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WAGES AND COST OF LIVING.

INTRODUCTION.

To meet the constant and growing demand on the part of the public for regular and adequate statistical information relating to wages and cost of living an extensive investigation was inaugurated in the winter of 1900-1901 by the Bureau of Labor. A number of investigations having for their purpose the collection and publication of statistics of wages and prices had been previously undertaken. These, perhaps, supplied the immediate need, but it was felt that the constant demand for current data could be met only by a very painstaking and complete investigation which would result in thoroughly representative figures for a period of years, and which would serve as the basis for the regular annual collection and presentation of data from the establishments covered. The investigation as originally planned contemplated the collection of data relating to the following subjects:

1. Cost of living, 1901.
2. Retail prices of food, 1890 to 1901.
3. Wages and hours of labor, 1890 to 1901.

The great labor involved in the collection and compilation of the data and the comparatively small force available for the work, however, protracted its completion to such an extent that the Bureau was enabled to include data for the years 1902 and 1903. The large quantity of data secured and the considerable space required for its adequate presentation rendered it necessary to devote two separate reports to the subjects covered, the results of the investigation into cost of living and retail prices forming the basis of the Eighteenth Annual Report of the Bureau, now in press, and those relating to wages and hours of

labor appearing in the forthcoming Nineteenth Annual Report. Owing to considerable delay in the completion of the work and the further delay in the publication of the reports, which will present the facts ascertained in great detail, it has been deemed desirable, as with former reports, to show briefly in the Bulletin of the Bureau the most salient and interesting results of the investigations.

The issue for November, 1903, contained a summary of the results as to cost of living and retail prices of food, the subject of the Eighteenth Annual Report, down to the end of 1902. After the close of 1903 the figures for that year became available and are included in the report. Therefore, that the results for the entire period may be available, they are reproduced here, with the results of the investigation as to wages and hours of labor. An explanation is given of the scope of the investigations and of the methods employed, and the results are here presented in the order of the publication of the reports.

COST OF LIVING AND RETAIL PRICES.

The Eighteenth Annual Report of the Bureau of Labor, the report for the year 1903, which is now in the hands of the printer, presents the results of an extended investigation into the cost of living of workingmen's families and the retail prices of the principal staple articles of food used by such families. The object of the investigation into cost of living was to determine the cost of housing, fuel, lighting, food, clothing, etc., in the ordinary family in the United States. The object of the investigation into retail prices was to determine the changes in the prices of the staple articles of food for a period of years, and thereby to determine as nearly as possible the changes in the cost of living in the several years covered.

The figures of income and expenditure furnished in detail by 2,567 families in 33 States, representing the leading industrial centers of the country, comprise the material for the detailed study of the cost of living. Certain data, which do not enter so much into detail, were collected in regard to the cost of living in 25,440 families, and the results are extensively summarized in the full report. The information relating to each family was secured directly from the husband or wife, or both, by the personal visit of a special agent of the Bureau, and the most important inquiries propounded were those relating to the earnings of the husband, the wife, and the children, and the expenditure of the family for housing, fuel, lighting, food, clothing, and other purposes during the year.

The following table shows for five geographical divisions and for the United States as a whole, the number of families investigated in detail, the average size of family, the average income per family, the average

expenditure per family for all purposes, and the average expenditure per family for food, the figures being for the year 1901:

NUMBER OF FAMILIES, AVERAGE SIZE OF FAMILY, AVERAGE INCOME PER FAMILY, AVERAGE EXPENDITURE PER FAMILY FOR ALL PURPOSES, AND AVERAGE EXPENDITURE PER FAMILY FOR FOOD, DURING THE YEAR 1901.

Geographical division.	Families.	Average size of family.	Average income per family.	Average expenditure per family for all purposes.	Average expenditure per family for food.
North Atlantic States	1, 415	5. 25	\$834. 83	\$778. 04	\$338. 10
North Central States	721	5. 46	842. 60	785. 95	321. 60
South Atlantic States	219	5. 30	762. 78	700. 62	298. 64
South Central States	122	5. 65	715. 46	690. 11	292. 68
Western States	90	4. 69	891. 82	751. 46	308. 53
United States.....	2, 567	5. 31	827. 19	768. 54	326. 90

This table shows that the 2,567 families consisted on an average of 5.31 persons, 0.7 person above the average of private families in the whole country as shown by the census of 1900. This larger size of family was not due to any intentional selection of larger families, for the only basis of selection was that the head of the family must be a wage worker or a salaried man earning not over \$1,200 during the year, and must be able to give information in regard to his expenditures in detail. The average income for the year of these 2,567 families from all sources was \$827.19. The average expenditure for all purposes was \$768.54 and the average expenditure for food was \$326.90 per family, or 42.54 per cent of the average expenditure for all purposes.

The two summaries which immediately follow are also based on the facts ascertained by the special inquiry covering 2,567 families. From these it was found possible to secure accurate data not only as to the total expenditures for food, but also as to the quantity and cost of each of the several articles consumed during the year. Data in minute detail were also secured from these families as to their expenditures for other purposes. The summary showing the average quantity and cost of the food consumed in the 2,567 families during the year follows:

AVERAGE QUANTITY AND COST PER FAMILY OF THE VARIOUS ARTICLES OF FOOD CONSUMED.

Article.	Quantity.	Cost.
Fresh beef	349.7 pounds ..	\$50. 05
Salt beef	48.6 pounds ..	5. 26
Fresh hog products	114.2 pounds ..	14. 02
Salt hog products	110.5 pounds ..	13. 89
Other meat	77.7 pounds ..	9. 78
Poultry	67.7 pounds ..	9. 49
Fish	79.9 pounds ..	8. 01
Eggs	85.2 dozen ..	16. 79
Milk	854.5 quarts...	21. 32

AVERAGE QUANTITY AND COST PER FAMILY OF THE VARIOUS ARTICLES OF FOOD
CONSUMED—Concluded.

Article.	Quantity.	Cost.
Butter	117.1 pounds ..	\$28.78
Cheese	16.0 pounds ..	2.62
Lard	84.4 pounds ..	9.35
Tea	10.6 pounds ..	5.30
Coffee	46.8 pounds ..	10.74
Sugar	268.5 pounds ..	15.76
Molasses	3.6 gallons ..	1.69
Flour and meal	680.8 pounds ..	16.76
Bread	252.7 loaves ..	12.44
Rice	25.1 pounds ..	2.05
Potatoes	14.7 bushels ..	12.93
Other vegetables		18.85
Fruit		16.52
Vinegar, pickles, and condiments		4.12
Other food		20.40
Total food		\$26.90

From the above table it is seen that the average family consumed 349.7 pounds of fresh beef during the year, and that the cost was \$50.05; the average quantity of salt beef consumed was 48.6 pounds, costing \$5.26, etc. As practically all of the family schedules were secured in the year 1901, this may be considered as showing the cost in that year. The quantity of some articles could not be given. These articles include vegetables other than potatoes, fruit, vinegar, pickles, and condiments, and other food. The average cost of all food for the 2,567 families during the year was \$326.90. The average total expenditure of these 2,567 families for all purposes as shown in the previous summary was \$768.54. The next summary shows the per cent of the total expenditure that was disbursed for the principal items entering into the cost of living:

PER CENT OF THE AVERAGE TOTAL EXPENDITURE OF 2,567 FAMILIES DISBURSED FOR
THE PRINCIPAL ITEMS ENTERING INTO THE COST OF LIVING.

Item.	Percent.	Item.	Percent.
Food	42.54	Charity	0.31
Rent	12.95	Furniture and utensils	3.42
Principal and interest on mortgage on home	1.58	Books and newspapers	1.09
Fuel	4.19	Amusements and vacation	1.60
Lighting	1.06	Intoxicating liquors	1.62
Clothing	14.04	Tobacco	1.42
Taxes	.75	Sickness and death	2.87
Insurance	2.73	Other purposes	5.87
Labor and other organization fees	1.17		
Religious purposes	.99		100.00

From this table it is seen that the expenditure for food constituted 42.54 per cent of the cost of living; that for housing, including rent and principal and interest paid on homes which were being acquired, constituted 14.53 per cent; that for clothing, 14.04 per cent, etc.

That part of the investigation which relates to retail prices is, it should be stated, the first extended investigation into retail prices covering a long series of years that has been made in this country. All previous price studies covering a period of years have dealt solely

with wholesale prices which, of course, do not represent accurately the cost to the small consumer. In their general trend retail prices follow the wholesale prices, but their fluctuations are smaller and less rapid, and this is clearly brought out in the full report.

In order to ascertain the course of retail prices of food for a series of years and the consequent changes in the cost of living as regards food, the Bureau through its agents secured from the books of 814 retail merchants, in the same localities from which data relating to family expenditures were obtained, the retail prices of the principal staple articles of food. These figures in all cases represent the actual sales to consumers and may, therefore, be considered entirely trustworthy; and covering as they do all parts of the country they may also be considered thoroughly representative. Prices were taken for each month during the fourteen years of 1890 to 1903, inclusive, which was as far back as it was practicable to go. These covered 30 distinct articles, and, under each article, various grades and descriptions of that article. From the monthly prices average yearly prices were computed, and these will be shown in detail in the forthcoming report for each locality covered. In order to show the changes from year to year relative prices or index numbers were computed. These relative prices consist of a series of percentages showing the per cent the price in each year was of the average price for the ten-year period from 1890 to 1899. This average price for the ten-year period was selected as the base because it represented the average conditions more nearly than the price in any one year which might be selected as a base for all articles. With each article represented by a percentage or index number it is possible to combine the several percentages and compute the percentage showing the relative price from year to year of all food. Several very interesting summaries from the report are here presented. The first shows the relative prices for each year from 1890 to 1903 of the staple articles of food for which the retail prices were secured:

RELATIVE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD, 1890 TO 1903.

[Average price for 1890-1899=100.]

Year.	Apples, evapo- rated.	Beans, dry.	Beef, fresh, roasts and stews.	Beef, fresh, steaks.	Beef, salt.	Bread, wheat.	Butter.	Cheese.	Chick- ens.	Coffee.
1890	109.0	103.3	99.5	98.8	97.5	100.3	99.2	98.8	101.3	105.4
1891	110.3	106.2	100.0	99.4	98.3	100.3	106.4	100.3	104.0	105.2
1892	99.3	102.4	99.6	99.3	99.5	100.3	106.8	101.5	103.8	103.8
1893	107.0	105.0	99.0	99.6	100.3	100.1	109.9	101.8	104.2	104.8
1894	105.8	102.8	98.3	98.2	98.9	99.9	101.7	101.6	98.6	103.8
1895	97.4	100.5	98.6	99.1	99.6	99.7	97.0	99.2	98.4	101.7
1896	88.6	92.7	99.1	99.5	99.8	99.9	92.7	97.9	97.1	99.6
1897	87.8	91.5	100.3	100.2	100.9	100.0	93.1	99.0	94.0	94.6
1898	95.4	95.9	101.7	102.0	102.1	99.8	95.1	97.5	96.8	91.1
1899	99.5	99.7	103.7	103.9	103.2	99.6	97.7	102.4	101.8	90.5
1900	95.2	110.0	106.5	106.4	103.7	99.7	101.4	103.9	100.8	91.1
1901	96.8	113.9	110.7	111.0	106.1	99.4	103.2	103.3	103.0	90.7
1902	104.4	116.8	118.6	118.5	118.0	99.4	111.5	107.3	113.2	89.6
1903	100.8	118.1	113.1	112.9	108.8	100.2	110.8	109.4	118.5	89.3

RELATIVE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD, 1890 TO 1903—Concluded.

[Average price for 1890-1899=100.]

Year.	Corn meal.	Eggs.	Fish, fresh.	Fish, salt.	Flour, wheat.	Lard.	Milk, fresh.	Molasses.	Mutton and lamb.	Pork, fresh.
1890	100.0	100.6	99.3	100.7	109.7	98.2	100.5	104.7	100.7	97.0
1891	109.7	106.9	99.6	101.7	112.5	99.8	100.5	101.7	100.6	98.7
1892	105.2	106.8	100.1	102.2	105.1	103.6	100.6	101.2	101.0	100.5
1893	103.1	108.1	100.1	103.4	96.1	117.9	100.4	100.6	99.9	107.0
1894	102.2	96.3	100.4	101.5	88.7	106.9	100.2	100.3	97.8	101.8
1895	100.8	99.3	99.8	98.9	89.0	100.1	100.0	99.0	98.7	99.7
1896	95.0	92.8	100.2	97.5	92.7	92.5	99.9	98.7	98.7	97.4
1897	93.7	91.4	99.8	95.2	104.3	89.8	99.7	97.7	99.6	97.6
1898	95.0	96.2	100.5	98.8	107.4	93.9	99.4	97.9	100.4	98.6
1899	95.1	101.1	100.2	100.2	94.6	97.1	98.9	98.2	102.6	107.7
1900	97.4	99.9	100.4	99.1	94.3	104.4	99.9	102.2	105.6	107.7
1901	107.1	105.7	101.4	100.9	94.4	113.1	101.1	101.3	109.0	117.9
1902	118.8	119.1	105.0	102.8	94.9	134.8	103.3	102.1	114.7	123.8
1903	120.7	125.3	107.3	108.4	101.2	126.7	105.8	103.8	112.6	127.0

Year.	Pork, salt, bacon.	Pork, salt, dry or pickled.	Pork, salt, ham.	Potatoes, Irish.	Prunes.	Rice.	Sugar.	Tea.	Veal.	Vinegar.
1890	95.8	95.3	98.7	109.3	116.8	101.3	113.6	100.0	98.8	102.9
1891	96.6	98.9	99.3	116.6	116.5	102.5	102.7	100.4	99.6	105.5
1892	99.1	100.5	101.9	95.7	113.5	101.3	96.2	100.2	100.0	102.7
1893	109.0	108.7	109.3	112.3	115.6	98.4	101.5	100.1	100.0	99.5
1894	103.6	103.4	101.9	102.6	100.9	99.0	98.8	98.7	98.7	99.3
1895	99.4	99.2	98.8	91.8	94.2	98.8	91.8	98.5	98.5	98.9
1896	96.7	95.5	97.6	77.0	96.8	96.7	96.6	98.8	99.5	97.2
1897	97.4	97.3	98.2	93.0	84.3	97.9	95.7	98.5	99.9	97.4
1898	100.2	99.1	95.1	105.4	86.3	101.7	101.3	100.7	101.2	97.9
1899	102.9	101.8	99.2	96.1	85.1	102.4	101.7	104.4	103.7	98.3
1900	109.7	107.7	105.3	93.5	83.0	102.4	104.9	105.5	104.9	98.5
1901	121.0	117.5	110.2	116.8	82.6	103.5	108.0	106.7	108.8	98.9
1902	135.6	132.5	119.4	117.0	83.4	103.5	96.0	107.2	115.2	99.5
1903	139.8	129.0	121.3	114.8	80.2	103.9	96.1	106.0	114.9	99.1

From this table it is seen that the price of fresh roasting and stewing beef in 1890 was 99.5 per cent of the average price during the ten-year period from 1890 to 1899. In 1891 the price was exactly the average price for the ten-year period—that is, 100.0. The lowest point reached was in 1894, when it was 98.3 per cent of the average price for the ten-year period. The highest point reached was in 1902, when it stood at 118.6. In 1903 it stood at 113.1, or 13.1 per cent higher than the average price for the period from 1890 to 1899. In the use of these tables showing the relative figures it should be borne in mind that the difference in the relative prices in any two years is not the per cent of difference in the cost. For example: The relative price of fresh roasting and stewing beef was 98.3 in 1894 and 113.1 in 1903. The difference in the relative prices is 14.8; and this figure being 15.1 per cent of 98.3, the per cent of increase in 1903 over 1894 is 15.1 per cent.

The next summary shows the relative prices of food, considered as a whole, for each year. The importance of the various articles or groups of articles of food in the family consumption having been determined from the expenditures of the 2,567 families referred to above, the relative prices of the several articles of food were weighted according to this importance. The result, shown in the following table, gives for 5 geographical divisions and the United States for the period

1890 to 1903 the relative retail price of the food consumed in one year by a workingman's family, compared with the average price for the ten-year period 1890 to 1899:

RELATIVE RETAIL PRICE OF FOOD, WEIGHTED ACCORDING TO THE AVERAGE FAMILY CONSUMPTION, 1890 TO 1903.

[Average price for 1890-1899=100.]

Year.	North Atlantic States, 1,415 families.	North Central States, 721 fam- ilies.	South Atlantic States, 219 fam- ilies.	South Central States, 122 fam- ilies.	Western States, 90 fam- ilies.	United States, 2,567 families.
1890	102.3	102.3	101.2	102.1	107.7	102.4
1891	103.2	104.5	102.1	103.6	108.7	103.8
1892	102.1	101.8	101.1	100.7	105.2	101.9
1893	104.4	105.4	103.2	103.5	102.9	104.4
1894	99.2	100.6	100.0	100.0	99.3	99.7
1895	97.7	98.0	98.7	98.1	96.7	97.8
1896	97.0	94.6	96.8	96.1	93.2	95.5
1897	96.9	95.6	97.1	97.3	92.7	96.3
1898	98.8	98.4	99.3	98.8	95.2	98.7
1899	99.5	98.9	100.5	99.9	98.5	99.5
1900	101.2	100.8	102.4	101.1	98.1	100.1
1901	104.7	106.1	106.9	106.9	99.9	105.2
1902	110.5	111.7	111.8	113.5	104.4	110.9
1903	110.1	111.0	111.2	113.5	103.7	110.8

The table shows that the lowest price of food during the period covered was in 1896, when according to the weighted relative prices it was 95.5 per cent of the average price from 1890 to 1899; and that the highest price was in 1902, when it was 110.9 per cent of the average price for the base period, or 10.9 per cent above the average price for ten years from 1890 to 1899. As stated above, these figures represent the relative prices of food when the various articles are weighted according to their importance in the family consumption, as shown by the summary on pages 705 and 706. A computation of the simple average of the relative prices of the 30 articles, however, discloses the fact that the simple unweighted average, giving to each of the articles equal importance, follows very closely the average weighted by family consumption. These simple averages are as follows: 1890, 102.1; 1891, 103.4; 1892, 101.8; 1893, 104.1; 1894, 100.3; 1895, 98.2; 1896, 95.8; 1897, 96.3; 1898, 98.5; 1899, 99.6; 1900, 101.5; 1901, 105.5; 1902, 110.9; and 1903, 110.9.

To render easy a comparison of the prices of the last year of the period, 1903, with those of each of the other years, the following table has been prepared, showing the per cent of increase or decrease in the prices of 1903 compared with the prices of each previous year of the period.

PER CENT OF INCREASE (+) OR DECREASE (−) IN RETAIL PRICES OF VARIOUS ARTICLES OF FOOD, 1903 COMPARED WITH PREVIOUS YEARS.

Article.	Per cent of increase or decrease in 1903 compared with—												
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Apples, evaporated.	− 7.5	− 8.6	+ 1.5	− 5.8	− 4.7	+ 3.5	+13.8	+14.8	+ 5.7	+ 1.3	+ 5.9	+ 4.1	− 3.4
Beans, dry.....	+14.3	+11.2	+15.3	+12.5	+14.9	+17.5	+27.4	+29.1	+23.1	+18.5	+ 7.4	+ 3.7	+ 1.1
Beef, fresh, roasts and stews.....	+13.7	+13.1	+13.6	+14.2	+15.1	+14.7	+14.1	+12.8	+11.2	+ 9.1	+ 6.2	+ 2.2	− 4.6
Beef, fresh, steaks.	+14.3	+13.6	+13.7	+13.4	+15.0	+13.9	+13.5	+12.7	+10.7	+ 8.7	+ 6.1	+ 1.7	− 4.7
Beef, salt.....	+11.6	+10.7	+ 9.3	+ 8.5	+10.0	+ 9.2	+ 9.0	+ 7.8	+ 6.6	+ 5.4	+ 4.9	+ 2.5	− 6.2
Bread, wheat.....	− .1	− .1	− .1	+ .1	+ .3	+ .5	+ .3	+ .2	+ .4	+ .6	+ .5	+ .8	+ .8
Butter.....	+11.7	+ 4.1	+ 3.7	+ .8	+ 8.9	+14.2	+19.5	+19.0	+16.5	+13.4	+ 9.3	+ 7.4	− .6
Cheese.....	+10.7	+ 9.1	+ 7.8	+ 7.5	+ 7.7	+10.3	+11.7	+10.5	+12.2	+ 6.8	+ 5.3	+ 5.9	+ 2.0
Chickens.....	+17.0	+13.9	+14.2	+13.7	+20.2	+20.4	+22.0	+26.1	+22.4	+16.4	+17.6	+15.0	+ 4.7
Coffee.....	−15.3	−15.1	−14.0	−14.8	−13.6	−12.2	−10.3	− 5.6	− 2.0	− 1.3	− 2.0	− 1.5	− .3
Corn meal.....	+20.7	+10.0	+14.7	+17.1	+18.1	+19.7	+27.1	+28.8	+27.1	+26.9	+23.9	+12.7	+ 1.6
Eggs.....	+24.6	+17.2	+17.3	+15.9	+30.1	+26.2	+35.0	+37.1	+30.2	+23.9	+25.4	+18.5	+ 5.2
Fish, fresh.....	+ 8.1	+ 7.7	+ 7.2	+ 7.2	+ 6.9	+ 7.5	+ 7.1	+ 7.5	+ 6.8	+ 7.1	+ 6.9	+ 5.8	+ 2.2
Fish, salt.....	+ 7.6	+ 6.6	+ 6.1	+ 4.8	+ 6.8	+ 9.6	+11.2	+13.9	+ 9.7	+ 8.2	+ 9.4	+ 7.4	+ 5.4
Flour, wheat.....	− 7.7	−10.0	− 3.7	+ 5.3	+14.1	+13.7	+ 9.2	− 3.0	− 5.8	+ 7.0	+ 7.3	+ 7.2	+ 6.6
Lard.....	+29.0	+27.0	+22.3	+ 7.5	+18.5	+26.6	+37.0	+41.1	+34.9	+30.5	+21.4	+ 7.3	− 5.7
Milk, fresh.....	+ 5.3	+ 5.3	+ 2.2	+ 5.4	+ 5.6	+ 5.8	+ 5.9	+ 6.1	+ 6.4	+ 7.0	+ 5.9	+ 4.6	+ 2.4
Molasses.....	− .9	+ 2.1	+ 2.6	+ 3.2	+ 3.5	+ 4.8	+ 5.2	+ 6.2	+ 6.0	+ 5.7	+ 1.6	+ 2.5	+ 1.7
Mutton and lamb..	+11.8	+11.9	+11.5	+12.7	+15.1	+14.1	+14.1	+13.1	+12.2	+ 9.7	+ 6.6	+ 3.3	− 1.8
Pork, fresh.....	+30.9	+28.7	+26.4	+18.7	+24.8	+27.4	+30.4	+30.1	+28.8	+24.9	+17.9	+ 7.7	+ 1.0
Pork, salt, bacon..	+45.9	+44.7	+41.1	+23.3	+34.9	+40.6	+44.6	+43.5	+39.5	+35.9	+27.4	+15.5	+ 3.1
Pork, salt, dry or pickled.....	+35.4	+30.4	+28.4	+18.7	+24.8	+30.0	+35.1	+32.6	+30.2	+26.7	+19.3	+ 9.8	− 2.6
Pork, salt ham.....	+22.9	+22.2	+19.0	+11.0	+19.0	+22.8	+24.3	+23.5	+27.5	+22.3	+15.2	+10.1	+ 1.6
Potatoes, Irish.....	+ 5.0	− 1.5	+20.0	+ 2.2	+11.9	+25.1	+49.1	+23.4	+ 8.9	+19.5	+22.8	− 1.7	− 1.9
Prunes.....	−31.3	−31.2	−29.3	−30.6	−20.5	−14.9	− 7.6	− 4.9	− 7.1	− 5.8	− 3.4	− 2.9	− 3.8
Rice.....	+ 2.6	+ 1.4	+ 2.6	+ 5.6	+ 4.9	+ 5.2	+ 7.4	+ 6.1	+ 2.2	+ 1.5	+ 1.5	+ .4	+ .4
Sugar.....	−19.0	− 6.4	− .1	− 5.3	+ 2.5	+ 4.7	− .5	+ .4	− 5.1	− 5.5	− 8.4	− 6.7	+ .1
Tea.....	+ 6.0	+ 5.6	+ 5.8	+ 5.9	+ 7.4	+ 7.6	+ 7.3	+ 7.6	+ 5.3	+ 1.5	+ .5	− .7	− 1.1
Veal.....	+16.3	+15.4	+14.9	+14.9	+16.4	+16.6	+15.5	+15.0	+13.5	+10.3	+ 9.5	+ 5.6	− .3
Vinegar.....	− 3.7	− 6.1	− 3.5	− .4	− .7	+ .2	+ 2.0	+ 1.7	+ 1.2	+ .8	+ .6	+ .2	− .4
All food weighted according to fam- ily consumption..	+ 7.7	+ 6.3	+ 8.2	+ 5.7	+10.6	+12.8	+15.5	+14.5	+11.8	+10.9	+ 9.1	+ 4.8	− .5

In this table (+) and (−) are used to show whether the price in 1903 was higher or lower than in the year indicated at the head of the column. Thus, on the first line it is seen that evaporated apples were 7.5 per cent lower in 1903 than in 1890; on the second line, that dry beans were 14.3 per cent higher in 1903 than in 1890; on the third line, that fresh roasting and stewing beef was 13.7 per cent higher in 1903 than in 1890, etc. The last line of the table shows the per cent of increase or decrease for all food in 1903 as compared with preceding years. Giving each article a weight in proportion to its cost in family consumption, food in 1903 was 7.7 per cent higher than in 1890, 6.3 per cent higher than in 1891, etc., and 15.5 per cent higher than in 1896, the year of lowest prices of food.

If the relative prices of food given above be taken in connection with the average actual expenditure for food in 1901 of the 2,567 families investigated by the Bureau, the amount of the average expenditure for food in each year may be calculated. This has been done and the results showing for 5 geographical groups and for the United States the average cost of food per family in each year from 1890 to 1903, inclusive, are given in the following table.

AVERAGE COST OF FOOD PER FAMILY, 1890 TO 1903, BASED ON AVERAGE COST PER FAMILY IN 1901 AND THE RELATIVE RETAIL PRICES OF FOOD WEIGHTED ACCORDING TO FAMILY CONSUMPTION.

Year.	North Atlantic States, 1,415 fam- ilies.	North Central States, 721 fam- ilies.	South Atlantic States, 219 fam- ilies.	South Central States, 122 fam- ilies.	Western States, 90 families.	United States, 90 2,567 fam- ilies.
1890	\$330.35	\$310.08	\$282.72	\$279.54	\$332.61	\$318.20
1891	333.26	316.75	285.23	283.64	335.72	322.55
1892	329.70	308.57	282.44	275.71	324.90	316.65
1893	337.13	319.48	288.30	283.37	317.80	324.41
1894	320.34	304.93	279.36	273.79	306.68	309.81
1895	315.50	297.05	275.73	268.59	298.65	303.91
1896	313.23	286.74	270.42	263.11	287.84	296.76
1897	312.91	289.77	271.26	266.40	286.29	299.24
1898	319.05	298.26	277.41	270.50	294.01	306.70
1899	321.31	299.78	280.76	273.51	304.21	309.19
1900	326.80	305.54	286.07	276.80	302.97	314.16
1901	338.10	321.60	298.64	292.68	308.53	326.90
1902	356.83	338.57	312.33	310.75	322.43	344.61
1903	355.54	336.45	310.65	310.75	320.27	342.75

From this table it will be seen that the average cost of food per family in 1890 was \$318.20. In 1896, the year of lowest prices, it fell to \$296.76; in 1902 it reached the highest point of the period, being \$344.61; while in 1903 it fell slightly, to \$342.75. The changes in the cost of living, as shown by the results of this investigation, relate to food alone, representing 42.54 per cent of all family expenditures in the 2,567 families furnishing information.

Of the remaining articles, constituting 57.46 per cent of the family expenditure, certain ones are, from their nature, affected only indirectly and in very slight degree by any rise or fall in prices. Such are payments on account of principal and interest of mortgage, taxes, property and life insurance, labor and other organization fees, religion, charity, books and newspapers, amusements and vacation, intoxicating liquors, and sickness and death. These together constituted 14.51 per cent of the family expenditure in 1901 of the 2,567 families investigated. Miscellaneous purposes, not reported, for which, from their very character, no prices are obtainable, made up 5.87 per cent, and rent, for which also no prices for the several years are available, made up 12.95 per cent.

The remaining classes of family expenditure, 24.13 per cent of all, consist of clothing 14.04 per cent, fuel and lighting 5.25 per cent, furniture and utensils 3.42 per cent, and tobacco 1.42 per cent. For these no retail prices covering a series of years are available, but it is probable that the advance of the retail prices was considerably less than the advance in wholesale prices, as the advance in the wholesale prices of 25 articles of food in 1903, as compared with 1896, was 27.9 per cent, while the advance in the retail prices of 25 similar articles or groups of articles, as shown by the results of this investigation, was but 15.3 per cent. An examination of the relative wholesale prices of these

classes of articles in Bulletin No. 51, giving them their proper weight according to family consumption, leads to the conclusion that the advance in the retail prices of these articles as a whole, comparing 1903 with the year of lowest prices, could have been but little, if at all, greater than the advance in the retail price of food.

If all classes of family expenditures as above be taken into consideration, it is apparently a safe and conservative conclusion, therefore, that the increase in the cost of living, as a whole, in 1903, when compared with the year of lowest prices, was less than 15.5 per cent, the figure given above as the increase in the cost of food as shown by this investigation. This assumes, of course, always the purchase of the same articles and the same quantities in years of low prices, low wages, and more or less irregular employment, and in years of higher prices, higher wages, and steady employment.

WAGES AND HOURS OF LABOR.

The Nineteenth Annual Report of the Bureau of Labor, the report for the year 1904, will present the results of an extensive investigation into the wages and hours of labor in the leading manufacturing and mechanical industries of the United States during the period from 1890 to 1903, inclusive. The investigation was designed to cover thoroughly the principal distinctive occupations in the leading industries belonging to this large industrial group in all sections of the country, with a view to securing data which should be entirely representative of conditions and show the trend of wages and hours of labor during the period covered. It is to be regretted that the force available for the prosecution of the work did not permit of the extension of the investigation to cover transportation, mining, agriculture,^a and the other great industrial groups. It is believed, however, that the data

^aThe "Wages of Farm Labor in the United States" is the title of a recent bulletin of the U. S. Department of Agriculture. From this the following table showing wages of farm laborers is drawn:

AVERAGE WAGES OF FARM LABORERS IN THE UNITED STATES IN CERTAIN YEARS
FROM 1890 TO 1902.

[From bulletin of the U. S. Department of Agriculture, "Wages of Farm Labor in the United States."]

Year.	Per month.		Per day of ordinary labor.		Per day in harvest.	
	Without board.	With board.	Without board.	With board.	Without board.	With board.
1890.....	\$18.33	\$12.45	\$0.92	\$0.68	\$1.30	\$1.02
1892.....	18.60	12.54	.92	.67	1.30	1.02
1893.....	19.10	13.29	.89	.69	1.24	1.03
1894.....	17.74	12.16	.81	.63	1.13	.93
1895.....	17.69	12.02	.81	.62	1.14	.92
1896.....	19.38	13.43	.96	.72	1.50	1.05
1899.....	20.23	14.07	1.01	.77	1.37	1.12
1902.....	22.14	16.40	1.13	.89	1.53	1.34

presented are more comprehensive and representative, so far as the manufacturing and mechanical industries are concerned, than any that have been heretofore published. It is believed also that the figures forming the basis of the report are in all particulars thoroughly accurate and trustworthy, inasmuch as they have been secured in all cases by personal visits of the special agents of the Bureau to the several establishments represented and have been drawn directly from the pay rolls and other records in existence and available for reference. The preservation of records of this character for any considerable period of years is not usual, and great difficulty was experienced in finding establishments in some industries which had been in existence since 1890 and had preserved their pay rolls and other records of transactions with their employees. In a few cases, indeed, the agents of the Bureau were compelled to accept data for less than the full period covered by the investigation in order to avoid the exclusion of some important occupation or industry from the report—data for the full period not being available—while in other cases the Bureau was compelled to accept data for less than the full period in order to secure the adequate representation of some important section of the country in certain industries in the report. An examination of the table by industries and occupations (Table I) shows that all occupations usually pertaining to the various industries are not covered. As has been previously mentioned, this is in accordance with the plan adopted to secure data for only the important and distinctive occupations which are considered representative of each industry. This plan resulted in a great saving of time in the collection of the data without materially affecting its representative character. Quite often it was not possible to secure data for all of the important and distinctive occupations in a particular establishment owing to imperfect records, and for this reason, also, data from the same number of establishments are not reported for each of the occupations. In all such cases the data available were taken. Finally, it should be stated that the data in all cases were taken from that portion of each year's pay rolls most nearly representing the average conditions in the establishment during each year.

The following table shows the industries covered by the report, the number of establishments in each industry from which data were secured, and the number of different occupations covered in each industry:

INDUSTRIES, NUMBER OF OCCUPATIONS, AND NUMBER OF ESTABLISHMENTS FROM WHICH REPORTS WERE SECURED.

Industry.	Number of occupations.	Number of establishments.	Industry.	Number of occupations.	Number of establishments.
Agricultural implements..	8	18	Iron and steel, rails	7	6
Bakery, bread	4	124	Leather	10	38
Blacksmithing and horse-shoeing.....	5	193	Liquors, distilled.....	10	4
Boots and shoes	10	46	Liquors, malt	8	55
Boots and shoes, rubber ..	6	2	Lithographing	3	5
Boxes, paper.....	11	6	Lumber	12	40
Brick	6	28	Marble and stone work ..	12	182
Building trades.....	19	1,199	Musical instruments, organs.....	8	3
Butter and cheese	2	29	Musical instruments, pianos.....	12	5
Candy	2	7	Oil, cotton seed	5	2
Carpets	8	8	Oil, linseed.....	6	2
Carriages and wagons	8	104	Paints	3	4
Cars, steam railroad	16	49	Paper and wood pulp	16	20
Clothing, factory product ..	7	14	Petroleum refining.....	8	3
Clothing, men's, custom work.....	4	46	Planing mill	9	94
Cooperage	11	17	Pottery	8	6
Cotton goods.....	6	26	Printing and publishing, book and job.....	10	103
Dyeing, finishing, and printing textiles.....	6	14	Printing and publishing, newspaper	4	132
Electrical apparatus and supplies.....	4	4	Rope and twine	7	2
Flour	5	34	Shipbuilding	17	38
Foundry and machine shop ..	10	342	Silk goods	12	13
Fruits and vegetables, canning and preserving	2	2	Slaughtering and meat packing	15	7
Furniture	9	59	Soap	6	3
Gas	4	7	Stoves	3	8
Glass, bottle and window ..	14	12	Streets and sewers, contract work.....	1	36
Glass, plate.....	9	2	Streets and sewers, municipal work.....	1	48
Harness	6	30	Sugar refining.....	9	2
Hats, fur	14	8	Tin plate	7	1
Hosiery and knit goods	7	8	Tobacco, cigarettes	4	3
Iron and steel, bar iron	16	16	Tobacco, cigars.....	7	17
Iron and steel, Bessemer converting	6	9	Tobacco, plug, fine cut, and granulated smoking.....	12	16
Iron and steel, blast furnace.....	5	19	Woolen and worsted goods.....	9	16
Iron and steel, blooming mill.....	7	8			
Iron and steel, muck bar.....	6	15			
Iron and steel, open-hearth steel.....	5	10	Total	519	3,429

This table shows that practically all of the leading manufacturing and mechanical industries are represented in the report. The number of industries is seen to be 67, while data were secured from a total of 519 distinctive occupations in 3,429 establishments.

Table I is a summary of the full report in which the data will be presented in great detail. In it are combined for each occupation all the data that were secured for that occupation. To illustrate the method of presentation the reader is referred to the table (page 731.) The first industry shown is that of agricultural implements, and the first occupation in that industry is blacksmiths. All of these blacksmiths are males. The prefatory note states that the data secured from 15 establishments are here combined. Passing the first line of the table

For the present, the second line shows that a total of 114 men were ordinarily employed in 1890 in this occupation in the establishments covered. In the year 1891 there were 115 men employed at the representative time of the year for which the schedules were taken; the numbers employed in each of the other years are likewise shown. To make the study of the table easier a relative number has been computed to accompany each actual number. All comparisons might be made with 1890 or any other year, but owing to the fact that the conditions in any one year might be abnormal it was determined, as in the case of retail prices, to take as a base for comparison, or 100.0, not any one year, but the average for the ten years from 1890 to 1899. On the first line, therefore, appears the number 126, which is the average number employed during the ten-year period from 1890 to 1899. In the second column is the relative number 100.0, indicating that the number 126 is taken as the base, or 100.0. In the second line, showing the number of employees in 1890, is given the relative number 90.5, indicating that in 1890 the number of employees in the several establishments was 90.5 per cent of the average number employed during the ten-year period from 1890 to 1899.

The next two columns show conditions in 1903 (the last year of the period), as compared with the average condition for the ten-year period and the condition in each of the thirteen years preceding 1903. The sign (+) or (—) indicates whether the number employed in 1903 was greater or less than the number employed in the year with which the comparison is made. Thus the number of blacksmiths in these 15 establishments covered was 16 more in 1903 than the average number employed during the ten-year base period, which, according to the next column, was 12.7 per cent more. When 1903 is compared with 1890, it is seen that there were 28 more employees in 1903 than in 1890, or, as the next column shows, 24.6 per cent more. With this explanation that part of the table referring to employees will be readily understood. It may be well in this connection, however, to repeat the caution previously given as to the use of relative figures. The difference between the relative numbers in any two years is not the per cent of difference between those relative numbers. For example, the relative number of blacksmiths in the agricultural-implement industry in 1895 was 96.0, the relative number in 1901 was 114.3, and the difference in the relative numbers is 18.3. The per cent of increase in the number of employees, however, from 1895 to 1901 is found by computation to be 19.1 per cent.

The next section of the table relates to hours of labor per week. The average number of hours shown is the true average for all employees. Taking, for example, the year 1890, a total was made of the hours worked per week by the 114 men, and this total divided by

114, the number of men, gives an average per week of 59.69 hours. Relative hours of work per week have also been computed for the assistance of the reader. The third column of this section shows the increase or decrease of hours in 1903 as compared with the preceding years, and the next column the per cent of increase or decrease in hours in 1903 as compared with the preceding years.

The third section of the table relates to rates of wages per hour. Employees are either time workers or piece workers. Time workers are paid by the hour, day, week, month, or year. The piece rate of piece workers would convey little information to the general reader. For this reason the time worked to secure the earnings shown on the pay roll has been secured in the case of all piece workers and the hourly earnings computed. All wages are here shown by the hour in order that the data may be thoroughly and fairly comparable. The working day is an uncertain unit, as the time actually worked may have been long or short, and the week, month, or the year is still more indefinite. Hence all wages, however shown on the pay rolls, have been reduced to the one definite standard—the rate per hour. The true average has been computed for the wages in the same manner as has been explained concerning hours per week. The relative hourly rate of wages in each year, the actual increase or decrease in wages in 1903 compared with preceding years, and the per cent of increase or decrease in wages in 1903 compared with preceding years, are shown in the columns following the actual wages per hour.

In studying Table I the reader will observe that for a comparatively small number of occupations no figures are shown for the early years of the period, as has been previously mentioned. It is because no data could be obtained for those years, and the occupation was deemed so important that it was believed the obtainable data, though incomplete, should be shown. No relative numbers have been computed for such occupations because the facts for a part of the base period are not known. It will be observed also that data have been included for a number of establishments for which figures could not be secured for the whole period. This course was pursued only in cases where the inclusion of such establishments did not materially affect the averages shown for the establishments for which data covering the entire period were obtained. It should be stated, also, that such data were included mainly to secure the representation of an industry from a section of the country not already represented by data for the entire period. Though these short-period establishments included did not affect the average hours and wages, their employees could not be combined with the employees in the other establishments without destroying the ratio of the number employed in the several years. For this reason the number of employees shown is always the

number employed in the establishments that were in operation during each year of the period.

The relative figures shown in Table I have been summarized so as to show conditions in each industry as a whole, and are presented in this Bulletin as Table II. This summary table shows the relative conditions in each year compared with the ten-year period 1890-1899. Like the general table, it embraces three divisions, the first relating to the number of employees in the several years, the second to the hours of work per week, and the third to the wages per hour. Each of these divisions is subdivided into two columns, one showing the relative number and the other the per cent of increase or decrease in 1903, the last year of the period, compared with each of the preceding years. The base on which the relative number is computed is the average for the ten-year period, 1890-1899. Referring, now, to the table it is seen that in 1890 the number of employees engaged in the agricultural-implement industry was 86.2 per cent of the average number employed during the ten-year period. In each of the years thereafter a greater number was employed than in 1890, the highest being in 1900, when 30.7 per cent more persons were employed in the occupations and establishments covered than during the base period. In 1903 the number employed was 24.8 per cent more than the average number employed in the ten-year base period. The next column shows that the number of persons employed in 1903 was 44.8 per cent more than the number employed in 1890, 41.5 per cent more than in 1891, etc. With this explanation the other divisions of the table relating to hours per week and wages per hour will be readily understood.

