each occupation, as presented in the various tables of this report, were computed by dividing the total earnings of all employees in the occupation during the pay period covered by the total hours worked by all employees in the occupation.

The regular or customary hours per day under normal conditions of 53 per cent of the employees covered remain the same from Monday to Friday and differ on Saturday and the hours per day of 47 per cent remain the same from Monday to Saturday, inclusive. The hours per day of over 96 per cent of the employees range from 8 to 10 Monday to Friday, and from $4 \frac{1}{2}$ to 8 on Saturday.

Between April 1, 1920, and the period covered in 1923 the regular or customary full-time hours per week of 7 . establishments were changed, the hours of 42 establishments remaining the same throughout the period or for that part of the period during which they were in operation. The only establishment which made a reduction changed from 50 to 48 hours per week. The full-time hours of one establishment were increased from 44 to 55 hours per week; of one from $45 \frac{1}{2}$ to $55 \frac{1}{2}$; of one from 48 to 50 ; of one from 48 to 55 ; and of one from 50 to 55 . The full-time hours per week of one establishment were increased from 45 to 55 , and later were reduced to a 48 -hour basis.

## REDUCTION IN WAGE RATES SINCE APRIL 1, 1920.

Forty of the 49 establishments for which data are presented made one or more changes in wage rates between April 1, 1920, and the period for which 1923 data are shown. All changes in Table 4 are general changes except eight, which were accomplished by individual changes from time to time. Twenty-one changes were increases and one establishment gave an increase to machine builders, cord tires, and made a reduction to the hand builders of cord tires. The increases ranged from 4 per cent to 50 per cent, and one establishment gave a general increase of 5 cents per hour. The decreases ranged from 5.5 per cent to 63 per cent, and two establishments made reductions over a period of time by individual changes which left the level of rates 50 per cent below that of April 1, 1920. Several of these decreases, however, followed installation of better equipment or change of method, and although the wage rates were reduced, it was usually possible for the wage earner to earn as much or more in a given time than before the change.

TABLE 4.-CHANGE IN WAGE RATES OF EMPLOYEES IN THE AUTOMOBILE TIRE INDUSTRY IN THE UNITED STATES BETWEEN APRIL 1, 1920, AND THE PERIOD COVERED BY THE 1923 STUDY.

| Number of estab-lishments. | Employees affeeted. | Per cent of increase ( + ) or decrease ( - ) in wage rates. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { First } \\ & \text { change. } \end{aligned}$ | Second <br> change. | Third change. | Fourth change. |
| 8 | All employees... | -10 |  |  |  |
| 2 | ....do.............. | +10 |  |  |  |
| 1 | …..do................. | $-12$ |  |  |  |
| 1 | ….do... | $-20$ |  |  |  |
| 1 | ...do. | ${ }_{-6}{ }^{-63}$ |  |  |  |
| 1 | ...do. | $-5 \frac{3}{2}$ | -10 |  |  |
| 1 | .....do. | $-10$ | -10 | -10 |  |
| 1 | - .....do.. | $-20$ | -9 | +5 |  |
| 1 | -....do... | - 20 | +10 +10 |  |  |
| 1 | -....d.do... | $-43$ | +10 -15 | $\xrightarrow{-10}$ |  |
| 1 | ......do. | -25 | -12 | +12 |  |
| 1 | .....do. | $-25$ | -20 | +10 |  |
| 1 | . do. | -20 | -10 | -10 | +10 |
| 1 | . do. | $-12^{\frac{1}{2}}$ | -10 | -12 | $+$ |
| 1 | . do. | +8 | -121 | ${ }^{-10}$ | +10 |
|  | . do. | -10 | +10 | ${ }_{(1)}^{(1)}$ |  |
| 1 | ....do.do. | ${ }_{3}^{-10}$ | -10 |  |  |
| 1 | …..do.. | $\stackrel{3}{ }=15^{*}$ |  |  |  |
| 1 | ......d.do... | ${ }^{3}-20$ | ......... |  | , |
| 1 | ....do... | $3^{3}-23$ |  |  |  |
| $\stackrel{2}{4}$ | . ..do. | ${ }^{3}-50$ |  |  |  |
| 1 | Builders and vulcanizers. | +15 +15 | $+15$ | +9 | + |
| 1 | Builders.............. | $-10$ | $-10$ |  |  |
|  | Builders- |  |  |  |  |
| 1 | male.. | +14 | ..... |  |  |
| 1 | cord, machine. | +9 |  |  |  |
|  | cord, hand.... | -15 |  |  |  |
| 1 | Piece workers... | -10 -10 | $8+10$ |  |  |
| 1 | Day workers.. | ${ }_{(6)}{ }^{-10}$ |  |  |  |
| 79 |  |  |  |  |  |

${ }^{1}$ Individual reductions from time to time since second change have reduced wage rates to the level which prevailed after first change, or 10 per cent below the rates of April 1, 1920.
${ }^{2}$ Individualincreasesfrom time to time since second change have restored the wage level which prevailed after first change.
3 This change was the result of individual changes from time to time.
4 Opened after being closed with wage rates $66_{3}^{2}$ per cent below those of April 1, 1920.
6 A fifth increase ( 9 per cent) was made which raised the wage rates to approximately 74 per cent of the rates of April 1, 1920.

6 Increase of 5 cents per hour.
7 No change, except one establishment, which increased the hiring rate 15 per cent.

## BONUS SYSTEMS.

Fifteen of the 49 establishments had bonus or premium systems in operation all or part of the time between April 1, 1920, and the period covered by this study, by which the earnings of wage earners were increased by the addition of a specified amount or per cent of their earnings at regular time or piece rates. Thirteen of the 49 establishments had bonus systems in operation when the 1923 data were obtained. Thirty-four establishments did not have bonus or premium systems at any time between April 1, 1920, and the period covered by this study.

Bonus and premium systems are based on attendance, earnings, efficiency or production, night work, or service.

## Attendance bonus.

Four establishments had bonus systems based on attendance all or a part of the time that there was work in the establishment for the
wage earners during the pay period. One establishment paid 10 per cent extra to all wage earners who were not absent unless excused for certain causes. Two establishments paid 10 per cent extra to all wage earners who had perfect attendance. One establishment paid $\$ 5$ extra per pay period (one-half month) if an employee worked at least five hours each day in the pay period. However, allowances and exceptions for certain causes are made. All of these systems were in operation when the 1923 data were taken.

## Earnings bonus.

Seven establishments had bonus systems whereby each employee received 10 per cent of his earnings extra. This bonus system was put in operation in five of the seven establishments early in 1923. In one establishment it was in operation during the entire period covered by this study and in another was discontinued July 1, 1920.

## Efficiency or production bonus.

One of the 16 establishments had a bonus system based on efficiency or production. This system is based on the amount of work completed in a specified time. Example: The standard of the system is 60 points per hour 0 r 480 points in eighthours. At theend of the day an employee may have completed enough work to give him 608 points, or 128 points extra. His base rate is 60 cents per hour, making the limit cost per point 1 cent. The 128 points extra equals $\$ 1.28$, of which the employee received one-fourth, or 32 cents, making his earnings for the day $\$ 5.12$. The balance of the $\$ 1.28$ is divided among the foremen, assistant foremen, and other supervisors who can not be included on a direct production basis. This system was in operation when the 1923 data were collected.

## Night-work bonus.

Two of the 16 establishments had bonus systems whereby wage earners' earnings were increased for working at night or on night shifts. One of the two establishments paid 5 per cent additional on the earnings at regular rates. The other increased the earnings of all wage earners in the tire room by the addition of 10 per cent of their earnings at regular rates, while wage earners in the mill room received 15 per cent additional for night work. The system of the second establishment was discontinued in November, 1922.

## Service bonus.

One establishment has a bonus system based on length of continuous service. Each wage earner received $\$ 1$ extra per week after one year of service; $\$ 1.50$ per week after two and one-half years' service; $\$ 2$ per week extra after five years' service; and $\$ 2.50$ per week extra after ten years' service. This system was in operation when the 1923 data were obtained.

## RATES FOR OVERTIME AND FOR WORK ON SUNDAYS AND HOLIDAYS.

Between April 1, 1920, and the period for which 1923 data are presented only 15 of the 49 establishments covered paid all or a part of their employees more than regular rates for time worked over and above the regular or customary full-time hours per day or week or for work on Sundays and holidays. Thirty-four establishments paid the regular or single rate for overtime and for work on Sundays and holidays.

TABLE 5.-ESTABLISHMENTS PAYING FOR OVERTIME AND FOR WORK ON SUNDAYS AND HOLIDAYS, EMPLOYEES ENTITLED TO SUCH PAY, PERIOD, AND RATE.

| Number of estabments. | Employees entitled. | Period during which employees were entitled to axtra pay. | Times regular rato for- |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Overtime. | Sundays and holidays. |
| 34 | All employees.. | Apr. 1, 1920, to date of this study | 1 | 1 |
|  |  |  | 11 | $1{ }^{13}$ |
| 17 | .....do. ${ }^{\text {do. }}$ | do. | ${ }_{1}^{12}$ | $\stackrel{1}{2}$ |
| ${ }^{1} 1$ | do.. | do |  | ${ }_{1}^{13}$ |
| 1 | .do. |  | $1{ }_{12}$ | 1 |
|  | . do. | Nov.1, 1921, to May 1, 1923.............................. | ${ }^{2} 17$ | , |
|  | do. | May 1, 1923, to date of this study .................... | $1 \frac{1}{1}$ | 1 |
| 1 | …do | Apr.1, 1920, to A.pr. 10, 1921 <br> Apr 101921 to Dec 11921 | ${ }_{1}^{13}$ | ${ }_{1}^{2}$ |
|  | . do. | Apr. 10, 1921, to Dec. 1, 1921 <br> Dec. 1, 1921, to date of this study | ${ }^{1} 18$ | $1{ }^{13}$ |
| 1 | .do. | Apr. 1, 1920, to July 1, 1920.............................. | $1{ }^{2}$ | $1{ }^{1}$ |
| 1 | Day workers.. | Apr. 1, 1920, to date of this study .................... | ${ }^{3} 11$ | $1{ }^{1}$ |
|  | Night workers... |  | ${ }^{1} 1$ | 1 |
| 1 | Time employees. | ....do.............................................. | 14 | 1 |

I Including one establishment which pays 50 per cent extra for Saturday afternoon.
2 For involuntary service; straight time for voluntary service.
8 After 10 hours.
${ }^{4}$ After 12 hours.

## NUMBER OF DAYS WORKED IN ONE PAY PERIOD.

Table 6 shows for 10 representative occupations average and specified number of days of work in the occupation and days worked by employees during the pay period for which data are presented in this report. The data are presented in two sections. The first section relates to establishments in which employees are paid weekly and the second section to establishments in which employees are paid biweekly or semimonthly.

Days of work in the occupation means the number of calendar days or parts of days on which there was work for the occupation as a whole. Any part of a day worked is counted a day for the purpose of this table.

The average number of days of work in the occupation was obtained by weighting the number of days on which there was work in the occupation in each establishment by the number of employees of each establishment, without regard to the actual days worked by individual employees.

The average number of days worked by employees in the occupation is a simple average, obtained by dividing the aggregate number of days on which some work was done by the total number of employees in the occupation.

Reading line 1 of the first section of the table, it is seen that for the occupation "Assemblers, male," data are presented for 28 establishments having a weekly pay period; that the average number of possible days of work in the occupation in one pay period is 5.9 days; that employees of four establishments had opportunity to work but five days in the occupation; and that employees of 24 establishments had opportunity to work six days during the week. Continuing on the same line, it is seen that there were 556 employees in the occupation in the 28 establishments; that the average number of days
on which work was done by them was 5.5 ; that 6 of the 556 employees worked on one day during the payperiod; that 11 worked on two days; that 7 worked on three days; that 27 worked on four days; that 138 worked on five days; that 367 worked on six days, and that none worked on more than six days.
In each occupation the average days on which employees worked is less than the average days of work in the occupation, due to the fact that some employees did not work the entire time that there was work for them in the occupation.

It will also be noted that individual employees worked more days than there was work for the occupation as a whole. Thus on line 6 in the first section of the table four curers, tires, male, are shown as having worked on 7 days although there was work for the occupation as a whole for not more than 6 days. These four employees worked on Sunday when there was no work for other employees in the occupation.

TABLE 6.-AVERAGE AND SPECIFIED DAYS OF WORK IN OCCUPATION, AND AVERAGE AND SPECIFIED DAYS ON WHICH EMPLOYEES WORKED, 1923, BY LENGTH OF PAY PERIOD AND OCCUPATION.

ONE-WEEK PAY PERIOD.

| Occupation and sex. | Estabments. |  | Number of estahlishments in which days of work in occupation in pay period were- |  |  | $\begin{aligned} & \text { Empioy- } \\ & \text { ees. } \end{aligned}$ | Average number of days on which employees worked in pay period. | Number of employees in occupation who in pay period worked specified number of days. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 1 |  | 2 | 3 | 4 | 5 | 6 | 7 |
|  |  |  | 5 | 6 | 7 |  |  |  |  |  |  |  |  |
| Assemblers: Male. | 28 | 5.9 | 4 | 24 |  | 556 | 5.5 | 6 | 11 | 7 | 27 | 138 | 367 |  |
| Assemblers: Female. | 15 | 5.9 |  | 15 |  | 322 | 5.5 | 4 | 4 | 15 | 16 | 61 |  |  |
| Builders and finishers: Male.. | 20 | 5.8 | 4 | 16 |  | 578 | 5.5 | 3 | $\frac{1}{4}$ | 10 | ${ }_{18}^{25}$ | 182 | 357 | 1 |
| Builders or makers, cord tires: Male...... | 20 19 |  |  | 18 |  | 759 299 | 5.6 5.4 | ${ }_{1}^{1}$ | 4 2 2 | 15 | 18 | ${ }_{104}^{238}$ | 482 |  |
|  | 19 30 | 5.7 5.8 | $\stackrel{4}{3}$ | ${ }_{27}^{15}$ |  | 1,139 | 5.4 5.5 | 5 | 16 | 28 | 64 | 324 | 695 | 4 |
| Finishers and treaders, cord tires: Male. | 21 | 5.8 | 1 | 20 |  | 1,059 | 5.5 | 2 | 6 | 20 | 45 | 293 | 693 |  |
| Finishers and treaders, cord tires: Female. | 3 | 5.8 | 1 | 2 |  | 279 | 5.3 | $\frac{1}{3}$ | 1 |  |  | 9 | 16 |  |
| Finishers and treaders, fabric tires: Male.. | ${ }^{18}$ | 5.8 | 3 | ${ }_{29}^{15}$ |  | 479 1 155 | 5.4 |  | 13 <br> 25 | ${ }_{29}^{29}$ | $\begin{array}{r}31 \\ 51 \\ \hline 1\end{array}$ | 146 157 157 | 274 <br> 846 <br> 8 |  |
| Laborers: Male.. | 30 | ${ }^{6.0} 9$. | 1 | ${ }_{29}^{29}$ | 1 | ${ }_{1}^{1,155}$ | 5.6 5.6 | 15 | 12 | $\stackrel{8}{8}$ | 45 | 157 <br> 182 <br> 15 | 846 804 |  |
| Milmen: Male | 22 | 5.8 | 4 | 18 |  | 1885 | 5.5 |  | 4 | 1 | 11 | 55 | 114 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

TWO WEEKS OR HALF-MONTH PAY PERIOD.