In Table II the facts relating to the several occupations in each industry have been consolidated so as to form an index for each industry as a whole. In the short table immediately following the facts relating to the several industries have been combined to form a general index of all industries.

COURSE OF WAGES AND HOURS OF LABOR, 1890 TO 1903, WHEN WEIGHTED ACCORDING TO AGGREGATE WAGES PAID IN EACH INDUSTRY AS REPORTED BY THE CENSUS OF 1900.

[Relative numbers computed on basis of average for 1890-1899=100.]

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	94.9	+33.2	100.7	-4.1	100.3	+16.0
1891	97.4	+29.8	100.5	-3.9	100.2	+16.1
1892	99.1	+27.5	100.5	-3.9	100.3	+15.4
1893	99.2	+27.4	100.3	-3.7	100.9	+15.3
1894	94.1	+34.3	99.8	-3.2	97.9	+18.8
1895	96.3	+31.3	100.1	-3.5	98.3	+18.3
1896	98.3	+28.6	99.8	-3.2	99.7	+16.6
1897	100.9	+25.3	99.6	-3.0	99.6	+16.8
1898	106.3	+18.9	99.7	-3.1	100.3	+16.0
1899	110.8	+14.1	99.2	-2.6	102.0	+14.0
1900	115.5	+ 9.4	98.7	-2.1	105.5	+10.2
1901	119.1	+ 6.1	98.1	-1.5	108.0	+ 7.7
1902	123.6	+ 2.3	97.3	- .7	112.3	+ 3.6
1903	126.4	(a)	96.6	(a)	116.3	(a)

"The figures in this column give opposite each year the per cent of increase or decrease (indicated by + or -) which the 1903 figures show as compared with the year specified. Thus, opposite the year 1890, under employees, appears +33.2; this shows that the per cent of increase in the number of employees in 1903 as compared with 1890 was 33.2; opposite 1890, under hours per week, appears -4.1; this shows that the per cent of decrease in the hours of labor per week in 1903 as compared with 1890 was 4.1; in like manner, under wages per hour, appears +16.0; this shows that the per cent of increase in the wages per hour in 1903 as compared with 1890 was 16.0. The figures opposite each year should be read in like manner. Opposite the year 1903, of course, no figures can be placed.

The first column of the table shows the relative number of persons employed in all of the establishments investigated that were in operation during each year of the period. This column probably does not show the full extent of the changes that have taken place in the industries of the United States during the period covered; as just stated, it measures only the changes that have taken place in those establishments that were in operation each year of the period. No figures are known to exist showing the decrease in the number of employees caused by the shutting down of establishments for one or more years of the period, or by the permanent closing of establishments. Neither are there any figures showing the increase in the number of wage-workers caused by the opening of new establishments during these years. The figures in this table relating to employees are of great value, however, for they show the changes that have taken place in a large number of establishments, and undoubtedly indicate to some extent the changes that have taken place in the number of persons employed in all industries throughout the country. The table shows that the lowest number employed was in the year 1894, when 94.1 per cent as many persons were employed as during the average period from 1890 to 1899. The highest point reached in the period covered was in 1903, when 26.4 per cent more persons were employed than the average for the ten-year base period. The next column shows the per cent of increase or decrease in the number of persons employed

In 1903 as compared with preceding years. Thus in 1903 there were employed 33.2 per cent more persons than in 1890, 34.3 per cent more than in 1894, and 2.3 per cent more than in 1902, etc. So far as these establishments are concerned it is seen that the number of employees engaged therein have gradually increased since the year 1894. It is seen that in the last year of the period, 1903, a greater number of workmen were employed than in any previous year, and in this last year the number employed was 34.3 per cent greater than in 1894, or more than one-third more.

The next section of the table relates to the hours of labor. The relative number shown is a comparison of the hours of work per week in each year with the average hours worked per week during the ten-year period from 1890 to 1899. In 1890 the hours of work per week were 0.7 per cent more than the average hours worked during the ten-year base period, while in 1903 the hours of work were but 96.6 per cent of the average for the base period; that is, 3.4 per cent less than the average hours worked during the period from 1890 to 1899. The next column shows the per cent of increase or decrease of hours per week in 1903 when compared with previous years; thus in 1903 the hours of work were 4.1 per cent less than in 1890, and 0.7 per cent less than in 1902. The tendency toward a gradual reduction of the hours of labor of the workman is clearly shown here.

The third section of the table relates to the wages per hour paid in all of the industries covered by the report. In 1890 wages were 0.3 per cent higher than the average wages paid during the ten years from 1890 to 1899. In 1891 they were 0.2 per cent higher. The lowest point reached was in 1894, when wages were 97.9 per cent of the average wages for the ten-year period; or, in other words, 2.1 per cent lower than the average for the ten-year period. From 1894 the movement has been gradually upward to 1903, when the average wages per hour were 116.3 per cent of the average for the base period; or, in other words, 16.3 per cent higher than the average wages per hour during the ten-year period, 1890 to 1899. The caution before given is here repeated. The per cent of change between one year and another is not the result of the subtraction of the two relative numbers. For example: The relative wages in all industries was 97.9 in 1894 and 116.3 in 1903; the difference between these relative numbers is 18.4. The per cent of increase in wages, however, from 1894 to 1903 was not 18.4. This difference, 18.4, is 18.8 per cent of 97.9, the number with which the comparison was made, making wages per hour in 1903 18.8 per cent higher than wages per hour in 1894. The column following the relative wages shows the per cent of increase or decrease in the average wages per hour in 1903 as compared with the preceding years. In this column it is seen that wages per hour in

1903 were 16.0 per cent higher than in 1890, 15.4 per cent higher than in 1892, 18.8 per cent higher than in 1894, 3.6 per cent higher than in 1902, etc.

In computing the figures for the table on page 718, each industry has been given a weight in proportion to the amount of wages paid therein, as shown by the United States Census of 1900. This was deemed to be the most equitable method of making allowance for the greater or less importance of the several industries. The agricultural-implement industry is an important industry, but by no means as great as the building industry of the country, therefore allowance for the importance was deemed necessary, and the most satisfactory method of weighting is believed to be the weighting in proportion to the wages paid in the several industries. In order to see what difference, if any, there would be in the results obtained by the method adopted for the computation of the relative number or index for all industries and by other methods, the relative numbers for wages were computed by three other methods. By giving all occupations an equal weight the relative number was found to be 100.2 in 1890, 100.3 in 1891, 100.6 in 1892, 100.5 in 1893, 97.9 in 1894, 98.8 in 1895, 99.6 in 1896, 99.5 in 1897, 100.1 in 1898, 101.9 in 1899, 104.9 in 1900, 107.2 in 1901, 111.2 in 1902, and 114.9 in 1903. By giving each industry an equal weight the relative number was 100.5 in 1890, 100.4 in 1891, 100.7 in 1892, 100.4 in 1893, 98.0 in 1894, 98.7 in 1895, 99.6 in 1896, 99.3 in 1897, 100.2 in 1898, 102.1 in 1899, 105.1 in 1900, 107.7 in 1901, 111.6 in 1902, and 114.7 in 1903. The third method was by giving each industry a weight in proportion to the number of employees engaged in the industry, as shown by the Census of 1900. Computed by this method the relative number was 100.4 in 1890, 100.2 in 1891, 100.7 in 1892, 100.9 in 1893, 97.9 in 1894, 98.4 in 1895, 99.9 in 1896, 99.6 in 1897, 100.3 in 1898, 101.8 in 1899, 105.4 in 1900, 107.9 in 1901, 111.9 in 1902, and 116.0 in 1903. In several of the industries, however, the number of employees varies considerably during the year in accordance with seasonal trade conditions. For this and other reasons it is believed that the number of employees does not measure the importance of the industry as fairly as do the wages paid. A comparison of the figures obtained by the three methods just described with the figures by weighting each industry in proportion to the wages paid in it shows how nearly the different methods produce the same results. Any one of the three other methods might very safely and properly be used, were no method more satisfactory available.

In studying the several tables thus far presented, the reader should bear in mind that the wages shown are the average rates of wages per hour and the hours shown the average number of hours worked per week. A reduction in hours in any year, therefore, implies a reduction of weekly earnings, unless accompanied by a corresponding increase

in the rates of wages per hour. In order to show the changes in weekly earnings that have taken place from year to year during the period, in all industries as a whole, the following table has been prepared:

RELATIVE WEEKLY EARNINGS PER EMPLOYEE AND FOR ALL EMPLOYEES, 1890 TO 1903.
[Relative numbers computed on basis of average for 1890-1899=100.]

Year.	Weekly earnings per employee.		Weekly earnings of all employees.	
	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890.....	101.0	+11.2	95.8	+48.1
1891.....	100.7	+11.5	98.1	+44.6
1892.....	101.3	+10.9	100.4	+41.3
1893.....	101.2	+11.0	100.4	+41.3
1894.....	97.7	+14.9	91.9	+54.4
1895.....	98.4	+14.1	94.8	+49.7
1896.....	99.5	+12.9	97.8	+45.1
1897.....	99.2	+13.2	100.1	+41.8
1898.....	100.0	+12.3	106.3	+33.5
1899.....	101.2	+11.0	112.1	+26.6
1900.....	104.1	+7.9	120.2	+18.1
1901.....	105.9	+6.0	126.1	+12.5
1902.....	109.3	+2.7	135.1	+5.0
1903.....	112.3	.....	141.9	.....

The first section of the table relates to the weekly earnings of the individual employee. From this table it is seen that the weekly earnings per employee in 1890 were 1.0 per cent higher than the average weekly earnings for the ten-year period, 1890 to 1899. In 1894 the average weekly earnings were 2.3 per cent lower than the average for the ten-year period, and in 1903 they were 12.3 per cent higher. The next column shows that the weekly earnings per employee in 1903 were 11.2 per cent higher than in 1890, 11.5 per cent higher than in 1891, 14.9 per cent higher than in 1894, and 2.7 per cent higher than in 1902, etc.

The second section of the table, relating to the aggregate weekly earnings of all employees engaged in the occupations covered in the establishments included in the report, which were in operation during each year of the period, is of great interest as indicating to some extent the considerable and steady increase during the years from 1894 to 1903 in the amount paid out in wages by the manufacturing and mechanical establishments of the country. While the figures given show that this increase has been very great it is believed that they do not mark the extreme increase that would be shown were figures available for the entire number of employees in all industries, for reasons previously stated on page 718. Bearing this fact in mind the table shows that the weekly earnings of the employees engaged in the occupations covered in the establishments running during each year of the period were, in 1890, 95.8 per cent of the average for the ten-year period from 1890 to 1899; in the year 1891 they were 98.1 per cent; in 1894 they were 91.9 per cent; in 1902 the relative figure was 135.1,

while in 1903 it was 141.9, or 41.9 per cent more than the average for the ten-year period. The next column of the table, comparing the last year of the period with each of the other years, indicates that in 1903 the aggregate weekly earnings of all employees were 48.1 per cent more than in the year 1890, 54.4 per cent more than in 1894, and 5.0 per cent more than in 1902, etc.

Thus it is seen that, considering the employees covered by this report, the average weekly earnings per employee in 1903 were 12.3 per cent higher than the average for the ten-year period 1890 to 1899, and that the aggregate weekly wages paid out to all employees in 1903 were 41.9 per cent more than the average weekly wages for the same ten-year period.

An examination of the figures of the two reports shows that the price of food in 1903 was 15.5 per cent above its lowest price in 1896, the year of lowest prices; that cost of living as a whole advanced probably somewhat less; that rates of wages per hour in 1903 had increased 18.8 per cent as compared with 1894, the year of lowest wages; that hours of labor in 1903 had decreased 4.1 per cent as compared with 1890; that weekly earnings had advanced 14.9 per cent in 1903 above the weekly earnings of 1894; that 34.3 per cent more persons were employed in 1903 than in 1894, and that 54.4 per cent more money was paid out in wages per week in 1903 than in 1894.

In the discussion of the several tables of this Bulletin references have been made to the extent of change from the lowest figures shown in the several tables to the figures of 1903. This brings out the full extent of the changes that have taken place in the several years of the period, but in studying the tables for cost of living and rates of wages together, however, comparisons should always be made for the same year; that is, the relative figures for any year in one table should be compared with the relative figures for the same year in another table.

The following table shows for each of the principal features covered by the triple investigation the relative figures for each year as compared with the average for the ten-year period from 1890 to 1899, and there has been added the purchasing power of the hourly wages and of the weekly earnings per employee, measured by retail prices of food. In regard to the purchasing power of hourly wages a word of explanation should be added. According to the table, relative average wages per hour for the base period 1890-1899 were 100, and in 1890 were 100.3; relative average retail prices of food, which for the period 1890-1899 were 100, in 1890 were 102.4. As with the slight advance in wages there was a greater advance in retail prices of food (compared with the base period 1890-1899), it is evident that the purchasing power of the hourly wage was less in 1890 than for the average of 1890-1899, and this the table shows, the figures being 97.9, a decline of 2.1 per cent. Again, taking 1903, it is seen that hourly wages were

16.3 per cent above the average of 1890-1899, while retail prices of food were 10.3, making the increase in purchasing power of the hourly wage 5.4 per cent. The purchasing power of weekly earnings per employee may be read in the same way.

RELATIVE EMPLOYEES, HOURS PER WEEK, WAGES PER HOUR, WEEKLY EARNINGS PER EMPLOYEE AND OF ALL EMPLOYEES, RETAIL PRICES OF FOOD, AND PURCHASING POWER OF HOURLY WAGES AND OF WEEKLY EARNINGS PER EMPLOYEE, MEASURED BY RETAIL PRICES OF FOOD, 1890 TO 1903.

[Average of 1890-1899=100.]

Year.	Employees.	Hours per week.	Wages per hour.	Weekly earnings per employee.	Weekly earnings of all employees.	Retail prices of food.	Purchasing power, measured by retail prices of food, of—	
							Hourly wages	Weekly earnings per employee.
1890	94.9	100.7	100.3	101.0	95.8	102.4	97.9	98.6
1891	97.4	100.5	100.2	100.7	98.1	103.8	96.5	97.0
1892	99.1	100.5	100.8	101.3	100.4	101.9	98.9	99.4
1893	99.2	100.3	100.9	101.2	100.4	104.4	96.6	96.9
1894	94.1	99.8	97.9	97.7	91.9	99.7	98.2	98.0
1895	96.3	100.1	98.3	98.4	94.8	97.8	100.5	100.6
1896	98.3	99.8	99.7	99.5	97.8	95.5	104.4	104.2
1897	100.9	99.6	99.6	99.2	100.1	96.3	103.4	103.0
1898	106.3	99.7	100.3	100.0	106.3	98.7	101.6	101.8
1899	110.8	99.2	102.0	101.2	112.1	99.5	102.5	101.7
1900	115.5	98.7	105.5	104.1	120.2	101.1	104.4	103.0
1901	119.1	98.1	108.0	105.9	126.1	105.2	102.7	100.7
1902	123.6	97.3	112.3	109.3	135.1	110.9	101.3	98.6
1903	126.4	96.6	116.3	112.3	141.9	110.3	105.4	101.8

The per cent of increase or decrease in 1903, the last year of the period, as compared with the base period 1890-1899, and with each of the other years covered, is shown in the following table:

PER CENT OF INCREASE (+) OR DECREASE (-) IN 1903, AS COMPARED WITH PREVIOUS YEARS, IN EMPLOYEES, HOURS PER WEEK, WAGES PER HOUR, WEEKLY EARNINGS PER EMPLOYEE AND OF ALL EMPLOYEES, RETAIL PRICES OF FOOD, AND PURCHASING POWER OF HOURLY WAGES AND OF WEEKLY EARNINGS PER EMPLOYEE, MEASURED BY RETAIL PRICES OF FOOD, 1890 TO 1903.

Year.	Per cent of increase (+) or decrease (-) in 1903, as compared with previous years.							
	Employees.	Hours per week.	Wages per hour.	Weekly earnings per employee.	Weekly earnings of all employees.	Retail prices of food.	Purchasing power, measured by retail prices of food, of—	
							Hourly wages.	Weekly earnings per employee.
Average 1890-99.	+26.4	-3.4	+16.3	+12.3	+41.9	+10.3	+5.4	+1.8
1890	+33.2	-4.1	+16.0	+11.2	+48.1	+7.7	+7.7	+3.2
1891	+29.8	-3.9	+16.1	+11.5	+44.6	+6.3	+9.2	+4.9
1892	+27.5	-3.9	+15.4	+10.9	+41.8	+8.2	+6.6	+2.4
1893	+27.4	-3.7	+15.3	+11.0	+41.8	+5.7	+9.1	+5.1
1894	+34.3	-3.2	+18.8	+14.9	+54.4	+10.6	+7.3	+3.9
1895	+31.3	-3.5	+18.3	+14.1	+49.7	+12.8	+4.9	+1.2
1896	+23.6	-3.2	+16.6	+12.9	+45.1	+15.5	+1.0	-2.3
1897	+25.3	-3.0	+16.8	+13.2	+41.8	+14.5	+1.9	-1.2
1898	+18.9	-3.1	+16.0	+12.3	+33.5	+11.8	+3.7	+ .5
1899	+14.1	-2.6	+14.0	+11.0	+26.6	+10.9	+2.8	+ .1
1900	+9.4	-2.1	+10.2	+7.9	+18.1	+9.1	+1.0	-1.2
1901	+6.1	-1.5	+7.7	+6.0	+12.5	+4.8	+2.6	+1.1
1902	+2.3	-.7	+3.6	+2.7	+5.0	-.5	+4.0	+3.2

RATES OF WAGES AND HOURS OF LABOR IN THE UNITED STATES AND IN EUROPE.

In order that figures might be available, in connection with the report on wages, for a fair comparison between wages and hours of labor in the United States and the important foreign manufacturing countries, the Bureau, in the fall of 1903, made an investigation of wages and hours of labor in a few important and clearly defined occupations in Great Britain, Germany, France, and Belgium. According to the usual practice of the Bureau, the data were secured by its own agents from the pay rolls of representative establishments. Only thirteen occupations were covered, but these are enough, it is believed, to show the difference generally between rates of wages and hours of labor in the United States and in Europe. The wages and hours of labor in the thirteen occupations are given in the following table:

WAGES AND HOURS OF LABOR IN LEADING OCCUPATIONS IN THE UNITED STATES AND IN EUROPE, 1890 TO 1903.

BLACKSMITHS.

Year.	Wages per hour.					Hours per week.				
	United States. (a)	Great Britain.	Germany.	France.	Belgium.	United States. (a)	Great Britain.	Germany.	France.	Belgium.
1890	\$0.2677	\$0.1652	\$0.1175	\$0.1474	.....	59.41	54.00	62.00	60.34	.....
1891	.2681	.1650	.1099	.1474	.....	59.20	53.67	67.50	60.34	.....
1892	.2672	.1671	.1129	.1474	.....	59.37	53.67	61.94	60.34	.....
1893	.2677	.1654	.1101	.1474	.....	59.03	53.67	61.95	60.34	.....
1894	.2611	.1674	.1020	.1573	.....	58.68	53.67	61.88	60.34	.....
1895	.2602	.1695	.1069	.1573	.....	59.18	53.67	61.38	60.34	.....
1896	.2643	.1716	.1136	.1573	.....	58.93	53.67	61.38	60.34	.....
1897	.2604	.1740	.1209	.1608	.....	58.96	53.67	59.38	60.34	.....
1898	.2587	.1747	.1129	.1617	.....	59.20	53.67	62.50	60.34	.....
1899	.2637	.1770	.1173	.1617	.....	58.98	53.67	59.99	60.34	.....
1900	.2635	.1724	.1300	.1617	.....	58.87	53.67	60.00	60.34	.....
1901	.2757	.1722	.1235	.1617	.....	57.78	53.67	60.00	60.34	.....
1902	.2844	.1742	.1228	.1617	.....	57.17	53.67	58.49	60.34	.....
1903	.2962	.1740	.1237	.1629	.....	56.65	53.67	59.90	60.19	.....

BOILER MAKERS.

Year.	Wages per hour.					Hours per week.				
	United States.	Great Britain.	Germany (Berlin only).	France.	Belgium.	United States.	Great Britain.	Germany (Berlin only).	France.	Belgium.
1890	\$0.2594	\$0.1595	\$0.0986	\$0.1417	\$0.0742	59.25	54.00	64.00	63.00	60.00
1891	.2577	.1603	.0881	.1417	.0735	59.23	53.67	75.00	63.00	60.00
1892	.2585	.1711	.0931	.1417	.0735	58.88	53.67	64.00	63.00	60.00
1893	.2583	.1646	.0912	.1417	.0749	58.39	53.67	64.00	63.00	60.00
1894	.2614	.1636	.0892	.1417	.0745	58.83	53.67	64.00	63.00	60.00
1895	.2629	.1645	.0955	.1417	.0746	58.47	53.67	63.00	63.00	60.00
1896	.2626	.1683	.0961	.1417	.0749	58.02	53.67	63.00	63.00	60.00
1897	.2607	.1677	.0937	.1417	.0749	58.11	53.67	68.00	63.00	60.00
1898	.2617	.1727	.1024	.1417	.0749	58.30	53.67	68.00	63.00	60.00
1899	.2654	.1744	.1059	.1417	.0749	58.06	53.67	64.00	63.00	60.00
1900	.2773	.1736	.1091	.1417	.0746	57.36	53.67	60.00	63.00	60.00
1901	.2794	.1735	.1088	.1455	.0751	56.82	53.67	60.00	61.50	60.00
1902	.2800	.1737	.1055	.1455	.0751	56.33	53.67	57.00	61.50	60.00
1903	.2843	.1719	.1123	.1455	.0753	56.24	53.67	60.00	61.50	60.00

* The wages and hours of labor shown for the United States are for blacksmiths in the foundry and machine shop industry.

WAGES AND HOURS OF LABOR IN LEADING OCCUPATIONS IN THE UNITED STATES AND IN EUROPE, 1890 TO 1903—Continued.

BRICKLAYERS.

Year.	Wages per hour.					Hours per week.				
	United States.	Great Britain.	Germany.	France.	Belgium.	United States.	Great Britain.	Germany.	France.	Belgium.
1890	\$0.4316	\$0.1757	\$0.1103	\$0.1277	\$0.0700	53.22	52.67	59.75	63.00	62.00
1891	.4265	.1791	.1096	.1277	.0693	52.80	52.67	59.75	63.00	62.00
1892	.4431	.1859	.1092	.1277	.0686	52.19	51.83	59.75	63.00	62.00
1893	.4436	.1859	.1094	.1277	.0687	51.63	51.83	59.75	63.00	62.00
1894	.4325	.1892	.1098	.1277	.0681	51.96	51.83	59.75	63.00	62.00
1895	.4367	.1892	.1062	.1277	.0683	51.56	51.83	59.75	63.00	62.00
1896	.4387	.1960	.1155	.1277	.0670	51.50	51.83	56.50	63.00	62.00
1897	.4361	.1994	.1166	.1325	.0677	51.11	51.83	56.50	63.00	62.00
1898	.4381	.1994	.1236	.1325	.0729	50.47	51.83	56.50	63.00	62.00
1899	.4567	.2028	.1247	.1325	.0731	49.24	51.83	56.50	63.00	62.00
1900	.4672	.2028	.1274	.1325	.0732	49.32	51.83	56.50	63.00	62.00
1901	.4912	.1994	.1303	.1325	.0821	48.62	51.83	56.50	63.00	62.00
1902	.5313	.2062	.1289	.1325	.0820	48.27	51.83	56.50	63.00	62.00
1903	.5471	.2062	.1328	.1325	.0845	47.83	51.83	56.50	63.00	62.00

CARPENTERS.

Year.	Wages per hour.					Hours per week.				
	United States. (a)	Great Britain.	Germany.	France.	Belgium.	United States. (a)	Great Britain.	Germany.	France.	Belgium.
1890	\$0.2713	\$0.1690	\$0.1025	\$0.1544	\$0.0713	55.94	52.67	59.41	60.00	64.87
1891	.2730	.1757	.1042	.1544	.0711	55.56	51.83	59.49	60.00	64.93
1892	.2825	.1791	.1010	.1544	.0714	55.12	51.00	59.28	60.00	64.51
1893	.2744	.1791	.1015	.1544	.0722	55.22	51.00	59.36	60.00	64.61
1894	.2693	.1791	.0998	.1544	.0730	55.27	51.00	59.45	60.00	64.54
1895	.2692	.1825	.1043	.1544	.0719	55.05	50.17	59.26	60.00	64.78
1896	.2740	.1893	.1085	.1544	.0737	54.67	50.17	59.05	60.00	64.60
1897	.2748	.1926	.1090	.1544	.0723	54.20	50.17	56.17	60.00	64.68
1898	.2790	.1926	.1105	.1544	.0727	54.02	50.17	55.89	60.00	64.67
1899	.2839	.1994	.1188	.1544	.0728	53.42	50.17	55.79	60.00	64.77
1900	.3049	.2028	.1215	.1544	.0728	51.86	50.17	55.47	60.00	64.65
1901	.3190	.2028	.1250	.1544	.0729	50.74	50.17	55.87	60.00	64.71
1902	.3403	.2028	.1263	.1544	.0728	49.70	50.17	55.48	60.00	64.77
1903	.3594	.2028	.1301	.1544	.0712	49.41	50.17	55.30	60.00	64.73

COMPOSITORS.

Year.	Wages per hour.					Hours per week.				
	United States. (b)	Great Britain.	Germany (Nuremberg only).	France.	Belgium.	United States. (b)	Great Britain.	Germany (Nuremberg only).	France.	Belgium.
1890	\$0.3980	\$0.1572	\$0.1065	\$0.1207	\$0.0788	53.15	54.33	57.40	60.00	60.00
1891	.3997	.1651	.1043	.1207	.0756	52.62	52.67	57.78	60.00	60.00
1892	.4013	.1689	.1109	.1207	.0772	52.58	52.17	57.82	60.00	60.00
1893	.3983	.1692	.1141	.1207	.0762	53.13	52.17	57.10	60.00	60.00
1894	.3796	.1693	.1153	.1207	.0790	52.75	52.17	56.36	60.00	60.00
1895	.3827	.1689	.1288	.1207	.0794	52.73	52.17	53.41	60.00	60.00
1896	.3897	.1695	.1215	.1207	.0796	52.58	52.17	53.60	60.00	60.00
1897	.3925	.1697	.1295	.1207	.0825	52.47	52.17	51.16	60.00	60.00
1898	.3984	.1697	.1282	.1255	.0820	52.06	52.17	51.13	60.00	60.00
1899	.4086	.1699	.1294	.1255	.0825	51.26	52.17	51.47	60.00	60.00
1900	.4071	.1699	.1299	.1255	.0833	51.09	52.17	50.80	60.00	60.00
1901	.4252	.1730	.1364	.1255	.0820	50.37	51.67	50.47	60.00	60.00
1902	.4352	.1768	.1369	.1255	.0907	49.96	50.83	51.21	60.00	54.00
1903	.4467	.1795	.1411	.1303	.0955	49.81	50.00	51.08	60.00	54.00

^a The wages and hours of labor shown for the United States are for carpenters in the building industry.

^b The wages and hours of labor shown for the United States are for compositors, newspaper.

WAGES AND HOURS OF LABOR IN LEADING OCCUPATIONS IN THE UNITED STATES AND IN EUROPE, 1890 TO 1903—Continued.

HOD CARRIERS.

Year.	Wages per hour.					Hours per week.				
	United States.	Great Britain.	Germany.	France (Paris only).	Belgium.	United States.	Great Britain.	Germany.	France (Paris only).	Belgium.
1890	\$0.2259	\$0.1217	\$0.0675	\$0.0965	\$0.0471	52.78	52.67	59.75	66.00	62.00
1891	.2248	.1217	.0639	.0965	.0472	52.54	52.67	59.75	66.00	62.00
1892	.2314	.1250	.0680	.0965	.0476	51.81	51.83	59.75	66.00	62.00
1893	.2325	.1250	.0691	.0965	.0479	51.64	51.83	59.75	66.00	62.00
1894	.2303	.1250	.0680	.0965	.0413	52.03	51.83	59.75	66.00	62.00
1895	.2320	.1318	.0684	.0965	.0493	51.53	51.83	59.75	66.00	62.00
1896	.2335	.1250	.0714	.0965	.0460	51.45	51.83	59.50	66.00	62.00
1897	.2322	.1250	.0712	.0965	.0472	51.42	51.83	59.50	63.57	62.00
1898	.2343	.1250	.0742	.0965	.0527	51.01	51.83	59.50	63.71	62.00
1899	.2518	.1250	.0758	.0965	.0532	49.79	51.83	59.50	63.83	62.00
1900	.2498	.1250	.0807	.0965	.0559	49.79	51.83	59.50	64.04	62.00
1901	.2546	.1250	.0805	.0965	.0566	49.35	51.83	59.50	64.46	62.00
1902	.2676	.1250	.0811	.0965	.0431	48.56	51.83	59.50	64.42	62.00
1903	.2863	.1250	.0849	.0965	(a)	47.98	51.83	59.50	63.91	(a)

IRON MOLDERS.

Year.	Wages per hour.					Hours per week.				
	United States. (b)	Great Britain.	Germany.	France (Paris only).	Belgium.	United States. (b)	Great Britain.	Germany.	France (Paris only).	Belgium.
1890	\$0.2540	\$0.1678	\$0.1009	\$0.1119	(a)	59.51	54.00	60.00	60.00	(a)
1891	.2565	.1678	.1051	.1158	(a)	59.60	53.67	60.00	60.00	(a)
1892	.2548	.1677	.1059	.1079	(a)	59.49	53.67	60.00	60.00	(a)
1893	.2557	.1683	.1024	.1158	(a)	59.18	53.67	60.00	60.00	(a)
1894	.2472	.1680	.0989	.1181	(a)	59.10	53.67	60.00	60.00	(a)
1895	.2476	.1700	.1008	.1204	(a)	59.29	53.67	60.00	60.00	(a)
1896	.2507	.1698	.1072	.1245	(a)	59.24	53.67	60.00	60.00	(a)
1897	.2525	.1756	.1017	.1253	\$0.0611	59.17	53.67	60.00	60.00	60.00
1898	.2503	.1764	.1028	.1239	.0619	59.34	53.67	60.00	60.00	60.00
1899	.2568	.1790	.1102	.1256	.0608	59.14	53.67	60.00	60.00	60.00
1900	.2694	.1790	.1140	.1245	.0640	59.07	53.67	60.00	60.00	60.00
1901	.2739	.1766	(a)	.1255	.0646	58.47	53.67	(a)	60.00	60.00
1902	.2894	.1765	(a)	.1282	.0659	57.65	53.67	(a)	60.00	60.00
1903	.3036	.1787	(a)	.1310	.0692	56.80	53.67	(a)	60.00	60.00

LABORERS, GENERAL.

Year.	Wages per hour.					Hours per week.				
	United States. (c)	Great Britain.	Germany.	France (Paris only).	Belgium.	United States. (c)	Great Britain.	Germany.	France (Paris only).	Belgium.
1890	\$0.1507	\$0.0948	\$0.0641	\$0.0965	\$0.0524	59.02	54.17	59.98	60.00	63.00
1891	.1511	.0984	.0632	.0965	.0524	59.02	53.93	60.01	60.00	63.00
1892	.1519	.0950	.0629	.0965	.0524	59.02	53.93	60.07	60.00	63.00
1893	.1493	.0954	.0630	.0965	.0524	58.80	53.93	60.06	60.00	63.00
1894	.1419	.0955	.0634	.0965	.0524	58.76	53.93	59.96	60.00	63.00
1895	.1440	.0950	.0640	.0965	.0524	58.88	53.93	60.06	60.00	63.00
1896	.1415	.0953	.0643	.0965	.0524	58.92	53.93	60.29	60.00	63.00
1897	.1445	.0975	.0645	.0965	.0524	58.80	53.93	59.80	60.00	63.00
1898	.1466	.0997	.0676	.0965	.0524	58.44	52.50	59.74	60.00	63.00
1899	.1457	.1015	.0704	.0965	.0524	58.71	52.50	59.62	60.00	63.00
1900	.1461	.1022	.0711	.0965	.0549	58.27	52.50	59.70	60.00	63.00
1901	.1585	.1028	.0763	.0965	.0549	57.98	52.50	59.62	60.00	63.00
1902	.1644	.1052	.0768	.0965	.0549	56.66	52.50	59.63	60.00	63.00
1903	.1676	.1019	.0797	.0965	.0549	56.13	52.50	59.36	60.00	63.00

a No data obtained.

b The wages and hours of labor shown for the United States are for iron molders in the foundry and machine shop industry.

c The wages and hours of labor shown for the United States are for laborers in the building industry.

WAGES AND HOURS OF LABOR IN LEADING OCCUPATIONS IN THE UNITED STATES AND IN EUROPE, 1890 TO 1903—Continued.

MACHINISTS.

Year.	Wages per hour.					Hours per week.				
	United States. (a)	Great Britain.	Germany (Berlin only).	France.	Belgium.	United States. (a)	Great Britain.	Germany (Berlin only).	France.	Belgium.
1890	\$0.2413	\$0.1534	\$0.0973	\$0.1256	.....	59.52	54.00	64.00	61.90	.....
1891	.2435	.1594	.1040	.1256	.....	59.47	53.67	65.00	61.89	.....
1892	.2459	.1590	.1046	.1257	.....	59.24	53.67	60.00	61.89	.....
1893	.2450	.1585	.1027	.1270	.....	59.03	53.67	68.00	61.89	.....
1894	.2347	.1588	.1107	.1272	.....	59.07	53.67	64.00	61.89	.....
1895	.2347	.1590	.1090	.1278	.....	59.08	53.67	63.00	61.88	.....
1896	.2397	.1607	.1057	.1279	.....	59.01	53.67	63.00	61.88	.....
1897	.2397	.1663	.1115	.1312	.....	58.96	53.67	64.00	61.82	.....
1898	.2377	.1654	.1129	.1335	.....	59.11	53.67	70.00	61.83	.....
1899	.2417	.1685	.1110	.1325	.....	58.72	53.67	64.00	64.18	.....
1900	.2485	.1684	.1211	.1325	.....	58.56	53.67	64.00	64.18	.....
1901	.2555	.1677	.1155	.1331	.....	57.37	53.67	60.00	61.50	.....
1902	.2646	.1691	.1141	.1310	.....	56.56	53.67	57.00	61.50	.....
1903	.2709	.1677	.1310	.1326	.....	56.12	53.67	60.00	61.50	.....

PAINTERS, HOUSE.

Year.	Wages per hour.					Hours per week.				
	United States.	Great Britain.	Germany.	France.	Belgium.	United States.	Great Britain.	Germany.	France.	Belgium.
1890	\$0.2680	\$0.1554	\$0.0934	\$0.1231	\$0.0603	55.23	54.33	56.50	60.00	66.00
1891	.2712	.1605	.0938	.1231	.0602	54.86	54.33	56.50	60.00	66.00
1892	.2747	.1639	.0956	.1231	.0602	54.43	52.67	56.50	60.00	66.00
1893	.2795	.1639	.0965	.1255	.0604	53.86	52.67	56.50	60.00	66.00
1894	.2737	.1639	.0992	.1313	.0604	54.01	52.67	56.50	60.00	66.00
1895	.2720	.1656	.1004	.1255	.0604	53.87	52.67	56.50	60.00	66.00
1896	.2742	.1656	.1021	.1256	.0583	53.61	51.00	56.25	60.00	66.00
1897	.2778	.1689	.1041	.1255	.0649	53.28	51.00	56.25	60.00	66.00
1898	.2827	.1723	.1053	.1255	.0652	52.79	51.00	56.25	60.00	66.00
1899	.2892	.1757	.1094	.1255	.0653	52.27	51.00	56.25	60.00	66.00
1900	.3054	.1757	.1147	.1255	.0685	50.91	51.00	56.25	60.00	66.00
1901	.3170	.1757	.1143	.1255	.0676	49.85	51.00	56.25	60.00	66.00
1902	.3303	.1774	.1170	.1255	.0652	49.27	51.00	56.25	60.00	66.00
1903	.3450	.1774	.1194	.1255	.0667	48.89	51.00	56.25	60.00	66.00

PLUMBERS.

Year.	Wages per hour.					Hours per week.				
	United States.	Great Britain.	Germany.	France (Paris only).	Belgium.	United States.	Great Britain.	Germany.	France (Paris only).	Belgium.
1890	\$0.3464	\$0.1757	\$0.0946	\$0.1501	\$0.0793	54.33	50.00	59.75	63.00	60.00
1891	.3488	.1757	.0953	.1501	.0779	54.09	50.00	59.75	63.00	60.00
1892	.3511	.1825	.0955	.1501	.0786	53.86	50.00	59.75	63.00	60.00
1893	.3552	.1825	.0955	.1501	.0724	53.36	50.00	59.75	63.00	60.00
1894	.3515	.1825	.0925	.1501	.0738	53.28	50.00	59.75	63.00	60.00
1895	.3546	.1892	.0926	.1501	.0736	53.08	50.00	59.75	63.00	60.00
1896	.3505	.1926	.0908	.1501	.0772	52.86	49.17	59.75	63.00	60.00
1897	.3598	.1960	.0938	.1501	.0772	52.67	49.17	59.75	54.00	60.00
1898	.3638	.1960	.0965	.1501	.0772	52.53	49.17	59.70	54.00	60.00
1899	.3694	.2027	.1004	.1501	.0784	52.28	49.17	59.70	54.00	60.00
1900	.3811	.2027	.1008	.1501	.0800	51.40	49.17	56.70	54.00	60.00
1901	.3935	.2027	.1091	.1501	.0724	50.77	49.17	56.70	54.00	60.00
1902	.4122	.2029	.1083	.1501	.0772	49.52	49.17	56.70	54.00	60.00
1903	.4371	.2027	.1148	.1501	.0784	48.97	49.17	56.68	54.00	60.00

^a The wages and hours of labor shown for the United States are for machinists in the foundry and machine shop industry.

WAGES AND HOURS OF LABOR IN LEADING OCCUPATIONS IN THE UNITED STATES AND IN EUROPE, 1890 TO 1903—Concluded.

STONECUTTERS.

Year.	Wages per hour.					Hours per week.				
	United States. (a)	Great Britain.	Germany (Nuremberg only).	France.	Belgium.	United States. (a)	Great Britain.	Germany (Nuremberg only).	France.	Belgium.
1890	\$0.3730	\$0.1689	\$0.0985	\$0.1400	\$0.0698	52.73	51.00	60.00	60.00	65.00
1891	.3903	.1723	.0978	.1424	.0690	52.54	51.00	60.00	60.00	65.00
1892	.3750	.1791	.1042	.1424	.0662	52.70	50.17	59.50	60.00	65.00
1893	.3618	.1859	.1052	.1424	.0655	53.12	50.17	59.50	60.00	65.00
1894	.3593	.1859	.0992	.1448	.0681	52.84	50.17	59.50	60.00	65.00
1895	.3611	.1859	.1027	.1448	.0724	52.67	50.17	59.50	60.00	65.00
1896	.3590	.1893	.1116	.1448	.0653	52.77	50.17	59.50	60.00	65.00
1897	.3524	.1893	.1129	.1448	.0676	52.99	50.17	59.50	60.00	65.00
1898	.3467	.1960	.1164	.1448	.0668	53.04	50.17	59.50	60.00	65.00
1899	.3584	.1960	.1166	.1448	.0646	51.70	50.17	59.50	60.00	65.00
1900	.3923	.1960	.1104	.1448	.0668	50.20	50.17	59.50	60.00	65.00
1901	.3568	.1960	.1188	.1448	.0674	49.96	50.17	59.50	60.00	65.00
1902	.3938	.1994	.1126	.1448	.0677	49.67	50.17	59.50	60.00	65.00
1903	.4225	.1994	.1177	.1448	.0685	48.67	50.17	54.00	60.00	65.00

STONE MASONS.