Table 7 shows for each district and for all districts combined average and classified days of operation during the year ending March 31, 1923.

The days of operation of 46 of the 49 establishments ranged from 217 to 308 and the average for all was 294 days. The average by districts ranged from 290 for Connecticut, Massachusetts, and New York to 302 for Akron. Twenty-seven establishments worked as many as 300 days and one establishment worked only 217 days. Data for one establishment were not available and two establishments began operations early in 1923. Data for these three establishments are not included in this table.

TABLE 7.-AVERAGE AND CLASSIEIED DAYS OF OPERATION DURING YEAR ENDING MARCH 31, 1923, BY DISTRIGTS.

| District. | Estab-lishments. | Average days of operation in one year. | Number of establishments whose days of operation were- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 217 | 249 | 235 | 204 | 272 | 285 to 289. | 291 to 290 | $\begin{aligned} & 300 \\ & \text { to } \\ & 308 . \end{aligned}$ |
| Akron. | 7 | 302 |  |  |  |  |  |  | 2 | 5 |
| Connecticut, Massachusetts, and New York. | 110 | 290 |  |  |  |  | 2 | 2 | 4 | 2 |
| Ohio (except Akron) and Michigan......... | 11 | 295 |  | 1 |  |  | 1 | 1 | 1 |  |
| New Jersey and Pennsylvania.............. | 12 | 293 | 1 |  |  | 1 |  | 1 |  | 4 |
| Indiana and Wisconsin. . . . . . . . . . . . . . . . . | 26 | 295 |  |  | 1 |  |  |  | 1 | 4 |
| All districts combined.................. | ${ }^{3} 46$ | 294 |  | 1 | 1 | 1 | 3 | 4 | 8 | 27 |

1 Not including 2 establishments that began business early in 1923.
2 Not including 1 establishment for which records were not available.
Not including 2 establishments that began business early in 1023 and 1 establishment for which records were not available.

The difference between the average days of operation (294) and the possible full-time of 313 week days was due, as shown in Table 8, to the 46 establishments as a whole having been closed an average of 3 Saturdays, 6 holidays, 2 days for inventory, 6 days on account of slack business, and 2 days for other causes.

TABLE 8.-AVERAGE NUMBER OF DAYS OF OPERATION AND OF DAYS IDLE ON ACCOUNT OF SPECIFIED CAUSES DURING YEAR ENDING MARCE 31, 1923, BY DISTRICTS.

| District. | $\begin{gathered} \text { Es- } \\ \text { tab- } \\ \text { lishh } \\ \text { ments } \end{gathered}$ | $\begin{aligned} & \text { Days of } \\ & \text { oper- } \\ & \text { ation in } \\ & \text { year. } \end{aligned}$ | Average days idle during year on account of- |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Saturday. | Sunday. | Holiday. | Inventory. | Slack | Other causes. |
| Akron. | 7 | 302 |  | 52 | 6 | 3 | 1 |  |
| Connecticut, Massachusetts and New York | 110 | 290 |  | 52 | 8 | 3 | 7 | 6 |
| Ohio (except Akron) and Michigan.. | 11 | 295 |  | 52 | 6 | 3 | 4 | 1 |
| New Jersey and Pennsylvania....... | 12 | 293 |  | 52 | ${ }^{6}$ | 3 | 7 |  |
| Indiana and Wisconsin.............. | 26 | 295 | 2 | 52 | 6 |  | 9 | 2 |
| Total. | ${ }^{3} 46$ | 294 | 3 | 52 | 6 | 2 | 6 | 2 |

[^0]
## GENERAL TABLES.

In addition to the text tables already shown, five general tables are presented, as follows:

Table A.-Average hours and earnings and classified full-time hours per week, 1923, by occupation, sex, and district.

Table B.-Average number of days of work in occupation and number actually worked by employees and average hours and earnings, 1923, by occupation, sex, length of pay period, and district.

Table C.-Average and classified earnings per hour in selected occupations, 1923, by sex and district.

Table D.-Number of employees in selected occupations working on as many days as there was work in the occupation during the pay period, classified by hours actually worked, 1923, by sex and district.
Table E.-Number of employees in selected occupations working on as many days as there was work in the occupation during the pay period, classified by actual earnings, 1923, by sex and district.

The presentation in Table B in parallel columns of "Average full-time hours per pay period" and "Average hours actually worked in one pay period" is for the purpose of comparing the regular hours during which it was possible for employees in an occupation to work with the hours actually worked. One shows the possible hours for work under normal conditions while the other shows what was actually done during one pay period by all employees in the occupation, including those who worked less than the hours of opportunity.

Tables C, D, and E are limited to 10 representative occupations which include 44 per cent of all wage earners covered.

Tables D and E are shown in two sections because some establishments had two-week or half-month pay periods and a separation of the data on the basis of one week was impracticable.

In Tables D and E the average full-time hours and earnings per pay period are given for all of the employees covered in each of the 10 representative occupations. In addition, these tables show the average and classified hours actually worked and the average and classified earnings actually received by such employees as worked on as many days as there was work in the occupation during the pay period covered.

All employees who worked on less than the number of days that there was work in the occupation have been excluded from the average and classified hours actually worked and average and classified earnings actually received, because it is the purpose of these tables to show as nearly as possible the hours and earnings actually made by employees who worked all the time that there was work in the occupation and to compare therewith the average hours and earnings that would have been made had each employee worked the regular or customary full-time hours of the pay period. This assumes that each employee would have earned the same average amount per hour during the full-time as was earned during the time actually worked in the pay period covered.

Some employees worked on less than the number of days that there was work in the occupation on account of being sick, disabled, laid off, absent by own accord, termination of service before end of pay period, or entering service after beginning of pay period.

Table A.-AVERAGE HOURS AND EARNINGS AND CLASSIFIED FULL-TIME HOURS PER WEEK, 1923, BY OCCUPATION, SEX, AND DISTRICT.

| Occupation, sex, and district. - | Estab-lishments. | Employees. | Averageearnings per hour | Average full-time earnings per week. | A verage full-time hours per week. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { Un- } \\ & \text { der } \\ & 40 . \end{aligned}$ | 40 | $\begin{gathered} \text { Over } \\ 40 \\ \text { and } \\ \text { under } \\ 45 . \end{gathered}$ | 45 | $\begin{gathered} \text { Over } \\ 45 \\ \text { and } \\ \text { under } \\ 48 . \end{gathered}$ | 48 | $\begin{gathered} \text { Over } \\ \text { 48 } \\ \text { ander } \\ \text { nad } \end{gathered}$ | 50 | $\begin{gathered} \text { Over } \\ 50 \\ \text { and } \\ \text { under } \\ 54 . \end{gathered}$ | 54 | 55 | $\left\lvert\, \begin{gathered} \text { Over } \\ 55 \\ \text { and } \\ \text { under } \\ 60 . \end{gathered}\right.$ | 60 | $\begin{aligned} & \text { Over } \\ & 60 . \end{aligned}$ |
| AIr baggers, Male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron....... | 6 | 97 | \$0.990 | \$48.31 | 48.8 |  |  |  |  | 7 | 78 |  |  |  |  | 12 |  |  |  |
| Connecticut, Massachusetts, and New York | 9 | 43 | . 727 | 39.91 | 54.9 |  |  |  | 5 |  | 11 | 1 | 3 | 1 | 1 |  |  | 13 | 8 |
| Ohio (except Akron) and Michigan . . . ${ }^{\text {New Jersey }}$. | 11 | 58 <br> 78 | $\begin{array}{r}.840 \\ .745 \\ \hline\end{array}$ | 39.40 <br> 34.79 | 46.9 46.7 |  | 17 |  | 9 | 2 | 18 6 |  |  | 4 | . | 11 6 | 5 | 5 | 4 |
| Indiana and Wisconsin........ | 5 | 16 | . 752 | 43.69 | 58.1 |  |  |  |  |  |  |  | 2 |  |  | 5 | 3 | 2 | 4 |
| Total. | 42 | 292 | . 843 | 41.56 | 49.3 |  | 54 |  | 14 | 11 | 123 | 1 | 5 | 5 | 1 | 34 | 8 | 20 | 16 |
| ASSEMBLERS, MALE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron....... | 6 | 218 | . 819 | 39.80 | 48.6 | 18 |  |  |  | 5 | 62 | 53 | 36 |  |  | 44 |  |  |  |
| Connecticut, Massachusetts, and New York. | 11 | 192 | . 638 | 31.07 | 48.7 |  |  |  | 32 |  | 46 | 7 | 102 | 5 |  |  |  |  |  |
| Ohio (except Akron) and Michigan | 10 | 134 | . 668 | 32.06 | 48.0 |  | 25 |  | 47 |  | 7 |  | 11 |  |  | 43 |  | 1 |  |
| New Jersey and Pennsylvania | 11 | 139 | . 517 | 27.87 | 53. 9 |  |  |  |  |  | 9 |  | 31 | 23 |  | 33 | 35 | 5 | 3 |
| Indiane and Wisconsin. | 6 | 80 | . 604 | 32.98 | 54.6 |  |  |  |  |  |  |  | 17 |  |  | 52 |  | 11 |  |
| Total | 44 | 763 | . 670 | 33.57 | 50.1 | 18 | 25 |  | 79 | 5 | 124 | 60 | 197 | 28 |  | 172 | 35 | 17 | 3 |
| Akron. | 4 | 146 | . 550 | 25. 47 | 46.3 |  |  | 6 | 88 |  | 8 | 28 | 16 |  |  |  |  |  |  |
| Connecticut, Massachusetts, and New York | 4 | 89 | . 532 | 24.84 | 46.7 |  |  | ...... | 43 |  | 39 |  | 7 |  |  |  |  |  |  |
| Qhio (except Akron) and Michigan... | 5 | 62 | . 384 | 18. 47 | 48.1 |  |  | . | 5 |  | 47 |  | 10 |  |  |  |  |  |  |
| New Jersey and Pennsylvania. | 7 | 93 | . 460 | 24.47 | 53.2 |  |  |  |  |  | 8 | . | 16 | 5 | 13 | 51 |  |  |  |
| Indiana and Wisconsin. | 2 | 6 | . 404 | 21.05 | 52.1 |  |  |  |  |  |  |  | 1 | 5 |  |  |  |  |  |
| Total. | 22 | 396 | . 498 | 24.10 | 48.4 |  |  | 6 | 136 |  | 102 | 28 | 50 | 10 | 13 | 51 |  | ... | $\ldots$ |
| BEAD MAKERS, MALE. |  |  |  |  |  |  |  |  |  |  | 15 |  |  |  |  |  |  |  |  |
| Akronecticut, Massachusetts, and New York. | 12 | 51 | . 773 | 38.65 30.60 | 50.0 49.6 |  |  |  | 10 |  | 18 | 4 | 13 | 2 | 1 | 11 |  |  |  |
| Ohio (except Akron) and Michigan....... | 10 | 50 | . 651 | 32. 29 | 49.6 |  | 8 |  |  |  | 18 |  | 5 |  |  | 19 |  |  |  |
| New Jersey and Pennsylvania... | 11 | 43 | . 635 | 32. 26 | 50.8 | .... | 2 | 5 | 4 |  | 2 |  | 6 | 6 |  | 17 | 1 |  |  |
| Indiana and Wisconsin........ | 6 | 31 | . 561 | 31. 14 | 55.5 |  |  |  |  |  |  |  | 4 | 5 |  | 17 |  |  | 5 |
| Total | 42 | 204 | . 636 | 32.31 | 50.8 |  | 10 | 5 | 14 | ...... | 53 | 4 | 28 | 13 | 1 | 70 | 1 | .... | 5 |



Table A.-AVERaGE hoURS AND EARNINGS AND CLASSIFIED FULL-TIME HOURS PER WEEK, 1923, BY OCCUPATION, SEX, AND DISTRICT-Continued.