Year.	Wages per hour.					Hours per week.				
	United States.	Great Britain.	Germany.	France (Paris only).	Belgium.	United States.	Great Britain.	Germany.	France (Paris only).	Belgium.
1890	\$0.3722	\$0.1774	\$0.1103	\$0.1404	\$0.0700	54.54	51.00	59.75	66.00	62.00
1891	.3732	.1808	.1096	.1404	.0693	54.51	51.00	59.75	66.00	62.00
1892	.3673	.1842	.1092	.1404	.0686	54.49	50.17	59.75	66.00	62.00
1893	.3644	.1910	.1094	.1404	.0687	54.17	50.17	59.75	66.00	62.00
1894	.3440	.1910	.1098	.1404	.0681	54.34	50.17	59.75	66.00	62.00
1895	.3485	.1943	.1062	.1404	.0683	54.05	50.17	59.75	66.00	62.00
1896	.3547	.1977	.1155	.1404	.0670	53.97	50.17	56.50	66.00	62.00
1897	.3628	.1977	.1166	.1448	.0677	53.05	50.17	56.50	66.00	62.00
1898	.3581	.2045	.1236	.1448	.0729	52.43	50.17	56.50	66.00	62.00
1899	.3719	.2045	.1247	.1448	.0731	52.73	50.17	56.50	66.00	62.00
1900	.3788	.2045	.1274	.1448	.0782	51.89	50.17	56.50	66.00	62.00
1901	.4007	.2045	.1303	.1448	.0821	51.23	50.17	56.50	66.00	62.00
1902	.4304	.2078	.1299	.1448	.0820	50.19	50.17	56.50	66.00	62.00
1903	.4486	.2078	.1328	.1448	.0845	49.54	50.17	56.50	66.00	62.00

^a The wages and hours of labor shown for the United States are for stonecutters, granite.

GENERAL TABLES.

WAGES AND HOURS OF LABOR.

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TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

AGRICULTURAL IMPLEMENTS.

BLACKSMITHS, Male.

[Data from 15 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	126	100.0	+16	+12.7	59.21	100.0	-0.47	-0.8	\$0.2257	100.0	+\$0.0107	+4.7
1890	114	90.5	+28	+24.6	59.69	100.8	- .95	-1.6	.2222	98.4	+ .0142	+ 6.4
1891	115	91.3	+27	+23.5	59.70	100.8	- .96	-1.6	.2287	101.3	+ .0077	+ 3.4
1892	131	104.0	+11	+ 8.4	59.69	100.8	- .95	-1.6	.2384	105.6	- .0020	- .8
1893	132	104.8	+10	+ 7.6	59.67	100.8	- .93	-1.6	.2605	115.4	- .0241	- 9.3
1894	124	98.4	+18	+14.5	57.08	96.4	+1.66	+2.9	.2257	100.0	+ .0107	+ 4.7
1895	121	96.0	+21	+17.4	59.69	100.8	- .95	-1.6	.2051	90.9	+ .0313	+15.3
1896	127	100.8	+15	+11.8	59.69	100.8	- .95	-1.6	.2154	95.4	+ .0210	+ 9.7
1897	123	97.6	+19	+15.4	57.72	97.5	+1.02	+1.8	.2163	95.8	+ .0201	+ 9.3
1898	139	110.3	+ 3	+ 2.2	59.69	100.8	- .95	-1.6	.2296	101.7	+ .0063	+ 3.0
1899	135	107.1	+ 7	+ 5.2	59.46	100.4	- .72	-1.2	.2149	95.2	+ .0215	+10.0
1900	143	113.5	- 1	- .7	59.50	100.5	- .76	-1.3	.2177	96.5	+ .0187	+ 8.6
1901	144	114.3	- 2	- 1.4	59.46	100.4	- .72	-1.2	.2150	95.3	+ .0214	+10.0
1902	134	106.3	+ 8	+ 6.0	59.45	100.4	- .71	-1.2	.2262	100.2	+ .0102	+ 4.5
1903	142	112.7	.....	.....	58.74	99.2	.....	.....	.2364	104.7	.....	.....

FITTERS, PLOW, Male.

[Data from 1 establishment.]

Av. 1890-99	9	100.0	.....	.....	54.00	100.0	.....	.....	\$0.1820	100.0	+\$0.0633	+34.8
1890	10	111.1	-1	-10.0	54.00	100.0	.....	.....	.1688	92.7	+ .0765	+45.3
1891	8	88.9	+1	+12.5	54.00	100.0	.....	.....	.1644	90.3	+ .0809	+49.2
1892	8	88.9	+1	+12.5	54.00	100.0	.....	.....	.1794	93.6	+ .0659	+36.7
1893	9	100.0	.....	.....	54.00	100.0	.....	.....	.1820	100.0	+ .0633	+34.8
1894	9	100.0	.....	.....	54.00	100.0	.....	.....	.1832	100.7	+ .0621	+33.9
1895	8	88.9	+1	+12.5	54.00	100.0	.....	.....	.1870	102.7	+ .0583	+31.2
1896	7	77.8	+2	+28.6	54.00	100.0	.....	.....	.2212	121.5	+ .0241	+10.9
1897	9	100.0	.....	.....	54.00	100.0	.....	.....	.1700	93.4	+ .0753	+44.3
1898	11	122.2	-2	-18.2	54.00	100.0	.....	.....	.1754	96.4	+ .0699	+39.9
1899	10	111.1	-1	-10.0	54.00	100.0	.....	.....	.1890	103.8	+ .0563	+29.8
1900	10	111.1	-1	-10.0	54.00	100.0	.....	.....	.1859	102.1	+ .0594	+32.0
1901	11	122.2	-2	-18.2	54.00	100.0	.....	.....	.2358	129.6	+ .0095	+ 4.0
1902	10	111.1	-1	-10.0	54.00	100.0	.....	.....	.2463	135.3	- .0010	- .4
1903	9	100.0	.....	.....	54.00	100.0	.....	.....	.2453	134.8	.....	.....

GRINDERS, PLOW, Male.

[Data from 1 establishment.]

Av. 1890-99	17	100.0	- 5	-29.4	54.00	100.0	.....	.....	\$0.1780	100.0	+\$0.0410	+23.0
1890	8	47.1	+ 4	+60.0	54.00	100.0	.....	.....	.1510	84.8	+ .0680	+45.0
1891	12	70.6	.....	.....	54.00	100.0	.....	.....	.1769	99.4	+ .0421	+23.3
1892	14	82.4	- 2	-14.3	54.00	100.0	.....	.....	.1511	84.9	+ .0679	+44.9
1893	18	105.9	- 6	-33.3	54.00	100.0	.....	.....	.1414	79.4	+ .0776	+54.9
1894	16	94.1	- 4	-25.0	54.00	100.0	.....	.....	.1794	100.8	+ .0396	+22.1
1895	18	105.9	- 6	-33.3	54.00	100.0	.....	.....	.1765	99.2	+ .0425	+24.1
1896	16	94.1	- 4	-25.0	54.00	100.0	.....	.....	.1920	107.9	+ .0270	+14.1
1897	16	94.1	- 4	-25.0	54.00	100.0	.....	.....	.2151	120.8	+ .0039	+ 1.3
1898	28	164.7	-16	-57.1	54.00	100.0	.....	.....	.2012	113.0	+ .0178	+ 8.3
1899	27	158.8	-15	-55.6	54.00	100.0	.....	.....	.1950	109.6	+ .0240	+12.3
1900	80	176.5	-18	-60.0	54.00	100.0	.....	.....	.2038	114.5	+ .0152	+ 7.5
1901	25	147.1	-13	-52.0	54.00	100.0	.....	.....	.1879	105.6	+ .0311	+16.6
1902	12	70.6	.....	.....	54.00	100.0	.....	.....	.1930	108.4	+ .0260	+13.5
1903	12	70.6	.....	.....	54.00	100.0	.....	.....	.2190	123.0	.....	.....

TABLE 1.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

AGRICULTURAL IMPLEMENTS—Continued.

MACHINE WOODWORKERS, Male.

[Data from 11 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	128	100.0	+66	+51.6	59.47	100.0	-0.16	-0.3	\$0.1852	100.0	+\$0.0165	+ 8.9
1890	119	93.0	+75	+63.0	59.67	100.3	-.36	-.6	.1880	101.5	+.0137	+ 7.3
1891	115	89.8	+79	+68.7	59.57	100.2	-.26	-.4	.1904	102.8	+.0113	+ 5.9
1892	122	95.3	+72	+59.0	59.57	100.2	-.26	-.4	.1886	101.8	+.0131	+ 6.9
1893	142	110.9	+52	+36.6	59.61	100.2	-.26	-.5	.1942	104.9	+.0075	+ 3.9
1894	111	86.7	+83	+74.8	59.54	100.1	-.23	-.4	.1837	99.2	+.0180	+ 9.8
1895	126	98.4	+68	+54.0	59.60	100.2	-.29	-.5	.1781	96.2	+.0236	+13.3
1896	116	90.6	+78	+67.2	59.56	100.2	-.25	-.4	.1786	96.4	+.0231	+12.9
1897	117	91.4	+77	+65.6	58.44	98.8	+.87	+1.5	.1835	99.1	+.0182	+ 9.9
1898	144	112.5	+50	+34.7	59.62	100.3	-.31	-.5	.1846	99.7	+.0171	+ 9.3
1899	165	128.9	+29	+17.6	59.50	100.1	-.19	-.3	.1820	98.3	+.0197	+10.8
1900	164	128.1	+30	+18.3	59.55	100.1	-.24	-.4	.1927	104.0	+.0090	+ 4.7
1901	162	126.6	+32	+19.8	59.54	100.1	-.23	-.4	.1923	103.8	+.0094	+ 4.9
1902	167	130.5	+27	+16.2	59.60	100.2	-.29	-.5	.2052	110.8	-.0035	- 1.7
1903	194	151.6	.....	.....	59.31	99.7	.....	.....	.2017	108.9	.....	.....

MACHINISTS, Male.

[Data from 15 establishments.]

Av. 1890-99.	339	100.0	+158	+46.6	59.55	100.0	-1.30	-2.2	\$0.2305	100.0	+\$0.0275	+11.9
1890	332	97.9	+165	+49.7	59.83	100.5	-1.58	-2.6	.2313	100.3	+.0267	+11.5
1891	335	98.8	+162	+48.4	59.81	100.4	-1.56	-2.6	.2354	102.1	+.0226	+ 9.6
1892	334	98.5	+163	+48.8	59.80	100.4	-1.55	-2.6	.2397	104.0	+.0183	+ 7.6
1893	363	107.1	+134	+36.9	59.81	100.4	-1.56	-2.6	.2458	106.6	+.0122	+ 5.0
1894	318	93.8	+179	+56.3	58.22	97.8	+.08	+.1	.2179	94.5	+.0401	+18.4
1895	319	94.1	+178	+55.8	59.82	100.5	-1.57	-2.6	.2159	93.7	+.0421	+19.5
1896	339	100.0	+158	+46.6	59.79	100.4	-1.54	-2.6	.2222	96.4	+.0358	+16.1
1897	311	91.7	+186	+59.8	59.08	99.1	-.78	-1.3	.2226	96.6	+.0354	+15.9
1898	358	105.6	+139	+38.8	59.80	100.4	-1.55	-2.6	.2334	101.3	+.0246	+10.5
1899	383	113.0	+114	+29.8	59.63	100.1	-1.38	-2.3	.2412	104.6	+.0168	+ 7.0
1900	420	123.9	+ 77	+18.3	59.59	100.1	-1.34	-2.2	.2448	106.2	+.0132	+ 5.4
1901	436	128.6	+ 61	+14.0	59.61	100.1	-1.36	-2.3	.2416	104.8	+.0164	+ 6.8
1902	422	124.5	+ 75	+17.8	59.56	100.0	-1.31	-2.2	.2483	107.7	+.0097	+ 3.9
1903	497	146.6	.....	.....	58.25	97.8	.....	.....	.2580	111.9	.....	.....

MOLDERS, IRON, Male.

[Data from 9 establishments.]

Av. 1890-99.	198	100.0	+ 82	+41.4	59.11	100.0	+0.05	+0.1	\$0.2615	100.0	+\$0.0534	+20.4
1890	171	86.4	+109	+63.7	59.66	100.9	-.50	-.8	.2676	102.3	+.0473	+17.7
1891	176	88.9	+104	+59.1	59.67	100.9	-.51	-.9	.2709	103.6	+.0440	+16.2
1892	206	104.0	+ 74	+35.9	59.70	101.0	-.54	-.9	.2779	106.3	+.0370	+13.3
1893	216	109.1	+ 64	+29.6	59.65	100.9	-.49	-.8	.2822	107.9	+.0327	+11.6
1894	173	87.4	+107	+61.8	58.56	99.1	+.61	+1.0	.2510	96.0	+.0639	+25.5
1895	189	95.5	+ 91	+43.1	59.53	100.7	-.37	-.6	.2441	93.3	+.0708	+29.0
1896	180	90.9	+100	+55.6	58.09	98.3	+1.07	+1.8	.2566	98.1	+.0583	+22.7
1897	162	81.9	+ 98	+53.8	57.35	97.0	+.18	+3.2	.2457	94.0	+.0692	+28.2
1898	282	117.2	+ 48	+20.7	59.34	100.4	-.18	-.3	.2530	96.7	+.0519	+24.5
1899	253	127.8	+ 27	+10.7	59.54	100.7	-.38	-.6	.2658	101.6	+.0491	+18.5
1900	263	132.8	+ 17	+ 6.5	59.62	100.9	-.46	-.8	.2856	109.2	+.0298	+10.3
1901	251	125.8	+ 29	+11.6	59.61	100.8	-.45	-.8	.2839	108.6	+.0310	+10.9
1902	241	121.7	+ 39	+16.2	59.56	100.8	-.40	-.7	.3132	119.8	+.0017	+ .5
1903	280	141.4	.....	.....	59.16	100.1	.....	.....	.3149	120.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

AGRICULTURAL IMPLEMENTS—Concluded.

PAINTERS, Male.

[Data for employees from 12 establishments for entire period. Data for hours and wages from 12 establishments, 1890-1894; 13 establishments, 1895-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99	119	100.0	+25	+21.0	59.55	100.0	+0.01	+0.02	\$0.1898	100.0	+\$0.0394	+20.8
1890	104	87.4	+40	+33.5	59.50	99.9	+0.06	+1	.1848	97.6	+.0439	+23.8
1891	109	91.6	+35	+32.1	59.49	99.9	+0.07	+1	.2060	108.8	+.0227	+11.0
1892	107	89.9	+37	+34.6	59.58	100.1	-.02	-.03	.2016	106.5	+.0307	+13.4
1893	111	93.3	+33	+29.7	59.63	100.1	-.07	-.1	.1980	104.6	+.0307	+13.5
1894	135	113.4	+9	+6.7	59.64	100.2	-.02	-.1	.1737	91.8	+.0650	+31.7
1895	120	100.8	+24	+20.0	59.54	100.0	+0.02	+0.03	.1838	97.1	+.0449	+24.4
1896	121	101.7	+23	+19.0	59.45	99.8	+0.13	+2	.1882	99.4	+.0405	+21.5
1897	117	98.3	+27	+23.1	59.44	99.8	+0.12	+2	.1852	97.8	+.0435	+23.5
1898	140	117.6	+4	+2.9	59.62	100.1	-.06	-.1	.1823	96.8	+.0464	+25.5
1899	123	103.4	+21	+17.1	59.58	100.1	-.02	-.03	.1891	99.9	+.0396	+20.9
1900	116	97.5	+28	+24.1	59.57	100.0	-.01	-.02	.2074	109.6	+.0213	+10.3
1901	151	126.9	-7	-4.6	59.63	100.1	-.07	-.1	.2034	107.4	+.0253	+12.4
1902	150	126.1	-6	-4.0	59.64	100.2	-.08	-.1	.2066	110.2	+.0201	+9.6
1903	144	121.0			59.56	100.0			.2237	120.8		

PATTERN MAKERS, Male.

[Data from 13 establishments.]

Av. 1890-99.	42	100 0	+23	+ 54.8	59.70	100.0	-0.82	-1.4	\$0.2378	100.0	+\$0.0304	+12.8
1890	32	76.2	+33	+103.1	59.78	100.1	-.90	-1.5	.2363	99.4	+.0319	+13.5
1891	36	85.7	+29	+80.6	59.78	100.1	-.90	-1.5	.2340	98.4	+.0342	+14.6
1892	41	97.6	+24	+58.5	59.71	100.0	-.83	-1.4	.2490	104.7	+.0192	+7.7
1893	46	109.5	+19	+41.3	59.72	100.0	-.84	-1.4	.2411	101.4	+.0271	+11.2
1894	39	92.9	+26	+66.7	59.77	100.1	-.89	-1.5	.2270	95.5	+.0412	+18.1
1895	44	104.8	+21	+47.7	59.70	100.0	-.82	-1.4	.2333	98.1	+.0349	+15.0
1896	42	100.0	+23	+54.8	59.62	99.9	-.74	-1.2	.2404	101.1	+.0278	+11.6
1897	41	97.6	+24	+53.5	59.68	100.0	-.80	-1.3	.2316	97.4	+.0366	+15.7
1898	49	116.7	+16	+32.7	59.61	99.8	-.73	-1.2	.2454	103.2	+.0228	+9.3
1899	48	114.3	+17	+35.4	59.65	99.9	-.77	-1.3	.2401	101.0	+.0231	+9.1
1900	68	161.9	-3	-4.4	59.66	97.9	-.78	-1.3	.2473	104.0	+.0209	+8.5
1901	65	154.8	.....	.....	59.63	99.9	-.75	-1.3	.2512	105.6	+.0170	+6.8
1902	57	135.7	+ 8	+ 14.0	59.70	100.0	-.82	-1.4	.2609	109.7	+.0073	+ 2.3
1903	65	154.8	.....	.....	58.88	98.6	.....	.....	.2682	112.6	.....	.....

BAKERY, BREAD.

BAKERS, FIRST HANDS, Male.

[Data from 163 establishments.]

Av. 1890-99.	182	100.0	+35	+19.2	65.73	100.0	-3.71	-5.6	\$0.2418	100.0	+ \$0.0390	+16.1
1890	173	95.1	+44	+25.4	66.18	100.7	-4.16	-6.3	.2397	99.1	+ .0411	+17.1
1891	172	94.5	+45	+26.2	66.25	100.8	-4.23	-6.4	.2402	99.3	+ .0406	+16.9
1892	176	96.7	+41	+23.3	66.24	100.8	-4.22	-6.4	.2408	99.6	+ .0400	+16.6
1893	177	97.3	+40	+22.6	66.16	100.7	-4.14	-6.3	.2440	100.9	+ .0368	+15.1
1894	181	99.5	+36	+19.9	65.81	100.1	-3.79	-5.8	.2372	98.1	+ .0436	+18.4
1895	183	100.5	+34	+18.6	65.68	99.9	-3.66	-5.6	.2388	98.8	+ .0420	+17.6
1896	185	101.6	+32	+17.3	65.66	99.9	-3.64	-5.5	.2395	99.0	+ .0413	+17.2
1897	186	102.2	+31	+16.7	65.66	99.7	-3.64	-5.4	.2414	99.8	+ .0394	+16.3
1898	191	104.9	+26	+13.6	65.22	99.2	-3.20	-4.9	.2447	101.2	+ .0361	+14.8
1899	196	107.7	+21	+10.7	64.55	98.2	-2.53	-3.9	.2516	104.0	+ .0293	+11.7
1900	197	108.2	+20	+10.2	63.61	96.8	-1.59	-2.5	.2591	107.2	+ .0217	+8.4
1901	208	114.3	+9	+4.3	63.24	96.2	-1.22	-1.9	.2650	109.6	+ .0158	+6.0
1902	214	117.6	+3	+1.4	62.94	95.8	-.92	-1.5	.2721	112.5	+ .0087	+3.2
1903	217	119.2			62.02	94.4			.2808	116.1		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BAKERY, BREAD—Concluded.

BAKERS, SECOND HANDS, Male.

[Data from 103 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	329	100.0	+ 95	+23.9	67.00	100.0	-4.08	-6.1	\$0.1846	100.0	+\$0.0332	+18.0
1890	305	92.7	+119	+39.0	66.84	99.8	-3.92	-5.9	.1823	98.8	+.0355	+19.5
1891	308	93.6	+116	+37.7	66.87	99.8	-3.95	-5.9	.1829	99.1	+.0349	+19.1
1892	309	93.9	+115	+37.2	67.00	100.0	-4.08	-6.1	.1839	99.6	+.0339	+18.4
1893	313	95.1	+111	+35.5	66.93	99.9	-4.01	-6.0	.1820	98.6	+.0358	+19.7
1894	322	97.9	+102	+31.7	66.55	99.3	-3.63	-5.5	.1823	98.8	+.0355	+19.5
1895	326	99.1	+ 98	+30.1	66.65	99.5	-3.73	-5.6	.1821	98.6	+.0357	+19.6
1896	333	101.2	+ 91	+27.3	66.62	99.4	-3.70	-5.6	.1842	99.8	+.0336	+18.2
1897	338	102.7	+ 86	+25.4	68.58	102.4	-5.66	-8.3	.1850	100.2	+.0328	+17.7
1898	361	109.7	+ 63	+17.5	68.21	101.8	-5.29	-7.8	.1913	103.6	+.0265	+13.9
1899	374	113.7	+ 50	+13.4	65.78	98.2	-2.86	-4.3	.1899	102.9	+.0279	+14.7
1900	391	118.8	+ 33	+ 8.4	64.79	96.7	-1.87	-2.9	.1966	106.5	+.0212	+10.8
1901	401	121.9	+ 29	+ 5.7	64.96	97.0	-2.04	-3.1	.2010	108.9	+.0168	+ 8.4
1902	445	135.3	- 21	- 4.7	64.56	96.4	-1.64	-2.5	.2101	113.8	+.0077	+ 3.7
1903	424	128.9	.....	.....	62.92	93.9	.....	.....	.2178	118.0	.....	.....

BAKERS, THIRD HANDS, Male.

[Data from 63 establishments.]

Av. 1890-99.	188	100.0	+109	+58.0	65.00	100.0	-5.33	-8.2	\$0.1592	100.0	+\$0.0497	+31.2
1890	176	93.6	+121	+68.8	65.26	100.4	-5.59	-8.6	.1585	99.6	+.0504	+31.8
1891	181	96.3	+116	+64.1	65.64	101.0	-5.97	-9.1	.1595	100.2	+.0494	+31.0
1892	182	96.8	+115	+63.2	65.95	101.5	-6.28	-9.5	.1593	100.1	+.0496	+31.1
1893	178	94.7	+119	+66.9	65.22	100.3	-5.55	-8.5	.1607	100.9	+.0482	+30.0
1894	134	97.9	+113	+61.4	65.56	100.9	-5.89	-9.0	.1567	98.4	+.0522	+33.3
1895	193	102.7	+104	+53.9	64.66	99.5	-4.99	-7.7	.1578	99.1	+.0511	+32.4
1896	196	104.3	+101	+51.5	64.58	99.4	-4.91	-7.6	.1586	99.6	+.0503	+31.7
1897	193	102.7	+104	+53.9	64.93	99.9	-5.26	-8.1	.1573	98.8	+.0516	+32.8
1898	196	104.3	+101	+51.5	64.77	99.6	-5.10	-7.9	.1592	100.0	+.0497	+31.2
1899	201	106.9	+ 96	+47.8	63.35	97.5	-3.71	-5.9	.1639	103.0	+.0450	+27.5
1900	214	113.8	+ 83	+38.8	62.80	96.6	-3.13	-5.0	.1760	110.6	+.0329	+18.7
1901	240	127.7	+ 57	+23.8	61.83	95.1	-2.16	-3.5	.1797	112.9	+.0292	+16.2
1902	260	138.3	+ 37	+14.2	61.51	94.6	-1.84	-3.0	.1915	120.3	+.0174	+ 9.1
1903	297	158.0	.....	.....	59.67	91.8	.....	.....	.2089	131.2	.....	.....

BAKERS, N. S., Male.

[Data from 20 establishments.]

Av. 1890-99.	477	100.0	+140	+29.1	63.23	100.0	-2.98	-4.7	\$0.2261	100.0	+\$0.0223	+ 9.9
1890	440	92.2	+176	+40.0	64.62	102.2	-4.37	-6.8	.2245	99.3	+.0239	+10.6
1891	450	94.3	+166	+36.9	63.92	101.1	-3.67	-5.7	.2267	100.3	+.0217	+ 9.6
1892	463	97.1	+153	+33.0	63.92	101.1	-3.67	-5.7	.2291	101.3	+.0193	+ 8.4
1893	464	97.3	+152	+32.8	63.80	100.9	-3.55	-5.6	.2309	102.1	+.0175	+ 7.6
1894	448	93.9	+168	+37.5	63.91	101.1	-3.66	-5.7	.2214	97.9	+.0270	+12.2
1895	471	98.7	+145	+30.8	63.50	100.4	-3.25	-5.1	.2211	97.8	+.0273	+12.3
1896	485	101.7	+131	+27.0	62.77	99.3	-2.52	-4.0	.2248	99.4	+.0236	+10.5
1897	492	103.1	+124	+25.2	62.39	98.7	-2.14	-3.4	.2262	100.0	+.0222	+ 9.8
1898	525	110.1	+ 91	+17.3	62.13	98.3	-1.93	-3.1	.2260	100.0	+.0224	+ 9.9
1899	531	111.3	+ 85	+16.0	61.27	96.9	-1.02	-1.7	.2307	102.0	+.0177	+ 7.7
1900	550	115.3	+ 66	+12.0	61.35	97.0	-1.10	-1.8	.2300	101.7	+.0184	+ 8.0
1901	574	120.3	+ 42	+ 7.3	61.00	96.5	-1.75	-1.2	.2334	103.2	+.0150	+ 6.4
1902	624	130.8	- 8	- 1.3	60.81	96.2	-1.56	-1.9	.2454	108.5	+.0030	+ 1.2
1903	616	129.1	.....	.....	60.25	95.3	.....	.....	.2484	109.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BLACKSMITHING AND HORSESHOEING.**BLACKSMITHS, Male.**

[Data from 59 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	142	100.0	+11	+ 7.7	59.24	100.0	-1.26	-2.1	\$0.2474	100.0	+\$0.0244	+ 9.7
1890	142	100.0	+11	+ 7.7	59.35	100.2	-1.37	-2.3	.2477	100.1	+.0241	+ 9.7
1891	146	102.8	+7	+ 4.8	59.34	100.2	-1.36	-2.3	.2481	100.3	+.0237	+ 9.6
1892	146	102.8	+7	+ 4.8	59.24	100.0	-1.26	-2.1	.2499	101.0	+.0219	+ 8.8
1893	147	103.5	+6	+ 4.1	59.20	99.9	-1.22	-2.1	.2491	100.7	+.0227	+ 9.1
1894	134	94.4	+19	+14.2	59.21	99.9	-1.23	-2.1	.2439	98.6	+.0279	+11.4
1895	135	95.1	+18	+13.3	59.23	100.0	-1.25	-2.1	.2490	98.2	+.0288	+11.9
1896	144	101.4	+9	+ 6.3	59.17	99.9	-1.19	-2.0	.2438	98.5	+.0280	+11.5
1897	138	97.2	+15	+10.9	59.22	100.0	-1.24	-2.1	.2472	99.9	+.0246	+10.0
1898	146	102.8	+7	+ 4.8	59.18	99.9	-1.20	-2.0	.2500	101.1	+.0218	+ 8.7
1899	145	102.1	+8	+ 5.5	59.23	100.1	-1.30	-2.2	.2511	101.5	+.0207	+ 8.2
1900	150	105.6	+3	+ 2.0	58.89	99.4	-.91	-1.5	.2537	102.5	+.0181	+ 7.1
1901	155	109.2	-2	- 1.3	58.88	99.3	-.85	-1.4	.2578	104.1	+.0142	+ 5.5
1902	153	107.7	.....	.....	58.21	98.3	-.23	-.4	.2663	107.6	+.0055	+ 2.1
1903	153	107.7	.....	.....	57.96	97.9	.....	.....	.2718	109.9	.....	.....

HORSESHOERS, FITTERS, Male.

[Data from 33 establishments.]

Av. 1890-99.	70	100.0	+5	+ 7.1	57.61	100.0	-1.54	-2.7	\$0.3035	100.0	+\$0.0200	+ 6.6
1890	68	97.1	+7	+10.3	58.81	102.1	-2.74	-4.7	.2944	97.0	+.0291	+ 9.9
1891	66	94.3	+9	+13.6	58.95	102.3	-2.88	-4.9	.2934	96.7	+.0301	+10.3
1892	70	100.0	+5	+ 7.1	58.94	102.1	-2.77	-4.7	.2956	97.4	+.0279	+ 9.4
1893	70	100.0	+5	+ 7.1	57.31	99.5	-1.24	-2.2	.3029	99.8	+.0206	+ 6.8
1894	72	102.9	+3	+ 4.2	57.14	99.2	-1.07	-1.9	.3040	100.2	+.0195	+ 6.4
1895	70	100.0	+5	+ 7.1	57.06	99.0	-.99	-1.7	.3041	100.2	+.0194	+ 6.4
1896	71	101.4	+4	+ 5.6	57.00	98.9	-.93	-1.6	.3083	101.6	+.0152	+ 4.9
1897	71	101.4	+4	+ 5.6	56.93	98.8	-.86	-1.5	.3115	102.6	+.0120	+ 3.9
1898	72	102.9	+3	+ 4.2	56.97	98.9	-.90	-1.6	.3114	102.6	+.0121	+ 3.9
1899	71	101.4	+4	+ 5.6	57.04	99.0	-.97	-1.7	.3089	101.8	+.0146	+ 4.7
1900	71	101.4	+4	+ 5.6	56.77	98.5	-.70	-1.2	.3129	103.1	+.0106	+ 3.4
1901	75	107.1	.....	.....	56.51	98.1	-.44	-.8	.3184	104.9	+.0051	+ 1.6
1902	71	101.4	+4	+ 5.6	56.37	97.8	-.30	-.5	.3161	104.2	+.0074	+ 2.3
1903	75	107.1	.....	.....	56.07	97.3	.....	.....	.3235	106.6	.....	.....

HORSESHOERS, FLOOR MEN, Male.

[Data from 109 establishments.]

Av. 1890-99.	264	100.0	.....	.....	57.97	100.0	-2.55	-4.4	\$0.2491	100.0	+\$0.0334	+13.4
1890	279	105.7	-15	-5.4	59.11	102.0	-3.69	-6.2	.2443	98.1	+.0331	+15.6
1891	269	101.9	-6	-1.9	59.10	101.9	-3.68	-6.2	.2430	97.6	+.0394	+16.2
1892	273	103.4	-9	-3.3	59.09	101.9	-3.67	-6.2	.2436	97.8	+.0388	+15.9
1893	267	101.1	-8	-1.1	58.43	100.8	-3.01	-5.2	.2452	98.4	+.0372	+15.2
1894	265	100.4	-1	-.4	57.58	99.3	-2.17	-3.8	.2519	101.1	+.0305	+12.1
1895	255	96.6	+9	+3.5	57.53	99.2	-2.11	-3.7	.2488	99.9	+.0336	+13.5
1896	253	97.7	+6	+2.3	57.45	99.2	-2.06	-3.6	.2504	100.5	+.0320	+12.8
1897	252	95.5	+12	+4.8	57.33	98.9	-1.91	-3.3	.2519	101.1	+.0305	+12.1
1898	261	98.9	+8	+1.1	57.13	98.6	-1.71	-3.0	.2549	102.3	+.0275	+10.8
1899	263	99.6	+1	+ .4	56.91	98.2	-1.49	-2.6	.2569	103.1	+.0255	+ 9.9
1900	268	101.5	-4	-1.5	56.61	97.7	-1.19	-2.1	.2612	104.9	+.0212	+ 8.1
1901	270	102.3	-6	-2.2	56.08	96.7	-.66	-1.2	.2655	106.6	+.0169	+ 6.4
1902	265	100.4	-1	-.4	55.68	96.0	-.26	-.5	.2686	107.8	+.0138	+ 5.1
1903	264	100.0	.....	.....	55.42	95.6	.....	.....	.2825	113.4	.....	.....

TABLE X.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BLACKSMITHING AND HORSESHOEING—Concluded.**HORSESHOERS, FORGEMEN, Male.**

[Data from 69 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	140	100.0	-5	-3.6	58.61	100.0	-3.00	-5.1	\$0.2858	100.0	+\$0.0423	+14.8
1890	144	102.9	-9	-6.2	59.35	101.8	-3.74	-6.3	.2814	98.6	+.0462	+16.4
1891	144	102.9	-9	-6.2	59.27	101.1	-3.66	-6.2	.2811	98.5	+.0465	+16.5
1892	143	102.1	-8	-5.6	59.27	101.1	-3.66	-6.2	.2811	98.5	+.0465	+16.5
1893	141	100.7	-6	-4.3	59.15	100.9	-3.54	-6.0	.2793	97.9	+.0483	+17.3
1894	139	99.8	-4	-2.9	58.63	100.0	-3.02	-5.2	.2806	98.3	+.0471	+16.3
1895	137	97.9	-2	-1.5	58.49	99.8	-2.68	-4.9	.2819	98.8	+.0457	+16.2
1896	138	98.6	-3	-2.2	58.41	99.7	-2.80	-4.8	.2856	100.1	+.0420	+14.7
1897	136	97.1	-1	-.7	58.20	99.3	-2.59	-4.5	.2886	101.2	+.0390	+13.5
1898	140	100.0	-5	-3.7	57.94	98.9	-2.33	-4.0	.2940	103.0	+.0336	+11.4
1899	139	99.8	-4	-2.9	57.35	97.9	-1.74	-3.0	.2991	104.8	+.0285	+9.5
1900	136	97.1	-1	-.7	56.82	96.9	-1.21	-2.1	.3078	107.9	+.0198	+6.4
1901	139	99.8	-4	-2.9	56.60	96.6	-.99	-1.7	.3133	109.8	+.0143	+4.6
1902	137	97.9	-2	-1.5	55.96	95.5	-.35	-.6	.3185	111.6	+.0091	+2.9
1903	135	96.4	.....	.....	55.61	94.9	.....	.....	.3276	114.8	.....	.....

HORSESHOERS, N. S., Male.

[Data from 62 establishments.]

Av. 1890-99.	122	100.0	- 2	-1.6	59.33	100.0	-2.12	-3.6	\$0.2541	100.0	+\$0.0412	+16.2
1890	126	108.3	- 6	-4.8	59.35	100.0	-2.14	-3.6	.2563	100.9	+.0390	+15.2
1891	125	102.5	- 5	-4.0	59.36	100.1	-2.15	-3.6	.2554	100.5	+.0399	+15.6
1892	127	104.1	- 7	-5.5	59.37	100.1	-2.16	-3.6	.2528	99.5	+.0425	+16.3
1893	122	100.0	- 2	-1.6	59.34	100.0	-2.13	-3.6	.2521	99.2	+.0432	+17.1
1894	118	96.7	+ 2	+1.7	59.32	100.0	-2.11	-3.6	.2475	97.4	+.0478	+19.3
1895	114	93.4	+ 6	+5.3	59.30	99.9	-2.09	-3.5	.2500	98.4	+.0453	+18.1
1896	115	94.3	+ 5	+4.3	59.30	99.9	-2.09	-3.5	.2515	99.0	+.0438	+17.4
1897	120	98.4	.....	.....	59.33	100.0	-2.12	-3.6	.2534	99.7	+.0419	+16.5
1898	123	100.8	- 3	-2.4	59.38	100.1	-2.17	-3.7	.2595	102.1	+.0358	+13.3
1899	127	104.1	- 7	-5.5	59.28	99.9	-2.07	-3.5	.2624	103.3	+.0329	+12.5
1900	130	106.6	-10	-7.7	58.92	99.3	-1.71	-2.9	.2640	103.9	+.0313	+11.9
1901	131	107.4	-11	-8.4	57.97	97.7	-.76	-1.3	.2734	107.6	+.0219	+8.0
1902	122	100.0	- 2	-1.6	57.82	97.5	-.61	-1.1	.2846	112.0	+.0107	+3.8
1903	120	98.4	.....	.....	57.21	96.4	.....	.....	.2953	116.2	.....	.....

BOOTS AND SHOES.**CLOSERS-ON, Female.**

[Data for employees from 15 establishments for entire period. Data for hours and wages from 15 establishments, 1890; 17 establishments, 1891, 1892; 18 establishments, 1893; 20 establishments, 1894; 24 establishments, 1895; 23 establishments, 1896; 26 establishments, 1897; 23 establishments, 1898; 32 establishments, 1899; 33 establishments, 1900, 1901; 34 establishments, 1902, 1903.]

Av. 1890-99.	71	100.0	+21	+29.6	57.23	100.0	-0.66	-1.2	\$0.1644	100.0	+\$0.0138	+ 8.4
1890	62	87.3	+30	+48.4	57.42	100.3	-.85	-1.5	.1491	90.7	+.0291	+19.5
1891	59	83.1	+33	+55.9	57.51	100.5	-.94	-1.6	.1592	96.8	+.0190	+11.9
1892	62	87.3	+30	+48.4	57.19	99.9	-.62	-1.1	.1616	98.3	+.0166	+10.3
1893	64	90.1	+28	+43.8	57.28	100.1	-.71	-1.2	.1650	100.4	+.0132	+ 8.0
1894	77	108.5	+15	+19.5	57.31	100.1	-.74	-1.3	.1704	103.6	+.0078	+ 4.6
1895	71	100.0	+21	+29.6	57.01	99.6	-.44	-.8	.1618	98.4	+.0164	+10.1
1896	79	111.3	+13	+16.5	57.04	99.7	-.47	-.8	.1699	103.3	+.0083	+ 4.9
1897	81	114.1	+11	+13.6	57.05	99.7	-.48	-.8	.1729	105.2	+.0053	+ 3.1
1898	76	107.0	+16	+21.1	57.45	100.4	-.88	-1.5	.1646	100.1	+.0136	+ 8.3
1899	83	116.9	+ 9	+10.8	57.03	99.7	-.46	-.8	.1692	102.9	+.0090	+ 5.3
1900	79	111.3	+13	+16.5	56.95	99.5	-.38	-.7	.1683	102.4	+.0099	+ 5.9
1901	83	116.9	+ 9	+10.8	56.83	99.3	-.26	-.5	.1734	105.5	+.0048	+ 2.8
1902	81	114.4	+11	+13.6	56.90	99.4	-.33	-.6	.1700	103.4	+.0082	+ 4.8
1903	92	129.6	.....	.....	56.57	98.8	.....	.....	.1782	108.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BOOTS AND SHOES—Continued.

CUTTERS, OUTSOLE, Male.

[Data for employees from 26 establishments for entire period. Data for hours and wages from 26 establishments, 1890; 27 establishments, 1891; 28 establishments, 1892; 29 establishments, 1893, 1894; 30 establishments, 1895, 1896; 31 establishments, 1897; 32 establishments, 1898, 1899; 33 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per-cent.			Num-ber.	Per-cent.			Amount.	Per-cent.
Av. 1890-99.	115	100.0	+46	+40.0	58.92	100.0	-1.06	-1.8	\$0.2204	100.0	+\$0.0132	+6.0
1890	102	88.7	+59	+57.8	59.03	100.2	-1.17	-2.0	.2247	102.0	+ .0089	+4.0
1891	109	94.8	+52	+47.7	59.95	101.7	-2.09	-3.6	.2194	99.5	+ .0142	+6.5
1892	112	97.4	+49	+43.8	59.04	100.2	-1.18	-2.0	.2184	99.1	+ .0152	+7.0
1893	113	98.3	+48	+42.5	58.79	99.8	-.93	-1.6	.2207	100.1	+ .0129	+5.8
1894	101	87.8	+60	+59.4	58.73	99.7	-.87	-1.5	.2134	96.8	+ .0202	+9.5
1895	108	93.9	+53	+49.1	58.77	99.8	-.91	-1.5	.2208	100.2	+ .0127	+5.7
1896	120	104.3	+41	+34.2	58.73	99.7	-.87	-1.5	.2178	98.8	+ .0158	+7.3
1897	135	117.4	+26	+19.3	58.71	99.6	-.85	-1.5	.2231	101.2	+ .0105	+4.7
1898	124	107.8	+37	+29.8	58.72	99.7	-.86	-1.5	.2235	101.4	+ .0101	+4.5
1899	130	113.0	+31	+23.8	58.74	99.7	-.88	-1.5	.2218	100.6	+ .0118	+5.3
1900	132	114.8	+29	+22.0	58.78	99.8	-.92	-1.6	.2252	102.2	+ .0084	+3.7
1901	140	121.7	+21	+15.0	58.70	99.6	-.84	-1.4	.2214	100.5	+ .0122	+5.5
1902	144	125.2	+17	+11.8	58.68	99.6	-.82	-1.4	.2282	103.5	+ .0054	+2.4
1903	161	140.0	.....	.....	57.86	98.2	.....	.....	.2336	106.0	.....	.....

CUTTERS, UPPER, Male.

[Data for employees from 22 establishments for entire period. Data for hours and wages from 22 establishments, 1890; 23 establishments, 1891; 25 establishments, 1892; 27 establishments, 1893; 28 establishments, 1894; 31 establishments, 1895, 1896; 32 establishments, 1897; 33 establishments, 1898; 37 establishments, 1899; 39 establishments, 1900-1903.]

Av. 1890-99.	433	100.0	+192	+44.8	58.99	100.0	-2.00	-3.4	\$0.2454	100.0	+\$0.0264	+10.8
1890	329	76.0	+296	+90.0	59.04	100.1	-2.05	-3.5	.2451	99.9	+ .0267	+10.9
1891	355	82.0	+270	+76.1	59.11	100.2	-2.12	-3.6	.2439	99.4	+ .0279	+11.4
1892	410	94.7	+215	+62.4	59.11	100.2	-2.12	-3.6	.2448	99.8	+ .0270	+11.0
1893	412	95.2	+213	+61.7	59.11	100.2	-2.12	-3.6	.2465	100.4	+ .0253	+10.3
1894	417	96.3	+208	+49.9	58.97	100.0	-1.98	-3.4	.2406	98.0	+ .0312	+13.0
1895	432	99.8	+193	+44.7	58.89	99.8	-1.90	-3.2	.2454	100.0	+ .0264	+10.8
1896	457	105.5	+168	+36.8	58.97	100.0	-1.98	-3.4	.2431	99.1	+ .0287	+11.8
1897	492	113.6	+133	+27.0	58.92	99.9	-1.93	-3.3	.2471	101.0	+ .0239	+9.6
1898	511	118.0	+114	+22.3	58.99	100.0	-2.06	-3.4	.2446	99.7	+ .0272	+11.1
1899	518	119.6	+107	+20.7	58.82	99.7	-1.83	-3.1	.2523	102.8	+ .0195	+7.7
1900	559	129.1	+66	+11.8	58.82	99.7	-1.63	-3.1	.2535	103.3	+ .0183	+7.2
1901	616	142.3	+9	+1.5	58.85	99.8	-1.86	-3.2	.2518	102.6	+ .0200	+7.9
1902	591	136.5	+34	+5.8	58.07	98.4	-1.08	-1.9	.2635	107.4	+ .0083	+3.1
1903	625	144.3	.....	.....	56.99	96.6	.....	.....	.2718	110.3	.....	.....

EDGE TRIMMERS, Male.

[Data for employees from 18 establishments for entire period. Data for hours and wages from 18 establishments, 1890; 20 establishments, 1891; 21 establishments, 1892; 23 establishments, 1893; 24 establishments, 1894; 27 establishments, 1895, 1896; 28 establishments, 1897; 30 establishments, 1898; 33 establishments, 1899; 34 establishments, 1900; 35 establishments, 1901-1903.]

Av. 1890-99.	89	100.0	+36	+40.4	56.95	100.0	-2.37	-4.2	\$0.3052	100.0	+\$0.0449	+14.7
1890	66	74.2	+59	+89.4	57.41	100.8	-2.83	-4.9	.2982	97.7	+ .0519	+17.4
1891	68	76.4	+57	+83.8	57.41	100.8	-2.83	-4.9	.2966	97.2	+ .0585	+18.0
1892	77	86.5	+48	+62.3	57.51	101.0	-2.93	-5.1	.3077	99.2	+ .0474	+15.7
1893	86	96.6	+39	+45.3	57.43	100.8	-2.85	-5.0	.3207	105.1	+ .0294	+9.2
1894	91	102.2	+34	+37.4	56.86	99.8	-2.28	-4.0	.3208	99.2	+ .0473	+15.6
1895	89	100.0	+36	+40.4	56.64	99.5	-2.06	-3.6	.3146	103.1	+ .0365	+11.3
1896	100	112.4	+25	+25.0	56.79	99.7	-2.21	-3.9	.3029	99.2	+ .0472	+15.6
1897	102	114.6	+23	+22.5	56.88	99.9	-2.30	-4.0	.3065	100.4	+ .0436	+14.2
1898	99	111.2	+26	+26.3	56.12	98.5	-1.54	-2.7	.3049	99.9	+ .0452	+14.8
1899	107	120.2	+18	+16.8	56.48	99.2	-1.90	-3.4	.3023	99.0	+ .0478	+15.8
1900	110	123.6	+15	+13.6	55.90	98.2	-1.32	-2.4	.3215	105.3	+ .0286	+8.9
1901	123	138.2	+2	+1.6	56.50	99.2	-1.92	-3.4	.3206	105.0	+ .0295	+9.2
1902	120	134.8	+5	+4.2	55.42	97.8	-.81	-1.5	.3359	110.1	+ .0142	+4.2
1903	125	140.4	.....	.....	54.58	95.8	.....	.....	.3501	114.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BOOTS AND SHOES—Continued.

GOODYEAR STITCHERS, Male.

[Data for employees from 10 establishments for entire period. Data for hours and wages from 10 establishments, 1890; 12 establishments, 1891; 13 establishments, 1892; 14 establishments, 1893; 15 establishments, 1894; 19 establishments, 1895, 1896; 21 establishments, 1897; 22 establishments, 1898; 23 establishments, 1899; 27 establishments, 1900, 1901; 29 establishments, 1902; 30 establishments, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	36	100.0	+22	+61.1	57.94	100.0	-3.24	-5.6	\$0.2939	100.0	+\$0.0905	+30.8
1890	33	91.7	+25	+75.8	58.67	101.3	-3.97	-6.8	.2605	88.6	+.1239	+47.6
1891	31	86.1	+27	+87.1	58.26	100.6	-3.56	-6.1	.2761	93.9	+.1083	+39.2
1892	31	86.1	+27	+87.1	58.25	100.5	-3.55	-6.1	.2585	96.5	+.1009	+35.6
1893	35	97.2	+23	+65.8	58.32	100.7	-3.62	-6.2	.2834	96.4	+.1010	+35.6
1894	33	91.7	+25	+75.8	57.67	99.6	-2.97	-5.1	.2926	99.6	+.0918	+31.4
1895	34	94.4	+24	+70.6	57.85	99.8	-3.15	-5.4	.2964	100.9	+.0880	+21.7
1896	38	105.6	+20	+52.6	57.69	99.6	-2.99	-5.2	.2899	98.6	+.0945	+32.6
1897	39	108.3	+19	+48.7	57.74	99.7	-3.04	-5.3	.3185	108.4	+.0659	+20.7
1898	39	108.3	+19	+48.7	57.65	99.5	-2.95	-5.1	.3134	106.6	+.0710	+22.7
1899	47	130.6	+11	+23.4	57.30	98.9	-2.60	-4.6	.3246	110.4	+.0598	+18.4
1900	54	150.0	+4	+7.4	57.23	98.8	-2.53	-4.4	.3397	115.6	+.0447	+13.2
1901	56	155.6	+2	+3.6	57.20	98.7	-2.50	-4.4	.3447	117.3	+.0397	+11.5
1902	57	158.3	+1	+1.8	55.08	95.1	-.38	-.7	.3572	121.5	+.0272	+7.6
1903	58	161.1	.....	.....	54.70	94.4	.....	.....	.3844	130.8	.....	.....

HEEL TRIMMERS, Male.

[Data for employees from 15 establishments for entire period. Data for hours and wages from 15 establishments, 1890; 17 establishments, 1891; 18 establishments, 1892; 20 establishments, 1893; 21 establishments, 1894; 25 establishments, 1895-1897; 26 establishments, 1898; 28 establishments, 1899, 29 establishments, 1900; 30 establishments, 1901-1903.]

Av. 1890-99.	35	100.0	-5	-14.3	57.31	100.0	-2.16	-3.8	\$0.3030	100.0	+\$0.0477	+15.7
1890	27	77.1	+3	+11.1	58.22	101.6	-3.07	-5.3	.2785	91.9	+.0722	+25.9
1891	30	85.7	.....	.....	57.71	100.7	-2.56	-4.4	.2750	90.8	+.0757	+27.5
1892	33	94.3	-3	-9.1	57.72	100.7	-2.57	-4.5	.2938	97.0	+.0569	+19.4
1893	35	100.0	-5	-14.3	57.54	100.4	-2.39	-4.2	.3173	104.7	+.0334	+10.5
1894	35	100.0	-5	-14.3	57.13	99.7	-1.98	-3.5	.3101	102.3	+.0406	+13.1
1895	38	108.6	-8	-21.1	56.96	99.4	-1.81	-3.2	.3123	103.6	+.0369	+11.8
1896	38	108.6	-8	-21.1	56.98	99.4	-1.83	-3.2	.3061	101.0	+.0446	+14.6
1897	39	111.4	-9	-23.1	56.93	99.3	-1.78	-3.1	.3101	102.3	+.0406	+13.1
1898	37	105.7	-7	-18.9	57.09	99.6	-1.94	-3.4	.3181	105.0	+.0326	+10.2
1899	34	97.1	-4	-11.8	56.80	99.1	-1.65	-2.9	.3075	101.5	+.0432	+14.0
1900	36	102.9	-6	-16.7	56.00	97.7	-.85	-1.5	.3174	104.8	+.0333	+10.5
1901	35	100.0	-5	-14.3	55.96	97.6	-.81	-1.4	.3198	105.5	+.0309	+9.7
1902	31	88.6	-1	-3.2	55.44	96.7	-.29	-.6	.3238	106.9	+.0269	+8.3
1903	30	85.7	.....	.....	55.15	96.2	.....	.....	.3507	115.7	.....	.....

LASTERS, MACHINE, Male.

[Data for employees from 10 establishments for entire period. Data for hours and wages from 10 establishments, 1890, 1891; 12 establishments, 1892; 14 establishments, 1893; 15 establishments, 1894; 16 establishments, 1895; 20 establishments, 1896; 23 establishments, 1897; 25 establishments, 1898; 30 establishments, 1899; 31 establishments, 1900; 32 establishments, 1901; 33 establishments, 1902, 1903.]

Av. 1890-99.	127	100.0	+62	+48.8	56.63	100.0	-1.26	-2.2	\$0.2329	100.0	+\$0.0468	+20.1
1890	76	59.8	+113	+148.7	56.34	99.5	-.97	-1.7	.2267	97.3	+.0530	+23.4
1891	86	67.7	+103	+119.8	56.74	100.2	-1.37	-2.4	.2284	98.1	+.0513	+22.5
1892	98	77.2	+91	+92.9	56.62	100.0	-1.25	-2.2	.2357	101.2	+.0440	+18.7
1893	110	86.6	+79	+45.4	56.50	99.8	-1.13	-2.0	.2336	96.1	+.0559	+25.0
1894	130	102.4	+59	+26.8	56.98	100.6	-1.61	-2.8	.2359	101.3	+.0438	+18.6
1895	149	117.3	+40	+13.1	56.92	100.5	-1.55	-2.7	.2332	101.1	+.0465	+19.9
1896	160	126.0	+29	+13.1	56.95	100.6	-1.56	-2.7	.2419	103.9	+.0378	+15.6
1897	163	128.0	+36	+23.6	56.62	100.0	-1.25	-2.2	.2273	97.6	+.0524	+23.1
1898	127	100.0	+62	+48.8	55.88	98.6	-.46	-.8	.2419	103.9	+.0378	+15.6
1899	176	138.6	+13	+7.4	56.78	100.3	-1.41	-2.5	.2343	100.6	+.0454	+19.4
1900	189	148.8	.....	.....	55.93	98.8	-.56	-1.0	.2398	103.0	+.0315	+16.6
1901	171	134.6	+18	+10.5	56.56	99.9	-1.18	-2.1	.2482	106.6	+.0315	+12.6
1902	161	126.8	+28	+17.4	55.77	98.5	-.40	-.7	.2665	114.4	+.0132	+5.0
1903	189	148.8	.....	.....	55.37	97.8	.....	.....	.2797	120.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BOOTS AND SHOES—Continued.

McKAY STITCHERS, Male.

[Data for employees from 14 establishments for entire period. Data for hours and wages from 14 establishments, 1890; 16 establishments, 1891; 17 establishments, 1892; 19 establishments, 1893; 20 establishments, 1894-1896; 21 establishments, 1897; 23 establishments, 1898; 24 establishments, 1899; 25 establishments, 1900; 26 establishments, 1901-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	45	100.0	- 6	-13.3	57.17	100.0	-1.97	-3.4	\$0.3042	100.0	+\$0.0108	+ 3.6
1890	35	77.8	+ 4	+11.4	58.11	101.6	-2.91	-5.0	.2889	95.0	+.0261	+ 9.0
1891	36	80.0	+ 3	+ 8.3	58.05	101.5	-2.85	-4.9	.2862	94.1	+.0288	+10.1
1892	47	104.4	- 8	-17.0	57.38	100.4	-2.18	-3.3	.3022	99.3	+.0128	+ 4.2
1893	47	104.4	- 8	-17.0	57.41	100.4	-2.21	-3.8	.3175	104.4	-.0025	- .8
1894	46	102.2	- 7	-15.2	57.05	99.8	-1.85	-3.2	.3061	100.6	+.0089	+ 2.9
1895	50	111.1	-11	-22.0	57.31	100.2	-2.11	-3.7	.3174	104.3	-.0024	- .8
1896	53	117.8	-14	-26.4	57.08	99.8	-1.88	-3.3	.3009	98.9	+.0141	+ 4.7
1897	47	104.4	- 8	-17.0	56.64	99.1	-1.44	-2.5	.3079	101.2	+.0071	+ 2.3
1898	46	102.2	- 7	-15.2	56.29	98.5	-1.09	-1.9	.3121	102.6	+.0029	+ .9
1899	45	100.0	- 6	-13.3	56.35	98.6	-1.15	-2.0	.3029	99.6	+.0121	+ 4.0
1900	44	97.8	- 5	-11.4	55.12	96.4	+ .08	+ 1.1	.3040	99.9	+.0110	+ 3.6
1901	48	106.7	- 9	-18.8	56.00	98.0	-.80	-1.4	.3015	99.1	+.0135	+ 4.5
1902	44	97.8	- 5	-11.4	55.31	96.7	-.11	-.2	.3062	100.7	+.0083	+ 2.9
1903	39	86.7	.....	.....	55.20	96.6	.....	.....	.3150	103.6	.....	.....

TREERS, Male.

[Data for employees from 13 establishments for entire period. Data for hours and wages from 13 establishments, 1890, 1891; 14 establishments, 1892; 15 establishments, 1893, 1894; 16 establishments, 1895, 1896; 17 establishments, 1897-1899; 19 establishments, 1900-1903.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.
Av. 1890-99.	137	100.0	- 8	57.52	100.0	-2.32	-4.0	\$0.2144	100.0
1890	88	64.2	+41	57.60	100.1	-2.40	-4.2	.2174	101.4
1891	114	83.2	+15	57.92	100.7	-2.72	-4.7	.2088	97.4
1892	108	78.8	+21	57.19	99.4	-1.99	-3.5	.2118	98.8
1893	148	108.0	-19	56.95	99.0	-1.75	-3.1	.2152	100.4
1894	141	102.9	-12	57.35	99.7	-2.15	-3.7	.2174	101.4
1895	147	107.8	-18	58.02	100.9	-2.82	-4.9	.2163	100.9
1896	167	121.9	-38	57.71	100.3	-2.51	-4.3	.2179	101.6
1897	157	114.6	-28	57.46	99.9	-2.26	-3.9	.2099	97.9
1898	155	113.1	-26	57.67	100.3	-2.47	-4.3	.2094	97.7
1899	141	102.9	-12	57.32	99.7	-2.12	-3.7	.2200	102.6
1900	144	105.1	-15	57.31	99.6	-2.11	-3.7	.2214	107.9
1901	149	108.8	-20	57.43	99.8	-2.23	-3.9	.2261	105.5
1902	125	91.2	+ 4	56.48	98.2	-1.28	-2.3	.2359	110.0
1903	129	94.2	.....	55.20	96.0	.....	.....	.2646	123.4

VAMPERS, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890; 2 establishments, 1891, 1892; 4 establishments, 1893; 5 establishments, 1894, 1895; 4 establishments, 1896; 5 establishments, 1897, 1898; 7 establishments, 1899, 1900; 9 establishments, 1901; 11 establishments, 1902; 10 establishments, 1903.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.
Av. 1890-99.	2	100.0	+1	56.36	100.0	-3.43	-6.1	\$0.2473	100.0
1890	1	50.0	+2	54.00	95.8	-1.07	-2.0	.2778	112.3
1891	1	50.0	+2	57.43	101.9	-4.50	-7.8	.2405	97.3
1892	1	50.0	+2	57.73	102.4	-4.80	-8.3	.2284	92.4
1893	2	100.0	+1	56.50	100.2	-3.57	-6.3	.2364	95.6
1894	2	100.0	+1	56.21	99.7	-3.28	-5.8	.2210	89.4
1895	2	100.0	+1	56.24	99.8	-3.31	-5.9	.2242	90.7
1896	2	100.0	+1	56.37	100.0	-3.44	-6.1	.2511	101.5
1897	2	100.0	+1	56.50	100.2	-3.57	-6.3	.2756	111.4
1898	3	150.0	.....	56.52	100.3	-3.59	-6.4	.2546	103.0
1899	3	150.0	.....	56.06	99.5	-3.13	-5.6	.2638	106.7
1900	3	150.0	.....	56.62	100.5	-3.69	-6.5	.2736	110.6
1901	3	150.0	.....	56.40	100.1	-3.47	-6.2	.2621	106.0
1902	3	150.0	.....	56.05	99.4	-3.12	-5.6	.2837	114.7
1903	3	150.0	.....	52.93	93.9	.....	.....	.3144	127.1

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BOOTS AND SHOES—Concluded.

VAMPERS, Female.

[Data for employees from 16 establishments for entire period. Data for hours and wages from 16 establishments, 1890; 18 establishments, 1891; 19 establishments, 1892; 20 establishments, 1893; 22 establishments, 1894; 26 establishments, 1895, 1896; 27 establishments, 1897; 29 establishments, 1898; 33 establishments, 1899; 34 establishments, 1900, 1901; 35 establishments, 1902; 33 establishments, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	116	100.0	+62	+53.4	57.28	100.0	-0.87	-1.5	\$0.1910	100.0	+\$0.0200	+10.5
1890	119	102.6	+59	+49.0	57.49	100.4	-1.08	-1.9	.1909	99.9	+.0201	+10.5
1891	106	91.4	+72	+67.1	57.42	100.2	-1.01	-1.8	.1789	93.7	+.0321	+17.9
1892	109	94.0	+69	+63.1	57.51	100.4	-1.10	-1.9	.1878	98.3	+.0232	+12.4
1893	107	92.2	+71	+66.1	57.33	100.1	-.92	-1.6	.1941	101.6	+.0169	+8.7
1894	110	94.8	+68	+61.8	57.24	99.9	-.88	-1.5	.1954	102.3	+.0156	+8.0
1895	119	102.6	+69	+49.0	57.25	99.9	-.84	-1.5	.1972	103.2	+.0138	+7.0
1896	118	101.7	+50	+60.8	57.07	99.6	-.66	-1.2	.1943	102.0	+.0162	+8.3
1897	122	105.2	+56	+45.9	57.02	99.5	-.61	-1.1	.1925	100.8	+.0185	+9.6
1898	120	103.4	+58	+48.3	57.31	100.1	-.90	-1.6	.1898	99.4	+.0212	+11.2
1899	132	113.8	+46	+34.8	57.17	99.8	-.76	-1.3	.1881	98.5	+.0229	+12.2
1900	141	121.6	+37	+26.2	57.11	99.7	-.70	-1.2	.1968	103.0	+.0142	+7.2
1901	151	130.2	+27	+17.9	57.06	99.6	-.65	-1.1	.1984	103.9	+.0126	+6.4
1902	163	140.5	+15	+9.2	56.82	99.2	-.41	-.7	.1996	104.5	+.0114	+5.7
1903	178	153.4	.....	.....	56.41	98.5	.....	.....	.2110	110.5	.....	.....

BOOTS AND SHOES, RUBBER.

BOOTMAKERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	30	100.0	+3	+10.0	60.00	100.0	.....	.....	\$0.2897	100.0	+\$0.0683	+23.6
1890	32	106.7	+1	+3.1	60.00	100.0	.....	.....	.3053	105.4	+.0527	+17.8
1891	30	100.0	+3	+10.0	60.00	100.0	.....	.....	.2940	101.5	+.0640	+21.8
1892	31	103.3	+2	+6.5	60.00	100.0	.....	.....	.3056	105.5	+.0524	+17.1
1893	34	113.3	-1	-2.9	60.00	100.0	.....	.....	.2976	102.7	+.0604	+20.8
1894	31	103.3	+2	+6.5	60.00	100.0	.....	.....	.2938	101.4	+.0642	+21.9
1895	31	103.3	+2	+6.5	60.00	100.0	.....	.....	.2940	101.5	+.0640	+21.8
1896	25	83.3	+8	+82.0	60.00	100.0	.....	.....	.2631	90.8	+.0949	+36.1
1897	31	103.3	+2	+6.5	60.00	100.0	.....	.....	.3186	110.0	+.0394	+12.4
1898	29	96.7	+4	+13.8	60.00	100.0	.....	.....	.2856	98.6	+.0725	+25.4
1899	29	96.7	+4	+13.8	60.00	100.0	.....	.....	.2397	82.7	+.1183	+49.4
1900	29	96.7	+4	+13.8	60.00	100.0	.....	.....	.2849	98.3	+.0731	+25.7
1901	25	83.3	+8	+82.0	60.00	100.0	.....	.....	.2963	102.3	+.0617	+20.8
1902	23	76.7	+10	+43.5	60.00	100.0	.....	.....	.3186	110.0	+.0394	+12.4
1903	33	110.0	.....	.....	60.00	100.0	.....	.....	.3580	123.6	.....	.....

CEMENTERS, Female.

[Data from 1 establishment.]

Av. 1890-99.	21	100.0	+14	+66.7	60.00	100.0	.....	.....	\$0.1394	100.0	-\$0.0052	-3.7
1890	8	38.1	+27	+337.5	60.00	100.0	.....	.....	.1405	100.8	-.0063	-4.5
1891	14	66.7	+21	+150.0	60.00	100.0	.....	.....	.1482	106.3	-.0140	-9.4
1892	18	85.7	+17	+94.4	60.00	100.0	.....	.....	.1662	119.2	-.0320	-19.3
1893	18	85.7	+17	+94.4	60.00	100.0	.....	.....	.1192	85.5	+.0150	+12.6
1894	22	104.8	+13	+59.1	60.00	100.0	.....	.....	.1354	97.1	-.0012	-.9
1895	23	109.5	+12	+52.2	60.00	100.0	.....	.....	.1385	99.4	-.0043	-3.1
1896	15	71.4	+20	+133.3	60.00	100.0	.....	.....	.1071	76.8	+.0271	+25.3
1897	28	133.3	+7	+25.0	60.00	100.0	.....	.....	.1403	100.6	-.0061	-4.3
1898	28	133.3	+7	+25.0	60.00	100.0	.....	.....	.1555	110.1	-.0193	-12.6
1899	38	181.0	-3	-7.9	60.00	100.0	.....	.....	.1455	104.4	-.0113	-7.8
1900	21	100.0	+14	+66.7	60.00	100.0	.....	.....	.1110	79.6	+.0232	+20.9
1901	33	157.1	+2	+6.1	60.00	100.0	.....	.....	.1284	92.1	+.0058	+4.5
1902	36	171.4	-1	-2.8	60.00	100.0	.....	.....	.1600	114.8	-.0258	-16.1
1903	35	166.7	.....	.....	60.00	100.0	.....	.....	.1342	96.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BOOTS AND SHOES, RUBBER—Continued.

CUTTERS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	31	100.0	+	+12.9	59.52	100.0	+0.08	+0.1	\$0.2771	100.0	\$0.0256	+ 9.2
1890	30	96.8	+	+16.7	59.53	100.0	+ .07	+ .1	.2702	97.5	+.0325	+12.0
1891	30	96.8	+	+16.7	59.53	100.0	+ .07	+ .1	.2686	96.9	+.0341	+12.7
1892	30	96.8	+	+16.7	59.50	100.0	+ .10	+ .2	.2633	95.0	+.0394	+15.0
1893	30	96.8	+	+16.7	59.50	100.0	+ .10	+ .2	.2713	97.9	+.0314	+11.6
1894	30	96.8	+	+16.7	59.50	100.0	+ .10	+ .2	.2734	98.7	+.0293	+10.7
1895	31	100.0	+	+12.9	59.52	100.0	+ .08	+ .1	.2837	104.2	+.0140	+ 4.3
1896	30	96.8	+	+16.7	59.50	100.0	+ .10	+ .2	.2641	95.3	+.0386	+14.6
1897	29	93.5	+	+20.7	59.52	100.0	+ .08	+ .1	.2915	105.2	+.0112	+ 3.3
1898	33	106.5	+	+2	59.55	100.1	+ .05	+ .1	.2712	97.9	+.0315	+11.6
1899	33	106.5	+	+2	59.55	100.1	+ .05	+ .1	.3083	111.3	-.0056	- 1.3
1900	34	109.7	+	+2.9	59.56	100.1	+ .04	+ .1	.2869	103.6	+.0153	+ 5.5
1901	32	103.2	+	+3	59.59	100.1	+ .01	+ .02	.3074	110.9	-.0047	- 1.5
1902	34	109.7	+	+2.9	59.53	100.0	+ .07	+ .1	.2533	102.2	+.0194	+ 6.3
1903	35	112.9	.....	.....	59.60	100.1	.....	.....	.3027	109.2	.....	.....

GRINDERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	31	100.0	+	+2	+ 6.5	59.00	100.0	.....	.....	\$0.1525	100.0	.....	.....
1890	25	80.6	+	+3	+32.0	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1891	30	96.6	+	+3	+10.0	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1892	33	106.5	.....	.....	.....	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1893	28	90.3	+	+5	+17.9	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1894	35	112.9	-	-2	- 5.7	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1895	30	96.8	+	+3	+10.0	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1896	30	96.8	+	+3	+10.0	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1897	33	106.5	.....	.....	.....	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1898	34	109.7	-	-1	- 2.9	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1899	30	96.8	+	+3	+10.0	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1900	35	112.9	-	-2	- 5.7	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1901	33	106.5	.....	.....	.....	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1902	30	96.8	+	+3	+10.0	59.00	100.0	.....	.....	.1525	100.0	.....	.....
1903	33	106.5	.....	.....	.....	59.00	100.0	.....	.....	.1525	100.0	.....	.....

MIXERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	14	100.0	+	+1	+ 7.1	59.07	100.0	.....	.....	\$0.1611	100.0	+.0031	+1.9
1890	15	107.1	.....	.....	.....	59.07	100.0	.....	.....	.1600	99.3	+.0042	+2.6
1891	13	92.9	+	+2	+15.4	59.08	100.0	-0.01	-0.02	.1602	99.4	+.0040	+2.5
1892	16	114.3	-	-1	- 6.3	59.06	100.0	+ .01	+ .02	.1603	99.5	+.0039	+2.4
1893	16	114.3	-	-1	- 6.3	59.06	100.0	+ .01	+ .02	.1595	99.0	+.0047	+2.9
1894	13	92.9	+	+2	+15.4	59.08	100.0	- .01	- .02	.1602	99.4	+.0040	+2.5
1895	13	92.9	+	+2	+15.4	59.08	100.0	- .01	- .02	.1609	99.9	+.0033	+2.1
1896	14	100.0	+	+1	+ 7.1	59.07	100.0	.....	.....	.1613	100.1	+.0029	+1.3
1897	12	85.7	+	+3	+25.0	59.08	100.0	- .01	- .02	.1616	100.3	+.0026	+1.6
1898	15	107.1	.....	.....	.....	59.07	100.0	.....	.....	.1633	101.4	+.0009	+ .6
1899	15	107.1	.....	.....	.....	59.07	100.0	.....	.....	.1633	101.4	+.0009	+ .6
1900	15	107.1	.....	.....	.....	59.07	100.0	.....	.....	.1642	101.9	.....	.....
1901	15	107.1	.....	.....	.....	59.07	100.0	.....	.....	.1633	101.4	+.0009	+ .6
1902	16	114.3	-	-1	- 6.3	59.06	100.0	+ .01	+ .02	.1627	101.0	+.0015	+ .9
1903	15	107.1	.....	.....	.....	59.07	100.0	.....	.....	.1642	101.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BOOTS AND SHOES, RUBBER—Concluded.**SHOEMAKERS, Female.**

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	120	100.0	+65	+54.2	60.00	100.0	.....	.....	\$0.1245	100.0	+\$0.0089	+7.1
1890	121	100.8	+64	+52.9	60.00	100.0	.....	.....	.1231	98.9	+.0108	+8.4
1891	109	90.8	+76	+69.7	60.00	100.0	.....	.....	.1221	98.1	+.0113	+9.8
1892	111	92.5	+74	+66.7	60.00	100.0	.....	.....	.1242	99.8	+.0092	+7.4
1893	132	110.0	+53	+40.2	60.00	100.0	.....	.....	.1258	101.0	+.0076	+6.0
1894	120	100.0	+65	+54.2	60.00	100.0	.....	.....	.1198	96.2	+.0136	+11.4
1895	130	108.3	+55	+42.3	60.00	100.0	.....	.....	.1283	103.1	+.0051	+4.0
1896	93	77.5	+92	+98.9	60.00	100.0	.....	.....	.1260	101.2	+.0074	+5.9
1897	130	108.3	+55	+42.3	60.00	100.0	.....	.....	.1252	100.6	+.0082	+6.5
1898	142	118.3	+43	+30.3	60.00	100.0	.....	.....	.1277	102.6	+.0057	+4.5
1899	114	95.0	+71	+62.3	60.00	100.0	.....	.....	.1231	98.9	+.0103	+8.4
1900	179	149.2	+6	+3.4	60.00	100.0	.....	.....	.1261	101.8	+.0073	+5.8
1901	164	136.7	+21	+12.8	60.00	100.0	.....	.....	.1207	96.9	+.0127	+10.5
1902	181	150.8	+4	+2.2	60.00	100.0	.....	.....	.1244	99.9	+.0090	+7.2
1903	185	154.2	.....	.....	60.00	100.0	.....	.....	.1334	107.1	.....	.....

BOXES, PAPER.**BOX MAKERS, MACHINE, Male.**

[Data from 1 establishment.]

Av. 1890-99.	13	100.0	+3	+23.1	60.00	100.0	.....	.....	\$0.0781	100.0	+\$0.0248	+33.9
1890	10	76.9	+6	+60.0	60.00	100.0	.....	.....	.0750	102.6	+.0229	+30.5
1891	10	76.9	+6	+60.0	60.00	100.0	.....	.....	.0717	98.1	+.0262	+36.5
1892	11	84.6	+5	+45.5	60.00	100.0	.....	.....	.0712	97.4	+.0267	+37.5
1893	12	92.3	+4	+33.3	60.00	100.0	.....	.....	.0736	100.7	+.0243	+33.0
1894	13	100.0	+3	+23.1	60.00	100.0	.....	.....	.0750	102.6	+.0229	+30.5
1895	13	100.0	+3	+23.1	60.00	100.0	.....	.....	.0750	102.6	+.0229	+30.5
1896	14	107.7	+2	+14.3	60.00	100.0	.....	.....	.0750	102.6	+.0229	+30.5
1897	16	123.1	.....	.....	60.00	100.0	.....	.....	.0688	94.1	+.0291	+42.3
1898	16	123.1	.....	.....	60.00	100.0	.....	.....	.0688	94.1	+.0291	+42.3
1899	16	123.1	.....	.....	60.00	100.0	.....	.....	.0771	105.5	+.0208	+27.0
1900	18	138.5	-2	-11.1	60.00	100.0	.....	.....	.0843	115.3	+.0136	+16.1
1901	17	130.8	-1	-5.9	60.00	100.0	.....	.....	.0853	116.7	+.0126	+14.8
1902	16	123.1	.....	.....	60.00	100.0	.....	.....	.0958	131.1	+.0021	+2.2
1903	16	123.1	.....	.....	60.00	100.0	.....	.....	.0979	133.9	.....	.....

CLAMPERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	2	100.0	.....	.....	59.00	100.0	.....	.....	\$0.2034	100.0	.....	.....
1890	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1891	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1892	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1893	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1894	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1895	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1896	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1897	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1898	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1899	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1900	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1901	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1902	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....
1903	2	100.0	.....	.....	59.00	100.0	.....	.....	.2034	100.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

BOXES, PAPER—Continued.

CLAMPERS, Female.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	2	100.0			59.00	100.0			\$0.1356	100.0		
1890	1	50.0	+1	+100.0	59.00	100.0			.1356	100.0		
1891	1	50.0	+1	+100.0	59.00	100.0			.1356	100.0		
1892	1	50.0	+1	+100.0	59.00	100.0			.1356	100.0		
1893	2	100.0			59.00	100.0			.1356	100.0		
1894	2	100.0			59.00	100.0			.1356	100.0		
1895	1	50.0	+1	+100.0	59.00	100.0			.1356	100.0		
1896	2	100.0			59.00	100.0			.1356	100.0		
1897	1	50.0	+1	+100.0	59.00	100.0			.1356	100.0		
1898	2	100.0			59.00	100.0			.1356	100.0		
1899	2	100.0			59.00	100.0			.1356	100.0		
1900	2	100.0			59.00	100.0			.1356	100.0		
1901	2	100.0			59.00	100.0			.1356	100.0		
1902	2	100.0			59.00	100.0			.1356	100.0		
1903	2	100.0			59.00	100.0			.1356	100.0		

CORNER CUTTERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	7	100.0	+2	+28.6	59.40	100.0	-2.62	-4.4	\$0.1650	100.0	+\$0.0180	+10.8
1890	5	71.4	+4	+80.0	59.40	100.0	-2.62	-4.4	.1649	99.9	+.0191	+11.6
1891	5	71.4	+4	+80.0	59.40	100.0	-2.62	-4.4	.1683	102.0	+.0157	+9.3
1892	6	85.7	+3	+60.0	59.33	99.9	-2.55	-4.3	.1769	107.2	+.0071	+4.0
1893	6	85.7	+3	+60.0	59.33	99.9	-2.55	-4.3	.1769	107.2	+.0071	+4.0
1894	6	85.7	+3	+60.0	59.50	100.2	-2.72	-4.6	.1626	98.5	+.0214	+13.2
1895	7	100.0	+2	+28.6	59.43	100.1	-2.65	-4.5	.1684	102.1	+.0156	+9.3
1896	7	100.0	+2	+28.6	59.43	100.1	-2.65	-4.5	.1650	100.0	+.0180	+10.8
1897	8	114.3	+1	+12.5	59.38	100.0	-2.60	-4.4	.1497	90.7	+.0343	+22.9
1898	7	100.0	+2	+28.6	59.43	100.1	-2.65	-4.5	.1492	90.4	+.0343	+23.3
1899	8	114.3	+1	+12.5	59.38	100.0	-2.60	-4.4	.1635	102.1	+.0155	+9.2
1900	9	128.6			59.44	100.1	-2.66	-4.5	.1571	95.2	+.0269	+17.1
1901	9	128.6			59.44	100.1	-2.66	-4.5	.1739	105.4	+.0101	+5.8
1902	9	128.6			59.44	100.1	-2.66	-4.5	.1664	100.8	+.0176	+10.6
1903	9	128.6			56.78	95.6			.1840	111.5		

CORNER STAYERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	2	100.0	+1	+50.0	59.00	100.0			\$0.1238	100.0	+\$0.0005	+0.4
1890	2	100.0	+1	+50.0	59.00	100.0			.1187	95.9	+.0056	+4.7
1891	2	100.0	+1	+50.0	59.00	100.0			.1187	95.9	+.0056	+4.7
1892	2	100.0	+1	+50.0	59.00	100.0			.1271	102.7	+.0028	+2.2
1893	1	50.0	+2	+200.0	59.00	100.0			.1356	109.5	+.0113	+8.3
1894	2	100.0	+1	+50.0	59.00	100.0			.1187	95.9	+.0056	+4.7
1895	1	50.0	+2	+200.0	59.00	100.0			.1017	82.1	+.0226	+22.2
1896	2	100.0	+1	+50.0	59.00	100.0			.1102	89.0	+.0141	+12.8
1897	2	100.0	+1	+50.0	59.00	100.0			.1356	109.5	+.0113	+8.3
1898	1	50.0	+2	+200.0	59.00	100.0			.1356	109.5	+.0113	+8.3
1899	2	100.0	+1	+50.0	59.00	100.0			.1356	109.5	+.0113	+8.3
1900	1	50.0	+2	+200.0	59.00	100.0			.1525	123.2	+.0282	+18.5
1901	1	50.0	+2	+200.0	59.00	100.0			.1525	123.2	+.0282	+18.5
1902	3	150.0			59.00	100.0			.1356	109.5	+.0113	+8.3
1903	3	150.0			59.00	100.0			.1243	100.4		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

BOXES, PAPER—Continued.

FINISHERS, Female.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (−) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (−) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (−) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount	Per cent.
Av. 1890-99.	71	100.0	—15	—21.1	59.65	100.0	—0.56	—0.9	\$0.0775	100.0	+\$0.0224	+28.9
1890	77	108.5	—21	—27.3	59.69	100.1	— .60	—1.0	.0766	98.8	+ .0233	+30.4
1891	78	109.9	—22	—28.2	59.64	100.0	— .55	— .9	.0781	100.8	+ .0218	+27.9
1892	76	107.0	—20	—26.3	59.72	100.1	— .63	—1.1	.0774	99.9	+ .0225	+29.1
1893	71	100.0	—15	—21.1	59.63	100.0	— .54	— .9	.0779	100.5	+ .0220	+28.2
1894	71	100.0	—15	—21.1	59.68	100.1	— .59	—1.0	.0770	99.4	+ .0229	+29.7
1895	70	98.6	—14	—20.0	59.69	100.1	— .60	—1.0	.0754	97.3	+ .0245	+32.5
1896	71	100.0	—15	—21.1	59.68	100.1	— .59	—1.0	.0754	97.3	+ .0245	+32.5
1897	72	101.4	—16	—22.2	59.63	100.0	— .54	— .9	.0762	98.3	+ .0237	+31.1
1898	73	102.8	—17	—23.3	59.59	99.9	— .50	— .8	.0765	98.7	+ .0234	+30.6
1899	46	64.8	+10	+21.7	59.50	99.7	— .41	— .7	.0848	109.4	+ .0151	+17.8
1900	45	63.4	+11	+24.4	59.56	99.8	— .47	— .8	.0871	112.4	+ .0128	+14.7
1901	45	63.4	+11	+24.4	59.51	99.8	— .42	— .7	.0942	121.5	+ .0057	+ 6.1
1902	61	85.9	— 5	— 8.2	59.41	99.6	— .32	— .5	.0928	119.7	+ .0071	+ 7.7
1903	56	78.9	.....	.....	59.09	99.1	.....	.....	.0999	128.9	.....	.....

GLUERS, Female.

[Data from 1 establishment.]

Av. 1890-99.	2	100.0	.....	.....	59.00	100.0	.....	.....	\$0.1487	100.0	+\$0.0012	+ 0.8
1890	2	100.0	.....	.....	59.00	100.0	.....	.....	.1568	105.4	+ .0069	+ 4.4
1891	2	100.0	.....	.....	59.00	100.0	.....	.....	.1573	105.8	+ .0074	+ 4.7
1892	2	100.0	.....	.....	59.00	100.0	.....	.....	.1584	106.5	+ .0085	+ 5.4
1893	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.1624	109.2	+ .0125	+ 7.7
1894	2	100.0	.....	.....	59.00	100.0	.....	.....	.1420	95.5	+ .0079	+ 5.6
1895	2	100.0	.....	.....	59.00	100.0	.....	.....	.1589	106.9	+ .0090	+ 5.7
1896	2	100.0	.....	.....	59.00	100.0	.....	.....	.1438	96.7	+ .0061	+ 4.2
1897	2	100.0	.....	.....	59.00	100.0	.....	.....	.1399	94.1	+ .0100	+ 7.1
1898	2	100.0	.....	.....	59.00	100.0	.....	.....	.1376	92.5	+ .0123	+ 8.9
1899	2	100.0	.....	.....	59.00	100.0	.....	.....	.1302	87.6	+ .0197	+15.1
1900	2	100.0	.....	.....	59.00	100.0	.....	.....	.1446	97.2	+ .0053	+ 3.7
1901	2	100.0	.....	.....	59.00	100.0	.....	.....	.1473	99.1	+ .0026	+ 1.8
1902	2	100.0	.....	.....	59.00	100.0	.....	.....	.1427	96.0	+ .0072	+ 5.0
1903	2	100.0	.....	.....	59.00	100.0	.....	.....	.1499	100.8	.....	.....

JOINERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	7	100.0	+3	+ 42.9	59.15	100.0	—0.65	—0.1	\$0.1678	100.0	+\$0.0131	+ 7.8
1890	5	71.4	+5	+100.0	59.20	100.1	— .70	—1.2	.1551	92.4	+ .0258	+16.6
1891	6	85.7	+4	+ 66.7	59.17	100.0	— .67	—1.1	.1688	100.6	+ .0121	+ 7.2
1892	6	85.7	+4	+ 66.7	59.17	100.0	— .67	—1.1	.1632	97.3	+ .0177	+10.8
1893	7	100.0	+3	+ 42.9	59.14	100.0	— .64	—1.1	.1665	99.2	+ .0144	+ 8.6
1894	7	100.0	+3	+ 42.9	59.14	100.0	— .64	—1.1	.1714	102.1	+ .0095	+ 5.5
1895	7	100.0	+3	+ 42.9	59.14	100.0	— .64	—1.1	.1641	97.8	+ .0168	+10.2
1896	8	114.3	+2	+ 25.0	59.13	100.0	— .63	—1.1	.1627	97.0	+ .0182	+11.2
1897	8	114.3	+2	+ 25.0	59.13	100.0	— .63	—1.1	.1690	100.7	+ .0119	+ 7.0
1898	8	114.3	+2	+ 25.0	59.13	100.0	— .63	—1.1	.1712	102.0	+ .0097	+ 5.7
1899	8	114.3	+2	+ 25.0	59.13	100.0	— .63	—1.1	.1859	110.8	+ .0050	+ 2.7
1900	7	100.0	+3	+ 42.9	59.14	100.0	— .64	—1.1	.1641	97.8	+ .0168	+10.2
1901	10	142.9	.....	.....	59.10	99.9	— .60	—1.0	.1555	92.7	+ .0254	+16.3
1902	10	142.9	.....	.....	59.10	99.9	— .60	—1.0	.1751	104.4	+ .0058	+ 3.3
1903	10	142.9	.....	.....	58.50	98.9	.....	.....	.1809	107.8	.....	.....