| Oecupation, sex, and district. | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments. } \end{aligned}$ | Em. ployees. | A verage earnings per hour. | Average full-time earnings per week. | Average full-time hours per week. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Under 40. | 40 | $\begin{array}{\|c\|} \text { Over } \\ 40 \\ \text { and } \\ \text { under } \\ 45 . \end{array}$ | 45 | $\begin{array}{\|c} \text { Over } \\ 45 \\ \text { and } \\ \text { under } \\ 48 . \end{array}$ | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 50 . \end{gathered}\right.$ | 50 | $\left\lvert\, \begin{gathered} \text { Over } \\ 50 \\ \text { and } \\ \text { under } \\ 54 . \end{gathered}\right.$ | 54 | 55 | Over 55 and under 60. | 60 | Over 60. |
| buffers, tubes, Male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 6 | 53 | \$0.800 | \$41. 54 | 48.3 |  |  |  |  | 7 | 30 | 9 | 6 |  |  | 1 |  |  |  |
| Connecticut, Massachusetts, and New York. | 6 | 23 | . 651 | 31.96 | 49.1 |  |  | 1 | 6 |  | 2 |  | 10 |  |  | 4 |  |  |  |
| Ohio (except Akron) and Michigan.......... | 8 | 27 | . 725 | 37.92 | 52.3 |  | 5 |  |  |  | 7 |  |  |  |  | 15 |  |  |  |
| New Jersey and Pennsylvania..... | 10 | 18 | .884 .549 | 34.54 29.76 | 50.5 54.2 |  | 2 | 3 |  |  | 1 |  | $\stackrel{2}{3}$ | 2 |  | ${ }^{4}$ | 4 |  | . $\cdot$.... |
| Indiana and Wisconsin....... | 5 | 19 | . 549 | 29.76 |  |  |  |  |  |  |  |  | 3 |  |  | 16 |  |  |  |
| Total. | 35 | 140 | . 734 | 36.92 | 50.3 | $\ldots$ | 7 | 4 | 6 | 7 | 40 | 9 | 21 | 2 |  | 40 | 4 |  |  |
| BUILDERS AND FINISHERS, MALE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron........................................ | 5 | 369 | . 937 | 45.35 | 43.4 | 16 |  |  |  |  | 305 | 12 | 11 |  |  | 25 |  |  |  |
| Connecticut, Massechusetts, and New York... | 10 | 313 | . 921 | 43.38 | 47.1 | ..... |  | 70 | 55 |  | 81 | 17 | 64 | 26 |  |  |  |  |  |
| Ohio (except Akron) and Michigan........... | 6 | 228 | . 874 | 41.78 | 47.8 |  | 17 |  | 78 20 |  | 88 |  |  |  |  | 45 |  |  |  |
| New Jersey and Pennsylvania................. | 7 | 63 | . 758 | 37. 07 | 48.9 |  | 11 |  | 20 |  | 1 | ..... |  | 7 | ... | ${ }^{7}$ | 17 |  |  |
| Indiana and Wisconsiu......... | 3 | 70 | . 718 | 39.27 | 54.7 |  |  |  |  |  |  |  |  | 7 |  | 63 |  |  |  |
| Total. | 31 | 1,043 | . 893 | 43.13 | 48.3 | 16 | 28 | 70 | 153 |  | 475 | 29 | 75 | 40 | … | 140 | 17 |  |  |
| BUILDERS OR MAEERS, CORD TTRES, MALE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 7 | 547 | . 959 | 46. 42 | 48.4 | 25 |  |  | 1 | 82 | 224 | 72 | 79 |  | ..... | 65 |  |  |  |
| Connecticut, Massachusets, and New York. | 6 | 110 | . 782 | 38.47 | 49.2 |  |  |  | 13 |  | 14 | ...... | 81 |  |  | 2 |  |  |  |
| Ohio (except Akron) and Michigan... | 9 | 159 | . 862 | 40.08 | 48.5 |  | 68 |  |  |  | 47 |  |  |  |  | 44 |  |  |  |
| New Jersey and Pennsylvania...... | 8 | 198 | . 870 | 40.63 | 46.7 |  | 70 |  | 34 |  | 9 | 17 | 14 | 17 |  | 18 | 19 |  |  |
| Indiana and Wisconsin ..... | 4 | 42 | . 730 | 40.66 | 55.7 |  |  |  |  |  |  |  |  | 1 |  | 28 | 13 |  |  |
| Total. | 35 | 1,050 | . 900 | 43.38 | 48.2 | 25 | 138 |  | 47 | 82 | 294 | 89 | 174 | 18 |  | 157 | 32 |  | ....... |
| butlders or makers, fabric tires, Male. |  |  |  |  |  |  |  |  |  |  |  |  |  | , |  |  |  |  |  |
| Akron. | 5 | 108 | . 957 | 46.32 | 48.4 |  |  |  |  | 18 | 48 | 20 | 20 |  |  | 2 |  |  |  |
| Connectiout, Massachusetts, and New York... | 4 | 82 | . 823 | 40.90 | 49.7 |  |  |  | 5 |  | + 3 |  | 72 | 2 |  | $\cdots$ |  |  |  |
| Ohio (except Alkron) and Michigan........... | 9 | 122 | . 898 | 42.48 | 47.3 |  | 39 |  | 16 |  | 27 |  |  |  |  | 40 |  |  |  |
| New Jersey and Pennsylvania.................. | 8 | 58 | . 821 | 38.09 | 46.4 |  | 15 |  | 21 |  |  | 7 | 2 | 5 |  | 3 | 5 |  |  |



Table A.-AVERAGE HOURS AND EARNINGS AND CLASSIFIED FULL-TIME HOURS PER WEEK, 1923, By OCCUPA-
TION, SEX, AND DISTRICT-Continued.

|  | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments. } \end{aligned}$ | Employees. | Average earnings per hour. | Average full-time earnings per week. | Average full-time hours fer week. | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Occupation, sex, and district. |  |  |  |  |  | Under 40. | 40 | $\left\lvert\, \begin{gathered} \text { Over } \\ 40 \\ \text { and } \\ \text { under } \\ 45 . \end{gathered}\right.$ | 45 | $\begin{gathered} \text { Over } \\ 45 \\ \text { and } \\ \text { ander } \\ 48 . \end{gathered}$ | 48 | $\left\lvert\, \begin{gathered} \text { Over } \\ 48 \\ \text { and } \\ \text { under } \\ 50 . \end{gathered}\right.$ | 50 | $\left\|\begin{array}{c} \text { Over } \\ 50 \\ \text { and } \\ \text { under } \\ 54 . \end{array}\right\|$ | 54 | 55 | $\begin{array}{\|c\|} \text { Over } \\ 55 \\ \text { and } \\ \text { under } \\ 60 . \end{array}$ | 60 | Over 60. |
| Curers, tires, male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron...................... | 7 | 619 | \$0.970 | \$46. 27 | 47.7 |  |  |  |  | 167 | 427 |  |  |  |  | 25 |  |  |  |
| Connecticut, Massachusetts, and New York. | 12 | 375 | . 793 | 41.71 | 52.6 |  |  |  | 91 | 91. | 105 | 10 | 17 |  |  | 8 |  | 90 | 54 |
| Ohio (except Akron) and Michigan ............ | 11 | 221 | . 922 | 42.14 | 45.7 |  | 87 |  |  | 21 | 87 |  |  |  |  | 26 |  |  |  |
| New Jersey and Pennyslvania..... | 12 | 295 | . 7981 | 36.54 | 46.2 |  | 140 |  | 20 | 8 | 57 |  |  | 18 |  | 14 | 10 | 6 13 | 4 |
| Indiana and Wisconsin.. | 7 | 141 | . 681 | 40.11 | 58.9 |  |  |  |  |  |  |  | 13 | 7 |  | 16 |  | 13 | 46 |
| Total. | 49 | 1,651 | . 869 | 42.75 | 49.2 |  | 227 |  | 111 | 196 | 676 | 10 | 30 | 25 |  | 89 | 56 | 109 | 122 |
| Akron......................... | 6 | 23 | . 800 | 38.88 | 48.6 |  |  |  |  | 1 | 16 | 2 | 3 |  |  | 1 |  |  |  |
| Connecticut, Massachusetts, and New York.. | 5 | 21 | . 651 | 31.31 | 48.1 |  |  |  | 11 |  |  |  | 7 |  |  | 3 |  |  |  |
| Ohio (except Akron) and Michigan........... | 9 | 39 | .760 | 38.38 | 50.5 |  | 7 |  |  |  | 10 |  |  |  |  | 22 |  |  |  |
| New Jersey and Pennsylvania..... | 8 | 17 | . 605 | 32.67 | 54.0 |  | 2 |  |  |  | 1 |  | 2 |  |  | 4 | 5 | 1 | 2 |
| Indiana and Wisconsin... | 6 | 8 | . 524 | 29.50 | 56.3 |  |  |  |  |  |  |  | 1 |  |  | 5 |  | 1 | 1 |
| Total | 34 | 108 | . 709 | 35.88 | 50.6 |  | 9 |  | 11 | 1 | 27 | 2 | 13 |  |  | 35 | 5 | 2 | 3 |
| finishers and treaders, cord tires, male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 7 | 681 | . 965 | 45.84 | 47.5 | 24 |  |  |  | 126 | 411 | 55 | 63 |  |  | 2 |  |  | ...... |
| Connecticut, Massachusetts, and New York... | 6 | 129 | . 715 | 34.75 | 48.6 |  |  |  | 10 |  | 19 |  | 99 |  |  | 1 |  |  |  |
| Ohio (except Akron) and Michigan. | 11 | 234 | . 793 | 36.87 | 46.5 |  | 70 |  | 53 |  | 59 |  |  |  |  | 52 |  |  |  |
| New Jersey and Pennsylvania. | 8 | 276 | . 796 | 37.01 | 46.5 |  | 110 |  | 45 |  | 8 | 25 | 8 | 21 |  | 28 | 31 |  |  |
| Indiana and Wisconsin. | 5 | 86 | . 715 | 39.83 | 55.7 |  |  |  |  |  |  |  | 1 | 3 |  | 53 | 29 |  | ...... |
| Total. | 37 | 1,406 | . 866 | 41.31 | 47.7 | 24 | 180 |  | 108 | 126 | 497 | 80 | 171 | 24 |  | 136 | 60 |  | -.... |
| FINIBHERS $\triangle$ ND TREADERS, CORD TIRES, FEMALE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| New Jersey and Pennsylvania. . . . . . . . . . . . | 3 | 27 | . 563 | 28.15 | 50.0 |  |  |  | 1. |  |  |  | 27 |  |  |  |  |  |  |



Table A.-AVERAGE HOURS AND EARNINGS AND CLASSIFIED FULL-TIME HOURS PER WEEK, 1923, BY OCCUPATION, SEX, AND DISTRICT-Continued.


STRIPPERS, AIR BAGS, MALE.
Connecticut, Massachusett........................................... Ohio (except Akron) and Michigan. New Jersey and Pennsỳlvaria. Indiana and Wisconsin.....................................

Total.
STRIPPERS, CORE, MALE.
 Indiana and Wisconsin.

Total.
STRIPPERS, TUBES, MALE.
Akron.
Comnectictot, Mossachisisetts, and New York. Ohio (except Akron) and Michigan. New Jersey and Pennsylvania.

Total
TEAR-DOWN MEN, MALE.
Connecticut, Massachusetts, and New York Ohio (except Akron) and Michigan.
New Jersey and Pennsylvania.
Indiana and Wisconsin..
Total.
tread cutters, male.
Akron.
Connecticut, Massachusetts, and New York. Ohio (except Akron) and Michigan.
New Jersey and Pennsyl vania. Indiana and Wisconsin.

Total.


Table A.-AVERAGE HOURS AND EARNINGS AND CLASSIFIED FULL-TIME HOURS PER WEEK, 1923, BY OCCUPA-
TION, SEX, AND DISTRICT-Concluded.

| Occupation, sex, and district. | Estab-lishments. | Employees. | Average earnings per hour. | Average full-time earnings per week. | $\begin{array}{\|c} \text { Average } \\ \text { full-time } \\ \text { hours } \\ \text { per } \\ \text { week. } \end{array}$ | Employees whose full-time hours per week were- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Un- der 40. | 40 | Over 40 and under 45. | 45 | Over 45 and under 48. | 48 | $\left\|\begin{array}{c} \text { Over } \\ \text { 48 } \\ \text { and } \\ \text { under } \\ 50 . \end{array}\right\|$ | 50 | Over 50 and under 54. | 54 | 55 | Over 55 and under 60. | 60 | Over 60. |
| Truckers, male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron................................. | 7 | 574 | \$0.816 | \$39.41 | 48.3 | 4 |  |  |  | 65 | 416 | 24 | 28 | 19 | .... | 13 | 5 | . |  |
| Connecticut, Massachusetts, and New York... | 7 | 107 | . 539 | 25. 76 | 47.8 |  |  | 17 | 20 |  | 15 |  | 51 |  |  | 4 |  |  |  |
| Ohio (except Akron) and Michigan ........... | 11 | 186 | . 595 | 29.33 | 49.3 |  | 31 |  | 43 | …r. | 30 |  |  |  |  | 57 | 17 | 8 |  |
| New Jersey and Pennsylvania...... | 10 | 111 | . 461 | 24.66 | 53.5 |  | 14 |  | 4 | -..... | 5 | ..... | 3 | 12 | -... | 22 | 33 | 12 | 6 |
| Indiana and Wisconsin . . | 6 | 97 | . 474 | 20.16 | 55.2 |  |  |  |  |  |  |  | 9 |  |  | 73 | 9 | 3 | 3 |
| Total. | 41 | 1,075 | . 683 | 33.88 | 49.6 | 4 | 45 | 17 | 67 | 65 | 466 | 24 | 91 | 31 | .... | 169 | 64 | 23 | 97 |
| Akron. | 7 | 27 | . 892 | 43.26 | 48.5 |  |  |  |  |  | 22 | 1 | 3 |  |  | 1 |  |  |  |
| Connecticut, Massachusetts, and New York.- | 8 | 14 | . 717 | 34. 77 | 48.5 |  |  |  | 3 |  | 3 | ...... | 7 |  |  | 1 |  |  |  |
| Ohio (except Akron) and Michigan . | 11 | 26 | . 764 | 40.49 | 53.0 |  |  |  | 4 | ...... | 3 | ...... |  |  |  | 17 |  | 2 | - |
| New Jersey and Pennsylvanis... | 9 | 18 | . 583 | 31.25 | 53.6 |  | 2 |  |  |  | 1 |  |  | 2 |  | 7 | 5 | .... | 1 |
| Indiana and Wisconsin........ | 5 | 11 | . 579 | 30.63 | 52.9 |  |  |  |  |  |  |  | 4 | 1 |  | 6 |  |  |  |
| Total. | 40 | 96 | . 738 | 37. 79 | 51.2 |  | 2 |  | 7 | ...... | 29 | 1 | 14 | 3 |  | 32 | 5 | 2 | 1 |
| Akron. | 7 | 27 | . 779 | 37.94 | 48.7 |  |  |  |  |  | 21 | 2 | 2 |  |  | 2 |  |  |  |
| Connecticut, Massachusetts, and New York. | 5 | 15 | . 587 | 27. 77 | 47.3 |  |  |  | 5 |  | 8 | ...... | 2 |  |  |  |  |  |  |
| Ohio (except Akron) and Michigan. | 10 | 25 | . 674 | 35. 86 | 53.2 |  |  |  | 4 | ...... | 3 |  |  |  |  | 15 |  | 3 |  |
| New Jersey and Pennsylvania.. | 7 | 13 | . 519 | 27.46 | 52.9 |  | 2 |  |  |  | 1 |  |  | 1 | .... | 5 | 3 |  | 1 |
| Indiana and Wisconsin. | 4 | 12 | . 525 | 27.77 | 52.9 |  |  |  |  |  |  |  | 5 |  |  | 7 |  |  |  |
| Total. | 33 | 92 | . 650 | 33.02 | 50.8 |  | 2 |  | 9 |  | 33 | 2 | 9 | 1 |  | 29 | 3 | 3 | 1 |
| Akron. | 7 | 79 | . 894 | 43.36 | 48.5 |  |  |  |  | 15 | 39 | 12 | 9 |  |  | 4 |  |  |  |
| Connecticut, Massachusetts, and New York... | 9 | 62 | . 662 | 31. 84 | 48.1 |  |  | 2 | 19 |  | 13 | ..... | 21 | 7 |  |  |  |  |  |
| Ohio (except Alron) and Michigan ............ | 9 | 40 | . 685 | 34. 80 | 50.8 |  | 7 |  |  |  | 9 |  |  |  |  | 24 |  |  |  |


| New Jersey and Pennsylvania. Indiana and Wisconsin....... | 8 5 | $\begin{aligned} & 44 \\ & 35 \end{aligned}$ | $\begin{array}{r} .687 \\ .590 \end{array}$ | $\begin{aligned} & 33.39 \\ & 32.21 \end{aligned}$ | $\begin{aligned} & 48.6 \\ & 54.6 \end{aligned}$ |  | 12 |  | 5 |  | 2 |  | 6 | 7 |  | \% ${ }_{3}$ | 11 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total. | 38 | 260 | . 733 | 36.36 | 49.6 |  | 19 | 2 | 24 | 15 | 63 | 12 | 43 | 14 | ..... | 51 | 17 |  |  |
| Akron. |  |  |  | 43.47 | 48.3 |  |  |  |  | 22 |  |  |  |  |  |  |  |  |  |
| Connecticut, Massachusetts, and New York. | 6 | 33 | . 590 | 28. 38 | 48.1 |  |  | 1 | 5 |  | 15 | 10 | 12 |  |  | 4 |  |  |  |
| Ohio (except Akron) and Michigan. ......... | 9 | 38 | . 698 | 33.22 | 47.6 |  | 8 |  |  |  | 9 |  |  |  |  | 21 |  |  |  |
| New Jersey and Pennsylvanis.... | 9 | 37 | . 688 | 35. 57 | 51.7 |  | 6 |  | 2 |  | 1 |  | 3 | 1 |  | 10 | 14 |  |  |
| Indians and Wisconsin........ | 4 | 34 | . 556 | 30.25 | 54.4 |  |  |  |  |  |  |  | 5 |  |  | 27 | 2 |  |  |
| Total. | 35 | 237 | . 745 | 36.95 | 49.6 |  | 14 | 1 | 7 | 22 | 74 | 10 | 30 | 1 |  | 62 | 16 |  |  |
| Akron . | 7 | 52 | . 753 | 36.37 | 48.3 |  |  |  |  | 10 | 27 | 7 | 7 |  |  | 1 |  |  |  |
| Connecticut, Massachusetts, and New Yor | 4 | 12 | . 550 | 26. 58 | 47.8 |  |  | 1 | 4 |  |  |  | 7 |  |  |  |  |  |  |
| Ohio (except Akron) and Michigan. | 9 | 20 | . 704 | 36.47 | 51.8 |  | 7 |  |  |  | 2 |  |  |  |  | 11 |  |  |  |
| New Jersey and Pennsylvania. . . Indiana and Wisconsin........... | 8 <br> 3 | 18 | .646 .624 | 31.65 34.07 | 49.0 54.6 |  | 1 | 4 |  | 3 | 1 |  | 1 |  |  | 3 11 | 3 |  |  |
| Total. | 31 | 114 | . 694 | 34. 42 | 49.6 |  | 8 | 5 | 4 | 13 | 30 | 7 | 18 |  | .... | 26 | 3. |  |  |
| Connecticut, Massachusetts, and New York | 3 | 5 | . 521 | 24.64 | 47.3 |  |  |  | 1 | 1 | 3 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron............................ | 7 | 2,397 | . 808 | 39.03 | 48.3 | 25 |  |  |  | 244 | 1,595 | 179 | 241 | 8 |  | 81 | 24 |  |  |
| Connecticut, Massachusetts, and New York .. | 12 | 1,038 | . 588 | 28. 36 | 48.4 |  |  | 80 | 285 |  | 234 | 8 | 309 | 12 | 8 | 61 |  | 26 |  |
| Ohio (except Akron) and Michigan | 11 | 795 | . 674 | 33.43 | 49.6 |  | 87 |  | 43 | 2 | 389 |  | 3 | 2 |  | 233 |  | 34 | 2 |
| New Jersey and Pennsylvania. | 12 | 890 | . 516 | 27.30 | 52.9 |  | 131 | 19 | 19 |  | 45 |  | 36 | 72 |  | 295 | 159 | 44 | 70 |
| Indians and Wisconsin. | 7 | 445 | . 551 | 30. 19 | 54.8 |  |  |  |  |  |  |  | 101 | 15 |  | 228 | 64 | 26 | 11 |
| Total | 49 | 5,565 | . 680 | 33.86 | 49.8 | 25 | 218 | 99 | 347 | 246 | 2,263 | 187 | 690 | 109 | 8 | 898 | 247 | 130 | 98 |
| Akron. | 6 | 442 | . 485 | 22.89 | 47.2 | 1 |  | 28 | 139 | 10 | 149 | 95 | 20 |  |  |  |  |  |  |
| Connecticut, Massachusetts, and New York | 9 | 189 | . 425 | 20.57 | 48.4 |  |  | 4 | 22 | 1 | 85 |  | 75 | 2 |  |  |  |  |  |
| Ohio (except Akron) and Michigan | 6 | 67 | . 434 | 21.05 | 48.5 |  |  |  | 4 |  | 45 |  | 15 | 1 | 1 | 1 |  |  |  |
| New Jersey and Pennsylvania | 9 | 142 | . 345 | 17.97 | 52.1 |  |  |  |  |  | 28 |  | 21 | 10 | 69 | 14 |  |  |  |
| Indiana and Wisconsin.. | 7 | 128 | . 385 | 20.87 | 54.2 |  |  |  |  |  |  |  | 16 | 10 |  | 102 |  |  |  |
| Total. | 37 | 968 | . 437 | 21.50 | 49.2 | 1 |  | 32 | 165 | 11 | 307 | 95 | 147 | 23 | 70 | 117 |  |  |  |

Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT.


Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.


Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION; SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.


TABLE B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.

| Occupation, sex, pay period, and district. | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments. } \end{aligned}$ | Em-ployces. | Average number of days on which- |  | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { full. } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { pay } \\ \text { period. } \end{gathered}$ | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { hours } \\ \text { actu- } \\ \text { ally } \\ \text { worked } \\ \text { in one } \\ \text { pay } \\ \text { period. } \end{gathered}$ | Per cent of full time worked. | $\left.\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { earn- } \\ \text { ings } \\ \text { per } \\ \text { pay } \end{gathered} \right\rvert\,$ | Aver-ageearn-ingsactu-allyreceivedinpayperiod. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { There } \\ \text { was } \\ \text { work } \\ \text { in oc- } \\ \text { cupa- } \\ \text { tion } \\ \text { in } \\ \text { pay } \\ \text { period. } \end{gathered}$ | Em- ploy- ees actu- ally worked in pay period. |  |  |  |  |  |
| BUFFERS, TUBES, MALE. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron............................. | 3 | 48 | 5.8 | 5.6 | 48.2 | 42.6 | 88 | \$41.84 | \$37,00 |
| New York........................ | 6 | 23 | 5.6 | 5.3 | 49.1 | 46.3 | 94 | 31.96 | 30.14 |
| Ohio (except Akron) and Michigan | 2 | 7 | 5.9 | 5.4 | 55.0 | 48.1 | 84 | 42.02 | 35. 22 |
| New Jersey and Pennsyivania.... | 7 | 13 | 5.8 | 5.8 | 51.8 | 49.6 | 96 | 35.02 | 33.52 |
| Indiana and Wisconsin............ | 3 | 13 | 6.0 | 5.7 | 53.8 | 47.9 | 89 | 29.70 | 26.44 |
| Total | 21 | 104 | 5.8 | 5.6 | 50.0 | 45.2 | 90 | 37.15 | 33.61 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron............... | 3 | 5 | 13.2 | 12.8 | 111.4 | 121.6 | 109 | 86.67 | 94.55 |
| Ohio (except Akron) and Michigan | 6 | 20 | 12.3 | 11.1 | 116.3 | 97.2 | 84 | 82.69 | 69.16 |
| New Jersey and Pennsylvania. | 3 | 5 | 10.2 | 10.2 | 103.0 | 91. 4 | 89 | 72.72 | 64.52 |
| Indiana and Wisconsin... | 2 | 6 | 12.3 | 11.8 | 112.5 | 105.9 | 94 | 60.86 | 57.34 |
| Total | 14 | 36 | 12.1 | 11.3 | 113.1 | 101.2 | 89 | 78.27 | 70.07 |
| builders and finishers, Male. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron................................ | 2 | 60 | 5.7 | 5.5 | 46.7 | 42.8 | 92 | 44.79 | 41.04 |
| Connecticut, Massachusetts, and New York | 10 | 313 | 5.8 | 5.5 | 47.1 | 43.7 | 93 | 43.38 | 40.26 |
| Ohio (except Akron) and Michigan | 3 | 162 | 5.9 | 5.6 | 46.8 | 43.3 | 93 | 41.51 | 38.39 |
| New Jersey and Pennsylvania.... | 5 | 43 | 5.2 | 5.2 | 46.7 | 42.6 | 91 | 37.45 | 34.20 |
| Total | 20 | 578 | 5.8 | 5.5 | 47.0 | 43.4 | 92 | 42.63 | 39.36 |
| Two weeks or one-half month: |  | 309 | 12.9 | 12.0 | 111.7 |  | 83 |  |  |
| Ohio(exceptAkron)and Michigan | 3 | 66 | 11.8 | 11.0 | 114.2 | 89.9 | 79 | 96.16 | 75.68 |
| New Jersey and Pennsylvania. | 2 | 20 | 12.5 | 11.9 | 108.8 | 105.9 | 97 | 72.03 | 70.07 |
| Indiana and Wisconsin... | 3 | 70 | 13.8 | 12.4 | 122.9 | 109.7 | 89 | 88.24 | 78.75 |
| Tota | 11 | 465 | 12.9 | 11.9 | 113.6 | 95.1 | 84 | 98.83 | 82.80 |
| bUILDERS OR MAKERS, CORD TIRES, male. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron............................. | 3 | 453 | 5.8 | 5.7 | 47.4 | 44.4 | 94 | 46.74 | 43.80 |
| Connecticut, Massachusetts, and New York. | 6 | 110 | 5.7 | 5.5 | 49.2 | 47.1 | 96 | 38.47 | 36.81 |
| Ohio (except Akron) and Michigan. | 2 | 25 | 5.7 | 5.2 | 45.7 | 38.8 | 85 | 43.23 | 36. 73 |
| New Jersey and Pennsylvania.... | 7 | 161 | 5.5 | 5.3 | 46.9 | 41.0 | 94 | 41.88 | 39.31 |
| Indiana and Wisconsin.... | 2 | 10 | 6.0 | 6.0 | 55.0 | 54.1 | 98 | 38.50 | 37.91 |
| Total | 20 | 759 | 5.7 | 5.6 | 47.6 | 44.7 | 94 | 44.22 | 41.52 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron........................... | 4 | 94 | 12.7 | 11.4 | 119.5 | 101.5 | 85 | 98.83 | 83.93 |
| Ohio (except Akron) and Michigan | 7 | 134 | 12.0 | 11.2 | 104.8 | 94.9 | 91 | 88.66 | 80.29 |
| New Jersey and Pennsylvania.... | 2 | 37 | 12.0 | 12.0 | 102.0 | 97.6 | 96 | 78. 44 | 75.08 |
| Indians and Wisconsin... | 2 | 32 | 11.0 | 9.1 | 111.8 | 93.4 | 84 | 82.62 | 69.02 |
| Total. | 15 | 297 | 12.1 | 11.2 | 109.8 | 97.2 | 89 | 89.93 | 79.58 |

TABLE B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEEG AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.


Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATTON AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.