TABLE II.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BOXES, PAPER—Continued.

LIMERS, MACHINE, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	2	100.0	.....	.....	59.00	100.0	.....	.....	\$0.1318	100.0	+\$0.0043	+ 3.3
1890	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.1186	90.3	+ .0170	+14.3
1891	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.1356	103.3	.....	.....
1892	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.1525	116.1	- .0169	-11.1
1893	2	100.0	.....	.....	59.00	100.0	.....	.....	.1271	96.8	+ .0085	+ 6.7
1894	2	100.0	.....	.....	59.00	100.0	.....	.....	.1271	96.8	+ .0085	+ 6.7
1895	2	100.0	.....	.....	59.00	100.0	.....	.....	.1356	103.3	.....	.....
1896	2	100.0	.....	.....	59.00	100.0	.....	.....	.1356	103.3	.....	.....
1897	2	100.0	.....	.....	59.00	100.0	.....	.....	.1271	96.8	+ .0085	+ 6.7
1898	2	100.0	.....	.....	59.00	100.0	.....	.....	.1271	96.8	+ .0085	+ 6.7
1899	2	100.0	.....	.....	59.00	100.0	.....	.....	.1271	96.8	+ .0085	+ 6.7
1900	2	100.0	.....	.....	59.00	100.0	.....	.....	.1271	96.8	+ .0085	+ 6.7
1901	2	100.0	.....	.....	59.00	100.0	.....	.....	.1271	96.8	+ .0085	+ 6.7
1902	2	100.0	.....	.....	59.00	100.0	.....	.....	.1356	103.3	.....	.....
1903	2	100.0	.....	.....	59.00	100.0	.....	.....	.1856	103.3	.....	.....

PAPER CUTTERS, Male.

[Data from 5 establishments.]

Av. 1890-99.	13	100.0	.....	.....	56.20	100.0	-0.51	-0.9	\$0.2727	100.0	-\$0.0172	-6.3
1890	14	107.7	-1	- 7.1	56.79	101.0	-1.10	-1.9	.2616	95.9	- .0061	-2.3
1891	14	107.7	-1	- 7.1	56.79	101.0	-1.10	-1.9	.2616	95.9	- .0061	-2.3
1892	12	92.3	+1	+ 8.3	55.92	99.5	-.23	-.4	.2724	99.9	- .0169	-6.2
1893	12	92.3	+1	+ 8.3	56.00	99.6	-.31	-.6	.2808	103.0	- .0253	-9.0
1894	13	100.0	.....	.....	55.85	99.4	-.16	-.3	.2748	100.8	- .0193	-7.0
1895	13	100.0	.....	.....	56.23	100.1	-.54	-1.0	.2690	95.6	- .0135	-5.0
1896	13	100.0	.....	.....	56.23	100.1	-.54	-1.0	.2727	100.0	- .0172	-6.3
1897	12	92.3	+1	+ 8.3	56.00	99.6	-.31	-.6	.2711	99.4	- .0156	-5.8
1898	11	84.6	+2	+18.2	56.18	100.0	-.49	-.9	.2821	103.4	- .0266	-9.4
1899	12	92.3	+1	+ 8.3	56.00	99.6	-.31	-.6	.2804	102.8	- .0249	-8.9
1900	11	84.6	+2	+18.2	56.18	100.0	-.49	-.9	.2791	102.3	- .0236	-8.5
1901	12	92.3	+1	+ 8.3	56.42	100.4	-.73	-1.3	.2678	98.2	- .0123	-4.6
1902	12	92.3	+1	+ 8.3	56.42	100.4	-.73	-1.3	.2706	99.2	- .0151	-5.6
1903	13	100.0	.....	.....	55.69	99.1	.....	.....	.2555	93.7	.....	.....

SCORERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	11	100.0	+4	+ 36.4	59.43	100.0	-2.76	-4.6	\$0.2390	100.0	+\$0.0209	+ 8.7
1890	7	63.6	+8	+114.3	59.43	100.0	-2.76	-4.6	.2571	107.6	+ .0028	+ 1.1
1891	9	81.8	+6	+ 66.7	59.44	100.0	-2.77	-4.7	.2429	101.6	+ .0170	+ 7.0
1892	10	90.9	+5	+ 50.0	59.50	100.1	-2.83	-4.8	.2320	97.1	+ .0279	+12.0
1893	10	90.9	+5	+ 50.0	59.50	100.1	-2.83	-4.8	.2370	99.2	+ .0229	+ 9.7
1894	12	109.1	+3	+ 25.0	59.42	100.0	-2.75	-4.6	.2370	99.2	+ .0229	+ 9.7
1895	12	109.1	+3	+ 25.0	59.42	100.0	-2.75	-4.6	.2357	98.6	+ .0242	+10.3
1896	12	109.1	+3	+ 25.0	59.42	100.0	-2.75	-4.6	.2384	99.7	+ .0215	+ 9.0
1897	12	109.1	+3	+ 25.0	59.42	100.0	-2.75	-4.6	.2386	99.8	+ .0213	+ 8.9
1898	10	90.9	+5	+ 50.0	59.40	99.9	-2.73	-4.6	.2374	99.3	+ .0225	+ 9.5
1899	11	100.0	+4	+ 36.4	59.36	99.9	-2.69	-4.5	.2343	98.0	+ .0256	+10.9
1900	11	100.0	+4	+ 36.4	59.36	99.9	-2.69	-4.5	.2481	103.8	+ .0118	+ 4.3
1901	14	127.3	+1	+ 7.1	59.43	100.0	-2.76	-4.6	.2548	106.6	+ .0051	+ 2.0
1902	15	136.4	.....	.....	59.47	100.1	-2.80	-4.7	.2511	105.1	+ .0088	+ 3.5
1903	15	136.4	.....	.....	56.67	98.4	.....	.....	.2599	108.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

BOXES, PAPER—Concluded.

TRIMMERS, Female.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	5	100.0	.....	.....	59.00	100.0	.....	.....	\$0.0852	100.0	+\$0.0091	+10.7
1890	5	100.0	.....	.....	59.00	100.0	.....	.....	.0911	106.9	+ .0032	+ 3.5
1891	5	100.0	.....	.....	59.00	100.0	.....	.....	.0879	103.2	+ .0064	+ 7.3
1892	5	100.0	.....	.....	59.00	100.0	.....	.....	.0933	110.1	+ .0005	+ .5
1893	5	100.0	.....	.....	59.00	100.0	.....	.....	.0653	76.6	+ .0290	+44.4
1894	4	80.0	+1	+25.0	59.00	100.0	.....	.....	.0823	96.6	+ .0120	+14.6
1895	3	60.0	+2	+66.7	59.00	100.0	.....	.....	.0979	114.9	- .0036	- 8.7
1896	3	60.0	+2	+66.7	59.00	100.0	.....	.....	.0853	100.1	+ .0090	+10.6
1897	5	100.0	.....	.....	59.00	100.0	.....	.....	.0790	92.7	+ .0158	+19.4
1898	5	100.0	.....	.....	59.00	100.0	.....	.....	.0819	96.1	+ .0124	+15.1
1899	5	100.0	.....	.....	59.00	100.0	.....	.....	.0879	103.2	+ .0064	+ 7.3
1900	4	80.0	+1	+25.0	59.00	100.0	.....	.....	.0809	95.0	+ .0134	+16.6
1901	4	80.0	+1	+25.0	59.00	100.0	.....	.....	.0774	90.8	+ .0169	+21.8
1902	4	80.0	+1	+25.0	59.00	100.0	.....	.....	.0927	108.8	+ .0016	+ 1.7
1903	5	100.0	.....	.....	59.00	100.0	.....	.....	.0943	110.7	.....	.....

BRICK.

BRICK-MACHINE TENDERS, Male.

[Data from 20 establishments.]

Av. 1890-99.	126	100.0	+12	+ 9.5	58.71	100.0	-0.28	-0.5	\$0.1736	100.0	+\$0.0224	+12.9
1890	125	99.2	+13	+10.4	58.70	100.0	-.27	-.5	.1735	99.9	+ .0225	+13.0
1891	127	100.8	+11	+ 8.7	58.63	99.9	-.20	-.9	.1729	99.6	+ .0231	+13.4
1892	126	100.0	+12	+ 9.5	58.62	99.8	-.19	-.3	.1788	103.0	+ .0172	+ 9.6
1893	124	98.4	+14	+11.3	58.69	100.0	-.26	-.4	.1766	101.7	+ .0194	+11.0
1894	125	99.2	+13	+10.4	58.70	100.0	-.27	-.5	.1708	95.4	+ .0252	+14.8
1895	125	99.2	+13	+10.4	58.70	100.0	-.27	-.5	.1697	97.8	+ .0265	+15.5
1896	125	99.2	+13	+10.4	58.75	100.1	-.32	-.5	.1712	98.6	+ .0248	+14.5
1897	125	99.2	+13	+10.4	58.75	100.1	-.32	-.5	.1689	97.3	+ .0271	+16.0
1898	127	100.8	+11	+ 8.7	58.77	100.1	-.34	-.6	.1746	100.6	+ .0214	+12.3
1899	129	102.4	+ 9	+ 7.0	58.79	100.1	-.36	-.6	.1791	103.2	+ .0169	+ 9.4
1900	130	103.2	+ 8	+ 6.2	58.80	100.2	-.37	-.6	.1815	104.6	+ .0145	+ 8.0
1901	128	101.6	+10	+ 7.8	58.88	100.3	-.45	-.8	.1850	106.6	+ .0110	+ 6.0
1902	131	104.0	+ 7	+ 5.3	58.81	100.2	-.38	-.6	.1932	111.3	+ .0028	+ 1.4
1903	133	109.5	.....	.....	58.43	99.6	.....	.....	.1960	112.9	.....	.....

KILN BURNERS, Male.

[Data from 22 establishments.]

Av. 1890-99.	100	100.0	+ 9	+ 9.0	74.68	100.0	-1.04	-1.4	\$0.2033	100.0	+\$0.0324	+15.9
1890	100	100.0	+ 9	+ 9.0	74.81	100.2	-1.17	-1.6	.2046	100.6	+ .0311	+15.2
1891	100	100.0	+ 9	+ 9.0	74.81	100.2	-1.17	-1.6	.2057	101.2	+ .0300	+14.6
1892	99	99.0	+10	+10.1	74.96	100.4	-1.32	-1.8	.2044	100.5	+ .0313	+15.3
1893	101	101.0	+ 8	+ 7.9	74.66	100.0	-1.02	-1.4	.2035	100.1	+ .0322	+15.8
1894	96	96.0	+13	+13.5	74.93	100.3	-1.29	-1.7	.1935	95.2	+ .0422	+21.8
1895	100	100.0	+ 9	+ 9.0	74.83	99.5	-.69	-.9	.2014	99.1	+ .0343	+17.0
1896	98	98.0	+11	+11.2	74.62	99.9	-.98	-1.3	.1955	96.2	+ .0402	+20.6
1897	102	102.0	+ 7	+ 6.9	74.05	99.2	-.41	-.6	.2074	102.0	+ .0283	+13.6
1898	102	102.0	+ 7	+ 6.9	74.52	99.3	-.88	-1.2	.2115	104.2	+ .0239	+11.3
1899	98	98.0	+11	+11.2	75.11	100.6	-1.47	-2.0	.2056	101.1	+ .0301	+14.6
1900	103	103.0	+ 6	+ 5.8	74.38	99.6	-.74	-1.0	.2130	104.8	+ .0227	+10.7
1901	108	108.0	+ 3	+ 2.8	73.97	99.0	-.33	-.4	.2235	109.9	+ .0122	+ 5.5
1902	108	108.0	+ 1	+ .9	74.16	99.3	-.52	-.7	.2313	113.8	+ .0044	+ 1.9
1903	109	109.0	.....	.....	73.64	98.6	.....	.....	.2357	115.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BRICK—Continued.

KILN SETTERS, Male.

[Data from 24 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	101	100.0	+14	+13.9	58.19	100.0	-0.22	-0.4	\$0.1935	100.0	+\$0.0143	+ 7.4
1890	98	97.0	+17	+17.3	57.99	99.7	-.02	-.08	.1920	99.2	+.0158	+ 8.2
1891	91	90.1	+24	+26.4	58.10	99.8	-.13	-.2	.1929	99.7	+.0149	+ 7.7
1892	96	95.0	+19	+19.8	58.07	99.8	-.10	-.2	.2029	104.9	+.0049	+ 2.4
1893	103	102.0	+12	+11.7	58.09	99.8	-.12	-.2	.1932	99.8	+.0146	+ 7.6
1894	99	98.0	+16	+16.2	58.25	100.1	-.28	-.5	.1926	99.5	+.0152	+ 7.9
1895	99	98.0	+16	+16.2	58.37	100.3	-.40	-.7	.1892	97.8	+.0186	+ 9.8
1896	103	102.0	+12	+11.7	58.15	99.9	-.18	-.3	.1895	97.9	+.0183	+ 9.7
1897	104	103.0	+11	+10.6	58.22	100.1	-.25	-.4	.1867	96.5	+.0211	+11.3
1898	103	102.0	+12	+11.7	58.32	100.2	-.35	-.6	.1972	101.9	+.0106	+ 5.4
1899	110	108.9	+5	+ 4.5	58.32	100.2	-.35	-.6	.1887	102.7	+.0091	+ 4.6
1900	107	105.9	+8	+ 7.5	58.38	100.3	-.41	-.7	.1991	102.9	+.0087	+ 4.4
1901	108	106.9	+7	+ 6.5	58.51	100.5	-.54	-.9	.1958	101.2	+.0120	+ 6.1
1902	110	108.9	+5	+ 4.5	58.43	100.4	-.46	-.8	.2069	106.9	+.0009	+ .4
1903	115	113.9	.....	.....	57.97	99.6	.....	.....	.2078	107.4	.....	.....

LABORERS, Male.

[Data from 11 establishments.]

Av. 1890-99.	205	100.0	+58	+19.0	62.10	100.0	-0.92	-1.5	\$0.1210	100.0	+\$0.0155	+12.9
1890	286	93.8	+77	+26.9	61.66	99.3	-.48	-.8	.1258	104.0	+.0107	+ 8.5
1891	297	97.4	+66	+22.2	62.00	99.8	-.82	-1.8	.1237	102.2	+.0128	+10.3
1892	302	99.0	+61	+20.2	61.97	99.8	-.79	-1.8	.1237	102.2	+.0128	+10.3
1893	311	102.0	+52	+16.7	62.30	100.3	-1.12	-1.8	.1220	100.8	+.0145	+11.3
1894	314	103.0	+49	+15.6	62.28	100.3	-1.10	-1.8	.1203	99.4	+.0162	+13.5
1895	310	101.6	+53	+17.1	62.31	100.3	-1.13	-1.8	.1175	97.1	+.0190	+16.2
1896	299	98.0	+64	+21.4	61.99	99.8	-.81	-1.8	.1196	98.8	+.0169	+14.1
1897	299	98.0	+64	+21.4	61.99	99.8	-.81	-1.8	.1196	98.8	+.0169	+14.1
1898	305	100.0	+58	+19.0	62.34	100.4	-1.16	-1.9	.1174	97.0	+.0191	+16.3
1899	327	107.2	+36	+11.0	62.19	100.1	-1.01	-1.6	.1202	99.3	+.0163	+13.6
1900	318	104.3	+45	+14.2	61.87	99.6	-.69	-1.1	.1234	102.0	+.0131	+10.6
1901	322	105.6	+41	+12.7	61.85	99.6	-.67	-1.1	.1248	103.1	+.0117	+ 9.4
1902	367	120.3	- 4	- 1.1	61.62	99.2	-.44	-.7	.1321	109.2	+.0044	+ 3.3
1903	363	119.0	.....	.....	61.18	98.5	.....	.....	.1365	112.9	.....	.....

MOLDERS, HAND, Male.

[Data from 6 establishments.]

Av. 1890-99.	19	100.0	+2	+10.5	58.90	100.0	+0.10	+0.2	\$0.2089	100.0	+\$0.0202	+ 9.7
1890	19	100.0	+2	+10.5	58.89	100.0	+ .11	+ .2	.2106	100.8	+.0185	+ 8.3
1891	19	100.0	+2	+10.5	58.89	100.0	+ .11	+ .2	.2106	100.8	+.0185	+ 8.3
1892	19	100.0	+2	+10.5	58.89	100.0	+ .11	+ .2	.2106	100.8	+.0185	+ 8.3
1893	19	100.0	+2	+10.5	58.89	100.0	+ .11	+ .2	.2119	101.4	+.0172	+ 8.1
1894	19	100.0	+2	+10.5	58.89	100.0	+ .11	+ .2	.2106	100.8	+.0185	+ 8.3
1895	17	89.5	+4	+23.5	58.76	99.8	+ .24	+ .4	.2103	100.7	+.0188	+ 8.9
1896	20	105.3	+1	+ 5.0	58.95	100.1	+ .05	+ .1	.1995	95.5	+.0296	+14.3
1897	20	105.3	+1	+ 5.0	58.95	100.1	+ .05	+ .1	.1995	95.5	+.0296	+14.3
1898	20	105.3	+1	+ 5.0	58.95	100.1	+ .05	+ .1	.2111	101.1	+.0180	+ 8.5
1899	20	105.3	+1	+ 5.0	58.95	100.1	+ .05	+ .1	.2143	102.6	+.0148	+ 6.9
1900	20	105.3	+1	+ 5.0	58.95	100.1	+ .05	+ .1	.2143	102.6	+.0148	+ 6.9
1901	21	110.5	.....	.....	59.00	100.2	.....	.....	.2154	103.1	+.0137	+ 6.4
1902	21	110.5	.....	.....	59.00	100.2	.....	.....	.2267	108.5	+.0024	+ 1.1
1903	21	110.5	.....	.....	59.00	100.2	.....	.....	.2291	109.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BRICK—Concluded.**OFF BEARERS, Male.**

[Data from 19 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Number.	Per cent.			Number.	Per cent.			Amount.	Per cent.
Av. 1890-99.	151	100.0	- 4	- 2.6	57.92	100.0	-0.27	-0.5	\$0.1572	100.0	+\$0.0226	+14.4
1890.....	153	101.3	- 6	- 3.9	57.93	100.0	- .28	- .5	.1596	101.5	+ .0202	+12.7
1891.....	147	97.4	.....	.....	57.77	99.7	- .12	- .2	.1639	104.3	+ .0159	+ 9.7
1892.....	159	105.3	-12	- 7.5	57.90	100.0	- .25	- .4	.1649	104.9	+ .0149	+ 9.0
1893.....	148	98.0	- 1	- .7	57.82	99.8	- .17	- .3	.1678	106.7	+ .0120	+ 7.2
1894.....	145	96.0	+ 2	+ 1.4	57.90	100.0	- .25	- .4	.1588	101.0	+ .0210	+13.2
1895.....	150	99.3	- 3	- 2.0	57.93	100.0	- .28	- .5	.1545	98.3	+ .0253	+16.4
1896.....	151	100.0	- 4	- 2.6	57.99	100.1	- .34	- .6	.1505	95.7	+ .0293	+19.5
1897.....	148	98.0	- 1	- .7	57.95	100.1	- .30	- .5	.1479	94.1	+ .0319	+21.6
1898.....	149	98.7	- 2	- 1.3	57.96	100.1	- .31	- .5	.1502	95.5	+ .0296	+19.7
1899.....	155	102.6	- 8	- 5.2	58.04	100.2	- .39	- .7	.1534	97.6	+ .0264	+17.2
1900.....	143	94.7	+ 4	+ 2.8	57.83	99.8	- .18	- .3	.1598	101.6	+ .0200	+12.5
1901.....	146	96.7	+ 1	+ .7	58.00	100.1	- .95	- 1.6	.1674	106.5	+ .0124	+ 7.4
1902.....	150	99.3	- 3	- 2.0	57.81	99.8	- .16	- .3	.1747	111.1	+ .0051	+ 2.9
1903.....	147	97.4	.....	.....	57.65	99.5	.....	.....	.1798	114.4	.....	.....

BUILDING TRADES.**BRICKLAYERS, Male.**

[Data from 212 establishments.]

Av. 1890-99.	4,355	100.0	+ 709	+16.3	51.57	100.0	-3.74	- 7.3	\$0.4387	100.0	+\$0.1084	+24.7
1890.....	4,422	101.5	+ 642	+14.5	53.22	103.2	-5.39	-10.1	.4316	98.4	+ .1155	+28.8
1891.....	4,892	112.3	+ 172	+ 3.5	52.80	102.4	-4.97	- 9.4	.4365	99.5	+ .1106	+25.3
1892.....	4,967	114.1	+ 97	+ 2.0	52.19	101.2	-4.36	- 8.4	.4431	101.0	+ .1040	+23.5
1893.....	4,585	104.1	+ 529	+11.7	51.63	100.1	-3.90	- 7.4	.4436	101.1	+ .1035	+23.3
1894.....	4,055	93.1	+1,009	+24.9	51.96	100.8	-4.13	- 7.9	.4325	98.6	+ .1146	+26.5
1895.....	3,841	88.2	+1,223	+31.8	51.56	100.0	-3.73	- 7.2	.4367	99.5	+ .1104	+25.3
1896.....	3,998	91.8	+1,066	+26.7	51.50	99.9	-3.67	- 7.1	.4337	98.9	+ .1134	+26.1
1897.....	4,010	92.1	+1,054	+26.3	51.11	99.1	-3.28	- 6.4	.4361	99.4	+ .1110	+25.5
1898.....	4,150	95.3	+ 914	+22.0	50.47	97.9	-2.64	- 5.2	.4331	98.7	+ .1140	+26.3
1899.....	4,675	107.3	+ 389	+ 8.3	49.24	95.5	-1.41	- 2.9	.4597	104.8	+ .0874	+19.0
1900.....	4,576	105.1	+ 488	+10.7	49.32	95.6	-1.49	- 3.0	.4672	106.5	+ .0799	+17.1
1901.....	5,142	118.1	+ 78	+ 1.5	48.62	94.3	- .79	- 1.6	.4912	112.0	+ .0559	+11.4
1902.....	4,781	109.8	+ 283	+ 5.9	48.27	93.6	- .44	- .9	.5318	121.1	+ .0158	+ 3.0
1903.....	5,064	116.3	.....	.....	47.83	92.7	.....	.....	.5471	124.7	.....	.....

CARPENTERS, Male.

[Data from 227 establishments.]

Av. 1890-99.	5,655	100.0	+ 925	+16.4	54.85	100.0	-5.44	- 9.9	\$0.2751	100.0	+\$0.0843	+30.6
1890.....	5,923	104.7	+ 657	+11.1	55.94	102.0	-6.53	-11.7	.2713	98.6	+ .0831	+32.5
1891.....	6,231	110.2	+ 349	+ 5.6	55.56	101.3	-6.15	-11.1	.2730	99.2	+ .0864	+31.6
1892.....	6,461	114.3	+ 119	+ 1.8	55.12	100.5	-5.71	-10.4	.2825	102.7	+ .0769	+27.2
1893.....	5,528	97.8	+1,052	+19.0	55.22	100.7	-5.81	-10.5	.2744	99.7	+ .0850	+31.0
1894.....	5,049	89.3	+1,531	+30.3	55.27	100.8	-5.36	-10.6	.2693	97.9	+ .0901	+33.5
1895.....	5,021	88.8	+1,559	+31.0	55.05	100.4	-5.64	-10.2	.2692	97.9	+ .0902	+33.5
1896.....	5,413	95.7	+1,167	+21.6	54.67	99.7	-5.26	- 9.6	.2740	99.6	+ .0854	+31.2
1897.....	5,403	95.5	+1,177	+21.8	54.20	98.8	-4.79	- 8.8	.2748	99.9	+ .0846	+30.8
1898.....	5,402	95.5	+1,178	+21.8	54.02	98.5	-4.61	- 8.5	.2790	101.4	+ .0804	+28.8
1899.....	6,120	108.2	+ 460	+ 7.5	53.42	97.4	-4.01	- 7.5	.2839	103.2	+ .0755	+26.6
1900.....	6,336	112.0	+ 244	+ 3.9	51.86	94.5	-2.45	- 4.7	.3049	118.8	+ .0545	+17.9
1901.....	6,660	117.8	- 80	- 1.2	50.74	92.5	-1.33	- 2.6	.3190	116.0	+ .0404	+12.7
1902.....	6,906	122.1	- 326	- 4.7	49.70	90.6	- .29	- .6	.3403	123.7	+ .0191	+ 5.6
1903.....	6,580	116.4	.....	.....	49.41	90.1	.....	.....	.3594	130.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BUILDING TRADES—Continued.

CORNICIE MAKERS, Male.

[Data from 40 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	517	100.0	+ 89	+17.2	52.44	100.0	-4.37	- 8.3	\$0.3015	100.0	+\$0.1037	+34.4
1890.....	549	106.2	+ 57	+10.4	54.74	104.4	-6.67	-12.2	.2867	95.1	+.1185	+41.3
1891.....	545	105.4	+ 61	+11.2	53.11	101.3	-5.04	- 9.5	.2928	97.1	+.1124	+38.4
1892.....	690	133.5	- 84	-12.2	51.60	98.4	-3.53	- 6.8	.2993	99.3	+.1059	+35.4
1893.....	516	99.8	+ 90	+17.4	52.75	100.6	-4.68	- 8.9	.2982	98.9	+.1070	+35.9
1894.....	416	80.5	+190	+45.7	52.61	100.3	-4.54	- 8.6	.2944	97.6	+.1108	+37.6
1895.....	441	85.3	+165	+37.4	52.47	100.1	-4.40	- 8.4	.2974	98.6	+.1078	+36.2
1896.....	484	93.6	+122	+25.2	52.16	99.5	-4.09	- 7.8	.3060	101.5	+.0992	+32.4
1897.....	466	90.1	+140	+30.0	51.92	99.0	-3.85	- 7.4	.3082	102.2	+.0970	+31.5
1898.....	501	96.9	+105	+21.0	51.69	98.6	-3.82	- 7.0	.3107	103.1	+.0945	+30.4
1899.....	562	108.7	+ 44	+ 7.8	51.36	97.9	-3.29	- 6.4	.3210	106.5	+.0842	+26.2
1900.....	535	103.5	+ 71	+13.3	50.42	96.1	-2.86	- 4.7	.3424	113.6	+.0628	+18.3
1901.....	538	104.1	+ 68	+12.6	49.55	94.5	-1.48	- 3.0	.3459	112.4	+.0563	+16.1
1902.....	593	114.7	+ 13	+ 2.2	48.49	92.5	- .42	- .9	.3774	125.2	+.0278	+ 7.4
1903.....	606	117.2	.....	.....	48.07	91.7	.....	.....	.4052	134.4	.....	.....

GAS FITTERS, Male.

[Data from 64 establishments.]

Av. 1890-99.	162	100.0	+24	+14.8	54.14	100.0	-4.95	- 9.1	\$0.3180	100.0	+\$0.0970	+30.5
1890.....	161	99.4	+25	+15.5	56.03	103.5	-6.84	-12.2	.3037	95.5	+.1113	+36.6
1891.....	162	100.0	+24	+14.8	55.53	102.6	-6.34	-11.4	.3062	96.3	+.1088	+35.5
1892.....	171	105.6	+15	+ 8.8	54.47	100.6	-5.28	- 9.7	.3144	98.9	+.1006	+32.0
1893.....	151	93.2	+35	+23.2	54.05	99.8	-4.86	- 9.0	.3170	99.7	+.0980	+30.9
1894.....	156	96.3	+30	+19.2	53.97	99.7	-4.78	- 8.9	.3150	99.1	+.1000	+31.7
1895.....	146	90.1	+40	+27.4	53.97	99.7	-4.78	- 8.9	.3159	99.3	+.0991	+31.4
1896.....	163	100.6	+23	+14.1	53.79	99.4	-4.60	- 8.6	.3181	100.0	+.0969	+30.5
1897.....	162	100.0	+24	+14.8	53.29	98.4	-4.10	- 7.7	.3231	101.6	+.0919	+28.4
1898.....	173	106.8	+13	+ 7.5	53.64	99.1	-4.45	- 8.3	.3299	103.7	+.0851	+25.8
1899.....	179	110.5	+ 7	+ 3.9	52.69	97.3	-3.50	- 6.6	.3363	105.8	+.0787	+23.4
1900.....	175	108.0	+11	+ 6.3	52.17	96.4	-2.98	- 5.7	.3499	110.0	+.0651	+18.6
1901.....	177	109.3	+ 9	+ 5.1	51.67	95.4	-2.48	- 4.8	.3629	114.1	+.0521	+14.4
1902.....	166	114.8	.....	.....	50.11	92.6	- .92	- 1.8	.3922	123.3	+.0228	+ 5.8
1903.....	186	114.8	.....	.....	49.19	90.9	.....	.....	.4150	130.5	.....	.....

HOD CARRIERS, Male.

[Data from 250 establishments.]

Av. 1890-99.	4,242	100.0	+1,000	+23.6	51.60	100.0	-3.62	-7.0	\$0.2329	100.0	+\$0.0534	+22.9
1890.....	4,327	102.0	+ 915	+21.1	52.78	102.3	-4.80	-9.1	.2259	97.0	+.0604	+26.7
1891.....	4,644	109.5	+ 598	+12.9	52.54	101.8	-4.56	-8.7	.2248	96.5	+.0615	+27.4
1892.....	4,894	115.4	+ 348	+ 7.1	51.81	100.4	-3.83	-7.4	.2314	99.4	+.0549	+25.7
1893.....	4,455	105.0	+ 787	+17.7	51.64	100.1	-3.66	-7.1	.2325	99.8	+.0538	+25.1
1894.....	3,698	87.2	+1,544	+41.8	52.03	100.8	-4.05	-7.8	.2303	98.9	+.0560	+24.3
1895.....	3,844	90.6	+1,396	+36.4	51.53	99.9	-3.55	-6.9	.2320	99.6	+.0543	+23.4
1896.....	3,959	93.3	+1,253	+32.4	51.45	99.7	-3.47	-6.7	.2335	100.3	+.0528	+22.6
1897.....	3,996	94.2	+1,246	+31.2	51.42	99.7	-3.44	-6.7	.2322	99.7	+.0541	+23.3
1898.....	3,920	92.4	+1,322	+33.7	51.01	98.9	-3.03	-5.9	.2343	100.6	+.0520	+22.2
1899.....	4,655	110.4	+ 557	+11.9	49.79	96.5	-1.81	-3.6	.2518	108.1	+.0345	+18.7
1900.....	4,417	104.1	+ 825	+18.7	49.79	96.5	-1.81	-3.6	.2498	107.3	+.0365	+14.6
1901.....	5,097	120.2	+ 145	+ 2.8	49.35	95.6	-1.37	-2.8	.2546	109.3	+.0317	+12.5
1902.....	5,062	119.3	+ 180	+ 3.6	48.56	94.1	- .56	-1.2	.2676	114.9	+.0187	+ 7.0
1903.....	5,242	123.6	.....	.....	47.98	93.0	.....	.....	.2863	122.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BUILDING TRADES—Continued.

INSIDE WIREMEN, Male.

[Data from 40 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Number.	Per cent.			Number.	Per cent.			Amount.	Per cent.
Av. 1890-99.	415	100.0	+349	+84.1	54.47	100.0	-5.68	-10.4	\$0.2896	100.0	+\$0.1177	+40.6
1890	308	74.2	+456	+148.1	55.97	102.8	-7.18	-12.8	.2594	89.6	+.1479	+57.0
1891	324	78.1	+440	+135.8	55.88	102.6	-7.09	-12.7	.2579	89.1	+.1494	+57.9
1892	392	94.6	+372	+94.9	53.79	98.8	-5.00	-9.8	.2652	91.6	+.1421	+53.6
1893	378	91.1	+386	+102.1	55.13	101.2	-6.34	-11.5	.2835	97.9	+.1238	+43.7
1894	389	93.7	+375	+96.4	55.29	101.5	-6.50	-11.8	.2782	96.1	+.1291	+46.4
1895	387	93.3	+377	+97.4	55.15	101.2	-6.36	-11.5	.2895	100.0	+.1178	+40.7
1896	426	102.7	+338	+79.3	54.07	99.3	-5.28	-9.8	.3026	104.5	+.1047	+34.6
1897	541	130.4	+223	+41.2	53.10	97.5	-4.31	-8.1	.3117	107.6	+.0956	+30.7
1898	508	122.4	+256	+50.4	52.96	97.2	-4.17	-7.9	.3245	112.1	+.0828	+25.5
1899	497	119.8	+267	+53.7	53.37	98.0	-4.58	-8.6	.3234	111.7	+.0839	+25.9
1900	609	146.7	+155	+28.5	51.58	94.7	-2.79	-5.4	.3495	120.7	+.0573	+16.5
1901	620	149.4	+144	+23.2	51.46	94.5	-2.67	-5.2	.3465	119.6	+.0608	+17.5
1902	733	176.6	+81	+4.2	50.57	92.8	-1.78	-3.5	.3757	129.7	+.0316	+8.4
1903	764	184.1	.....	.....	48.79	89.6	.....	.....	.4073	140.6	.....	.....

LABORERS, Male.

[Data from 146 establishments.]

Av. 1890-99.	4,460	100.0	+622	+13.9	58.84	100.0	-2.71	-4.6	\$0.1467	100.0	+\$0.0209	+14.2
1890	5,118	114.8	-86	-7.7	59.02	100.3	-2.89	-4.9	.1507	102.7	+.0169	+11.2
1891	4,861	109.0	+221	+4.5	59.02	100.3	-2.89	-4.9	.1511	103.0	+.0165	+10.9
1892	4,812	107.9	+270	+5.6	59.02	100.3	-2.89	-4.9	.1519	103.5	+.0157	+10.3
1893	4,516	101.8	+566	+12.5	58.80	99.9	-2.67	-4.5	.1493	101.8	+.0183	+12.3
1894	4,128	92.6	+954	+23.1	58.76	99.9	-2.63	-4.5	.1419	96.7	+.0257	+18.1
1895	3,796	85.1	+1,286	+33.9	58.88	100.1	-2.75	-4.7	.1440	98.2	+.0236	+16.4
1896	4,018	90.1	+1,064	+26.5	58.92	100.1	-2.79	-4.7	.1415	96.5	+.0261	+18.4
1897	4,000	89.7	+1,082	+27.1	58.80	99.9	-2.67	-4.5	.1445	98.5	+.0231	+16.0
1898	4,524	101.4	+558	+12.3	58.44	99.3	-2.31	-4.0	.1466	99.9	+.0210	+14.3
1899	4,822	108.1	+260	+5.4	58.71	99.8	-2.58	-4.4	.1457	99.3	+.0219	+15.0
1900	5,275	118.3	-193	-3.7	58.27	99.0	-2.14	-3.7	.1461	99.6	+.0215	+14.7
1901	4,648	104.2	+434	+9.3	57.98	98.5	-1.85	-3.2	.1585	108.0	+.0091	+5.7
1902	5,317	119.2	-235	-4.4	56.66	96.3	-.53	-.9	.1644	112.1	+.0032	+1.9
1903	5,082	113.9	.....	.....	56.13	95.4	.....	.....	.1676	114.2	.....	.....

LATHERS, Male.

[Data from 10 establishments.]

Av. 1890-99.	108	100.0	+16	+14.8	51.78	100.0	-6.20	-12.0	\$0.3375	100.0	+\$0.0384	+11.4
1890	92	85.2	+32	+34.8	54.58	105.4	-9.00	-16.5	.3174	94.0	+.0585	+18.4
1891	88	81.5	+36	+40.9	54.60	105.4	-9.02	-16.5	.3165	93.8	+.0594	+18.8
1892	117	108.3	+7	+6.0	54.30	104.9	-8.72	-16.1	.3237	95.9	+.0522	+16.1
1893	99	91.7	+25	+25.2	54.23	104.8	-8.71	-16.0	.3107	93.8	+.0592	+18.7
1894	98	90.7	+26	+26.5	54.23	104.7	-8.65	-16.0	.3166	93.8	+.0595	+18.7
1895	119	110.2	+5	+4.2	53.70	103.7	-8.12	-15.1	.3304	97.9	+.0455	+13.8
1896	114	105.6	+10	+8.8	48.25	93.2	-2.67	-5.5	.3588	106.3	+.0171	+4.8
1897	107	99.1	+17	+15.9	48.24	93.2	-2.66	-5.5	.3584	106.2	+.0175	+4.9
1898	129	119.4	-5	-3.9	47.78	92.3	-2.20	-4.6	.3693	109.5	+.0064	+1.7
1899	118	109.3	+6	+5.1	47.78	92.3	-2.20	-4.6	.3668	108.7	+.0091	+2.5
1900	131	121.3	-7	-5.3	45.18	87.3	+.40	+.9	.3738	110.8	+.0021	+.6
1901	131	121.3	-7	-5.3	45.50	87.9	+.08	+.2	.3753	111.2	+.0006	+.2
1902	146	135.2	-22	-15.1	45.40	87.7	+.18	+.4	.3883	115.1	-.0124	-8.2
1903	124	114.8	.....	.....	45.58	88.0	.....	.....	.3759	111.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

BUILDING TRADES—Continued.

PAINTERS, Male.

[Data from 203 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	3,676	100.0	+345	+ 9.4	53.82	100.0	-4.98	- 9.2	\$0.2763	100.0	+\$0.0687	+24.9
1890	3,541	96.3	+480	+13.6	55.23	102.6	-6.34	-11.5	.2680	97.0	+.0770	+28.7
1891	3,708	100.9	+313	+ 8.4	54.86	101.9	-5.97	-10.9	.2712	98.2	+.0738	+27.2
1892	3,877	105.5	+144	+ 3.7	54.43	101.1	-5.54	-10.2	.2747	99.4	+.0703	+25.6
1893	3,666	99.7	+356	+ 9.7	53.86	100.1	-4.97	- 9.2	.2795	101.2	+.0655	+23.4
1894	3,450	93.9	+571	+16.6	54.01	100.4	-5.12	- 9.5	.2737	99.1	+.0713	+26.1
1895	3,460	94.1	+561	+16.2	53.87	100.1	-4.98	- 9.2	.2720	98.4	+.0730	+26.8
1896	3,648	99.2	+373	+10.2	53.61	99.6	-4.72	- 8.8	.2742	99.2	+.0708	+25.8
1897	3,737	101.7	+284	+ 7.6	53.28	99.0	-4.39	- 8.2	.2778	100.5	+.0672	+24.2
1898	3,723	101.8	+298	+ 8.0	52.79	98.1	-3.90	- 7.4	.2827	102.3	+.0623	+22.0
1899	3,953	107.5	+ 68	+ 1.7	52.27	97.1	-3.38	- 6.5	.2892	104.7	+.0558	+19.3
1900	4,089	111.2	- 68	- 1.7	50.91	94.6	-2.02	- 4.0	.3054	110.5	+.0396	+13.0
1901	4,284	116.5	-263	- 6.1	49.85	92.6	- .96	- 1.9	.3170	114.7	+.0280	+ 8.8
1902	4,254	115.7	-233	- 5.5	49.27	91.5	- .38	- .8	.3303	119.5	+.0147	+ 4.5
1903	4,021	109.4	.....	.....	48.89	90.8	.....	.....	.3450	124.9	.....	.....

PAPER HANGERS, Male.

[Data from 93 establishments.]

Av. 1890-99.	505	100.0	+103	+20.4	55.50	100.0	-5.46	- 9.8	\$0.2874	100.0	+\$0.0739	+25.7
1890	475	94.1	+133	+28.0	56.27	101.4	-6.23	-11.1	.2830	98.5	+.0783	+27.7
1891	479	94.9	+129	+26.9	56.00	100.9	-5.96	-10.6	.2853	99.3	+.0760	+26.6
1892	508	100.6	+100	+19.7	56.04	101.0	-6.00	-10.7	.2856	99.4	+.0757	+26.5
1893	472	93.5	+136	+28.8	55.95	100.8	-5.91	-10.6	.2842	98.9	+.0771	+27.1
1894	465	92.1	+143	+30.8	55.72	100.4	-5.68	-10.2	.2827	98.4	+.0786	+27.8
1895	472	93.5	+136	+28.8	55.75	100.5	-5.71	-10.2	.2830	98.5	+.0783	+27.7
1896	504	99.8	+104	+20.6	55.41	99.8	-5.37	- 9.7	.2861	99.5	+.0752	+26.3
1897	534	105.7	+ 74	+13.9	54.94	99.0	-4.90	- 8.9	.2906	101.1	+.0707	+24.3
1898	548	108.5	+ 60	+10.9	54.62	98.4	-4.58	- 8.4	.2956	102.9	+.0657	+22.2
1899	595	117.8	+ 13	+ 2.2	54.31	97.9	-4.27	- 7.9	.2980	103.7	+.0633	+21.2
1900	602	119.2	+ 6	+ 1.0	53.31	96.1	-3.27	- 6.1	.3114	108.4	+.0499	+16.0
1901	646	127.9	- 38	- 5.9	51.52	92.8	-1.45	- 2.9	.3259	113.4	+.0354	+10.9
1902	627	124.2	- 19	- 3.0	50.72	91.4	- .68	- 1.3	.3415	118.8	+.0198	+ 5.8
1903	608	120.4	.....	.....	50.04	90.2	.....	.....	.3613	125.7	.....	.....

PLASTERERS, Male.

[Data from 146 establishments.]

Av. 1890-99.	1,681	100.0	+214	+12.7	51.83	100.0	-4.79	- 9.2	\$0.3969	100.0	+\$0.1299	+32.7
1890	1,684	100.2	+211	+12.5	53.50	103.2	-6.46	-12.1	.3648	91.9	+.1620	+44.4
1891	1,782	106.0	+113	+ 6.3	52.67	101.6	-5.63	-10.7	.3966	99.9	+.1302	+32.8
1892	1,857	110.5	+ 88	+ 2.0	52.09	100.5	-5.05	- 9.7	.4100	103.3	+.1168	+28.5
1893	1,721	102.4	+174	+10.1	51.97	100.3	-4.93	- 9.5	.4019	101.3	+.1249	+31.1
1894	1,547	92.0	+348	+22.5	52.01	100.3	-4.97	- 9.6	.3915	98.6	+.1353	+34.6
1895	1,547	92.0	+348	+22.5	51.63	99.6	-4.59	- 8.9	.3924	98.9	+.1344	+34.3
1896	1,642	97.7	+253	+15.4	51.50	99.4	-4.46	- 8.7	.3985	100.4	+.1283	+32.2
1897	1,587	94.4	+308	+19.4	51.96	100.3	-4.92	- 9.5	.3903	98.3	+.1365	+35.0
1898	1,630	97.0	+265	+16.3	51.11	98.6	-4.07	- 8.0	.3974	100.1	+.1294	+32.6
1899	1,817	108.1	+ 78	+ 4.3	49.82	96.1	-2.78	- 5.6	.4254	107.2	+.1014	+23.8
1900	1,875	111.5	+ 20	+ 1.1	48.75	94.1	-1.71	- 3.5	.4378	110.3	+.0890	+20.3
1901	1,769	105.2	+126	+ 7.1	48.27	93.1	-1.23	- 2.5	.4570	115.1	+.0698	+15.3
1902	2,061	122.6	-166	- 8.1	47.29	91.2	- .25	- .5	.4946	124.6	+.0322	+ 6.5
1903	1,895	112.7	.....	.....	47.04	90.8	.....	.....	.5268	132.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BUILDING TRADES—Continued.

PLUMBERS, Male.

[Data from 221 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	1,380	100.0	+215	+15.6	53.23	100.0	-4.26	-8.0	\$0.3550	100.0	+\$0.0821	+23.1
1890	1,368	99.1	+227	+16.6	54.33	102.1	-5.36	-9.9	.3464	97.6	+.0907	+26.2
1891	1,384	100.3	+211	+15.2	54.09	101.6	-5.12	-9.5	.3488	98.3	+.0853	+25.3
1892	1,427	103.4	+168	+11.8	53.86	101.2	-4.89	-9.1	.3511	98.9	+.0860	+24.5
1893	1,377	99.8	+218	+15.6	53.30	100.2	-4.39	-8.2	.3552	100.1	+.0819	+23.1
1894	1,303	94.4	+232	+17.2	53.28	100.1	-4.31	-8.1	.3515	99.0	+.0856	+24.4
1895	1,301	94.3	+234	+17.2	53.08	99.7	-4.11	-7.7	.3546	99.9	+.0825	+23.3
1896	1,365	98.9	+230	+16.8	52.86	99.3	-3.89	-7.4	.3505	98.7	+.0866	+24.7
1897	1,307	99.1	+228	+16.7	52.67	98.9	-3.70	-7.0	.3598	101.4	+.0773	+21.5
1898	1,443	104.6	+152	+10.5	52.63	98.7	-3.56	-6.9	.3638	102.5	+.0733	+20.1
1899	1,466	106.2	+129	+8.8	52.28	98.2	-3.31	-6.3	.3694	103.8	+.0687	+18.6
1900	1,523	110.4	+72	+4.7	51.40	96.6	-2.43	-4.7	.3811	107.4	+.0560	+14.7
1901	1,633	118.3	-38	-2.3	50.77	95.4	-1.80	-3.5	.3935	110.8	+.0436	+11.1
1902	1,627	117.9	-32	-2.0	49.52	93.0	-1.56	-1.1	.4122	116.1	+.0249	+6.0
1903	1,595	115.6	.....	.....	48.97	92.0	.....	.....	.4371	123.1	.....	.....

ROOFERS, GRAVEL AND TAR, Male.

[Data from 9 establishments.]

Av. 1890-99.	76	100.0	-2	-2.6	57.39	100.0	-0.80	-1.4	\$0.2310	100.0	+\$0.0303	+13.1
1890	63	82.9	+11	+17.5	57.62	100.4	-1.03	-1.6	.2242	97.1	+.0371	+16.5
1891	68	89.5	+6	+8.8	57.53	100.2	-.94	-1.6	.2334	101.0	+.0279	+12.0
1892	70	92.1	+4	+5.7	58.11	101.3	-1.52	-2.6	.2394	103.6	+.0219	+9.1
1893	104	136.8	-30	-28.8	56.31	98.1	+1.25	+1.5	.2485	107.6	+.0128	+5.2
1894	58	76.3	+16	+27.6	57.41	100.0	-.82	-1.4	.2263	92.0	+.0350	+15.5
1895	69	90.8	+5	+7.2	58.00	101.1	-1.41	-2.4	.2136	93.5	+.0477	+22.3
1896	77	101.3	-3	-4.0	57.35	99.9	-.76	-1.3	.2230	96.5	+.0383	+17.2
1897	76	100.0	-3	-2.6	57.24	99.7	-.65	-1.1	.2331	100.9	+.0282	+12.1
1898	84	110.5	-10	-11.9	57.14	99.6	-.57	-1.0	.2313	100.1	+.0300	+13.0
1899	93	122.4	-19	-20.4	57.16	99.6	-.57	-1.0	.2376	102.9	+.0237	+10.0
1900	80	105.3	-6	-7.5	55.05	95.9	+1.54	+2.8	.2645	114.5	+.0032	+1.2
1901	83	109.2	-9	-10.8	55.23	96.2	+1.36	+2.5	.2677	115.9	+.0064	+2.4
1902	72	94.7	+2	+2.8	55.00	95.8	+1.59	+2.9	.2645	114.4	+.0030	+1.1
1903	74	97.4	.....	.....	56.59	98.6	.....	.....	.2618	115.1	.....	.....

ROOFERS, SLATE AND TILE, Male.

[Data from 40 establishments.]

Av. 1890-99.	271	100.0	-13	-4.8	53.44	100.0	-4.82	-9.0	\$0.3265	100.0	+\$0.0923	+28.3
1890	299	110.3	-41	-13.7	53.85	100.8	-5.23	-9.7	.3304	101.2	+.0884	+26.8
1891	292	107.7	-49	-11.6	53.91	100.9	-5.29	-9.8	.3259	99.8	+.0929	+28.5
1892	267	105.9	-29	-10.1	53.95	101.0	-5.33	-9.9	.3293	100.9	+.0895	+27.2
1893	273	100.7	-15	-5.5	53.73	100.5	-5.11	-9.5	.3276	100.3	+.0912	+27.8
1894	245	90.4	+13	+5.3	53.80	100.7	-5.18	-9.6	.3183	97.5	+.1005	+31.6
1895	243	91.5	+10	+4.0	53.82	100.7	-5.20	-9.7	.3203	98.1	+.0985	+30.8
1896	265	97.8	-7	-2.6	53.38	99.9	-4.76	-8.9	.3213	98.4	+.0975	+30.3
1897	272	100.4	-14	-5.1	52.85	98.9	-4.23	-8.0	.3220	98.6	+.0968	+30.1
1898	260	95.9	-2	-1.8	52.92	99.0	-4.30	-8.1	.3309	101.3	+.0879	+26.6
1899	273	100.7	-15	-5.5	52.21	97.7	-3.59	-6.9	.3388	103.8	+.0800	+23.6
1900	266	98.2	-8	-3.0	50.89	95.2	-2.27	-4.5	.3576	109.5	+.0612	+17.1
1901	259	95.6	-1	-1.4	50.68	94.8	-2.06	-4.1	.3657	112.0	+.0531	+14.5
1902	272	100.4	-14	-5.1	48.99	91.7	-.37	-.8	.3869	118.5	+.0319	+8.2
1903	258	95.2	.....	.....	48.62	91.0	.....	.....	.4188	128.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

BUILDING TRADES—Continued.

ROOFERS, TIN, Male.

[Data from 94 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount	Per cent.
Av. 1890-99.	842	100.0	+ 87	+ 10.3	54.47	100.0	-4.67	- 8.6	\$0.2858	100.0	+\$0.0629	+22.2
1890	818	96.6	+116	+ 14.3	55.57	102.0	-5.77	-10.4	2788	97.0	+ 0714	+25.9
1891	863	102.5	+ 66	+ 7.6	55.10	101.2	-5.30	- 9.6	2813	99.1	+ 0654	+23.2
1892	843	100.1	+ 86	+ 10.2	55.05	101.1	-5.25	- 9.5	2813	99.1	+ 0654	+23.2
1893	886	105.2	+ 43	+ 4.9	54.69	100.4	-4.39	- 8.0	2837	100.0	+ 0630	+22.2
1894	799	94.9	+130	+16.3	54.36	100.7	-5.06	- 9.2	2775	97.8	+ 0692	+24.9
1895	789	93.7	+140	+17.7	54.64	100.3	-4.34	- 8.9	2808	98.8	+ 0664	+23.7
1896	850	101.0	+ 79	+ 9.3	54.24	99.6	-4.44	- 8.2	2841	100.1	+ 0626	+23.0
1897	814	96.7	+115	+14.1	53.94	99.0	-4.14	- 7.7	2850	100.4	+ 0617	+21.6
1898	861	102.3	+ 68	+ 7.9	53.53	98.3	-3.73	- 7.0	2908	102.5	+ 0559	+19.2
1899	906	107.6	+ 23	+ 2.5	53.05	97.4	-3.25	- 6.1	2985	105.2	+ 0482	+16.1
1900	888	105.5	+ 41	+ 4.6	52.07	95.6	-2.27	- 4.4	3066	108.7	+ 0381	+12.3
1901	919	109.1	+ 10	+ 1.1	51.08	93.8	-1.28	- 2.5	3176	111.9	+ 0291	+ 9.2
1902	968	115.0	- 89	- 4.0	49.79	91.4	+ .01	+ .02	3398	119.7	+ 0069	+ 2.0
1903	929	110.3	.....	.....	49.80	91.4	.....	.....	3467	122.2	.....	.....

STEAM FITTERS, Male.

[Data from 73 establishments.]

Av. 1890-99.	617	100.0	+179	+29.0	53.87	100.0	-5.95	-11.0	\$0.3343	100.0	+\$0.0913	+27.3
1890	674	93.0	+222	+35.7	55.25	102.6	-7.33	-13.3	3206	95.9	+ 1050	+32.8
1891	561	90.9	+235	+41.9	54.92	101.9	-7.00	-12.7	3216	96.2	+ 1040	+32.3
1892	614	99.5	+182	+29.6	54.55	101.3	-6.63	-12.2	3322	99.4	+ 0934	+28.1
1893	666	107.9	+130	+19.8	54.71	101.6	-6.72	-12.4	3356	97.4	+ 1000	+30.7
1894	596	96.6	+200	+33.6	53.57	99.4	-5.65	-10.5	3316	99.2	+ 0940	+28.3
1895	588	95.3	+208	+35.4	53.75	99.8	-5.89	-10.8	3322	98.2	+ 0974	+29.7
1896	616	99.8	+190	+29.2	53.44	99.2	-5.52	-10.3	3360	100.5	+ 0896	+26.7
1897	653	105.8	+143	+21.9	53.16	98.7	-5.24	- 9.9	3393	101.5	+ 0863	+25.4
1898	628	101.8	+168	+26.8	53.13	98.6	-5.21	- 9.8	3486	104.3	+ 0770	+22.1
1899	669	108.4	+127	+19.0	52.19	96.9	-4.27	- 8.2	3590	107.4	+ 0666	+18.6
1900	659	106.8	+187	+20.8	51.71	96.0	-5.79	- 7.3	3613	108.1	+ 0643	+17.8
1901	711	115.2	+ 85	+12.0	50.66	94.0	-2.74	- 5.4	3849	115.1	+ 0407	+10.6
1902	798	129.3	- 2	- .3	49.77	92.4	-1.85	- 3.7	4018	120.2	+ 0238	+ 5.9
1903	796	129.0	.....	.....	47.92	89.0	.....	.....	4256	127.3	.....	.....

STONE MASONS, Male.

[Data from 115 establishments.]

Av. 1890-99.	886	100.0	+187	+21.1	53.83	100.0	-4.29	-8.0	\$0.3617	100.0	+\$0.0869	+24.0
1890	947	106.9	+126	+13.3	54.54	101.3	-5.00	-9.2	3722	102.9	+ 0764	+20.5
1891	1021	115.2	+ 52	+ 5.1	54.51	101.3	-4.97	-9.1	3732	103.2	+ 0754	+20.2
1892	984	111.1	+ 89	+ 9.0	54.49	101.2	-4.95	-9.1	3673	101.5	+ 0813	+22.1
1893	898	101.4	+175	+19.5	54.17	100.6	-4.63	-8.5	3644	100.7	+ 0842	+23.1
1894	799	90.2	+274	+34.3	54.34	100.9	-4.80	-8.8	3440	95.1	+ 1046	+30.4
1895	798	90.1	+275	+34.5	54.05	100.4	-4.51	-8.3	3485	96.4	+ 1001	+28.5
1896	828	93.5	+245	+29.6	53.97	100.3	-4.43	-8.2	3547	98.1	+ 0939	+26.7
1897	796	89.8	+277	+34.3	53.05	98.6	-3.51	-6.6	3628	99.0	+ 0858	+23.6
1898	932	105.2	+141	+15.1	52.43	97.4	-2.89	-5.5	3531	100.3	+ 0905	+25.3
1899	860	97.1	+213	+24.8	52.73	98.0	-3.19	-6.0	3719	102.8	+ 0767	+20.6
1900	935	105.5	+138	+14.8	51.89	96.4	-2.35	-4.5	3788	104.7	+ 0698	+18.4
1901	927	104.6	+146	+15.7	51.23	95.2	-1.69	-3.3	4007	110.8	+ 0479	+12.0
1902	954	107.7	+119	+12.5	50.19	93.2	-1.65	-1.3	4304	119.0	+ 0182	+ 4.2
1903	1073	121.1	.....	.....	49.54	92.0	.....	.....	4486	124.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

BUILDING TRADES—Concluded.

STONE SETTERS, Male.

[Data from 27 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	109	100.0	+25	+22.9	51.51	100.0	-2.67	-5.2	\$0.4297	100.0	+\$0.0698	+16.2
1890	96	88.1	+38	+39.6	53.53	103.9	-4.69	-8.8	.3964	92.3	+ .1031	+26.0
1891	96	88.1	+38	+39.6	53.25	103.4	-4.41	-8.3	.3990	92.9	+ .1005	+25.2
1892	108	99.1	+26	+24.1	51.53	100.1	-2.69	-5.2	.4306	100.2	+ .0689	+16.0
1893	111	101.8	+23	+20.7	51.36	99.7	-2.52	-4.9	.4291	99.9	+ .0704	+16.4
1894	105	96.3	+29	+27.6	51.12	99.2	-2.28	-4.5	.4332	100.8	+ .0663	+15.3
1895	118	108.3	+16	+13.6	50.91	98.8	-2.07	-4.1	.4384	102.0	+ .0611	+13.9
1896	116	106.4	+18	+15.5	51.19	99.4	-2.35	-4.6	.4331	100.8	+ .0664	+15.3
1897	107	98.2	+27	+25.2	50.92	98.9	-2.08	-4.1	.4424	103.0	+ .0571	+12.9
1898	108	99.1	+26	+24.1	50.70	98.4	-1.86	-3.7	.4480	104.3	+ .0515	+11.5
1899	122	111.9	+12	+ 9.8	50.59	98.2	-1.75	-3.5	.4464	103.9	+ .0531	+11.9
1900	134	122.9	.....	.....	49.60	96.3	-1.76	-1.5	.4620	107.5	+ .0375	+ 8.1
1901	146	133.9	-12	- 8.2	49.12	95.4	-1.28	- 6	.4859	113.1	+ .0136	+ 2.8
1902	142	130.3	- 8	- 5.6	49.13	95.4	-1.29	- 6	.4765	110.9	+ .0230	+ 4.8
1903	134	122.9	.....	.....	48.84	94.8	.....	.....	.4995	116.2	.....	.....

STRUCTURAL IRON WORKERS, Male.

[Data for employees from 19 establishments for entire period. Data for hours and wages from 19 establishments, 1890-1892; 20 establishments, 1893-1903.]

Av. 1890-99.	561	100.0	+598	+106.6	55.14	100.0	-4.29	- 7.8	\$0.2643	103.0	+\$0.1472	+55.7
1890	436	77.7	+723	+165.8	56.73	102.9	-5.88	-10.4	.2475	93.6	+ .1640	+66.3
1891	551	98.2	+608	+110.3	56.15	101.8	-5.30	- 9.4	.2591	98.0	+ .1524	+58.8
1892	602	107.3	+557	+ 92.5	54.77	99.3	-3.92	- 7.2	.2658	100.6	+ .1457	+54.8
1893	554	98.8	+605	+109.2	55.18	100.1	-4.33	- 7.8	.2666	100.9	+ .1449	+54.4
1894	416	74.2	+743	+178.6	56.20	101.9	-5.35	- 9.5	.2470	93.5	+ .1645	+66.6
1895	446	79.5	+713	+159.9	55.22	100.1	-4.37	- 7.9	.2581	97.7	+ .1584	+59.4
1896	648	115.5	+511	+ 78.9	54.32	98.5	-3.47	- 6.4	.2576	97.5	+ .1539	+59.7
1897	628	111.9	+531	+ 84.6	53.47	97.0	-2.62	- 4.9	.2751	104.1	+ .1364	+49.6
1898	685	122.1	+474	+ 69.2	53.90	97.8	-3.05	- 5.7	.2784	105.3	+ .1331	+47.8
1899	648	115.5	+511	+ 78.9	55.44	100.5	-4.59	- 8.3	.2876	108.8	+ .1239	+43.1
1900	798	142.2	+361	+ 45.2	54.03	98.0	-3.18	- 5.9	.3183	120.4	+ .0932	+29.3
1901	1,097	195.5	+ 62	+ 5.7	53.30	96.7	-2.45	- 4.6	.3659	138.4	+ .0456	+12.5
1902	1,280	228.2	-121	- 9.5	50.52	91.6	+ .33	+ .7	.4121	155.9	+ .0006	- .1
1903	1,159	206.6	.....	.....	50.85	92.2	.....	.....	.4115	155.7	.....	.....

BUTTER AND CHEESE.

BUTTER MAKERS, Male.

[Data from 21 establishments.]

Av. 1890-99.	97	100.0	+2	+2.1	74.95	100.0	+0.52	+0.7	\$0.1462	100.0	+\$0.0087	+6.0
1890	91	93.8	+8	+8.8	74.96	100.0	+ .51	+ .7	.1470	100.5	+ .0079	+5.4
1891	92	94.8	+7	+7.6	74.90	99.9	+ .57	+ .8	.1468	100.4	+ .0081	+5.5
1892	95	97.9	+4	+4.2	75.04	100.1	+ .43	+ .6	.1440	98.5	+ .0109	+7.6
1893	95	97.9	+4	+4.2	75.04	100.1	+ .43	+ .6	.1441	98.6	+ .0108	+7.5
1894	97	100.0	+2	+2.1	75.08	100.2	+ .39	+ .5	.1420	97.1	+ .0129	+9.1
1895	99	102.1	.....	.....	74.32	99.8	+ .65	+ .9	.1435	98.2	+ .0114	+7.9
1896	100	103.1	-1	-1.0	74.91	99.9	+ .56	+ .7	.1488	101.8	+ .0061	+4.1
1897	101	104.1	-2	-2.0	75.00	100.1	+ .47	+ .6	.1464	100.1	+ .0085	+5.8
1898	99	102.1	.....	.....	74.82	99.8	+ .65	+ .9	.1498	102.5	+ .0051	+3.4
1899	100	103.1	-1	-1.0	74.91	99.9	+ .56	+ .7	.1498	102.5	+ .0051	+3.4
1900	100	103.1	-1	-1.0	74.91	99.9	+ .56	+ .7	.1498	102.5	+ .0051	+3.4
1901	99	102.1	.....	.....	74.82	99.8	+ .65	+ .9	.1519	103.9	+ .0030	+2.0
1902	100	103.1	-1	-1.0	75.56	100.8	- .09	- .1	.1532	104.8	+ .0017	+1.1
1903	99	102.1	.....	.....	75.47	100.7	.....	.....	.1549	106.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BUTTER AND CHEESE—Concluded.**CHEESE MAKERS, Male.**

[Data from 13 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	34	100.0			69.37	100.0	-0.21	-0.3	\$0.1643	100.0	+\$0.0107	+6.5
1890	32	94.1	+5	+ 8.8	69.75	100.5	-.59	-.8	.1635	99.5	+.0115	+7.0
1891	33	97.1	+4	+12.1	69.55	100.3	-.39	-.6	.1619	98.5	+.0131	+8.1
1892	34	100.0	+3	+ 8.8	69.35	100.0	-.19	-.3	.1629	99.1	+.0121	+7.4
1893	34	100.0	+3	+ 8.8	69.35	100.0	-.19	-.3	.1629	99.1	+.0121	+7.4
1894	34	100.0	+3	+ 8.8	69.35	100.0	-.19	-.3	.1629	99.1	+.0121	+7.4
1895	34	100.0	+3	+ 8.8	69.35	100.0	-.19	-.3	.1629	99.1	+.0121	+7.4
1896	34	100.0	+3	+ 8.8	69.35	100.0	-.19	-.3	.1629	99.1	+.0121	+7.4
1897	34	100.0	+3	+ 8.8	69.35	100.0	-.19	-.3	.1637	99.6	+.0113	+6.9
1898	35	102.9	+2	+ 5.7	69.17	99.7	-.01	-.01	.1675	101.9	+.0075	+4.5
1899	35	102.9	+2	+ 5.7	69.17	99.7	-.01	-.01	.1715	104.4	+.0035	+2.0
1900	35	102.9	+2	+ 5.7	68.31	98.5	+.85	+1.2	.1761	107.2	-.0011	-.6
1901	37	108.8			69.16	99.7			.1742	106.0	+.0008	+.5
1902	37	108.8			69.16	99.7			.1751	106.6	+.0001	+.1
1903	37	108.8			69.16	99.7			.1750	106.5		

CANDY.**CANDY MAKERS, Male.**

[Data from 7 establishments.]

Av. 1890-99.	61	100.0	-10	-16.4	59.69	100.0	-0.06	-0.1	\$0.2299	100.0	+\$0.0078	+3.4
1890	66	108.2	-15	-22.7	59.67	100.0	-.04	-.1	.2257	98.2	+.0120	+5.3
1891	64	104.9	-13	-20.3	59.64	99.9	-.01	-.02	.2255	98.1	+.0122	+5.4
1892	63	103.3	-12	-19.0	59.75	100.1	-.12	-.2	.2272	98.8	+.0105	+4.6
1893	62	101.6	-11	-17.7	59.73	100.1	-.10	-.2	.2199	95.7	+.0178	+8.1
1894	58	95.1	-7	-12.1	59.71	100.0	-.08	-.1	.2211	96.2	+.0166	+7.5
1895	61	100.0	-10	-16.4	59.69	100.0	-.06	-.1	.2317	100.8	+.0060	+2.6
1896	58	95.1	-7	-12.1	59.69	100.0	-.06	-.1	.2384	103.7	+.0007	-.3
1897	63	103.3	-12	-19.0	59.71	100.0	-.08	-.1	.2284	99.3	+.0093	+4.1
1898	55	90.2	-4	- 7.3	59.67	100.0	-.04	-.1	.2404	104.6	+.0027	-1.1
1899	56	91.8	-5	- 8.9	59.64	99.9	-.01	-.02	.2409	104.8	+.0032	-1.3
1900	55	90.2	-4	- 7.3	59.64	99.9	-.01	-.02	.2270	98.7	+.0107	+4.7
1901	48	78.7	+3	+ 6.3	59.58	99.8	+.05	+.1	.2411	104.9	+.0034	-1.4
1902	50	82.0	+1	+ 2.0	59.60	99.8	+.03	+.1	.2378	103.4	+.0001	-.04
1903	51	83.6			59.63	99.9			.2377	103.4		

DIPPERS, Female.

[Data from 5 establishments.]

Av. 1890-99.	164	100.0	+37	+22.6	58.89	100.0	+0.25	+0.4	\$0.0757	100.0	+\$0.0115	+15.2
1890	192	117.1	+9	+4.7	58.09	98.6	+1.05	+1.8	.0805	106.3	+.0067	+8.3
1891	185	112.8	+16	+8.6	58.04	98.6	+1.10	+1.9	.0821	108.5	+.0051	+6.2
1892	169	103.0	+32	+14.9	58.78	99.8	+.36	+.6	.0763	100.8	+.0109	+14.3
1893	175	106.7	+26	+14.9	58.80	99.8	+.34	+.6	.0762	100.7	+.0110	+14.4
1894	158	96.3	+43	+27.2	58.77	99.8	+.37	+.6	.0767	101.3	+.0105	+13.7
1895	150	91.5	+51	+34.0	59.13	100.5	-.04	-.1	.0734	97.0	+.0138	+18.8
1896	155	94.5	+46	+29.7	59.25	100.6	-.11	-.2	.0728	96.2	+.0144	+19.8
1897	156	95.1	+45	+28.8	59.26	100.6	-.12	-.2	.0733	96.8	+.0139	+19.0
1898	146	89.0	+55	+37.7	59.33	100.7	-.19	-.3	.0730	96.4	+.0142	+19.5
1899	154	93.9	+47	+30.5	59.36	100.8	-.22	-.4	.0731	96.6	+.0141	+19.3
1900	169	103.0	+32	+14.9	59.39	100.8	-.25	-.4	.0751	99.2	+.0121	+16.1
1901	170	103.7	+31	+14.2	59.36	100.8	-.22	-.4	.0863	114.0	+.0009	+1.0
1902	167	101.8	+34	+20.4	59.35	100.8	-.21	-.4	.0859	113.5	+.0013	+1.5
1903	201	122.6			59.14	100.4			.0872	115.2		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARPETS.

BURLERS, Female.

[Data from 6 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	97	100.0			59.59	100.0			\$0.1289	100.0	+\$0.0302	+23.4
1890	95	97.9	+23	+23.7	60.00	100.7	-0.27	-0.5	.1255	97.4	+.0336	+26.8
1891	98	95.9	+27	+29.0	60.00	100.7	-.68	-1.1	.1286	99.8	+.0305	+23.7
1892	88	90.7	+32	+36.4	60.00	100.7	-.68	-1.1	.1343	104.2	+.0248	+18.5
1893	108	111.3	+12	+11.1	59.15	99.3	+.17	+3	.1309	101.6	+.0282	+21.5
1894	73	75.3	+47	+64.4	59.78	100.3	-.46	-8	.1212	94.0	+.0379	+31.3
1895	100	103.1	+20	+20.0	59.30	99.5	+.02	+.03	.1250	97.0	+.0341	+27.3
1896	109	112.4	+11	+10.1	59.28	99.5	+.04	+1	.1324	102.7	+.0267	+20.2
1897	93	95.9	+27	+29.0	59.56	99.9	-.23	-4	.1255	97.4	+.0336	+26.8
1898	102	105.2	+18	+17.6	59.41	99.7	-.09	-2	.1399	108.5	+.0192	+13.7
1899	104	107.2	+16	+15.4	59.46	99.8	-.14	-2	.1254	97.3	+.0337	+26.9
1900	109	112.4	+11	+10.1	59.41	99.7	-.09	-2	.1358	105.4	+.0233	+17.2
1901	114	117.5	+6	+5.3	59.40	99.7	-.08	-1	.1432	111.1	+.0159	+11.1
1902	116	119.6	+4	+3.4	59.43	99.7	-.11	-2	.1455	112.9	+.0136	+9.3
1903	120	123.7			59.32	99.5			.1591	123.4		

DYERS, Male.

[Data from 6 establishments.]

Av. 1890-99.	186	100.0	+29	+15.6	59.19	100.0	-0.44	-0.7	\$0.1474	100.0	+\$0.0071	+4.8
1890	224	120.4	-9	-4.0	60.00	101.4	-1.25	-2.1	.1451	98.4	+.0094	+6.5
1891	204	109.7	+11	+5.4	60.00	101.4	-1.25	-2.1	.1463	99.3	+.0082	+5.6
1892	176	94.6	+39	+22.2	59.72	100.9	-.97	-1.6	.1503	102.0	+.0042	+2.8
1893	196	105.4	+19	+9.7	58.82	99.4	-.07	-1	.1493	101.3	+.0052	+3.5
1894	168	90.3	+47	+28.0	59.11	99.9	-.36	-6	.1413	95.9	+.0132	+9.3
1895	187	100.5	+28	+15.0	58.83	99.4	-.08	-1	.1413	95.9	+.0132	+9.3
1896	183	98.4	+32	+17.5	58.78	99.3	-.09	-1	.1485	100.7	+.0060	+4.0
1897	165	88.7	+50	+30.3	58.93	99.6	-.13	-3	.1522	103.3	+.0023	+1.5
1898	173	93.0	+42	+24.3	58.85	99.4	-.10	-2	.1496	101.5	+.0049	+3.3
1899	179	96.2	+36	+20.1	58.83	99.4	-.08	-1	.1496	101.5	+.0049	+3.3
1900	181	97.3	+34	+18.8	58.80	99.3	-.05	-1	.1487	100.9	+.0058	+3.9
1901	180	96.8	+35	+19.4	58.82	99.4	-.07	-1	.1487	100.9	+.0058	+3.9
1902	206	110.8	+9	+4.4	58.73	99.2	+.02	+.03	.1477	100.2	+.0068	+4.6
1903	215	115.6			58.75	99.3			.1545	104.8		

LOOM FIXERS, Male.

[Data from 9 establishments.]

Av. 1890-99.	77	100.0	+9	+11.7	59.34	100.0	-0.44	-0.7	\$0.2494	100.0	+\$0.0156	+6.3
1890	70	90.9	+16	+22.9	59.99	101.1	-1.09	-1.8	.2533	101.6	+.0117	+4.6
1891	74	96.1	+12	+16.2	59.97	101.1	-1.07	-1.8	.2443	98.0	+.0207	+8.5
1892	77	100.0	+9	+11.7	59.27	99.9	-.37	-.6	.2500	100.2	+.0150	+6.0
1893	78	101.3	+8	+10.3	58.97	99.4	-.07	-.1	.2512	100.7	+.0138	+5.5
1894	75	97.4	+11	+14.7	59.01	99.4	-.11	-.2	.2485	99.6	+.0165	+6.9
1895	78	101.3	+8	+10.3	59.03	99.5	-.13	-.2	.2455	98.4	+.0195	+7.9
1896	76	98.7	+10	+13.2	59.03	99.5	-.13	-.2	.2453	98.4	+.0197	+8.0
1897	77	100.0	+9	+11.7	59.01	99.4	-.11	-.2	.2562	102.7	+.0088	+3.4
1898	82	106.5	+4	+4.9	59.02	99.5	-.12	-.2	.2479	99.4	+.0171	+6.9
1899	78	101.3	+8	+10.3	59.13	99.6	-.23	-.4	.2514	100.8	+.0136	+5.4
1900	79	102.6	+7	+8.9	59.16	99.7	-.24	-.4	.2520	101.0	+.0130	+5.2
1901	81	105.2	+5	+6.2	59.14	99.7	-.26	-.4	.2515	100.8	+.0135	+5.4
1902	82	106.5	+4	+4.9	59.10	99.6	-.20	-.3	.2555	102.4	+.0095	+3.7
1903	86	111.7			58.90	99.3			.2650	106.8		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

CARPETS—Continued.

SPOOLERS, Female.

[Data from 6 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	138	100.0	- 2	- 1.4	59.16	100.0	-0.19	-0.3	\$0.1127	100.0	+\$0.0070	+ 6.2
1890	144	104.3	- 8	- 5.6	60.00	101.4	-1.03	-1.7	.1132	100.4	+.0065	+ 5.7
1891	144	104.3	- 8	- 5.6	60.00	101.4	-1.03	-1.7	.1078	95.7	+.0119	+11.0
1892	148	107.2	-12	- 8.1	59.07	99.8	- .10	- 2	.1105	98.0	+.0092	+ 8.3
1893	157	113.8	-21	-13.4	58.76	99.3	+ .21	+ 4	.1144	101.5	+.0053	+ 4.6
1894	142	102.9	-6	- 4.2	58.90	99.6	+ .07	+ 1	.1168	103.6	+.0029	+ 2.5
1895	153	110.9	-17	-11.1	58.89	99.5	+ .08	+ 1	.1119	99.3	+.0078	+ 7.0
1896	138	100.0	- 2	- 1.4	58.88	99.5	+ .09	+ 2	.1130	100.3	+.0067	+ 5.9
1897	118	85.5	+18	+15.3	59.00	99.7	- .03	- 1	.1140	101.2	+.0057	+ 5.0
1898	113	81.9	+23	+20.4	59.12	99.9	- .15	- 3	.1125	99.8	+.0072	+ 6.4
1899	126	91.3	+10	+ 7.9	59.00	99.7	- .03	- 1	.1133	100.5	+.0064	+ 5.6
1900	139	100.7	- 3	- 2.2	58.95	99.6	+ .02	+ .03	.1122	99.6	+.0075	+ 6.7
1901	141	102.2	- 5	- 3.5	58.95	99.6	+ .02	+ .03	.1140	101.2	+.0057	+ 5.0
1902	137	99.3	- 1	- .7	58.98	99.7	- .01	- .02	.1179	104.6	+.0018	+ 1.5
1903	136	98.6	.....	.....	58.97	99.7	.....	.....	.1197	106.2	.....	.....

TWISTERS, Female.

[Data from 3 establishments.]

Year.	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	Wages per hour.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.
Av. 1890-99.	62	100.0	+28	+45.2	59.27	100.0	-0.18	-0.3
1890	72	116.1	+18	+25.0	60.00	101.2	-.91	-1.5
1891	68	109.7	+22	+32.4	60.00	101.2	-.91	-1.5
1892	68	109.7	+22	+32.4	60.00	101.2	-.91	-1.5
1893	63	101.6	+27	+42.9	59.02	99.6	+.07	+ 1
1894	53	85.5	+37	+69.8	59.02	99.6	+.07	+ 1
1895	64	103.2	+26	+40.6	58.72	99.1	+.37	+ 6
1896	67	108.1	+23	+34.3	58.90	99.4	+.19	+ 3
1897	53	85.5	+37	+69.8	59.06	99.6	+.03	+ 1
1898	45	72.6	+45	+100.0	59.11	99.7	-.02	- .03
1899	68	109.7	+22	+32.4	58.88	99.3	+.21	+ 4
1900	82	132.3	+ 8	+ 9.8	58.95	99.5	+.14	+ 2
1901	75	121.0	+15	+20.0	58.80	99.2	+.29	+ 5
1902	82	132.3	+ 8	+ 9.8	59.00	99.5	+.09	+ 2
1903	90	145.2	.....	.....	59.09	99.7	.....	.....

WEAVERS, BRUSSELS AND WILTON, Male.

[Data from 3 establishments.]

Year.	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	Wages per hour.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.
Av. 1890-99.	421	100.0	+183	+43.5	59.38	100.0	-0.07	-0.1
1890	411	97.6	+193	+47.0	60.00	101.0	-.69	-1.2
1891	391	92.9	+213	+54.5	60.00	101.0	-.69	-1.2
1892	427	101.4	+177	+41.5	59.17	99.6	+.14	+ 2
1893	399	94.8	+205	+51.4	59.37	100.0	-.06	- 1
1894	399	94.8	+205	+51.4	59.15	99.6	+.16	+ 3
1895	450	106.9	+154	+34.2	59.21	99.7	+.10	+ 2
1896	441	104.8	+163	+37.0	59.22	99.7	+.09	+ 2
1897	448	106.4	+156	+34.8	59.21	99.7	+.10	+ 2
1898	396	94.1	+208	+52.5	59.20	99.7	+.11	+ 2
1899	448	106.4	+156	+34.8	59.24	99.8	+.07	+ 1
1900	464	110.2	+140	+30.2	59.44	100.1	-.13	- 2
1901	501	119.0	+103	+20.6	59.30	99.9	+.01	+ .02
1902	537	127.6	+ 67	+12.5	59.32	99.9	-.01	- .02
1903	604	143.5	.....	.....	59.31	99.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARPETS—Continued.

WEAVERS, BRUSSELS AND WILTON, Female.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	74	100.0	+ 53	+ 71.6	58.60	100.0	-0.60	-1.0	\$0.1345	100.0	+\$0.0228	+17.0
1890	80	108.1	+ 47	+ 58.8	60.00	102.4	-2.00	-3.3	.1327	98.7	+.0246	+18.5
1891	74	100.0	+ 53	+ 71.6	60.00	102.4	-2.00	-3.3	.1227	91.2	+.0346	+28.2
1892	73	98.6	+ 54	+ 74.0	60.00	102.4	-2.00	-3.3	.1232	91.6	+.0341	+27.7
1893	96	129.7	+ 31	+ 32.3	58.00	99.0	.....	.....	.1290	95.9	+.0283	+21.9
1894	24	32.4	+103	+429.2	58.00	99.0	.....	.....	.1168	86.8	+.0405	+34.7
1895	71	95.9	+ 56	+ 78.9	58.00	99.0	.....	.....	.1243	92.4	+.0330	+26.5
1896	82	110.8	+ 45	+ 54.9	58.00	99.0	.....	.....	.1435	106.7	+.0138	+ 9.6
1897	51	68.9	+ 76	+149.0	58.00	99.0	.....	.....	.1441	107.1	+.0132	+ 9.2
1898	84	113.5	+ 43	+ 51.2	58.00	99.0	.....	.....	.1484	110.3	+.0089	+ 6.0
1899	105	141.9	+ 22	+ 21.0	58.00	99.0	.....	.....	.1603	119.2	+.0030	- 1.9
1900	114	154.1	+ 13	+ 11.4	58.00	99.0	.....	.....	.1512	112.4	+.0061	+ 4.0
1901	131	177.0	- 4	- 3.1	58.00	99.0	.....	.....	.1892	140.7	+.0319	+16.9
1902	131	177.0	- 4	- 3.1	58.00	99.0	.....	.....	.1460	108.6	+.0113	+ 7.7
1903	127	171.6	.....	.....	58.00	99.0	.....	.....	.1573	117.0	.....	.....

WEAVERS, INGRAIN, Female.

[Data from 3 establishments.]

Av. 1890-99.	419	100.0	- 3	- 0.7	58.90	100.0	-0.03	-0.1	\$0.1310	100.0	+\$0.0097	+ 7.4
1890	406	96.9	+10	+ 2.5	59.95	101.8	-1.08	-1.8	.1262	96.8	+.0145	+11.5
1891	431	102.9	-15	- 3.5	59.93	101.7	-1.06	-1.8	.1218	93.0	+.0189	+15.5
1892	437	104.3	-21	- 4.8	58.56	99.4	+ .31	+ .5	.1241	94.7	+.0166	+13.4
1893	388	92.6	+28	+ 7.2	58.56	99.4	+ .31	+ .5	.1290	98.5	+.0117	+ 9.1
1894	444	106.0	-28	- 6.3	58.54	99.4	+ .33	+ .6	.1315	100.4	+.0092	+ 7.0
1895	375	89.5	+41	+10.9	58.47	99.3	+ .40	+ .7	.1321	100.8	+.0086	+ 6.5
1896	399	95.2	+17	+ 4.3	58.68	99.6	+ .19	+ .3	.1331	101.6	+.0076	+ 5.7
1897	419	100.0	- 3	- 0.7	58.72	99.7	+ .15	+ .3	.1404	107.2	+.0003	+ 2.1
1898	435	103.8	-19	- 4.4	58.80	99.8	+ .07	+ .1	.1314	100.3	+.0093	+ 7.1
1899	453	108.1	-37	- 8.2	58.77	99.8	+ .10	+ .2	.1399	106.8	+.0008	+ .6
1900	441	105.3	-25	- 5.7	58.86	99.9	+ .01	+ .02	.1354	103.4	+.0053	+ 3.9
1901	420	100.2	- 4	- 1.0	58.87	99.9			.1390	106.1	+.0017	+ 1.2
1902	434	103.6	-18	- 4.1	58.86	99.9	+ .01	+ .02	.1223	93.4	+.0184	+15.0
1903	416	99.3			58.87	99.9			.1407	107.4		

WEAVERS, INGRAIN. (a)

[Data from 4 establishments.]