| Ocoupation, sex, pay period, and district. | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments. } \end{aligned}$ | Em ployees. | Average number of days on which- |  | $\begin{gathered} \text { Aver- } \\ \text { qge } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { pay } \\ \text { period. } \end{gathered}$ | Aver-agehoursactu-allyworkedin onepayperiod. | Per cent of full time worked. | Average fulltime earnings per pay period. | Aver-ageearu-ingsactu-allyre-ceivedinpayperiod. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | There was work in 0ccupar tion in pay period. | Em- ploy- eos actu- ally worked in pay period. |  |  |  |  |  |
| Calender men's helpers, malk. |  |  |  |  |  |  |  |  |  |
| One week: <br> Akron | 3 | 137 | 5.9 | 5.6 | 48.1 | 44.1 | 92 | +11 80 | 838.37 |
| Connecticut, Massachusetts, and |  | 137 | 5.9 | 5.6 | 48.1 | 44.1 | 92 | \$11.80 | \$38.36 |
| New York . ...................... | 10 | 174 | 5. 8 | 5.5 | 48.0 | 47.7 | 99 | 28.90 | 28.72 |
| Ohio (except Akron) and Michigan | 3 | 51 | 5.7 | 5.6 | 48.5 | 45.1 | 93 | 34.82 | 32.40 |
| New Jersey and Pennsylvania.... | 9 | 79 | 5.6 | 5.4 | 52.4 | 50.4 | 96 | 30.03 | 28.85 |
| Indisns and Wisconsin............ | 3 | 23 | 6.0 | 5.4 | 52.6 | 46. 4 | 88 | 24.20 | 21.34 |
| Total | 28 | '464 | 5.8 | 5.5 | 49.1 | 46.8 | 95 | 33.19 | 31.63 |
| Two weeks or one-half month: <br> Akron | 4 | 80 | 12.8 | 11.7 | 112.6 | 96.2 | 85 |  |  |
| Ohio (except Akron) and Michigan | 8 | 78 | 12.7 | 11.4 | 126.5 | 100.6 | 80 | 73.37 | 72.81 58.39 |
| New Jersey and Pennsylvania. | 3 | 12 | 12.3 | 11.6 | 100.6 | 95.1 | 95 | 68.71 | 64.95 |
| Indians and Wisconsin. | 4 | 28 | 12.8 | 12.2 | 119.1 | 113.5 | 95 | 66.33 | 63.18 |
| Total | 19 | 198 | 12.7 | 11.6 | 118.3 | 100.3 | 85 | 77.01 | 65.30 |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron............................ | 3 | 140 | 5.9 | 5.8 | 47.9 | 46.0 | 96 | 38.75 | 37.20 |
| Connecticut, Massachusetts, and New York. | 11 | 54 | 5.8 | 5.6 | 50.8 |  | 99 | 30.07 | 29.67 |
| Ohio (except Akron) and Michigan | 3 | 12 | 6.0 | 6.0 | 49.2 | 51.1 | 104 | 36.51 | 37.97 |
| New Jersey and Pennsylvania.... | 9 | 26 | 5.9 | 5.6 | 57.3 | 56.9 | 99 | 33.06 | 32.81 |
| Indians.and Wisconsin.......... | 3 | 16 | 6.0 | 5.9 | 54.4 | 51.7 | 95 | 24.70 | 23.43 |
| Total. | 29 | 248 | 5.9 | 5.7 | 50.0 | 48.7 | 97 | 35.20 | 34.27 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron............................... | 4 | 33 | 12.7 | 12.3 | 113.3 | 123.5 | 109. | 78.97 | 86.09 |
| Ohio (except Akron) and Michigan | 8 | 34 | 12.6 | 11.8 | 123.3 | 114.6 | 93 | 65.60 | $60.93)$ |
| New Jersey and Pemnsylvania.. | 3 | 9 | 12.4 | 11.0 | 116.0 | 102.0 | 88 | 63.22 | 55.59 |
| Indiana and Wisconsin. | 4 | 9 | 12.4 | 12.4 | 114.3 | 119.9 | 105 | 69.49 | 72.97 |
| Total | 19 | 85 | 12.6 | 12.0 | 117.7 | 117.3 | 100 | 71.68 | 71.39 |
| CURERS, BEADS, Male. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron............................... | 3 | 60 | 5.8 | 5.7 | 48.0 | 44.1 | 92 | 43.68 | 40.17 |
| Connecticut, Massachusetts, and New York. | g | 74 | 5.8 | 5.6 | 52.5 | 50.2 | 96 | 39.69 | 37.94 |
| Ohio (except Akron) and Michigan | 3 | 31 | 5.9 | 5.9 | 47.7 | 47.2 | 99 | 41.69 | 41.31 |
| New Jersey and New York. ...... | 8 | 33 | 5.7 | 5.5 | 52.5 | 51.0 | 97 | 33.96 | 37.83 |
| Indiana and Wisconsin............ | 2 | 6 | 6.0 | 5.5 | 51.7 | 46.4 | 90 | 38.88 | 34.83 |
| Total | 25 | 204 | 5.8 | 5.7 | 50.4 | 48.0 | 95 | 40.98 | 39.01 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron............................... | 4 | 29 | 12.3 | 11.6 | 113.8 | 108.7 | 96 | 92.29 | 88.15 |
| Ohio (except Akron) and Michigan | 8 | 38 | 12.4 | 11.7 | 122.0 | 106. 4 | 87 | 83.20 | 72.51 |
| New Jersey and New York.......- | 3 | 10 | 12.3 | 12.1 | 103.0 | 100.6 | 98 | 60.77 | 59.32 |
| Indiana and Wisconsin............ | 3 | 17 | 11.3 | 10.8 | 125. 1 | 121.3 | 97 | 76.19 | 73.33 |
| Total................................ | 18 | 91 | 12.2 | 11.5 | 118.0 | 109.2 | 93 | 82.36 | 76.18 |

Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.


Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.

| Occupation, sex, pay period, and district. | Establish. ments. | Em-ployees. | Average number of days on which- |  | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { full- } \\ \text { time } \\ \text { hours } \\ \text { per } \\ \text { pay } \\ \text { period. } \end{gathered}$ | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { hours } \\ \text { actu- } \\ \text { ally } \\ \text { worked } \\ \text { in one } \\ \text { pay } \\ \text { period. } \end{gathered}$ | Per cent of full time worked. | Aver-agefull-timeearn-ingsperpayperiod. | A ver- age <br> earn- <br> ings actu- <br> ally <br> re- <br> ceived <br> in <br> pay <br> period. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | There Was work in 0c-cupation in pay period. | Em- ploy- ees aetu- ally worked in pay period. |  |  |  |  |  |
| FINISHERS AND TREADERS, FABRIC TIRES, MALE. |  |  |  |  |  |  |  |  |  |
| One week: <br> Akron | 3 | 212 | 6.0 | 5.7 | 48.3 | 43.8 | 91 | \$45.02 | \$40. 81 |
| Connecticut, Massachusetts, and |  |  |  |  |  |  |  |  |  |
| New York ..................... | 4 | 82 | 5.5 | 5.3 | 49.4 | 46. | 94 | 40.31 | 38.00 |
| Ohio (except Akron) and Michigan | 2 | 88 | 5.7 5.4 | 5.3 4.9 | 45.0 | 37.2 43.1 | 88 | 44.87 | 37.08 |
| Indiana and Wisconsin........ | 2 | 29 | 6.0 | 4.9 | 50.7 | 43.1 39.5 | 78 | 34.92 32.30 | 31.19 25.15 |
| Sotal | 18 | 479 | 5.8 | 5.4 | 48.2 | 43.0 | 89 | 41.60 | 37.09 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 11 | 120 | 11.5 | 9.9 | 113.3 | 87.8 | 77 | 82.94 | 64. 28 |
| FINISHERS, TUBES, MALE. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| AkTon | 3 | 116 | 5.8 | 5.6 | 48.0 | 43.1 | 90 | 43.15 | 38.73 |
| Connecticut, Massachssetts, and New York. | 5 | 25 | 6.0 | 5.6 | 47.2 | 46.8 | 99 | 29.55 | 29.28 |
| Ohio (except Akron) and Michigan | 2 | 9 | 6.0 | 5.8 | 50.3 | 47.1 | 94 | 38.93 | 36.43 |
| New Jersey and Pennsylvania..... | 6 | 18 | 5.9 | 5.6 | 54.3 | 50.0 | 92 | 29.70 | 27.37 |
| Indiana and Wisconsin ............ | 2 | 9 | 6.0 | 5.8 | 55.0 | 49.3 | 90 | 28.55 | 25.59 |
| Total | 18 | 177 | 5.9 | 5. 6 | 49.0 | 44.8 | 91 | 38.76 | 35,46 |
| Two weeks or ono-half month: |  |  |  |  |  |  |  |  |  |
| Akron........................... | 4 | 15 | 13.2 | 12.0 | 113.9 | 104.5 | 92 | 83.72 | 76.76 |
| Ohio (except Akron) and Michigan | 4 | 10 | 11.6 | 11.3 | 110.2 | 98.8 | 90 | 89.37 | 80.17 |
| Indians and Wisconsin............ | 2 | 7 | 12.3 | 11.9 | 112.1 | 108.4 | 97 | 57.28 | 55.46 |
| Total | 10 | 32 | 12.5 | 11.8 | 112.3 | 103.6 | 92 | 79.28 | 73. 16 |
| FINISHERS, TUBES, FEMALE. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Connecticut, Massachusetts, and |  | 16 |  | 4.9 |  |  |  |  |  |
| New Jersey and Pennsylvania..... | 4 | 18 | 6.1 | 6. 0 | 47.2 | 41.5 52.6 | 87 | 20.33 20.70 | 17.73 |
| Indiana and Wisconsin............ | 2 | 16 | 5.9 | 5.7 | 54.7 | 42.5 | 78 | 27.08 | 21.05 |
| Total | 10 | 45 | 5.6 | 5.5 | 52.0 | 45.0 | 87 | 22.62 | 19.59 |
| Laborers, Male. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron. | 3 | 340 | 6.0 | 5.8 | 48.2 | 47.0 | 98 | 34.61 | 33.79 |
| Connecticut, Massachusetts, and New York. | 12 | 373 | 5.9 | 5.5 | 49.3 | 49.4 | 100 | 24.65 | 24.71 |
| Ohio (except Akron) and Michigan | 3 | 104 | 6.0 | 5.5 | 54.1 | 52.0 | 96 | 26.02 | 25.00 |
| New Jersey and Pennsylvania.... | 9 | 239 | 5.9 | 5.4 | 55.4 | 51.8 | 94 | 23.16 | 21.65 |
| Indiana and Wisconsin............ | 3 | 99 | 6.0 | 5.3 | 52.7 | 46.4 | 88 | 21.40 | 18.83 |
| Total.............................. | 30 | 1,155 | 6.0 | 5.6 | 51.0 | 49.2 | 96 | 27.23 | 26.27 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Ohio (except Äkron)and Michigan | 8 | 165 | 13.2 | 11.0 | 117.7 | 106.6 | 91 | 50.26 | 45.52 |
| New Jersey and Pennsylvania.... | 3 | 51 | 13.3 | 10.7 | 104.6 | 95.6 | 91 | 45. 81 | 41.89 |
| Indiana and Wisconsin............ | 4 | 97 | 11.8 | 9.5 | 117.0 | 95.6 | 82 | 53.12 | 43.41 |
| Total. | 19 | 449 | 13.0 | 11.0 | 116. 1 | 105. 0 | 90 | 52.83 | 47.79 |

Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERage hours and Earnings, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.

| Occupation, sex, pay period, and district. | Estab lishments. | Em-ployees. | Average number of days on which- |  | Average fulltime hours per pay period. | Average hours actually worked in one pay period. | Per cent of full time worked. | Aver-agefull-timeearn-ingsperpayperiod. | Aver-ageearn-ingsactu-allyre-ceivedinpayperiod. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | There work in oc-cupstion in pay period. | Em- ploy- ees actu- ally worked in pay period. |  |  |  |  |  |
| MILLMEN, MALE. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron.............................. | 3 | '622 | 5.9 | 5.8 | 48.1 | 45.9 | 95 | \$40.84 | \$38.96 |
| N Y Massachusetts, and <br> New York. | 12 | 158 | 5.8 | 5.5 | 49.2 | 49.2 | 100 | 31.73 | 31.72 |
| Ohio (except Akron) and Michigan | 3 | 59 | 5.8 | 5.4 | 47.4 | 44.6 | 94 | 35.22 | 33.17 |
| New Jersey and Pennsylvania.... | 9 | 177 | 5.6 | 5.1 | 53.0 | 50.6 | 95 | 32.12 | 30.63 |
| Indiana and Wisconsin.: | 3 | 15 | 6.0 | 5.6 | 53.5 | 50.0 | 93 | 29.32 | 27.43 |
| Total | 30 | 1,067 | 5.8 | 5.6 | 49.3 | 47.3 | 96 | 37.17 | 35.63 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron........................ | 4 | 131 | 12.4 | 11.4 | 112.4 | 102.1 | 91 | 78.79 | 71.54 |
| New Jersey and Pennsylvania.... | 8 | 314 | 12.0 | 11.3 | 134.5 | 110.6 | 82 | 80.30 | 66.99 66.03 |
| Indians and Wisconsin............ | 4 | 49 | 12.1 | 11.6 | 116.4 | 109.4 | 94 | 75.54 | 70.99 |
| Total | 19 | 330 | 12.2 | 11.4 | 118.5 | 105.9 | 89 | 77.62 | 69.30 |
| RIMMERS, MALE. |  |  |  |  |  |  |  |  |  |
| One week: |  |  |  |  |  |  |  |  |  |
| Akron...........................- | 3 | 82 | 6.0 | 5.8 | 47.9 | 44.1 | 92 | 48.91 | 45. 02 |
| Connecticut, Massachusetts, and New York. | 5 | 47 | 5.8 | 5.5 | 49.5 | 48.9 | 99 | 37.57 | 37.11 |
| Ohio (except Akron) and Michigan. | 3 | 37 | 5.7 | 5.3 | . 17.5 | 43.8 | 92 | 40.23 | 37.10 |
| New Jersey and Pennsylvania.... | 8 | 62 | 5.4 | 4.9 | 47.4 | 43.7 | 92 | 35.36 | 32.62 |
| Indiana and Wisconsin... | 2 | 5 | 6.0 | 6.0 | 51.0 | 47.4 | 93 | 39.37 | 36.59 |
| Total | 21 | 233 | 5.8 | 5.4 | 48.1 | 45.0 | 94 | 41.37 | 38.69 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron.........................- | 3 | 20 | 12.2 | 11.8 | 114.3 | 11.0 .0 | 104 | 87.90 | 91.45 |
| gan | 8 | 33 | 11.8 | 11.4 | 99.5 | 93.9 | 94 | 77.81 | 73.42 |
|  | 3 | 14 | 12.1 | 11.6 | 98.1 | 92.8 | 95 | 80.15 | 75.78 |
| Indians and Wisconsin............. | 3 | 13 | 11.5 | 10.2 | 123.0 | 104.3 | 85 | 67.04 | 56.90 |
| Total. | 17 | 80 | 11.9 | 11.3 | 106.8 | 101.7 | 95 | 79.46 | 75.65 |
| SKIVERS, TUBES, MATE. |  |  |  |  |  |  |  |  |  |
| One week: <br> Akron. | 2 | 12 | 6.0 | 5.8 | 47.8 | 44.7 | 94 | 36.52 | 34.11 |
| Connecticut, Massachusetts, and |  |  |  |  | 4.8 | 4.7 |  |  | 34.11 |
| New York. . . . ................... | 5 | 6 | 5.0 | 4.8 | 47.5 | 41.3 | 87 | 31.54 | 27.43 |
| New Jersey and Penosylvania.... | 6 | 10 | 5.9 | 5.7 | 51.0 | 48.5 | 95 | 38.51 | 36.61 |
| Indiana and Wisconsin........ | 2 | 8 | 6.0 | 4.9 | 64.4 | 36.6 | 67 | 34.16 | 23.02 |
| Total | 15 | 36 | 5.8 | 5.4 | 50.1 | 43.4 | 87 | 36.07 | 31.23 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron........................... | 3 | 6 | 13.0 | 13.0 | 111.5 | 127.1 | 114 | 84. 29 | 96.12 |
| Ohio (except Akron) and Michigan. | 5 | 10 | 12.6 | 11.1 | 117.6 | 99.0 | 84 | 71.85 | 60.55 |
| New Jersey and Pennsylvania.... | . 2 | 5 | 12.4 | 11.2 | 102.0 | 101.6 | 100 | 71. 30 | 71.02 |
| Total. | 10 | 21 | 12.7 | 11.7 | 112.1 | 107.7 | 96 | 76.23 | 73.20 |

Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.


TABLE B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.


Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continued.


TABIE B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATLON, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Continaed.


Table B.-AVERAGE NUMBER OF DAYS OF WORK IN OCCUPATION AND NUMBER ACTUALLY WORKED BY EMPLOYEES AND AVERAGE HOURS AND EARNINGS, 1923, BY OCCUPATION, SEX, LENGTH OF PAY PERIOD, AND DISTRICT-Concluded.

| Occupation, sex, pay period, and district. | $\left\lvert\, \begin{gathered} \text { Estab- } \\ \text { lish- } \\ \text { ments. } \end{gathered}\right.$ | Em-ployees. | Average number of days on which- |  |  | Aver-agehoursactu-allyworkedin onepayperiod. | Per cent of full time worked. | Average fulltime earnings per pay period. | Aver-ageeang-ingsactu-allyre-ceivedinpayperiod. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | There was work in oc- cupa- tion in pay period. | Em- ploy- ees actu- ally worked in pay period. |  |  |  |  |  |
| VALVE INSERTERS, FEMALE. <br> One week: <br> Connecticut, Massachusetts, and <br> New York. | 3 | 5 | 5.2 | 5.2 | 47.3 | 44.5 | 94 | \$24.64 | \$23.18 |
| OTHER EMPLOYEES, MALE. |  |  |  | , |  |  |  |  |  |
| One week: <br> Akron. | 3 | 2,038 | 5.9 | 5.7 | 48.1 | 45.1 | 94 | 39.97 | 37.47 |
| Connecticut, Massachusetts, and New York. | 12 | 1,038 | 5.9 | 5.6 | 48.4 | 47.6 | 98 | 28.36 | 27.88 |
| Ohio (except Akron) and Michigan | 3 | 513 | 5.9 | 5.6 | 48.4 | 46.3 | 96 | 35.62 | 34.08 |
| New Jersey and Pennsylvania.... | 9 | 702 | 5.8 | 5.3 | 54.8 | 50.0 | 91 | 27.73 | 25.30 |
| Indiana and Wisconsin ............ | 3 | 168 | 6.0 | 5.4 | 52.3 | 45.7 | 87 | 31.69 | 27.68 |
| Total | 30 | 4,459 | 5.9 | 5.6 | 49.4 | 46.6 | 94 | 34.53 | 32.56 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron ............................ | 4 | 359 | 13.1 | 11.6 | 113.0 | 101.1 | 89 | 76.73 | 68.63 |
| Ohio (except A kron) and Michigan | 8 | 282 | 12.7 | 11.6 | 116.5 100.8 | 109.8 102.8 | 94 | 65.47 55.74 | 61.68 56.86 |
| New Jersey and Pennsylvania.... | 3 | 188 | 12.8 11.6 | 12.0 | 100.8 114.8 | 102.8 93.6 | 102 | 55.74 | 56.86 48.38 |
| Indiana and Wisconsin ............ |  | 277 | 11.6 | 9.4 | 114.8 | 93.6 | 82 | 59.35 | 48.38 |
| Total | 19 | 1,106 | 12.6 | 11.1 | 112.3 | 101.7 | 91 | 66.03 | 59.79 |
| OTHER EMPLOYEES, FEMALE. |  |  |  |  |  |  |  |  |  |
| One week: <br> Akron. | 3 | 367 | 6.0 | 5.6 | 46.8 | 41.8 | 89 | 23.31 | 20.84 |
| Connecticut, Massachusetts, and New York | 9 | 189 | 5.7 | 5.4 | 48.4 | 44.2 | 91 | 20.57 | 18.80 |
| Ohio (except Akron) and Michigan | 3 | 21 | 6.0 | 5.4 | 48.2 | 42.9 | 89 | 27.96 | 24.88 |
| New Jersey and Pennsylvania.... | 7 | 81 | 5.8 | 5.2 | 52.6 | 45.6 | 87 | 18.62 | 16.15 |
| Indiana and Wisconsin............. | 3 | 74 | 6.0 | 5.7 | 53.8 | 12.9 | 80 | 21.36 | 17.04 |
| Total. | 23 | 732 | 5.9 | 5.5 | 48.6 | 43.0 | 88 | 22.06 | 19.52 |
| Two weeks or one-half month: |  |  |  |  |  |  |  |  |  |
| Akron............................ | 3 | 75 | 11.5 | 9.8 | 110.9 | 82.5 | 74 | 47.02 | 34.95 |
| Ohio (except Akron) and Michigan | 3 | 46 | 12.5 | 12.2 | 109.0 | 94.3 | 87 | 40.11 | 34.71 |
| New Jersey and Pennsylvania.... | 2 | 61 | 12.5 | 11.5 | 109.7 | 94.9 | 87 | 36.53 | 31.65 |
| Indiana and Wisconsin............. | 4 | 54 | 12.0 | 11.2 | 110.6 | 98.1 | 89 | 40.81 | 36.26 |
| Total. | 12 | 236 | 12.0 | 11.0 | 110.2 | 91.6 | 83 | 41.33 | 34.35 |

## Table C.-AVERAGE AND CLASSIFIED EARNINGS PER HOUR IN SELECTED OCCUPATIONS, 1923, BY SEX AND DISTRICT.



[^1]Table C.-AVERAGE AND CLASSIFIED EARNINGS PER HOUR IN SELECTED OCCUPATIONS, 1923, BY SEX AND DISTRICT-Coneld.


TABLE D.-NUMBER OF EMPLOYEES IN SELECTED OCCUPATIONS WORKING ON AS MANY DAYS AS THERE WAS WORK IN THE OCCUPATION DURING THE PAY PERIOD, CLASSIFIED BY HOURS ACTUALLY WORKED, 1923, BY SEX AND DISTRICT,

ONE-WEEK PAY PERIOD.



TABLE D.-NUMBER OF EMPLOYEES IN SELECTED OCCUPATIONS WORKING ON AS MANY DAYS AS THERE WAS WORK IN THE OCCUPATION DURING THE PAY PERIOD, CLASSIFIED BY HOURS ACTUALLY WORKED, 1923, BY SEX AND DISTRICT-Continued.

ONE-WEEK PAY PERIOD-Concluded.

| Occupation, sex, and district. | $\left\|\begin{array}{c} \text { Estab- } \\ \text { lish- } \\ \text { ments. } \end{array}\right\|$ | All employees. |  | Employees working on all days of operation. |  | Employees who during the pay period worked- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Num- | Average full-time hours per week. | Number. | Average hours per week. | 24 and un- der 28 hrs. | 28 and un- der 32 hrs. | $\begin{gathered} 32 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 36 \\ \text { hrs. } \end{gathered}$ | 36 and un- der 40 hrs. | hrs. | 40 and un- der 45 hrs. | hrs. | 45 <br> and <br> un- <br> der <br> 48 <br> hrs. | hrs. | 48 and un- der 50 hrs | hrs. | 50 and un- dor 54 hrs. | hrs. | h5s. | 55 and un- der 60 hrs. | hrs. | 60 and un- der 64 hrs. | $\begin{gathered} 64 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 68 \\ \text { hrs. } \end{gathered}$ | $\begin{gathered} 68 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 72 \\ \text { hrs. } \end{gathered}$ | 72 hrs. and over. |
| LABORERS, MALE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron......................... | 3 | 340 | 48.2 | 280 | 48.7 |  |  | 1 |  | 1 | 14 | 71 | 31 | 43 | 34 | 1 | 52 |  |  | 24 |  | 2 | 3 |  |  |
| Connecticut, Massachusette, and New York. | 12 | 373 | 49.3 | 297 | 53.2 |  |  | 1 | 2 |  | 11 | 23 | 15 | 7 | 22 | 40 | 49 | 12 | 16 | 48 | 6 | 29 | 8 | 3 |  |
| Ohio (except Akron) and Michigan......... | 3 | 104 | 54.1 | 77 | 58.1 |  |  |  |  |  |  | 2 |  | 3 | 1 | 6 | 1 | 5 | 19 | 7 | 7 | 10 | 12 | 1 | 3 |
| New Jersey and Pennsylvania... | 9 | 239 | 55.4 | 185 | 57.1 |  |  | ... | 3 | 5 | 1 | 2 | 2 |  | 2 | 3 | 18 | 7 | 37 | 50 | 17 | 14 | 7 | 7 | 10 |
| Indiana and Wisconsin. | 3 | 99 | 52.7 | 73 | 52.8 |  |  |  |  |  | 6 | 4 | 5 | 2 | 4 | 9 | 3 | 9 | 14 | 11 | .... | 2 | .... | 4 |  |
| Total. | 30 | 1,155 | 51.0 | 912 | 53.0 | .... | .... | 2 | 5 | 6 | 32 | 102 | 53 | 55 | 63 | 59 | 123 | 36 | 86 | 140 | 30 | 57 | 30 | 15 | 18 |
| Akron......... | 3 | 622 | 48.1 | 576 | 46.9 |  | 1 |  | 2 | 24 | 42 | 227 | 74 | 108 | 27 | 7 | 14 | 4 |  | 42 |  | 2 | 1 | 1 |  |
| Connecticut, Massachusetts, and New York. | 12 | 158 | 49.2 | 123 | 52.9 |  |  | 1 |  |  | 21 | 1 | 9 | 5 | 6 | 20 | 10 | 6 | 4 | 20 |  | 8 | 1 | 10 | i |
| Ohio (except Alron) and Michigain. | 3 | 59 | 47.4 | 49 | 48.0 |  |  | $\cdots$ | 2 | 3 | 4 | 15 | 2 | 9 | 2 | 1 | 2 |  | 1 | 4 | 3 | 1 |  |  |  |
| Newf Jersey and Pennsylvania... | 9 | 177 | 53.0 | 134 | 55.5 |  |  | 1 | 1 | 12 |  | 5 | 2 | 1 |  | 2 | 14 | 5 | 24 | 25 | 14 | 10 | 13 | 3 | 2 |
| Indiana and Wisconsin. | 3 | 51 | 53.5 | 36 | 53.8 |  |  |  |  |  |  |  | 3 | 2 | 1 | 2 | 5 | 1 | 15 | 6 |  |  |  | 1 |  |
| Total. | 30 | 1,067 | 49.3 | 918 | 49.3 |  | 1 | 2 | 5 | 39 | 67 | 248 | 90 | 125 | 36 | 32 | 45 | 16 | 44 | 97 | 17 | 21 | 15 | 15 | 3 |
| Akron. | 3 | 67 | 48.1 | 62 | 45.7 |  |  |  |  |  | 12 | 31 | 10 | 3 | 3 | 2 | 1 |  |  |  |  |  |  |  |  |
| Connecticut, Massachusetts, and New York. | 9 | 62 | 48.1 | 40 | 49.4 |  |  |  |  |  | 6 | 2 |  | 8 | 4 | 8 | 10 |  |  |  |  | 1 | 1 |  |  |
| Ohio (except Akron) and Michigan.......... | 2 | 6 | 50.3 | 5 | 44.8 |  |  |  | 3 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |
| New Jersey and Pennsylvania... | 5 | 28 | 47.7 | 25 | 46.9 |  |  |  |  | 4 | 7 | 2 | 2 | 1 | 2 |  | 2 |  |  | 5 |  |  |  |  |  |
| Indiana and Wisconsin.... | 3 | 22 | 53.6 | 14 | 46.0 |  |  |  |  |  | 6 | 2 | 2 |  | 2 | 2 |  |  |  |  |  |  |  |  |  |
| Total. | 22 | 185 | 48.8 | 146 | 46.9 |  |  |  | 3 | 4 | 31 | 37 | 14 | 12 | 11 | 12 | 13 |  | 2 | 5 |  | 1 | 1 |  |  |

TWO-WEEK OR HALF-MONTH PAY PERIOD.

| Occupation, sex, and district. | $\begin{gathered} \text { Num- } \\ \text { ber } \\ \text { of es- } \\ \text { tab- } \\ \text { lish- } \\ \text { ments. } \end{gathered}$ | All employees. |  | Employees working on all days of operation. |  | Employees who during the pay period worked- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\text { ber. }}{\text { Num- }}$ | Average full-time hours per pay period. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | Average hours per pay period. | $\begin{gathered} 64 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 68 \\ \text { hrs. } \end{gathered}$ | $\begin{gathered} 68 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 72 \\ \text { hrs. } \end{gathered}$ | $\begin{gathered} 72 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 76 \\ \text { hrs. } \end{gathered}$ | $\left\|\begin{array}{c} 76 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 80 \\ \text { hrs. } \end{array}\right\|$ | hrs. | 80 and un- der 84 hrs. | 84 and un- der 88 hrs. | hrs. | 88 and un- der 92 hrs. | $\begin{array}{\|c} 92 \\ \text { and } \\ \text { un } \\ \text { der } \\ 96 \\ \text { hrs. } \end{array}$ | ¢ 98 | 96 and un- der der hrs. | 104 | 104 and un- der 112 hrs. | 112 | 112 and un- der 120 hrs. | 120 | 120 <br> and <br> un- <br> der <br> der <br> hrs. <br> hrs | 125 | $\begin{array}{\|c\|} 125 \\ \text { and } \\ \text { un- } \\ \text { der } \\ 132 \\ \text { hrs. } \end{array}$ | 132 and un- der 140 brs. | $\begin{aligned} & 140 \\ & \text { hrs. } \\ & \text { and } \\ & \text { over. } \end{aligned}$ |
| ASSEMBLERS, MALE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron.... | 4 | 65 | 119.3 | 42 | 112.9 |  |  |  |  |  |  |  |  | 1 | 1 |  | 11 | 1 | 4 | 4 | 7 |  | 3 | 5 | 2 | 3 |  |
| Ohio (except Akron) and Michigan. | 7 | 64 | 107.5 | 30 | 104.5 |  | 1 |  |  |  | 1 | 4 |  | .... | 6 | 2 | 2 | ... | 1 | 2 | 5 | ... | 3 | . | 1 | 1 | i |
| New Jersey and Pennsylvania..... | 2 | 22 | 114.4 | 7 | 109.1 |  |  |  |  |  |  |  |  |  | 2 |  | 2 |  |  |  | 1 |  | 1 |  |  | 1 |  |
| Indiana and Wisconsin......... | 3 | 56 | 118.9 | 38 | 121.3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 | 2 | 7 |  | 4 | 8 | 7 | 3 | 1 |
| Total. | 16 | 207 | 115.0 | 117 | 112.4 |  | 1 |  |  | $\ldots$ | 1 | 4 |  | 1 | 10 | 2 | 15 | 1 | 10 | 8 | 20 | $\ldots$ | 11 | 13 | 10 | 8 | 2 |
| Akron. | 2 | 14 | 98.1 | 11 | 93.6 |  |  |  |  |  |  | 1 | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio (except Akron) and Michigan. | 3 | 48 | 108.7 | 34 | 95.3 | 4 | 1 | 1 |  |  | 1 |  |  | 1 | 4 | 1 | 5 | 11 | ... |  |  |  |  |  |  |  |  |
| New Jersey and Pennsylvania..... | 2 | 12 | 110.7 | 4 | 83.8 |  | .... | 1 | . |  |  | 2 | 1 |  |  |  |  |  | ... | .... |  |  |  |  |  |  |  |
| Total | 7 | 74 | 107.0 | 49 | 94.0 | 4 | 1 | 2 | ... | ... | 1 | 3 | 3 | 3 | 4 | 1 | 11 | 5 | 11 | .... | ... |  | $\cdots$ |  | .. |  |  |
| bullders and finishers, male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 3 | 309 | 111.7 | 172 | 98.1 |  |  |  | 8 | .... | 3 | 7 | 29 | 2 | 1 |  | 106 | 1 | 7 | .... | 7 |  | 1 |  |  |  |  |
| Ohio (except Akron) and Michigan. | 3 | 66 | 114.2 | 41 | 97.6 |  |  |  |  |  | 1 | 2 | .... | 4 | 6 | 7 | 16 | 1 | 3 | .... |  |  | 1 |  |  |  | ..... |
| Pennsylvania and New Jersey. | 2 | 20 | 108.8 | 9 | 113.1 |  |  |  |  |  |  |  |  |  |  |  | 1 | .... | 5 |  |  |  | 1 |  | 1 | 1 | ..... |
| Indiana and Wisconsin.... | 3 | 70 | 122.9 | 46 | 121.4 |  |  |  |  |  |  |  |  |  | 1 |  | 4 |  |  |  | 3 | 1 | 9 | 24 | 4 |  | ..... |
| Total. | 11 | 465 | 113.6 | 268 | 102.6 | ... |  | . | 8 | $\ldots$ | 4 | 9. | 29 | 6 | 8 | 7 | 127 | 2 | 15 | .... | 10 | 1 | 12 | 24 | 5 | 1 | ...... |
| BUILDERS OR MAKERS, CORD TIRES, MALE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 4 | 94 | 119.5 | 38 | 105.5 |  | 1 | . | 2 | 2 | ... | 2 | 4 |  | 1 |  | 2 | 2 | 5 | ..- | 6 | 0 | 1 | 1 | 1 | 2 | ..... |
| Ohio (except Akron) and Michigan. | 7 | 134 | 104.8 | 92 | 100.4 |  |  |  |  |  | ... | 2 | 27 | $\cdots$ | 8 | 1 | 12 | 22 | 7 | .... | 1 | 7 | 2 | 1 | 1 | 1 | ..... |
| New Jersey and Pennsylvania..... | 2 | 37 | 102.0 | 34 | 99.2 | ... | ... | 1 | 2 |  |  |  |  | 1 | 7 | 1 | 7 | 12 | 1 |  | 2 |  |  |  |  |  |  |
| Indiana and Wisconsin............. | 2 | 32 | 111.8 | 15 | 116.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 15 |  |  |  |  |  |  |
| Total. | 15 | 297 | 109.8 | 179 | 102.6 |  | 1 | 1 | 4 | 2 | - | 4 | 31 | 1. | 16 | 2 | 21 | 36 | 13 | $\ldots$ | 24 | 13 | 3 | 2 | 2 | 3 | ..... |