Av. 1890-99.	435	100.0	- 54	-12.4	60.00	100.0	-1.14	-1.9	\$0.1653	100.0	+\$0.0187	+11.3
1890	521	119.8	-140	-26.9	60.00	100.0	-1.14	-1.9	.1643	99.4	+.0197	+12.0
1891	452	103.9	- 71	-15.7	60.00	100.0	-1.14	-1.9	.1717	103.9	+.0123	+ 7.2
1892	465	106.9	- 84	-18.1	60.00	100.0	-1.14	-1.9	.1735	105.0	+.0105	+ 6.1
1893	438	100.7	- 57	-13.0	60.00	100.0	-1.14	-1.9	.1618	97.9	+.0222	+13.7
1894	421	96.8	- 40	- 9.5	60.00	100.0	-1.14	-1.9	.1514	91.6	+.0326	+21.5
1895	426	97.9	- 45	-10.6	60.00	100.0	-1.14	-1.9	.1585	95.9	+.0255	+16.1
1896	400	92.0	- 19	- 4.8	60.00	100.0	-1.14	-1.9	.1741	105.3	+.0099	+ 5.7
1897	422	97.0	- 41	- 9.7	60.00	100.0	-1.14	-1.9	.1621	98.1	+.0219	+13.5
1898	407	93.6	- 26	- 6.4	60.00	100.0	-1.14	-1.9	.1711	103.5	+.0129	+ 7.5
1899	397	91.3	- 16	- 4.0	60.00	100.0	-1.14	-1.9	.1648	99.7	+.0192	+11.7
1900	378	86.9	+ 3	+ .8	60.00	100.0	-1.14	-1.9	.1668	100.9	+.0172	+10.3
1901	414	95.2	- 33	- 8.0	60.00	100.0	-1.14	-1.9	.1740	105.3	+.0100	+ 5.7
1902	404	92.9	- 23	- 5.7	60.00	100.0	-1.14	-1.9	.1780	107.7	+.0060	+ 3.4
1903	381	87.6	.....	.....	58.86	98.1	.....	.....	.1840	111.3	.....	.....

4Sex not reported.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

CARPETS—Concluded.

WINDERS, Female.

[Data from 6 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	236	100.0	+67	+28.4	59.15	100.0	-0.66	-1.1	\$0.1106	100.0	+\$0.0072	+6.5
1890	212	89.8	+91	+42.9	60.00	101.4	-1.51	-2.5	.1112	100.5	+.0066	+5.9
1891	211	89.4	+92	+43.6	60.00	101.4	-1.51	-2.5	.1072	96.9	+.0106	+9.9
1892	219	92.8	+84	+38.4	59.10	99.9	-.61	-1.0	.1110	100.4	+.0068	+6.1
1893	246	104.2	+57	+23.2	58.82	99.4	-.93	-.6	.1102	99.6	+.0076	+6.9
1894	209	88.6	+94	+45.0	58.93	99.6	-.44	-.7	.1083	97.9	+.0095	+8.8
1895	257	108.9	+46	+17.9	58.91	99.6	-.42	-.7	.1083	97.9	+.0095	+8.8
1896	250	105.9	+53	+21.2	58.89	99.6	-.40	-.7	.1119	101.2	+.0059	+5.3
1897	244	103.4	+59	+24.2	58.95	99.7	-.46	-.8	.1088	98.4	+.0090	+8.8
1898	247	104.7	+56	+22.7	58.94	99.6	-.45	-.8	.1130	102.2	+.0048	+4.2
1899	262	111.0	+41	+15.6	58.93	99.6	-.44	-.7	.1162	105.1	+.0016	+1.4
1900	268	113.6	+35	+13.1	58.96	99.7	-.47	-.8	.1183	107.0	+.0005	-.4
1901	278	117.8	+25	+9.0	58.88	99.5	-.39	-.7	.1147	103.7	+.0031	+2.7
1902	294	124.6	+9	+3.1	58.89	99.6	-.40	-.7	.1152	104.2	+.0026	+2.3
1903	303	128.4			58.49	98.9			.1178	106.5		

CARRIAGES AND WAGONS.

BLACKSMITHS, Male.

[Data from 98 establishments.]

Av. 1890-99.	583	100.0	+ 70	+12.0	58.75	100.0	-0.97	-1.7	\$0.2300	100.0	+\$0.0149	+ 6.5
1890	590	101.2	+ 63	+10.7	59.17	100.7	-1.39	-2.3	.2356	102.4	+.0093	+ 3.9
1891	590	101.2	+ 63	+10.7	59.20	100.8	-1.42	-2.4	.2342	101.8	+.0107	+ 4.6
1892	610	104.6	+ 43	+ 7.0	59.14	100.7	-1.36	-2.3	.2343	101.9	+.0106	+ 4.5
1893	673	115.4	- 20	- 3.0	59.08	100.6	-1.30	-2.2	.2169	94.3	+.0280	+12.9
1894	579	99.3	+ 74	+12.8	58.00	98.7	-.22	-.4	.2222	96.6	+.0227	+10.2
1895	608	104.3	+ 45	+ 7.4	58.42	99.4	-.64	-1.1	.2136	95.0	+.0263	+12.0
1896	497	85.2	+156	+31.4	58.38	99.4	-.60	-1.0	.2340	101.7	+.0109	+ 4.7
1897	514	88.2	+139	+27.0	58.75	100.0	-.97	-1.7	.2356	102.4	+.0093	+ 3.9
1898	585	100.3	+ 68	+11.6	58.87	100.2	-1.09	-1.9	.2321	100.9	+.0128	+ 5.5
1899	587	100.7	+ 66	+11.2	58.52	99.6	-.74	-1.3	.2366	102.9	+.0083	+ 3.5
1900	600	102.9	+ 53	+ 8.8	58.48	99.5	-.70	-1.2	.2342	101.8	+.0107	+ 4.6
1901	648	111.1	+ 5	+ .8	58.60	99.7	-.82	-1.4	.2356	102.4	+.0093	+ 3.9
1902	627	107.5	+ 26	+ 4.1	58.27	99.2	-.49	-.8	.2410	104.8	+.0039	+ 1.6
1903	653	112.0	.....	.....	57.78	98.3	.....	.....	.2449	106.5	.....	.....

BODY MAKERS, CARRIAGE, Male.

[Data from 26 establishments.]

Av. 1890-99.	195	100.0	+ 76	+39.0	59.10	100.0	-0.79	-1.3	\$0.2395	100.0	+\$0.0106	+4.4
1890	168	86.2	+103	+61.3	59.31	100.4	-1.00	-1.7	.2398	100.1	+.0103	+4.3
1891	187	95.9	+ 84	+44.9	59.36	100.4	-1.05	-1.8	.2388	99.7	+.0113	+4.7
1892	187	95.9	+ 84	+44.9	59.29	100.3	-.98	-1.7	.2424	101.2	+.0077	+3.2
1893	190	97.4	+ 81	+42.6	59.15	100.1	-.84	-1.4	.2399	100.2	+.0102	+4.3
1894	228	116.9	+ 43	+18.9	59.31	100.4	-1.00	-1.7	.2362	98.6	+.0139	+5.9
1895	183	93.8	+ 88	+48.1	59.19	100.2	-.88	-1.5	.2344	97.9	+.0157	+6.7
1896	178	91.3	+ 93	+52.2	59.09	100.0	-.78	-1.3	.2361	98.6	+.0140	+5.9
1897	197	101.0	+ 74	+37.6	59.00	99.8	-.69	-1.2	.2361	98.6	+.0140	+5.9
1898	196	100.5	+ 75	+38.8	58.98	99.8	-.67	-1.1	.2421	101.1	+.0080	+3.3
1899	231	118.5	+ 40	+17.3	58.29	98.6	+ .02	+ .03	.2487	103.8	+.0014	+.6
1900	227	116.4	+ 44	+19.4	58.81	99.5	-.50	-.9	.2407	100.5	+.0094	+3.9
1901	269	137.9	+ 2	+ .7	58.94	99.7	-.63	-1.1	.2357	98.4	+.0144	+6.1
1902	271	139.0			58.90	99.7	-.59	-1.0	.2458	102.6	+.0043	+1.7
1903	271	139.0			58.31	98.7			.2501	104.4		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

CARRIAGES AND WAGONS—Continued.

BODY MAKERS, NOT SPECIFIED, Male.

[Data from 19 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	120	100.0	—18	—15.0	59.34	100.0	—0.12	—0.2	\$0.2253	100.0	+\$0.0168	+7.5
1890	120	100.0	—18	—15.0	59.42	100.1	— .20	— .3	.2251	99.9	+ .0170	+7.6
1891	125	104.2	—23	—18.4	59.56	100.4	— .6	— .6	.2255	100.1	+ .0166	+7.4
1892	126	105.0	—24	—19.0	59.40	100.1	— .18	— .3	.2270	100.8	+ .0151	+6.7
1893	142	118.3	—40	—28.2	59.14	99.7	+ .07	+ .1	.2295	101.9	+ .0126	+5.5
1894	112	93.3	—10	—8.9	59.29	99.9	— .08	— .1	.2294	97.8	+ .0217	+9.8
1895	112	93.3	—10	—8.9	59.33	100.0	— .11	— .2	.2154	95.6	+ .0267	+12.4
1896	109	90.8	—7	—6.4	59.32	100.0	— .10	— .2	.2252	130.0	+ .0169	+7.5
1897	119	99.2	—17	—14.3	59.13	99.6	+ .09	+ .2	.2269	100.7	+ .0152	+6.7
1898	116	96.7	—14	—12.1	59.38	100.1	— .16	— .3	.2265	100.5	+ .0156	+6.9
1899	117	97.5	—15	—12.8	59.43	100.2	— .21	— .4	.2316	102.8	+ .0105	+4.5
1900	117	97.5	—15	—12.8	59.42	100.1	— .29	— .3	.2296	101.9	+ .0125	+5.4
1901	124	103.3	—22	—17.7	59.44	100.2	— .22	— .4	.2299	102.0	+ .0122	+5.3
1902	98	81.7	+4	+4.1	59.50	100.3	— .28	— .6	.2299	102.0	+ .0122	+5.3
1903	102	85.0	.....	.....	59.22	99.8	.....	.....	.2421	107.5	.....	.....

IRONERS, Male.

[Data for employees from 7 establishments for entire period. Data for hours and wages from 8 establishments, 1890-1896, 1898-1903; 7 establishments, 1897.]

Av. 1890-99.	97	100.0	+28	+28.9	55.79	100.0	—2.01	—3.6	\$0.2135	100.0	+\$0.0254	+11.9
1890	97	100.0	+28	+28.9	56.28	100.9	—2.50	—4.4	.2097	98.2	+ .0292	+13.9
1891	101	104.1	+24	+23.8	56.48	101.2	—2.70	—4.6	.2059	96.4	+ .0330	+16.0
1892	111	114.4	+14	+12.6	56.45	101.2	—2.67	—4.7	.2048	95.9	+ .0341	+16.7
1893	103	106.2	+22	+21.4	55.55	99.6	—1.77	—3.2	.2133	99.9	+ .0256	+12.0
1894	87	89.7	+38	+43.7	55.43	99.4	—1.65	—3.0	.2172	101.7	+ .0217	+10.0
1895	93	95.9	+32	+34.4	55.79	100.0	—2.01	—3.6	.2119	99.3	+ .0270	+12.7
1896	77	79.4	+48	+62.3	55.71	99.9	—1.93	—3.5	.2219	108.9	+ .0170	+7.7
1897	90	92.3	+35	+38.9	55.39	99.3	—1.61	—2.9	.2183	102.2	+ .0206	+9.4
1898	101	104.1	+24	+23.8	56.28	100.9	—2.51	—4.5	.2110	98.8	+ .0279	+13.2
1899	108	111.3	+17	+15.7	54.53	97.7	— .75	—1.4	.2212	103.6	+ .0177	+8.0
1900	121	124.7	+4	+3.3	54.36	97.4	— .58	—1.1	.2207	103.4	+ .0192	+8.2
1901	117	120.6	+8	+6.6	55.40	99.3	—1.62	—2.9	.2140	100.2	+ .0249	+11.6
1902	114	117.5	+11	+9.6	56.32	100.9	—2.54	—4.5	.2129	99.7	+ .0260	+12.2
1903	125	128.9	.....	.....	53.78	96.4	.....	.....	.2389	111.9	.....	.....

MACHINE WOODWORKERS, Male.

[Data from 18 establishments.]

Av. 1890-99.	227	100.0	+78	+34.4	59.01	100.0	—0.21	—0.4	\$0.1774	100.0	+\$0.0190	+10.7
1890	215	94.7	+90	+41.9	59.40	100.8	— .66	—1.1	.1756	99.0	+ .0208	+11.8
1891	223	98.2	+82	+36.8	59.52	100.9	— .72	—1.2	.1733	97.7	+ .0231	+13.3
1892	221	97.4	+84	+38.0	59.51	100.8	— .71	—1.2	.1793	101.1	+ .0171	+9.5
1893	209	92.1	+96	+45.9	59.41	100.7	— .61	—1.0	.1761	99.3	+ .0203	+11.5
1894	190	83.7	+115	+60.5	57.55	97.5	+1.25	+2.2	.1787	100.7	+ .0177	+9.9
1895	232	102.2	+73	+31.5	59.07	100.1	— .27	— .5	.1710	96.4	+ .0254	+14.9
1896	212	93.4	+93	+43.9	58.23	98.7	+ .57	+1.0	.1820	102.6	+ .0144	+7.9
1897	228	100.4	+77	+33.8	58.83	99.7	— .03	— .1	.1776	100.1	+ .0188	+10.6
1898	266	117.2	+39	+14.7	59.51	100.8	— .71	—1.2	.1787	100.7	+ .0177	+9.9
1899	277	122.0	+28	+10.1	59.04	100.1	— .24	— .4	.1813	102.2	+ .0151	+8.3
1900	270	118.9	+35	+13.0	58.93	99.9	— .13	— .2	.1864	105.1	+ .0100	+5.4
1901	306	134.8	—1	—3.3	59.01	100.0	— .21	— .4	.1833	103.3	+ .0131	+7.1
1902	310	136.6	—5	—1.6	58.92	99.8	— .12	— .2	.1936	109.1	+ .0028	+1.4
1903	305	134.4	.....	.....	58.80	99.6	.....	.....	.1964	110.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARRIAGES AND WAGONS—Concluded.

PAINTERS, Male.

[Data from 76 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Number.	Per cent.			Number.	Per cent.			Amount.	Per cent.
Av. 1890-99.	747	100.0	+121	+16.2	58.73	100.0	-0.89	-1.5	\$0.2114	100.0	+\$0.0175	+8.3
1890	716	95.9	+152	+21.2	58.76	100.1	-.92	-1.6	.2086	98.7	+.0203	+9.7
1891	738	98.8	+130	+17.6	58.88	100.3	-1.04	-1.8	.2082	98.5	+.0207	+9.9
1892	761	101.9	+107	+14.1	58.79	100.1	-.95	-1.6	.2134	100.9	+.0155	+7.3
1893	752	100.7	+116	+15.4	58.72	100.0	-.88	-1.5	.2121	100.3	+.0168	+7.9
1894	684	91.6	+184	+26.9	58.93	100.3	-1.09	-1.8	.2108	99.7	+.0181	+8.6
1895	719	96.3	+149	+20.7	58.76	100.1	-.92	-1.6	.2121	100.3	+.0168	+7.9
1896	738	98.8	+130	+17.6	58.73	100.0	-.89	-1.5	.2109	99.8	+.0180	+8.5
1897	719	96.3	+149	+20.7	58.65	99.9	-.81	-1.4	.2103	99.5	+.0186	+8.8
1898	763	104.3	+85	+11.9	58.72	100.0	-.88	-1.5	.2132	100.9	+.0157	+7.4
1899	857	114.7	+11	+1.3	58.36	99.4	-.52	-.9	.2144	101.4	+.0145	+6.8
1900	878	117.5	-10	-1.1	58.19	99.1	-.35	-.6	.2167	102.5	+.0122	+5.6
1901	915	122.5	-47	-5.1	58.45	99.5	-.61	-1.0	.2190	103.6	+.0099	+4.5
1902	900	120.5	-32	-3.6	58.56	99.7	-.72	-1.2	.2190	103.6	+.0099	+4.5
1903	868	116.2	.....	.....	57.84	98.5	.....	.....	.2289	108.3	.....	.....

TRIMMERS, CARRIAGE, Male.

[Data from 46 establishments.]

Av. 1890-99.	211	100.0	+38	+18.0	58.62	100.0	-1.11	-1.9	\$0.2284	100.0	+\$0.0150	+6.6
1890	195	92.4	+54	+27.7	58.87	100.4	-1.86	-2.3	.2313	101.3	+.0121	+5.2
1891	196	92.9	+53	+27.0	58.90	100.5	-1.89	-2.4	.2305	100.9	+.0129	+5.6
1892	211	100.0	+38	+18.0	58.76	100.2	-1.25	-2.1	.2299	100.7	+.0135	+5.9
1893	197	93.4	+52	+26.4	58.55	99.9	-1.04	-1.8	.2326	101.8	+.0108	+4.6
1894	203	96.2	+46	+22.7	58.68	100.1	-1.17	-2.0	.2254	98.7	+.0180	+8.0
1895	204	96.7	+45	+22.1	58.73	100.2	-1.22	-2.1	.2263	99.1	+.0171	+7.6
1896	210	99.5	+39	+18.6	58.59	99.9	-1.08	-1.8	.2250	98.5	+.0184	+8.2
1897	215	101.9	+34	+15.8	58.68	100.1	-1.17	-2.0	.2259	98.9	+.0175	+7.7
1898	232	110.0	+17	+7.3	58.59	99.9	-1.08	-1.8	.2258	98.9	+.0176	+7.8
1899	247	117.1	+2	+1.6	57.80	98.6	-.29	-.5	.2314	101.3	+.0120	+5.2
1900	245	116.1	+4	+1.6	57.85	98.7	-.34	-.6	.2306	101.0	+.0128	+5.6
1901	272	128.9	-23	-8.5	57.86	98.7	-.85	-.6	.2321	101.6	+.0113	+4.9
1902	246	116.6	+3	+1.2	58.24	99.4	-.73	-1.3	.2348	102.8	+.0086	+3.7
1903	249	118.0	.....	.....	57.51	98.1	.....	.....	.2434	106.6	.....	.....

WOODWORKERS, Male.

[Data from 29 establishments.]

Av. 1890-99.	109	100.0	-4	-3.7	57.75	100.0	-1.49	-2.6	\$0.2390	100.0	+\$0.0113	+4.7
1890	102	93.6	+3	+2.9	57.82	100.1	-1.56	-2.7	.2402	100.5	+.0101	+4.2
1891	102	93.6	+3	+2.9	57.88	100.2	-1.62	-2.8	.2399	100.4	+.0104	+4.3
1892	113	103.7	-8	-7.1	57.75	100.0	-1.49	-2.6	.2396	100.3	+.0107	+4.5
1893	113	103.7	-8	-7.1	57.89	100.2	-1.63	-2.8	.2371	99.2	+.0132	+5.6
1894	103	94.5	+2	+1.9	57.65	99.8	-1.39	-2.4	.2375	99.4	+.0128	+5.4
1895	104	95.4	+1	+1.0	57.79	100.1	-1.53	-2.6	.2419	101.2	+.0084	+3.5
1896	113	103.7	-8	-7.1	57.38	99.4	-1.12	-2.0	.2401	100.5	+.0102	+4.2
1897	112	102.8	-7	-6.3	57.93	100.3	-1.67	-2.9	.2376	99.4	+.0127	+5.3
1898	112	102.8	-7	-6.3	58.00	100.4	-1.74	-3.0	.2366	99.0	+.0137	+5.8
1899	116	106.4	-11	-9.5	57.41	99.4	-1.15	-2.0	.2394	100.2	+.0109	+4.6
1900	117	107.3	-12	-10.3	57.42	99.4	-1.16	-2.0	.2429	101.6	+.0074	+3.0
1901	122	111.9	-17	-13.9	57.07	98.8	-.81	-1.4	.2418	101.2	+.0085	+3.5
1902	111	101.8	-6	-5.4	57.04	98.8	-.78	-1.4	.2444	102.3	+.0059	+2.4
1903	105	96.3	.....	.....	56.26	97.4	.....	.....	.2503	104.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARS, STEAM RAILROAD.

BLACKSMITHS, Male.

[Data for employees from 44 establishments for entire period. Data for hours and wages from 44 establishments, 1890-1898; 45 establishments, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	989	100.0	+371	+37.5	57.57	100.0	-0.06	-0.1	\$0.2669	100.0	+\$0.0117	+4.4
1890	1,103	111.5	+257	+23.3	58.69	101.9	-1.18	-2.0	.2730	102.3	+.0056	+2.1
1891	1,035	104.7	+325	+31.4	58.05	100.8	-.54	-.9	.2697	101.0	+.0089	+3.3
1892	1,067	107.9	+298	+27.5	58.44	101.5	-.98	-1.6	.2711	101.6	+.0075	+2.8
1893	1,056	106.8	+304	+28.8	58.22	101.1	-.71	-1.2	.2716	101.8	+.0070	+2.6
1894	812	82.1	+548	+67.5	55.60	96.6	+1.91	+3.4	.2699	101.1	+.0087	+3.2
1895	805	81.4	+555	+68.9	56.45	98.1	+1.06	+1.9	.2727	102.2	+.0059	+2.2
1896	995	100.6	+365	+63.7	56.90	98.8	+.61	+1.1	.2565	96.1	+.0221	+8.6
1897	903	91.8	+457	+60.6	56.50	98.1	+1.01	+1.8	.2652	99.4	+.0134	+5.1
1898	1,034	104.6	+326	+31.5	58.19	101.1	-.68	-1.2	.2589	97.0	+.0197	+7.6
1899	1,084	109.6	+276	+25.5	58.63	101.8	-1.12	-1.9	.2603	97.5	+.0183	+7.0
1900	1,200	121.3	+160	+13.3	58.68	101.9	-1.17	-2.0	.2614	97.9	+.0172	+6.6
1901	1,220	123.4	+140	+11.5	58.07	100.9	-.56	-1.0	.2648	99.2	+.0188	+5.2
1902	1,282	129.6	+78	+6.1	58.00	100.7	-.49	-.8	.2679	100.4	+.0107	+4.0
1903	1,360	137.6	.....	.....	57.51	99.9	.....	.....	.2786	104.4	.....	.....

BOILER MAKERS, Male.

[Data from 34 establishments.]

Av. 1890-99.	562	100.0	+382	+68.0	57.20	100.0	-0.85	-1.5	\$0.2673	100.0	+\$0.0357	+13.4
1890	514	91.5	+430	+83.7	59.34	103.7	-2.99	-5.0	.2685	100.4	+.0345	+12.8
1891	518	92.2	+426	+82.2	57.69	100.9	-1.34	-2.3	.2721	101.8	+.0309	+11.4
1892	567	100.9	+377	+66.5	59.10	103.3	-2.75	-4.7	.2695	100.8	+.0335	+12.4
1893	571	101.6	+373	+65.8	58.68	102.6	-2.33	-4.0	.2709	101.3	+.0321	+11.8
1894	528	94.0	+416	+78.8	54.23	94.8	+2.12	+3.9	.2650	99.1	+.0380	+14.3
1895	532	94.7	+412	+77.4	55.69	97.2	+.76	+1.4	.2637	98.7	+.0393	+14.9
1896	563	100.2	+381	+67.7	55.62	97.2	+.73	+1.3	.2648	99.1	+.0382	+14.4
1897	579	103.0	+365	+63.0	55.74	97.4	+.61	+1.1	.2639	98.7	+.0391	+14.8
1898	611	108.7	+333	+54.5	58.04	101.5	-1.69	-2.9	.2658	99.4	+.0372	+14.0
1899	640	113.9	+304	+47.5	57.98	101.4	-1.63	-2.8	.2687	100.5	+.0343	+12.3
1900	665	118.3	+279	+42.0	58.22	101.8	-1.87	-3.2	.2723	101.9	+.0307	+11.3
1901	758	134.9	+186	+24.5	57.34	100.2	-.99	-1.7	.2745	102.7	+.0285	+10.4
1902	785	139.7	+159	+20.3	57.09	99.8	-.74	-1.3	.2820	105.5	+.0210	+7.4
1903	944	168.0	.....	.....	56.35	98.5	.....	.....	.3030	113.4	.....	.....

BRASS FINISHERS, Male.

[Data from 7 establishments.]

Av. 1890-99.	72	100.0	+73	+101.4	59.55	100.0	-3.60	-6.0	\$0.2627	100.0	+\$0.0542	+20.6
1890	63	87.5	+82	+130.2	59.67	100.2	-3.72	-6.2	.2780	105.3	+.0389	+14.0
1891	61	84.7	+84	+137.7	59.08	99.2	-3.13	-5.3	.2761	105.1	+.0408	+14.8
1892	68	94.4	+77	+113.2	59.72	100.3	-3.77	-6.3	.2738	104.2	+.0431	+15.7
1893	77	106.9	+68	+88.3	59.78	100.4	-3.83	-6.4	.2811	107.0	+.0358	+12.7
1894	60	83.3	+85	+141.7	59.42	99.8	-3.47	-5.8	.2309	87.9	+.0860	+37.2
1895	63	87.5	+82	+130.2	59.32	99.6	-3.37	-5.7	.2463	93.8	+.0706	+28.7
1896	90	125.0	+55	+61.1	59.43	99.8	-3.48	-5.9	.2588	98.5	+.0581	+22.4
1897	71	98.6	+74	+104.2	59.31	99.6	-3.36	-5.7	.2603	99.1	+.0566	+21.7
1898	100	138.9	+45	+45.0	59.87	100.5	-3.92	-6.5	.2581	98.2	+.0588	+22.8
1899	66	91.7	+79	+119.7	59.85	100.5	-3.90	-6.5	.2635	100.3	+.0534	+20.3
1900	74	102.8	+71	+95.9	59.82	100.5	-3.87	-6.5	.2772	105.5	+.0397	+14.3
1901	73	101.4	+72	+98.6	59.75	100.3	-3.80	-6.4	.2654	101.0	+.0515	+19.4
1902	79	109.7	+66	+83.5	59.78	100.4	-3.83	-6.4	.2942	112.0	+.0227	+7.7
1903	145	201.4	.....	.....	55.95	94.0	.....	.....	.3169	120.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARS, STEAM RAILROAD—Continued.

CABINETMAKERS, Male.

[Data from 15 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	727	100.0	+ 22	+ 8.0	59.63	100.0	-3.94	-6.6	\$0.2354	100.0	+\$0.0715	+30.4
1890	713	98.1	+ 36	+ 5.0	59.71	100.1	-4.02	-6.7	.2533	107.6	+ .0536	+21.2
1891	703	96.7	+ 46	+ 6.5	59.54	99.8	-3.85	-6.5	.2526	107.3	+ .0543	+21.5
1892	538	74.0	+211	+39.2	59.57	99.9	-3.88	-6.5	.2408	102.3	+ .0661	+27.5
1893	642	88.3	+107	+16.7	59.82	100.3	-4.13	-6.9	.2481	105.4	+ .0588	+23.7
1894	614	84.5	+135	+22.0	59.55	99.9	-3.86	-6.5	.2036	86.5	+ .1033	+50.7
1895	782	107.6	- 33	- 4.2	59.70	100.1	-4.01	-6.7	.2160	91.8	+ .0909	+42.1
1896	699	96.1	+ 50	+ 7.2	59.64	100.0	-3.95	-6.6	.2304	97.9	+ .0765	+33.2
1897	848	116.6	- 99	-11.7	59.55	99.9	-3.86	-6.5	.2288	97.2	+ .0781	+34.1
1898	727	100.0	+ 22	+ 3.0	59.57	99.9	-3.88	-6.5	.2338	99.3	+ .0731	+31.3
1899	1,001	137.7	-252	-25.2	59.61	100.0	-3.92	-6.6	.2464	104.7	+ .0605	+24.6
1900	906	124.6	-157	-17.3	59.72	100.2	-4.03	-6.7	.2516	106.9	+ .0558	+22.0
1901	917	126.1	-168	-18.3	59.30	99.4	-3.61	-6.1	.2652	112.7	+ .0417	+15.7
1902	975	134.1	-226	-23.2	59.41	99.6	-3.72	-6.3	.2884	122.5	+ .0185	+ 6.4
1903	749	103.0	.....	.....	55.69	93.4	.....	.....	.3069	130.4	.....	.....

CARPENTERS, Male.

[Data for employees from 40 establishments for entire period. Data for hours and wages from 40 establishments, 1890-1893; 41 establishments, 1899-1903.]

Av. 1890-99.	4,094	100.0	+1,379	+33.7	57.53	100.0	-0.60	-1.0	\$0.2185	100.0	+\$0.0213	+ 9.7
1890	4,129	100.9	+1,344	+32.6	58.24	101.2	-1.31	-2.2	.2219	101.6	+ .0179	+ 8.1
1891	4,157	101.5	+1,316	+31.7	57.78	100.4	-1.35	-1.5	.2216	101.4	+ .0182	+ 8.2
1892	4,320	105.5	+1,153	+26.7	58.29	101.3	-1.36	-2.3	.2249	102.9	+ .0149	+ 6.6
1893	4,285	104.7	+1,188	+27.7	57.79	100.5	-1.36	-1.5	.2286	104.6	+ .0112	+ 4.9
1894	3,695	90.3	+1,778	+48.1	56.33	97.9	+ .60	+1.1	.2117	96.9	+ .0281	+13.3
1895	3,667	89.6	+1,806	+49.3	56.97	99.0	- .04	- .1	.2149	98.4	+ .0249	+11.6
1896	3,903	95.3	+1,570	+40.2	56.88	98.9	+ .05	+ .1	.2130	97.5	+ .0268	+12.6
1897	3,925	95.9	+1,548	+39.4	56.75	98.6	+ .18	+ .3	.2146	98.2	+ .0252	+11.7
1898	4,307	105.2	+1,166	+27.1	58.20	101.2	-1.27	-2.2	.2188	97.8	+ .0260	+12.2
1899	4,556	111.3	+ 917	+20.1	58.11	101.0	-1.18	-2.0	.2202	100.8	+ .0196	+ 8.9
1900	4,964	121.3	+ 509	+10.3	58.27	101.3	-1.34	-2.3	.2199	100.6	+ .0199	+ 9.0
1901	5,003	122.2	+ 470	+ 9.4	57.87	100.6	- .94	-1.6	.2236	102.3	+ .0162	+ 7.2
1902	5,396	131.8	+ 77	+ 1.4	57.92	100.7	- .99	-1.7	.2314	105.9	+ .0084	+ 3.6
1903	5,473	133.7	.....	.....	56.93	99.0	.....	.....	.2398	109.7	.....	.....

COPPERSMITHS, Male

[Data from 14 establishments.]

Av. 1890-99.	33	100.0	+15	+45.5	55.41	100.0	+1.26	+2.3	\$0.2817	100.0	+\$0.0070	+2.5
1890	30	90.9	+18	+60.0	58.50	105.6	-1.83	-3.1	.2856	101.4	+ .0031	+1.1
1891	28	84.8	+20	+71.4	57.68	104.1	-1.01	-1.8	.2855	101.3	+ .0032	+1.1
1892	29	87.9	+19	+65.5	57.45	103.7	- .78	-1.4	.2834	100.6	+ .0053	+1.9
1893	29	87.9	+19	+65.5	56.34	101.7	+ .33	+ .6	.2900	102.9	+ .0013	- .4
1894	31	93.9	+17	+54.8	51.77	93.4	+4.90	+9.5	.2812	99.8	+ .0075	+2.7
1895	28	84.8	+20	+71.4	53.50	96.6	+3.17	+5.9	.2857	101.4	+ .0030	+1.1
1896	34	103.0	+14	+41.2	62.94	95.5	+3.73	+7.0	.2795	99.2	+ .0092	+3.3
1897	38	115.2	+10	+26.3	53.00	95.7	+3.67	+6.9	.2744	97.4	+ .0143	+5.2
1898	41	124.2	+ 7	+17.1	56.56	102.1	+ .11	+ .2	.2710	96.2	+ .0177	+6.5
1899	41	124.2	+ 7	+17.1	56.37	101.7	+ .30	+ .5	.2803	99.5	+ .0084	+3.0
1900	44	133.3	+ 4	+ 9.1	57.07	103.0	- .7	- .7	.2801	99.4	+ .0086	+3.1
1901	45	136.4	+ 3	+ 6.7	56.27	101.6	+ .40	+ .7	.2789	99.0	+ .0098	+3.5
1902	54	163.6	- 6	-11.1	56.96	102.3	- .29	- .5	.2827	100.4	+ .0060	+2.1
1903	48	145.5	.....	.....	56.67	102.3	.....	.....	.2837	102.5	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARS, STEAM RAILROAD—Continued.

LABORERS, Male.

[Data from 11 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	751	100.0	+307	+ 40.9	58.17	100.0	+1.42	+2.4	\$0.1304	100.0	+\$0.0058	+4.4
1890	793	105.6	+265	+ 33.4	58.85	101.2	+ .74	+1.3	.1300	99.7	+ .0062	+4.8
1891	834	111.1	+224	+ 26.9	58.94	101.3	+ .65	+1.1	.1294	99.2	+ .0068	+5.3
1892	805	107.2	+253	+ 31.4	58.77	101.0	+ .82	+1.4	.1313	100.7	+ .0049	+3.7
1893	790	105.2	+268	+ 33.9	58.33	100.3	+1.26	+2.2	.1464	112.3	- .0102	-7.0
1894	527	70.2	+531	+100.8	56.69	97.5	+2.90	+5.1	.1303	99.9	+ .0059	+4.5
1895	610	81.2	+448	+ 73.4	58.04	99.8	+1.55	+2.7	.1268	97.2	+ .0094	+7.4
1896	779	103.7	+279	+ 35.8	57.93	99.6	+1.66	+2.9	.1279	98.1	+ .0083	+6.5
1897	620	82.6	+438	+ 70.6	57.63	99.1	+1.96	+3.4	.1284	98.5	+ .0078	+6.1
1898	823	109.6	+235	+ 28.6	58.31	100.2	+1.28	+2.2	.1268	97.2	+ .0094	+7.4
1899	930	123.8	+128	+ 13.8	58.16	100.0	+1.43	+2.5	.1271	97.5	+ .0091	+7.2
1900	1,119	149.0	- 61	- 5.5	58.28	100.2	+1.31	+2.2	.1311	100.5	+ .0051	+3.9
1901	1,095	145.8	- 37	- 3.4	58.54	100.6	+1.05	+1.8	.1308	100.3	+ .0054	+4.1
1902	905	120.5	+158	+ 16.9	58.37	100.3	+1.22	+2.1	.1344	103.1	+ .0018	+1.3
1903	1,058	140.9	.....	.....	59.59	102.4	.....	.....	.1362	104.4	.....	.....

MACHINE WOODWORKERS, Male.

[Data for employees from 21 establishments for entire period. Data for hours and wages from 21 establishments, 1890-1898; 22 establishments, 1899-1903.]

Av. 1890-99.	389	100.0	+154	+39.6	58.83	100.0	-2.29	-3.9	\$0.2159	100.0	+\$0.0296	+13.7
1890	436	112.1	+107	+24.5	59.33	100.8	-2.79	-4.7	.2222	102.9	+ .0233	+10.5
1891	464	119.3	+ 79	+17.0	59.22	100.7	-2.68	-4.5	.2288	106.0	+ .0167	+ 7.3
1892	525	135.0	+ 18	+ 3.4	59.52	101.2	-2.98	-5.0	.2167	100.4	+ .0288	+13.3
1893	557	143.2	- 14	- 2.5	59.51	101.2	-2.97	-5.0	.2213	102.5	+ .0242	+10.9
1894	288	74.0	+255	+88.5	58.19	98.9	-1.65	-2.8	.2101	97.3	+ .0354	+16.8
1895	289	74.3	+254	+87.9	58.39	99.3	-1.85	-3.2	.2081	96.4	+ .0374	+18.0
1896	308	79.2	+235	+76.3	58.42	99.3	-1.88	-3.2	.2140	99.1	+ .0315	+14.7
1897	290	74.6	+253	+87.2	58.14	98.8	-1.60	-2.8	.2059	95.4	+ .0396	+19.2
1898	345	88.7	+198	+57.4	58.72	99.8	-2.18	-3.7	.2140	99.1	+ .0315	+14.7
1899	387	99.5	+156	+40.3	58.88	100.1	-2.34	-4.0	.2178	100.9	+ .0277	+12.7
1900	428	110.0	+115	+26.9	59.21	100.6	-2.67	-4.5	.2195	101.7	+ .0260	+11.8
1901	466	119.8	+ 77	+ 9.5	58.60	99.6	-2.06	-3.5	.2177	100.8	+ .0278	+12.8
1902	497	127.8	+ 46	+ 6.3	58.68	99.7	-2.14	-3.6	.2288	106.0	+ .0167	+ 7.3
1903	543	139.6	.....	.....	56.54	96.1	.....	.....	.2155	113.7	.....	.....

MACHINISTS, Male.

[Data for employees from 44 establishments for entire period. Data for hours and wages from 44 establishments, 1890-1898; 45 establishments, 1899-1903.]

Av. 1890-99.	3,201	100.0	+1,080	+33.7	57.17	100.0	-0.42	-0.7	\$0.2623	100.0	+\$0.0281	+10.7
1890	3,035	94.8	+1,246	+41.1	58.32	102.0	-1.57	-2.7	.2636	100.5	+ .0268	+10.2
1891	3,031	94.7	+1,250	+41.2	57.56	100.7	-1.81	-3.1	.2625	100.1	+ .0279	+10.6
1892	3,189	99.6	+1,092	+34.2	58.44	102.2	-1.69	-2.9	.2630	100.3	+ .0274	+10.4
1893	3,204	100.1	+1,077	+33.6	57.93	101.3	-1.18	-2.0	.2643	100.8	+ .0261	+ 9.9
1894	2,909	90.9	+1,372	+47.2	54.85	95.9	+1.90	+3.5	.2641	100.7	+ .0263	+10.0
1895	3,083	94.9	+1,243	+40.9	56.81	99.4	- .06	-1.0	.2620	99.9	+ .0284	+10.8
1896	3,262	101.9	+1,019	+31.2	56.42	98.7	+ .37	+ .6	.2609	99.5	+ .0295	+11.3
1897	3,171	99.1	+1,110	+35.0	56.28	98.4	+ .47	+ .8	.2607	99.4	+ .0297	+11.4
1898	3,472	108.5	+ 809	+23.3	57.84	100.3	- .59	-1.0	.2598	98.9	+ .0311	+12.0
1899	3,702	115.7	+ 579	+15.6	57.74	101.0	- .97	-1.7	.2627	100.2	+ .0277	+10.5
1900	3,794	118.5	+ 487	+12.8	58.12	101.7	-1.39	-2.4	.2639	100.6	+ .0265	+10.0
1901	3,787	118.3	+ 494	+13.0	57.95	101.4	-1.20	-2.1	.2677	102.1	+ .0227	+ 8.5
1902	3,978	124.3	+ 308	+ 7.6	57.94	101.3	-1.19	-2.1	.2749	104.8	+ .0155	+ 5.6
1903	4,281	133.7	.....	.....	56.75	99.3	.....	.....	.2904	110.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARS, STEAM RAILROAD—Continued.

MOLDERS, BRASS, Male.