Table D.-NUMBER OF EMPLOYEES IN SELECTED OCCUPATIONS WORKING ON AS MANY DAYS AS THERE WAS WORK IN THE OCCUPATION DURING THE PAY PERIOD, CLASSIFIED BY HOURS ACTUALLY WORKED, 1923, BY SEX AND DISTRICT-Concluded.

TWO-WEEK OR HALF-MONTH PAY PERIOD-Concluded.


| FINISHERS AND TREADERS, FABRIC TIRES, MALE. <br> Akron. Ohio (except Akron)and Michigan. Indiana and Wisconsin. | 2 6 3 | 4 86 30 | 118.5 112.2 115.7 | 3 47 19 | 100.3 102.2 113.7 |  |  |  |  |  | 6 | 9 | $\cdots$ | 2 | 1 | 8 <br> 2 | 3 | 5 | $\cdots$ | 5 8 | 3 | 1 | 2 | 2 | $\stackrel{-7}{ }$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 11 | 120 | 113.3 | 69 | 105.4 |  | .... | .... | .... |  | 6 | 9 | 3 | 4 | 1 | 10 | 3 | 6 |  | 13 | 3 | 2 | 4 | 3 | 2 |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Akron............................... | 4 | 136 | 117.8 |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  | 6 |  | 4 | 1 | 13 | 4 | 19 | 15 | 22 |
| Ohio (except Akron) and Michigan. | 8 3 | 165 51 | 117.7 104.6 | $\begin{aligned} & 87 \\ & 23 \end{aligned}$ | 125.7 117.2 |  |  |  |  |  |  |  |  | 1 |  | 5 |  | 5 8 | $\cdots$ | 4 10 | 24 | 10 | 1 | 7 | 12 | 18 |
| New Jersey and Pennsylvania..... | 3 | 51 97 | 104.6 117.0 | $\begin{array}{r} 23 \\ 54 \end{array}$ | 117.2 117.7 |  |  |  |  |  |  |  |  |  |  |  |  | 6 12 | 3 | 10 |  |  |  | ${ }_{13}$ | 1 | 1 |
| Indiana and Wisconsin............. | 4 | 97 |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 12 |  | 13 |  | 4 | 4 | 13 | 0 | ..... |
| Total. | 19 | 449 | 116.1 | 253 | 132.1 |  | .... | ... | .... | ... | 2 | 1 | .... | 1 | 1 | 7 | .... | 29 | 4 | 31 | 25 | 27 | 9 | 41 | 34 | 41 |
| Akron............. | 4 | 131 | 112.4 | 74 | 108.5 |  | 1 |  | 2 | .... | 3 | 4 | 7 | 8 | 4 | 11 | 1 | 9 |  | 5 |  | 1 |  | 6 | 3 | 9 |
| Ohio (except Akron) and Michigan. | 8 | 116 | 121.7 | 78 | 117.7 |  |  |  |  |  | 2 | .... | 1 | .... | 1 | 12 |  | 7 | 4 | 11 | 10 | 8 |  | 7 | 11 | 4 |
| New Jersey and Pennsylvania. | 3 | 34 | 134.5 | 22 | 118.6 |  |  |  |  |  | 1 |  | 1 |  | .. | 3 | 1 | 8 |  | 1 | 1 |  |  |  | . | 6 |
| Indiana and Wisconsin..... | 4 | 49 | 116.4 | 40 | 115.7 |  |  |  |  |  |  |  |  | 1 |  | 4 |  | 11 |  | 9 |  |  | 10 | 4 |  | 1 |
| Total. | 19 | 330 | 118.5 | 214 | 114.2 |  | 1 |  | 2 |  | 6 | 4 | 9 | 9 | 5 | 30 | 2 | 35 | 4 | 26 | 11 | 9 | 10 | 17 | 14 | 20 |
| Akron. | 4 | 12 | 113.0 | 9 | 117.8 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  | 3 | 1 | 4 |  |  |  |  |
| Ohio (except Akron) and Michigan. | 7 | 34 | 114.9 | 18 | 110.0 |  | 1 |  |  |  | 1 | 4 | 1 |  |  | 1 |  | ... | 2 | $\ldots$ | 4 |  |  |  |  | 4 |
| New Jersey and Pennsylvania..... | 3 | 16 | 106.9 | 11 | 104.3 |  |  |  |  |  |  |  |  |  |  | 8 | ... |  |  | 2 | ... | 1 |  |  |  |  |
| Indiana and Wisconsin............ | 2 | 13 | 114.6 | 12 | 112.0 |  |  |  |  |  |  |  |  |  |  | 2 |  | 5 |  | 4 |  |  |  | 1 |  |  |
| Total. | 16 | 75 | 112.8 | 50 | 110.6 |  | 1 |  |  |  | 1 | 4 | 1 | .... |  | 11 | .... | 6 | 2 | 9 | 5 | 5 |  | 1 |  | 4 |

TABLE E.-NUMBER OF EMPLOYEES IN SELECTED OCCUPATIONS WORKING ON AS MANY DAYS AS THERE WAS WORK IN THE OCCUPATION DURING THE PAY PERIOD, 1923, CLASSIFIED BY ACTUAL EARNINGS, BY SEX AND DISTRICT.

ONE-WEEK PAY PERIOD.


| Ohio (except Akron) and Michigan . . . . . . . . . ${ }^{\text {a }}$. Now Jersey and Pennsylvania.................... | 7 2 | 25 161 10 | $\begin{aligned} & 43.23 \\ & 41.88 \\ & 38.50 \end{aligned}$ | 20 136 10 | $\begin{aligned} & 39.63 \\ & 40.18 \\ & 37.91 \end{aligned}$ |  |  |  |  |  | 1 | 3 10 | 5 <br> 21 <br> 1 | 2 43 7 | 4 34 2 | ${ }_{16}^{16}$ | $\begin{aligned} & 2 \\ & 4 \end{aligned}$ | $\stackrel{2}{3}$ | 3 | 1 | ..... |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 20 | 759 | 44.22 | 670 | 42.79 | ..... |  |  |  |  | 5 | 22 | 56 | 111 | 236 | 145 | 55 | 25 | 13 | 2 | ..... |
| bUILDERS OR MAKERS, FABriC tires, Male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 3 | 103 | 46.51 | 84 | 45.80 |  |  |  |  |  |  |  |  | 4 | 27 | 46 | 4 |  | 3 |  |  |
| Connecticut, Massachusetts, and New York | 4 | 82 | 40.90 | 59 | 40.43 |  |  |  |  |  |  | 2 | 8 | 21 | 16 | 9 | 1 | 1 |  | 1 | ... |
| Ohio (except Akron) and Mıchigan. ......... | 2 | 40 | 44.87 | 31 | 43.31 |  |  |  |  |  | 1 |  | 4 | 7 | 4 | 9 | 4 | 1 | 1 |  | ..... |
| New Jersey and Pennsylvania... | 8 | 58 | 38.09 | 55 | 38. 12 |  |  |  |  |  | 3 | 3 | 12 | 9 | 23 | 3 | 2 |  |  |  |  |
| Indians and Wisconsin... | 2 | 16 | 36.04 | 7 | 34.02 |  |  |  |  |  | 1 | 1 | 1 | 3 | 1 |  |  |  |  |  |  |
| Total | 19 | 299 | 42.58 | 236 | 41.99 | …… |  |  | ..... |  | 5 | 6 | 25 | 44 | 71 | 67 | 11 | 2 | 4 | 1 | ..... |
| CURERS, TIRES, MALE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 3 | 455 | 49.53 | 339 | 47.66 |  |  |  |  |  |  |  | 1 | 9 | 52 | 210 | 49 | 15 | 3 |  |  |
| Connecticut, Massachusetts, and New York | 12 | 375 | 41.71 | 294 | 39.93 |  |  |  |  |  | 3 | 46 | 48 | 34 | 92 | 44 | 13 | 9 | 2 | 1 | 8 |
| Ohio (except Akron) and Michigan. | 3 | 51 | 47.23 | 48 | 45.99 |  |  |  |  |  |  |  |  |  |  | 28 | 10 | 4 | 6 |  |  |
| New Jersey and Pennsylvania... | 9 | 220 | 36.91 | 173 | 37. 42 |  |  |  |  | 1 | 4 | 18 | 43 | 41 | 53 | 10 | 3 |  |  |  |  |
| Indiana and Wisconsin. | 3 | 35 | 41.25 | 26 | 44.54 |  |  |  |  |  |  | 1 |  | 1 | 8 | 15 | 1 |  | . |  |  |
| Total | 30 | 1,136 | 44.15 | 880 | 42.88 | .... |  |  |  | 1 | 7 | 65 | 92 | 85 | 233 | 289 | 70 | 30 | 5 | 1 | 2 |
| FINSHERS AND treaders, Cord tires, male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 3 | 595 | 46.03 | 501 | 44.17 |  |  |  |  |  | 1 | 4 | 25 | 57 | 214 | 130 | 46 | 21 | 2 | 1 | ..... |
| Connecticut, Massachusetts, and New York.... | 6 | 129 | 34.75 | 113 | 34.98 |  |  |  |  |  | 9 | 24 | 24 | 23 | 22 | 11 |  |  |  |  | ...... |
| Ohio (except Akron) and Michigan............. | 3 | 75 | 42. 54 | 66 | 40.57 |  |  |  |  |  |  | 2 | 7 | 20 | 26 | 9 | 2 |  |  |  |  |
| New Jersey and Pennsylvania...... | ${ }_{6}^{6}$ | 240 | 37.06 | 203 | 38.65 |  |  |  |  |  | 9 | 11 | 35 | 91 | 49 | 8 | ..... |  |  |  |  |
| Inditana and Wisconsin. | 3 | 20 | 35.02 | 17 | 37.91 |  |  |  |  |  |  | 2 | 4 | 4 | 7 |  |  |  |  |  |  |
| Total | 21 | 1,059 | 42.09 | 900 | 40.94 | ..... |  |  |  |  | 19 | 43 | 95 | 195 | 318 | 158 | 48 | 21 | 2 | 1 |  |
| IINISHERS AND TREADERS, CORD TIRES, FEMALE, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| New Jersey and Pennsylvania | 3 | 27 | 28.15 | 20 | 27.98 | ..... | .... |  | ... | ..... | 5 | 10 | 4 | 1 |  |  |  |  |  |  | ..... |
| finishers and treaders, fabric tires, male. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Akron. | 3 | 212 | 45.02 | 160 | 43.44 |  |  |  |  |  | . | 1 | 9 | 18 | 59 | 71 | 2 |  |  |  |  |
| Connecticut, Massachusetts, and New York... | 4 | 82 | 40.31 | 69 | 39.67 |  |  |  |  |  |  | 4 | 10 | 23 | 20 | 9 | 3 |  |  |  | - |
| Ohio (except Akron) and Michigan. . . . . . . . . . | 2 | 68 | 44.87 | 52 | 40.64 | -... |  |  |  | 2 | 5 | 6 | 10 | 17 | 7 | 2 | 3 | 3 |  |  | . |
| New Jersey and Pennsylvania.................... | 7 | 88 | 34. 92 | 66 | 35.11 |  |  |  |  |  |  | 10 | 20 | 24 | 12 | .... | ..... |  |  |  |  |
| Indiana and Wisconsin.. | 2 | 29 | 32.30 | 12 | 30.70 |  |  |  |  |  | 3 | 4 | 2 | 1 | 2 |  |  |  |  |  |  |
| Total. | 18 | 479 | 41.60 | 359 | 40.35 | -... | ..... | .... | ..... | -.... | 5 | 24 | 47 | 76 | 110 | 87 | 7 | 3 | ..... |  |  |

Table E.-NUMBER OF EMPLOYEES IN SELECTED OCCUPATIONS WORKING ON AS MANY DAYS AS THERE WAS WORK IN THE OCCUPATION DURING THE PAY PERIOD, 1923, CLASSIFIED BY ACTUAL EARNINGS BY SEX AND DISTRICT-Continued.

ONE-WEEK PAY PERIOD-Concluded.


TWO-WEEK OR HALF-MONTH PAY PERIOD.


TABLE E.-NUMBER OF EMPLOYEES IN SELECTED OCCUPATIONS WORKING ON AS MANY DAYS AS THERE WAS WORK IN THE OCCUPATION DURING THE PAY PERIOD, 1923, CLASSIFIED BY ACTUAL EARNINGS, BY SEX AND DISTRICT-Concluded.

TWO-WEEK OR HALF-MONTH PAY PERIOD-Concluded.



## OCCUPATIONS IN THE AUTOMOBILE TIRE INDUSTRY.

The occupations for which data are presented in this report are arranged below alphabetically, each followed by the terms of operations which were found to be comparable in regard to duties performed. The operation terms are defined in the glossary which follows this list.

On account of the variation in the degree of specialization developed in different establishments, it was found extremely difficult to select a list of occupations under which each employee of all establishments covered could be classified so that all employees in each classification would be performing like or similar operations regardless of the methods used by the different establishments. Operation terms varied in name and number according to the organization and number of employees in each establishment. The name of the occupation as it appears in the various tables is shown below in italics and is followed by the job or operation terms found in use in various establishments for the same class of work.

[^2]Tube wrapper. -Includes cross wrapper.
Valve inserter.-Includes fitter, inserter, stemmer, and valver.
Other employees.-Include air-bag builder, booker, box maker, dryer, heater man, inspector, repairer, packer, and all employees not listed above.

## GLOSSARY OF TERMS FOUND IN THE AUTOMOBILE TIRE INDUSTRY, 1923.

Air-bag builder.-Makes the tubes which are used to inflate the green tire during the curing process.

Air bagger.-Inserts a tube made of rubberized fabric, but similar in other respects to an ordinary inner tube, in uncured tires to inflate them during the curing process.

Assembler. (See specified part, as Ply and Tread.)
Band builder.-Arranges and splices the ends of plies together on a drum, one ply upon another to the proper number, preparatory to the builder's shaping the band into a tire over a metal core.

Bead buffer.-Roughens the surface of beads by buffing before they are placed between the plies of the unfinished tire. Buffing removes all excess threads.

Bead cementer.-Prepares the bead stock for its covering by dipping it in liquid cement.

Bead coverer. (See Bead flapper or Bead-wire taper.)
Bead cutter.-Cuts wire which forms the core of the bead to proper lengths, or more often cuts tubed bead rubber to proper lengths as it comes from the tubing machine.

Bead dipper. (See Bead cementer.)
Bead-filler cutter. (See Bead cutter.)
Bead flapper.-Cements a strip or flap of rubberized fabric over bead stock to form a covered bead.

Bead maker.-Performs all the operations of making the bead; i. e., splicing, covering, trimming, and buffing.

Bead presser--Places the uncured beads in a mold which is placed in a press while the bead is being cured or semicured.

Bead splicer.-Joins the ends of the bead wire, splices and solders, or splices and cements the ends of the tubed rubber bead core.

Bead-tape cutter.-Cuts the tape after the bead is completely wrapped.
Bead trimmer. (See Bead buffer.)
Bead-wire insulator.-Operates a machine which covers several bead-wire cores, side by side, with soft rubber. These are later cut apart, each forming a separate. bead.

Bead-wire taper.-Wraps with tape, by hand or on a machine, the wire core of the bead.

Bead wrapper.-Wraps with tape, by hand or on a machine, the rubber or wire core of the bead.

Bias-cutter helper.-Assists the operator by helping place the rolls of fabric, removing the bias strips after they are cut to length, booking them, and doing other things as the type of bias cutter may necessitate.

Bias-cutter operator--With the aid of helper adjusts heavy rolls of rubberized fabric in the machine and adjusts the machine for cutting the fabric into proper lengths and widths for use in building tires.

Blow-off man.-Removes the cured tube from the mandrel or pole after the curing process, blowing it loose from the pole with a strong jet of compressed air.

Booker.-Takes the strips of raw gum and fabric as they come from the bias cutters and tread cutters and places them in books with cloth leaves to prevent their adhering one to another.

Box maker.-Assembles pasteboard cartons in which inner tubes are packed.
Breakdown man. (See Cracker; Tear-down man.)
Breaker layer.-Lays properly the breaker strip on the tread.
Buffer, tube.-Makes the beveled ends of the unfinished tube rough, so the splicing operation will make a perfect joint.

Builder, cord tire (machine).-Places metal core coated with cement on tire building machine; places band (or pocket) on the core; puts on the beads which are like hoops; arranges necessary plies over the beads; stitches and trims them; and removes the core and unfinished tire from the machine. It then goes to the finisher.

Builder, fabric tire (machine).-Places cemented metal core in machine; places drum of fabric plies in the machine; arranges the proper number of plies on
the core, putting the beads between the proper plies; stitches the plies down and trims them; and then removes core and unfinished tire from machine. It is then ready for the finisher.

Builder and finisher.-Usually cements the core; puts the core on a buck; removes the plies from books; places them on the core; inserts the beads at the proper place; and stitches down the plies. He then trims the fabric, applies the wearing strip, side wall, cushion, breaker strip, and tread, thus finishing the tire.

Calender man.-Guages and checks the rubber stock to see that it is of proper thickness and sufficiently warmed up for running through the calendering machine.

Calender man, first.-Regulates the rolls; keeps the stock straight as it passes through the rolls; sees that the rubber is evenly distributed on the fabric, and that the fabric is properly started on the liners.

Calender man's helper.-Usually brings the rubber stock to the calender machine; takes the calendered stock away, and generally assists wherever necessary with the work about the calendering machine.

Carrier.-Carries wraps, poles, etc., in the tube department from the tube strippers to the tube wrappers and tube rollers.
Cementer. (See Finisher, tube.)
Cleaner.-Cleans molds, poles, mandrels, cores, etc., usually by the use of soapstone, to remove rubber refuse.

Compounder.-Weighs the proportions of various ingredients according to formulas and places the same in receptacle along with the proper amount of rubber ready to be mixed.

Core pusher.-Rolls the core from the tire-strippers' bench to the cooling room and from the cooling room to the tire-building department.

Coverer. (See Finisher, cord tires; Finisher, fabric tires; Bead flapper; Beadwire taper.)

Cracker.-Operates mill used in breaking down or cracking crude rubber.
Cross wrapper. (See Tube wrapper.)
Curer.-Places uncured tires in molds; lowers them into a heater; allows them to remain for a specified time and removes them, or places poles of mandrels over which tubes have been rolled into heating kettles and cures them. (See Bead pressers.)

Cut-off man. (See Tread cutter.)
Drum handler.-Rolls drum, from which the builder has removed the ply fabric, to the bias-cutting machines, where more plies are spliced and rolled upon them.

Dryer.-Hangs washed sheets of rubber over poles to dry, in a room where a high temperature is maintained, or lays the rubber in trays and places in a vacuum chamber.

Finisher, cord tire.-Takes the cord-tire pocket as it comes from the builder and applies the wearing strip and side wall; puts on the cushion strip, breaker strip, and applies the tread, and usually removes the core from the uncured tire.

Finisher, fabric tire.-Performs same operations as finisher, cord tire, except that the core is usually left in the fabric tire until after it is cured.

Finisher, tube.-Mounts the cured tube on a mandrel, washes the buffed ends of the tube in an acid solution, coats them with cement, and places the valve stem inside, making the tube ready for the splicer to join the ends.

Heater man.-Watches the indicators showing pressure and temperature in the curing kettles, in highly specialized establishments.

Inspector.-Examines the finished product for possible defects.
Janitor--Looks after the needs of the factory, helping to keep scraps cleaned up, and other things of a general nature.

Kettle tender. (See Curer.)
Laborer. (See Carrier; Cleaner; Core pusher; Drum handler; Janitor; Racker; Receiving laborer; Shipping laborer; Salvage man; Scrap man; Soapstoner; Sweeper; and Tire duster.)

Loader.-Loads and unloads molds, tires, and molds containing tires onto and off the automatic conveyor at necessary places; often applied to employee who loads the molds into curing pit or chamber.

Mandreler. (See Finisher, tube.)
Millman.-Operates a mixing mill which mixes raw rubber with the various mixtures put up by the compounder into a homogeneous batch.

Mixer.-Same as millman.
Mold man. (See Bead presser.)

Mounter. (See Finisher, tube.)
Pitman.-Lowers the tire molds into the pit where the tires are cured. This process is found in specialized establishments. (See Curer.)

Ply assembler.-Receives plies from the bias-cutting machine; smooths out any wrinkles; trims them for width; splices the ends together; and rolls them on a spool or drum ready for the band builders.

Ply bander. (See Band builder.)
Ply splicer. (See Ply assembler.)
Pocket builder. (See Band builder.)
Pressman. (See Bead presser.)
Puts-up batches. (See Compounder.)
Racker.-Places tires, tubes, molds, etc., in racks to prevent congestion about the workroom.

Receiving laborer.-Unloads freight; breaks open boxes of raw rubber; and does general work in and about the receiving department.
Repairer.-Makes any necessary repairs on new tires found defective by the inspector.

Rimmer.-Places the rims or rings on uncured air-bagged tires, and secures them with bolts.

Rim pressman.-Same as rimmer, except that the rims are drawn well together in a press before securing.

Rougher. (See Buffer, tube.)
Salvage man.- Picks from scraps materials that can be used again.
Scrap man.- Collects the scraps of rubber, fabric, and cord stock, and removes them from the workrooms.

Sheeter.-Operates a machine which rolls the raw batch out into sheets.
Shipping laborer.-Packs, nails boxes, assists in loading cars, and performs other general work about the shipping department.
Skiver, tube.-Bevels the inside of one end and the outside of the other end of the tube, making it ready for finishing.

Soapstoner. (See Cleaner.)
Splicer, tube.-Splices the ends of the finished tube together either by the use of steam or an acid.

Stemmer. (See Valve inserter.)
Stock roller. (See Ply assembler.)
Stripper, air bag:-Removes the air bag used in the process of curing from the cured tire.

Stripper, core.-Removes the core used in the process of curing from the cured tire.

Stripper, tube.-Removes the wrap from the tube after it is cured.
Sweeper.-Uses a broom and cleans refuse from the factory floors.
Tear-down man.-Removes the bolts and the two rims or rings from the tires cured on air bags.

Tire duster.-Dries tires by wiping them with a powder after curing.
Tread assembler.-Builds treads by laying the proper number of thin pieces of tread stock one upon another in order of width, trims them, and weighs the assembled tread.

Tread builder. (See Tread assembler.)
Tread cutter.-Cuts tread stock to proper length, as it comes from the tubing machine, weighs it, and puts it in books.

Trucker.-Conveys materials and supplies about the factory by means of hand trucks.

Tube builder. (See Tube roller.)
Tube-machine feeder.-Feeds warm rubber stock into the hopper of the tube machine.

Tube-machine operator.-Runs the tube machine which forces warm rubber stock through dies of desired shape, forming tread stock, solid-tire stock, bead and tube stock, etc.

Tube roller.-Wraps a specified number of layers of thin uncured gum around poles or mandrels. The layers unite in the curing process and form the wall of the tube.

Tube wrapper.-Takes the poles from the tube roller, places them on a machine, and cross wraps them with a narrow strip of cloth before they are placed in the curing kettles.

Unloader. (See Loader.)
Valve fitter. (See Valve inserter.)

Valve inserter.-Puts stem of valve through hole in tube; applies the valve patch; puts on the fittings, and tightens them with a machine.

Valver. (See Valve inserter.)
Warm-up man.-Operates a mill in which mixed rubber is warmed up to a certain temperature preparatory to running the rubber through the calender and tube machines.

Washer.-Operates a mill equipped with water facilities for washing crude rubber. (See Finisher, tube.)

Water bagger. -Inserts a tube in an uncured tire, the tube being afterwards filled with water under pressure to inflate the tire during the curing process.

Weigher. (See Compounder.)
Wind-up man. (See Calender man, first.)


[^0]:    ${ }^{1}$ Not including 2 establishments that began operation early in 1923.
    2 Not including 1 establishment for which records were not available.
    a Not including 2 establishments that began business early in 1923 and 1 establishment for which records were not available.

[^1]:    1 Including 1 whose earnings per hour were " 20 and under 25 cents."
    3 Including 1 whose earnings per hour were " 20 and under 25 cents," and 1 whose earnings per hour were "Under 20 cents."
    Including 1 whose earnings per hour were " $\$ 1.50$ and over."

[^2]:    Air bagger.-Includes water bagger.
    Assembler.-Includes band builder, breaker layer, ply assembler, ply bander, ply splicer, pocket builder, stock roller, tread assembler, and tread builder.

    Bead maker.
    Beads, other employees.-Include bead buffer, cementer, coverer, cutter, dipper, fiapper, splicer, tape cutter, trimmer, wire insulator, and wire taper.

    Bias-cutter operator.
    Bias-cutter helper.
    Buffer, tube.-Includes rougher.
    Builder, cord tire.
    Builder, fabric tire.
    Builder and finisher.
    Calender man.
    Calender man, first.-Includes wind-up man.
    Calender man's helper.
    Compounder.-Includes weigher and employee who "puts up batches."
    Curer, bead.-Includes moldman and pressman.
    Curer, tire.-Includes loader, pitman, and unloader.
    Curer, tube.-Includes kettle tender.
    Finisher and treader, cord tire.-Includes coverer.
    Finisher and treader, fabric tire.-Includes coverer.
    Finisher, tube.-Includes cementer, mandreler, mounter, and washer.
    Laborer. -Includes carrier, cleaner, core pusher, drum handler, janitor, racker, receiving and shipping laborer, salvage man, scrap man, soapstoner, tire duster, etc.

    Millman.-Includes break-down man, cracking, mixing, warming-up, and washing mill.

    Rimmer.-Includes rim pressman.
    Skiver, tube.
    Splicer, tube.-Includes steam and acid splicer.
    Stripper, air-bag.-Includes water-bag stripper.
    Stripper, core.-Stripper of core from cured tire only.
    Stripper, tube.-Includes blow-off man.
    Tear-down man.
    Tread cutter.-Includes cut-off man.
    Trucker.-Employee using hand truck only.
    Tube-machine feeder.
    Tube-machine operator.
    Tube roller.-Includes tube builder.