[Data from 11 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	68	100.0	+40	+ 58.8	58.82	100.0	-2.68	-4.5	\$0.2722	100.0	+\$0.0477	+17.5
1890	66	97.1	+42	+ 63.6	59.42	101.0	-3.28	-5.4	.2877	105.6	+.0322	+11.2
1891	70	102.9	+38	+ 54.3	59.67	101.4	-3.48	-5.8	.2909	106.9	+.0290	+10.0
1892	73	107.4	+35	+ 47.9	59.63	101.4	-3.44	-5.9	.2693	98.9	+.0506	+18.8
1893	70	102.9	+38	+ 54.3	59.44	101.1	-3.25	-5.5	.2750	101.0	+.0449	+16.3
1894	54	79.4	+54	+100.0	55.56	94.5	+.62	+1.1	.2843	104.4	+.0356	+12.5
1895	56	82.4	+52	+ 92.9	59.52	101.2	-3.33	-5.6	.2654	98.9	+.0645	+25.3
1896	59	86.8	+49	+ 83.1	59.37	100.9	-3.18	-5.4	.2504	94.2	+.0635	+24.8
1897	68	100.0	+40	+ 58.8	56.62	96.3	-.43	-.8	.2625	96.4	+.0574	+21.9
1898	78	114.7	+30	+ 38.5	59.49	101.1	-3.30	-5.5	.2639	97.0	+.0560	+21.2
1899	81	119.1	+27	+ 33.3	59.52	101.2	-3.33	-5.6	.2766	101.6	+.0438	+15.7
1900	90	132.4	+18	+ 20.0	59.69	101.5	-3.50	-5.9	.2714	99.7	+.0485	+17.9
1901	100	147.1	+8	+ 1.0	59.76	101.6	-3.57	-6.0	.2780	102.1	+.0419	+15.1
1902	106	155.9	+2	+ 5.9	59.86	101.8	-3.67	-6.1	.2973	109.2	+.0226	+ 7.6
1903	108	158.8	.....	.....	56.19	95.6	.....	.....	.3199	117.5	.....	.....

MOLDERS, IRON, Male.

[Data for employees from 13 establishments for entire period. Data for hours and wages from 13 establishments, 1890-1898; 14 establishments, 1899-1903.]

Av. 1890-99.	571	100.0	+128	+22.4	58.29	100.0	-0.40	-0.7	\$0.2572	100.0	+\$0.0155	+ 6.0
1890	645	113.0	+ 54	+ 8.4	58.55	100.4	-.66	-1.1	.2704	105.1	+.0023	+ 2.9
1891	607	106.3	+ 92	+15.2	58.73	100.8	-.84	-1.4	.2666	103.7	+.0061	+ 2.3
1892	637	111.6	+ 62	+ 9.7	58.75	100.8	-.86	-1.5	.2687	104.5	+.0040	+ 1.8
1893	558	97.7	+141	+25.3	58.69	100.7	-.80	-1.4	.2791	108.5	+.0064	+ 2.3
1894	491	86.0	+208	+42.4	56.19	96.4	+1.70	+3.0	.2551	99.2	+.0176	+ 6.9
1895	475	83.2	+224	+47.2	58.67	100.7	-.78	-1.3	.2548	99.1	+.0179	+ 7.0
1896	580	101.6	+119	+20.5	58.97	101.2	-1.06	-1.8	.2382	92.6	+.0345	+14.5
1897	487	85.3	+212	+43.5	56.51	96.9	+1.38	+2.4	.2473	96.2	+.0254	+10.3
1898	571	100.0	+128	+22.4	58.88	101.0	-.99	-1.7	.2457	95.5	+.0270	+11.0
1899	658	115.2	+ 41	+ 6.2	58.92	101.1	-1.08	-1.7	.2462	95.7	+.0265	+10.8
1900	712	124.7	- 13	- 1.8	58.92	101.1	-1.08	-1.7	.2518	97.9	+.0209	+ 8.3
1901	648	113.5	+ 51	+ 7.9	58.42	100.2	-.53	-.9	.2542	98.8	+.0185	+ 7.3
1902	717	125.6	- 18	- 2.5	58.41	100.2	-.52	-.9	.2608	101.2	+.0124	+ 4.8
1903	699	122.4	.....	.....	57.89	99.8	.....	.....	.2727	106.0	.....	.....

PAINTERS, Male.

[Data for employees from 35 establishments for entire period. Data for hours and wages from 35 establishments, 1890-1898; 36 establishments, 1899-1903.]

Av. 1890-99.	1,222	100.0	- 83	- 6.8	57.92	100.0	-0.66	-1.1	\$0.2297	100.0	+\$0.0125	+5.4
1890	1,391	113.8	-252	-18.1	58.69	101.3	-1.43	-2.4	.2354	102.5	+.0065	+2.9
1891	1,521	124.5	-382	-25.1	58.53	101.1	-1.27	-2.2	.2351	102.4	+.0071	+3.0
1892	1,382	113.1	-243	-17.6	58.65	101.3	-1.39	-2.4	.2334	101.6	+.0088	+3.8
1893	1,576	129.0	-437	-27.7	58.70	101.4	-1.44	-2.5	.2369	103.1	+.0053	+2.2
1894	975	79.8	+164	+16.8	56.88	98.2	+.38	+.7	.2247	97.8	+.0175	+7.8
1895	1,072	87.7	+ 67	+ 6.3	57.41	99.1	-.18	-.3	.2216	96.5	+.0206	+9.3
1896	1,046	85.6	+ 93	+ 8.9	57.33	99.0	-.07	-.1	.2266	98.7	+.0156	+6.9
1897	945	77.3	+194	+20.5	56.81	98.1	+.45	+.8	.2315	100.8	+.0107	+4.6
1898	1,079	88.3	+ 60	+ 5.6	58.06	100.2	-.80	-1.4	.2258	98.3	+.0164	+7.3
1899	1,236	101.1	- 97	- 7.8	58.18	100.4	-.92	-1.6	.2264	98.6	+.0158	+7.0
1900	1,198	98.0	- 59	- 4.9	58.38	100.8	-1.12	-1.9	.2236	97.3	+.0186	+8.3
1901	1,265	103.5	-126	-10.0	57.78	99.8	-.52	-.9	.2284	99.4	+.0188	+6.0
1902	1,278	104.6	-139	-10.9	57.73	99.7	-.47	-.8	.2331	101.5	+.0091	+3.9
1903	1,139	93.2	.....	.....	57.26	98.9	.....	.....	.2422	105.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease, (—) in 1903, as compared with previous years, see note on page 718.]

CARS, STEAM RAILROAD—Continued.

PATTERN MAKERS, Male.

[Data for employees from 24 establishments for entire period. Data for hours and wages from 24 establishments, 1890-1898; 25 establishments, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	111	100.0	+29	+26.1	57.15	100.0	—0.98	—1.7	\$0.2737	100.0	+\$0.0234	+ 8.5
1890	113	101.8	+27	+23.9	58.04	101.6	—1.87	—3.2	.2785	101.8	+ .0186	+ 6.7
1891	110	99.1	+30	+27.3	57.64	100.9	—1.47	—2.6	.2805	102.5	+ .0166	+ 5.9
1892	117	105.4	+23	+19.7	58.09	101.6	—1.92	—3.3	.2769	101.2	+ .0202	+ 7.3
1893	108	97.3	+32	+29.6	58.15	101.7	—1.98	—3.4	.2829	103.4	+ .0142	+ 5.0
1894	98	88.3	+42	+42.9	56.50	98.9	— .33	— .6	.2761	100.9	+ .0210	+ 7.6
1895	103	92.8	+37	+35.9	55.92	97.8	+ .25	+ .4	.2709	99.0	+ .0262	+ 9.7
1896	110	99.1	+30	+27.3	55.84	97.7	+ .33	+ .6	.2622	95.8	+ .0349	+13.3
1897	102	91.9	+38	+37.3	55.47	97.1	+ .70	+1.3	.2655	97.0	+ .0316	+11.9
1898	125	112.6	+15	+12.0	57.73	101.0	—1.56	—2.7	.2738	100.0	+ .0233	+ 8.5
1899	127	114.4	+13	+10.2	58.16	101.8	—1.99	—3.4	.2701	98.7	+ .0270	+10.0
1900	130	117.1	+10	+ 7.7	58.12	101.7	—1.95	—3.4	.2741	100.1	+ .0230	+ 8.4
1901	141	127.0	— 1	— 7.7	57.74	101.0	—1.57	—2.7	.2794	102.1	+ .0177	+ 6.3
1902	139	125.2	+ 1	+ .7	58.01	101.5	—1.84	—3.2	.2806	102.5	+ .0165	+ 5.9
1903	140	126.1	.....	.....	56.17	98.8	.....	.....	.2971	108.5	.....	.....

PIPE FITTERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890-1898; 7 establishments, 1899-1903.]

Av. 1890-99.	54	100.0	+24	+44.4	56.85	100.0	+0.27	+0.5	\$0.2398	100.0	+\$0.0155	+ 6.5
1890	55	101.9	+23	+41.8	58.25	102.5	-1.13	-1.9	.2484	103.6	+ .0069	+ 2.8
1891	51	94.4	+27	+62.9	58.37	102.7	-1.25	-2.1	.2325	97.0	+ .0228	+ 9.8
1892	61	113.0	+17	+27.9	58.72	103.3	-1.60	-2.7	.2294	95.7	+ .0259	+11.3
1893	67	124.1	+11	+16.4	58.25	102.5	-1.13	-1.9	.2439	101.7	+ .0114	+ 4.7
1894	50	92.6	+28	+56.0	53.70	94.5	+3.42	+6.4	.2457	102.5	+ .0096	+ 3.9
1895	51	94.4	+27	+62.9	54.93	96.7	+2.14	+3.9	.2386	99.5	+ .0167	+ 7.0
1896	47	87.0	+31	+66.0	54.77	96.3	+2.35	+4.3	.2380	99.2	+ .0173	+ 7.3
1897	51	94.4	+27	+62.9	54.82	96.4	+2.30	+4.2	.2388	99.6	+ .0165	+ 6.9
1898	52	96.3	+26	+50.0	58.06	102.1	- .94	-1.6	.2432	101.4	+ .0121	+ 5.0
1899	52	96.3	+26	+50.0	58.55	103.0	-1.43	-2.4	.2396	99.9	+ .0157	+ 6.6
1900	51	94.4	+27	+62.9	58.51	102.9	-1.39	-2.4	.2376	99.1	+ .0177	+ 7.4
1901	69	127.8	+ 9	+13.0	57.65	101.4	- .53	- .9	.2426	101.2	+ .0127	+ 5.2
1902	73	135.2	+ 5	+ 6.8	57.64	101.4	- .52	- .9	.2401	100.1	+ .0152	+ 6.3
1903	78	144.4	.....	.....	57.12	100.5	.....	.....	.2553	106.5	.....	.....

TINSMITHS, Male.

[Data for employees from 34 establishments for entire period. Data for hours and wages from 34 establishments, 1890-1898; 35 establishments, 1900-1903.]

Av. 1890-99.	375	100.0	+108	+27.5	57.90	100.0	-1.41	-2.4	\$0.2348	100.0	+\$0.0448	+19.1
1890	355	94.7	+123	+34.6	59.14	102.1	-2.65	-4.5	.2305	98.2	+ .0491	+21.3
1891	384	102.4	+ 94	+24.5	58.52	101.1	-2.03	-3.5	.2279	97.1	+ .0517	+22.7
1892	352	93.9	+126	+35.8	58.56	101.1	-2.07	-3.5	.2415	102.9	+ .0381	+15.8
1893	374	99.7	+104	+27.8	58.23	100.6	-1.74	-3.0	.2382	101.4	+ .0414	+17.4
1894	362	96.5	+116	+32.0	56.32	97.3	+ .17	+ .3	.2296	97.8	+ .0500	+21.8
1895	346	92.3	+132	+38.1	57.07	98.6	- .58	-1.0	.2331	99.3	+ .0465	+19.9
1896	356	94.9	+122	+34.3	57.09	98.6	- .60	-1.1	.2391	101.8	+ .0405	+16.9
1897	357	95.2	+121	+33.9	56.87	98.2	- .38	- .7	.2402	102.3	+ .0394	+16.4
1898	440	117.3	+ 38	+ 8.6	58.63	101.3	-2.14	-3.7	.2268	96.6	+ .0528	+23.3
1899	425	113.3	+ 53	+12.5	58.61	101.2	-2.12	-3.6	.2410	102.6	+ .0386	+16.0
1900	435	116.0	+ 43	+ 9.9	59.04	102.0	-2.55	-4.3	.2427	103.4	+ .0369	+15.2
1901	477	127.2	+ 1	+ .2	58.30	100.7	-1.81	-3.1	.2428	103.4	+ .0368	+15.2
1902	485	129.3	- 7	- 1.4	58.05	100.3	-1.56	-2.7	.2635	112.2	+ .0161	+ 6.1
1903	478	127.5	.....	.....	56.49	97.6	.....	.....	.2796	119.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

CARS, STEAM RAILROAD—Concluded.

UPHOLSTERERS, Male.

[Data from 25 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	174	100.0	+14	+ 8.0	58.16	100.0	-2.98	-5.1	\$0.2602	100.0	+\$0.0306	+11.8
1890	175	100.6	+18	+ 7.4	58.57	100.7	-3.39	-5.8	.2809	108.0	+ .0099	+ 3.5
1891	202	116.1	-14	- 6.9	58.69	100.9	-3.51	-6.0	.2740	105.3	+ .0168	+ 6.1
1892	185	106.3	+ 8	+ 1.6	58.66	100.9	-3.48	-5.9	.2786	105.1	+ .0172	+ 6.3
1893	210	120.7	-22	-10.5	58.78	101.1	-3.60	-6.1	.2783	107.0	+ .0125	+ 4.8
1894	152	87.4	+36	+23.7	57.23	98.5	-2.10	-3.7	.2417	92.9	+ .0491	+20.3
1895	154	88.5	+34	+22.1	57.38	98.7	-2.20	-3.8	.2523	97.0	+ .0385	+15.3
1896	148	85.1	+40	+27.0	57.89	99.5	-2.71	-4.7	.2469	94.9	+ .0439	+17.8
1897	159	91.4	+29	+18.2	57.58	99.0	-2.40	-4.2	.2504	96.2	+ .0404	+16.1
1898	172	98.9	+16	+ 9.0	58.25	100.2	-3.07	-5.3	.2504	96.2	+ .0404	+16.1
1899	179	102.9	+ 9	+ 5.3	58.48	100.6	-3.30	-5.6	.2530	97.2	+ .0375	+14.9
1900	204	117.2	-16	- 7.8	58.75	101.0	-3.57	-6.1	.2553	98.1	+ .0355	+13.9
1901	185	106.3	+ 3	+ 1.6	58.46	100.5	-3.28	-5.6	.2601	100.0	+ .0307	+11.8
1902	183	105.2	+ 5	+ 2.7	58.18	100.0	-3.00	-5.2	.2703	103.9	+ .0205	+ 7.6
1903	188	108.0	.....	.....	55.18	94.9	.....	.....	.2908	111.8	.....	.....

CLOTHING, FACTORY PRODUCT.

BUTTONHOLE MAKERS, MACHINE, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	+1	+16.7	59.57	100.0	-5.57	-9.4	\$0.0569	100.0	+\$0.0185	+32.5
1890	6	100.0	+1	+16.7	59.67	100.2	-5.67	-9.5	.0600	105.4	+ .0154	+25.7
1891	6	100.0	+1	+16.7	59.67	100.2	-5.67	-9.5	.0600	105.4	+ .0154	+25.7
1892	6	100.0	+1	+16.7	59.67	100.2	-5.67	-9.5	.0600	105.4	+ .0154	+25.7
1893	7	116.7	.....	.....	59.57	100.0	-5.57	-9.4	.0575	101.1	+ .0179	+31.1
1894	5	83.3	+2	+40.0	59.40	99.7	-5.40	-9.1	.0521	91.6	+ .0233	+44.7
1895	5	83.3	+2	+40.0	59.40	99.7	-5.40	-9.1	.0521	91.6	+ .0233	+44.7
1896	7	116.7	.....	.....	59.57	100.0	-5.57	-9.4	.0551	96.8	+ .0203	+36.8
1897	7	116.7	.....	.....	59.57	100.0	-5.57	-9.4	.0575	101.1	+ .0179	+31.1
1898	7	116.7	.....	.....	59.57	100.0	-5.57	-9.4	.0575	101.1	+ .0179	+31.1
1899	7	116.7	.....	.....	59.57	100.0	-5.57	-9.4	.0575	101.1	+ .0179	+31.1
1900	7	116.7	.....	.....	59.57	100.0	-5.57	-9.4	.0575	101.1	+ .0179	+31.1
1901	6	100.0	+1	+16.7	58.00	97.4	-4.00	-6.9	.0614	107.9	+ .0140	+22.8
1902	6	100.0	+1	+16.7	54.00	90.6	.....	.....	.0664	116.7	+ .0090	+13.6
1903	7	116.7	.....	.....	54.00	90.6	.....	.....	.0754	132.5	.....	.....

BUTTONHOLE MAKERS, MACHINE, Female.

[Data from 5 establishments.]

Av. 1890-99.	12	100.0	+2	+16.7	56.54	100.0	+0.39	+0.7	\$0.1062	100.0	+\$0.0001	+0.1
1890	12	100.0	+2	+16.7	57.37	102.0	- .74	-1.3	.1016	95.7	+ .0047	+4.6
1891	12	100.0	+2	+16.7	57.37	102.0	- .74	-1.3	.1016	95.7	+ .0047	+4.6
1892	12	100.0	+2	+16.7	57.67	102.0	- .74	-1.3	.1023	96.3	+ .0040	+3.9
1893	12	100.0	+2	+16.7	56.17	99.3	+ .76	+1.4	.1019	96.0	+ .0044	+4.3
1894	12	100.0	+2	+16.7	56.17	99.3	+ .76	+1.4	.1019	96.0	+ .0044	+4.3
1895	12	100.0	+2	+16.7	56.17	99.3	+ .76	+1.4	.1019	96.0	+ .0044	+4.3
1896	11	91.7	+3	+27.3	55.91	98.9	+1.02	+1.8	.1120	105.5	+ .0057	-5.1
1897	11	91.7	+3	+27.3	55.91	98.9	+1.02	+1.8	.1120	105.5	+ .0057	-5.1
1898	11	91.7	+3	+27.3	55.91	98.9	+1.02	+1.8	.1170	110.2	+ .0107	-9.1
1899	12	100.0	+2	+16.7	56.17	99.3	+ .76	+1.4	.1096	103.2	+ .0033	-3.0
1900	12	100.0	+2	+16.7	56.17	99.3	+ .76	+1.4	.1052	99.1	+ .0011	+1.0
1901	12	100.0	+2	+16.7	56.17	99.3	+ .76	+1.4	.1056	99.4	+ .0007	+ .7
1902	13	108.3	+1	+ 7.7	56.00	99.0	+ .93	+1.7	.1028	96.8	+ .0035	+3.4
1903	14	116.7	.....	.....	56.93	100.7	.....	.....	.1063	100.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CLOTHING, FACTORY PRODUCT—Continued.

CUTTERS, HAND, Male.

[Data from 8 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	21	100.0	+5	+23.8	59.07	100.0	+0.05	+0.1	\$0.3901	100.0	+\$0.0082	+2.1
1890	19	90.5	+7	+36.8	59.21	100.2	- .09	- .2	.4043	103.6	- .0060	-1.5
1891	19	90.5	+7	+36.8	59.21	100.2	- .09	- .2	.4043	103.6	- .0060	-1.5
1892	21	100.0	+5	+23.8	59.14	100.1	- .02	- .03	.3863	99.0	+ .0120	+3.1
1893	20	95.2	+6	+30.0	59.10	100.1	+ .02	+ .03	.3981	102.1	+ .0002	+ .1
1894	21	100.0	+5	+23.8	59.14	100.1	- .02	- .03	.3839	98.4	+ .0144	+3.8
1895	21	100.0	+5	+23.8	59.00	99.9	+ .12	+ .2	.3898	99.8	+ .0090	+2.3
1896	21	100.0	+5	+23.8	59.00	99.9	+ .12	+ .2	.3893	99.8	+ .0090	+2.3
1897	22	104.8	+4	+18.2	58.91	99.7	+ .21	+ .4	.3897	99.9	+ .0086	+2.2
1898	23	109.5	+3	+13.0	58.96	99.8	+ .16	+ .3	.3814	97.8	+ .0169	+4.4
1899	24	114.3	+2	+ 8.3	59.00	99.9	+ .12	+ .2	.3746	96.0	+ .0238	+6.4
1900	23	109.5	+3	+13.0	58.96	99.8	+ .16	+ .3	.4019	103.8	- .0066	-1.6
1901	25	119.0	+1	+ 4.0	58.92	99.7	+ .20	+ .3	.3924	100.6	+ .0059	+1.5
1902	27	128.6	-1	- 3.7	59.00	99.9	+ .12	+ .2	.3758	97.1	+ .0195	+5.1
1903	26	123.8	.....	.....	59.12	100.1	.....	.....	.3983	102.1	.....	.....

CUTTERS, MACHINE, Male.

[Data from 7 establishments.]

Av. 1890-99.	17	100.0	+2	+11.8	57.95	100.0	-0.79	-1.4	\$0.2440	100.0	+\$0.0176	+ 7.2
1890	18	105.9	+1	+ 5.6	58.00	100.1	- .84	-1.4	.2459	100.8	+ .0157	+ 6.4
1891	18	105.9	+1	+ 5.6	58.00	100.1	- .84	-1.4	.2459	100.8	+ .0157	+ 6.4
1892	19	111.8	.....	.....	58.11	100.3	- .95	-1.6	.2435	99.8	+ .0181	+ 7.4
1893	18	105.9	+1	+ 5.6	58.00	100.1	- .84	-1.4	.2459	100.8	+ .0157	+ 6.4
1894	17	100.0	+2	+11.8	58.00	100.1	- .84	-1.4	.2359	96.7	+ .0257	+10.9
1895	16	94.1	+3	+18.8	57.88	99.9	- .72	-1.2	.2433	99.7	+ .0183	+ 7.5
1896	16	94.1	+3	+18.8	57.88	99.9	- .72	-1.2	.2433	97.7	+ .0183	+ 7.5
1897	16	94.1	+3	+18.8	57.88	99.9	- .72	-1.2	.2401	98.4	+ .0215	+ 9.0
1898	16	94.1	+3	+18.8	57.88	99.9	- .72	-1.2	.2438	99.9	+ .0178	+ 7.3
1899	16	94.1	+3	+18.8	57.88	99.9	- .72	-1.2	.2523	103.4	+ .0093	+ 3.7
1900	18	105.9	+1	+ 5.6	58.00	100.1	- .84	-1.4	.2529	103.6	+ .0087	+ 3.4
1901	19	111.8	.....	.....	57.89	99.9	- .73	-1.3	.2530	103.7	+ .0086	+ 3.4
1902	19	111.8	.....	.....	57.87	99.0	- .21	- .4	.2589	106.1	+ .0027	+ 1.0
1903	19	111.8	.....	.....	57.16	98.6	.....	.....	.2616	107.2	.....	.....

EXAMINERS, Female.

[Data from 4 establishments.]

Av. 1890-99.	17	100.0	+19	+111.8	58.69	100.0	-1.73	-3.0	\$0.1325	100.0	-\$0.0177	-13.4
1890	17	100.0	+19	+111.8	58.06	99.9	-1.70	-2.9	.1299	98.0	- .0151	-11.6
1891	17	100.0	+19	+111.8	58.06	99.9	-1.70	-2.9	.1299	98.0	- .0151	-11.6
1892	18	105.9	+18	+100.0	58.17	100.1	-1.81	-3.1	.1255	94.7	- .0107	- 8.5
1893	17	100.0	+19	+111.8	58.06	99.9	-1.70	-2.9	.1299	98.0	- .0151	-11.6
1894	15	88.2	+21	+140.0	58.33	100.4	-1.97	-3.4	.1324	99.9	- .0176	-13.3
1895	15	88.2	+21	+140.0	58.33	100.4	-1.97	-3.4	.1330	100.4	- .0182	-13.7
1896	19	111.8	+17	+ 89.5	58.11	100.0	-1.75	-3.0	.1334	100.7	- .0186	-13.9
1897	15	88.2	+21	+140.0	.87	99.6	-1.51	-2.6	.1362	102.8	- .0214	-15.7
1898	15	88.2	+21	+140.0	57.87	99.6	-1.51	-2.6	.1351	102.0	- .0203	-15.0
1899	19	111.8	+17	+ 89.5	58.00	99.8	-1.64	-2.8	.1393	105.1	- .0245	-17.6
1900	21	123.5	+15	+ 71.4	58.10	100.0	-1.74	-3.0	.1373	103.6	- .0225	-16.4
1901	24	141.2	+12	+ 50.0	57.83	99.6	-1.47	-2.5	.1421	107.2	- .0273	-19.2
1902	31	182.4	+ 5	+ 16.1	57.39	98.8	-1.03	-1.8	.1160	87.5	- .0012	- 1.0
1903	36	211.8	.....	.....	56.36	97.0	.....	.....	.1148	86.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CLOTHING, FACTORY PRODUCT—Continued.

FINISHERS, Female.

[Data from 7 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	63	100.0	+27	+42.9	56.48	100.0	-0.89	-1.6	\$0.0874	100.0	+\$0.0010	+1.1
1890	57	90.5	+33	+57.9	56.93	100.8	-1.84	-2.4	.0875	100.1	+.0009	+1.0
1891	57	90.5	+33	+57.9	56.93	100.8	-1.84	-2.4	.0875	100.1	+.0009	+1.0
1892	62	98.4	+28	+45.2	56.69	100.4	-1.10	-1.9	.0858	98.2	+.0026	+3.0
1893	61	96.8	+29	+47.5	56.66	100.3	-1.07	-1.9	.0856	97.9	+.0028	+3.3
1894	56	88.9	+34	+60.7	56.89	100.7	-1.30	-2.3	.0866	97.9	+.0028	+3.3
1895	57	90.5	+33	+57.9	56.51	100.1	-.92	-1.6	.0885	101.3	-.0001	-.1
1896	59	93.7	+31	+52.6	56.12	99.4	-.53	-.9	.0885	101.3	-.0001	-.1
1897	65	103.2	+25	+38.5	56.11	99.3	-.52	-.9	.0885	101.3	-.0001	-.1
1898	73	115.9	+17	+23.3	56.00	99.2	-.41	-.7	.0894	102.3	-.0010	-1.1
1899	78	123.8	+12	+15.4	55.91	99.0	-.32	-.6	.0897	99.2	+.0017	+2.0
1900	87	138.1	+3	+3.4	55.91	99.0	-.32	-.6	.0876	100.2	+.0008	+.9
1901	84	133.3	+6	+7.1	55.63	98.5	-.04	-.1	.0903	103.3	-.0019	-2.1
1902	93	147.6	-3	-3.2	55.60	98.4	-.01	-.02	.0885	101.3	-.0001	-.1
1903	90	142.9	.....	.....	55.59	98.4	.....	.....	.0884	101.1	.....	.....

PRESSERS, Male.

[Data for employees from 7 establishments for entire period. Data for hours and wages from 8 establishments, 1890-1899; 7 establishments, 1900-1903.]

Av. 1890-99.	26	100.0	+1	+3.8	58.19	100.0	-0.97	-1.7	\$0.1722	100.0	+\$0.0232	+13.5
1890	28	107.7	-1	-3.6	58.31	100.2	-1.09	-1.9	.1729	103.4	+.0225	+13.0
1891	28	107.7	-1	-3.6	58.31	100.2	-1.09	-1.9	.1729	100.4	+.0225	+13.0
1892	29	111.5	-2	-6.9	58.37	100.3	-1.15	-2.0	.1727	100.3	+.0227	+13.1
1893	26	100.0	+1	+3.8	58.19	100.0	-.97	-1.7	.1789	103.9	+.0165	+9.2
1894	29	111.5	-2	-6.9	58.37	100.3	-1.15	-2.0	.1727	100.3	+.0227	+13.1
1895	30	115.4	-3	-10.0	58.32	100.2	-1.10	-1.9	.1723	100.1	+.0231	+13.4
1896	23	88.5	+4	+17.4	57.96	99.6	-.74	-1.3	.1667	96.8	+.0287	+17.2
1897	23	88.5	+4	+17.4	58.00	99.7	-.78	-1.3	.1636	95.0	+.0318	+19.4
1898	24	92.3	+3	+12.5	58.08	99.8	-.86	-1.5	.1679	97.5	+.0275	+16.4
1899	23	88.5	+4	+17.4	58.00	99.7	-.78	-1.3	.1812	105.2	+.0142	+7.8
1900	27	103.8	.....	.....	58.07	99.8	-.85	-1.5	.1897	104.9	+.0147	+8.1
1901	30	115.4	-3	-10.0	58.13	99.9	-.91	-1.6	.1884	109.4	+.0070	+3.7
1902	28	107.7	-1	-3.6	58.11	99.9	-.89	-1.5	.1912	111.0	+.0042	+2.2
1903	27	103.8	.....	.....	57.22	98.3	.....	.....	.1954	113.5	.....	.....

PRESSERS, Female.

[Data from 3 establishments.]

Av. 1890-99.	39	100.0	+25	+64.1	55.69	100.0	-0.02	-0.04	\$0.0736	100.0	+\$0.0030	+4.1
1890	40	102.6	+24	+60.0	55.75	100.1	-.08	-.1	.0753	102.3	+.0013	+1.7
1891	40	102.6	+24	+60.0	55.75	100.1	-.08	-.1	.0753	102.3	+.0013	+1.7
1892	41	105.1	+23	+56.1	55.71	100.0	-.04	-.1	.0759	103.1	+.0007	+.9
1893	41	105.1	+23	+56.1	55.71	100.0	-.04	-.1	.0759	103.1	+.0007	+.9
1894	32	82.1	+32	+100.0	55.69	100.0	-.02	-.04	.0636	86.4	+.0130	+20.4
1895	34	87.2	+30	+88.2	55.71	100.0	-.04	-.1	.0669	90.9	+.0097	+14.5
1896	40	102.6	+24	+60.0	55.68	100.0	-.01	-.02	.0738	100.3	+.0028	+3.8
1897	41	105.1	+23	+56.1	55.63	99.9	+.04	+.1	.0760	103.3	+.0006	+.8
1898	41	105.1	+23	+56.1	55.63	99.9	+.04	+.1	.0760	103.3	+.0006	+.8
1899	44	112.8	+20	+45.5	55.61	99.9	+.06	+.1	.0775	105.3	-.0009	-1.2
1900	47	120.5	+17	+36.2	55.62	99.9	+.05	+.1	.0796	108.2	-.0030	-3.8
1901	54	138.5	+10	+18.5	55.67	100.0	.....	.....	.0809	109.9	-.0043	-5.3
1902	59	151.3	+5	+8.5	55.65	99.9	+.02	+.04	.0778	105.7	-.0012	-1.5
1903	64	164.1	.....	.....	55.67	100.0	.....	.....	.0766	104.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CLOTHING, FACTORY PRODUCT—Concluded.

SEWING-MACHINE OPERATORS, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890-1901; 2 establishments, 1902, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per-cent.			Num-ber.	Per-cent.			Amount.	Per-cent.
Av. 1890-99.	12	100.0	+1	+ 8.3	59.00	100.0	-4.98	-8.4	\$0.2046	100.0	+\$0.0221	+ 8.4
1890	10	83.3	+3	+30.0	59.00	100.0	-4.98	-8.4	.2627	99.3	+.0240	+ 9.1
1891	10	83.3	+3	+30.0	59.00	100.0	-4.98	-8.4	.2627	99.3	+.0240	+ 9.1
1892	11	91.7	+2	+18.2	59.00	100.0	-4.98	-8.4	.2636	101.9	+.0171	+ 6.3
1893	11	91.7	+2	+18.2	59.00	100.0	-4.98	-8.4	.2636	101.9	+.0171	+ 6.3
1894	13	108.3	.....	.....	59.00	100.0	-4.98	-8.4	.2608	98.6	+.0259	+ 9.9
1895	13	108.3	.....	.....	59.00	100.0	-4.98	-8.4	.2608	98.6	+.0259	+ 9.9
1896	10	83.3	+3	+30.0	59.00	100.0	-4.98	-8.4	.2627	99.3	+.0240	+ 9.1
1897	13	108.3	.....	.....	59.00	100.0	-4.98	-8.4	.2608	98.6	+.0259	+ 9.9
1898	13	108.3	.....	.....	59.00	100.0	-4.98	-8.4	.2608	98.6	+.0259	+ 9.9
1899	12	100.0	+1	+ 8.3	59.00	100.0	-4.98	-8.4	.2754	104.1	+.0113	+ 4.1
1900	13	108.3	.....	.....	54.00	91.5	+ .07	+ .1	.2738	103.5	+.0129	+ 4.7
1901	13	108.3	.....	.....	54.00	91.5	+ .07	+ .1	.2991	113.0	+.0124	- 4.1
1902	13	108.3	.....	.....	54.28	92.0	-.21	-.4	.2522	95.8	+.0345	+13.7
1903	13	108.3	.....	.....	54.07	91.6	.....	.....	.2867	108.4	.....	.....

SEWING-MACHINE OPERATORS, Female.

[Data from 9 establishments.]

Av. 1890-99.	830	100.0	+ 71	+ 8.6	57.46	100.0	-0.43	-0.7	\$0.0828	100.0	+\$0.0095	+11.5
1890	781	94.1	+120	+15.4	57.56	100.2	-.53	-.9	.0807	97.5	+.0116	+14.4
1891	846	101.9	+ 55	+ 6.5	57.41	99.9	-.38	-.7	.0823	99.4	+.0100	+12.2
1892	818	98.6	+ 83	+10.1	57.45	100.0	-.42	-.7	.0837	101.1	+.0086	+10.3
1893	738	88.9	+163	+22.1	57.72	100.5	-.69	-1.2	.0818	98.8	+.0105	+12.8
1894	812	97.8	+ 89	+11.0	57.53	100.1	-.50	-.9	.0800	96.6	+.0123	+15.4
1895	829	99.9	+ 72	+ 8.7	57.57	100.2	-.54	-.9	.0806	97.3	+.0117	+14.5
1896	803	96.7	+ 98	+12.2	57.44	100.0	-.41	-.7	.0825	99.6	+.0098	+11.9
1897	860	103.6	+ 41	+ 4.8	57.29	99.7	-.26	-.5	.0820	99.0	+.0103	+12.6
1898	923	111.2	- 22	- 2.4	57.22	99.6	-.19	-.3	.0875	105.7	+.0048	+ 5.5
1899	891	107.3	+ 10	+ 1.1	57.37	99.8	-.34	-.6	.0873	105.4	+.0050	+ 5.7
1900	879	105.9	+ 22	+ 2.5	57.46	100.0	-.43	-.7	.0853	103.0	+.0070	+ 8.2
1901	898	108.2	+ 3	+ .3	57.44	100.0	-.41	-.7	.0863	104.2	+.0060	+ 7.0
1902	826	99.5	+ 75	+ 9.1	57.20	99.5	-.17	-.3	.0899	108.6	+.0024	+ 2.7
1903	901	108.6	.....	.....	57.03	99.3	.....	.....	.0923	111.5	.....	.....

CLOTHING, MEN'S, CUSTOM WORK.

BUSHEL MEN, Male.

[Data from 43 establishments.]

Av. 1890-99.	111	100.0	+19	+17.1	60.09	100.0	-1.34	-2.2	\$0.2413	100.0	+\$0.0140	+5.8
1890	103	92.8	+27	+26.2	59.95	99.8	-1.20	-2.0	.2431	100.7	+.0122	+5.0
1891	102	91.9	+28	+27.5	59.95	99.8	-1.20	-2.0	.2455	101.7	+.0098	+4.0
1892	106	95.5	+24	+22.6	59.94	99.8	-1.19	-2.0	.2427	100.6	+.0126	+5.2
1893	107	96.4	+23	+21.5	59.94	99.8	-1.19	-2.0	.2415	100.1	+.0138	+5.7
1894	105	94.6	+25	+23.8	60.57	100.8	-1.32	-3.0	.2363	97.9	+.0190	+8.0
1895	109	98.2	+21	+19.3	60.50	100.7	-1.75	-2.9	.2374	98.4	+.0179	+7.5
1896	116	104.5	+14	+12.1	59.95	99.8	-1.20	-2.0	.2350	97.4	+.0203	+8.6
1897	116	104.5	+14	+12.1	60.47	100.6	-1.72	-2.8	.2401	99.5	+.0152	+6.3
1898	124	111.7	+ 6	+ 4.8	59.90	99.7	-1.15	-1.9	.2437	101.0	+.0116	+4.8
1899	121	109.0	+ 9	+ 7.4	59.70	99.4	-.95	-1.6	.2431	102.8	+.0072	+2.9
1900	120	108.1	+10	+ 8.3	59.30	98.7	-.55	-.9	.2504	103.8	+.0049	+2.0
1901	122	109.9	+ 8	+ 6.9	59.31	98.7	-.56	-.9	.2515	104.2	+.0038	+1.5
1902	127	114.4	+ 3	+ 2.4	59.20	98.5	-.45	-.8	.2526	104.7	+.0027	+1.1
1903	130	117.1	.....	.....	58.75	97.8	.....	.....	.2553	105.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CLOTHING, MEN'S, CUSTOM WORK—Continued.

BUSHEL MEN, Female.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890-1895; 2 establishments, 1896, 1897; 3 establishments, 1898-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	\$0.1211	100.0	+\$0.0060	+ 5.0
1890	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1250	103.2	+.0021	+ 1.7
1891	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1250	103.2	+.0021	+ 1.7
1892	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1250	103.2	+.0021	+ 1.7
1893	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1250	103.2	+.0021	+ 1.7
1894	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1250	103.2	+.0021	+ 1.7
1895	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1250	103.2	+.0021	+ 1.7
1896	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1167	96.4	+.0104	+ 8.9
1897	3	150.0	+1	+ 33.3	60.00	100.0	-1.50	-2.5	.1188	98.1	+.0083	+ 7.0
1898	3	150.0	+1	+ 33.3	60.00	100.0	-1.50	-2.5	.1125	92.9	+.0146	+13.0
1899	2	100.0	+2	+100.0	60.00	100.0	-1.50	-2.5	.1133	93.6	+.0138	+12.2
1900	3	150.0	+1	+ 33.3	60.00	100.0	-1.50	-2.5	.1167	96.4	+.0104	+ 8.9
1901	4	200.0	.....	.....	60.00	100.0	-1.50	-2.5	.1214	100.2	+.0057	+ 4.7
1902	4	200.0	.....	.....	60.00	100.0	-1.50	-2.5	.1229	101.5	+.0042	+ 3.4
1903	4	200.0	.....	.....	58.50	97.5	.....	.....	.1271	105.0	.....	.....

COAT MAKERS, Male.

[Data from 14 establishments.]

Av. 1890-99.	104	100.0	+26	+25.0	58.98	100.0	-2.40	-4.1	\$0.3157	100.0	+\$0.0371	+11.8	
1890	95	91.3	+35	+36.8	60.06	101.8	-3.48	-5.8	.3000	95.0	+	.0528	+17.6
1891	94	90.4	+36	+38.3	59.04	100.1	-2.46	-4.2	.3023	95.7	+	.0505	+16.7
1892	104	100.0	+26	+25.0	59.02	100.1	-2.44	-4.1	.3003	95.1	+	.0525	+17.5
1893	109	104.8	+21	+19.3	59.06	100.1	-2.48	-4.2	.3108	98.4	+	.0420	+13.5
1894	100	96.2	+30	+30.0	59.10	100.2	-2.52	-4.3	.3383	107.2	+	.0145	+ 4.3
1895	102	98.1	+28	+27.5	59.12	100.2	-2.54	-4.3	.3372	106.8	+	.0156	+ 4.6
1896	103	99.0	+27	+26.2	59.13	100.3	-2.55	-4.3	.3155	99.9	+	.0373	+11.8
1897	108	103.8	+22	+20.4	59.00	100.0	-2.42	-4.1	.3140	99.5	+	.0388	+12.4
1898	106	101.9	+24	+22.6	58.08	98.5	-1.50	-2.6	.3233	102.4	+	.0295	+ 9.1
1899	116	111.6	+14	+12.1	58.14	98.6	-1.56	-2.7	.3153	99.9	+	.0375	+11.9
1900	122	117.3	+8	+ 6.6	57.84	97.2	- 76	-1.3	.3357	106.3	+	.0171	+ 6.1
1901	122	117.3	+8	+ 6.6	57.84	97.2	- 76	-1.3	.3373	106.8	+	.0155	+ 4.6
1902	126	121.2	+4	+ 3.2	57.38	97.3	- 80	-1.4	.3447	109.2	+	.0081	+ 2.4
1903	130	125.0	.....	.....	56.58	95.9	.....	.....	.3528	111.8	.....	.....	.....

CUTTERS, Male.

[Data from 34 establishments.]

Av. 1890-99.	75	100.0	+ 9	+12.0	58.14	100.0	-1.66	-2.9	\$0.5286	100.0	+\$0.0307	+5.8	
1890	77	102.7	+ 7	+ 9.1	58.17	100.1	-1.69	-2.9	.5280	99.9	+	.0313	+5.9
1891	75	100.0	+ 9	+12.0	58.12	100.0	-1.64	-2.8	.5320	100.6	+	.0278	+5.1
1892	75	100.0	+ 9	+12.0	58.12	100.0	-1.64	-2.8	.5380	100.8	+	.0268	+4.9
1893	76	101.3	+ 8	+10.5	58.30	100.3	-1.82	-3.1	.5362	101.4	+	.0231	+4.3
1894	71	94.7	+13	+18.3	58.18	100.1	-1.70	-2.9	.5281	99.9	+	.0312	+5.9
1895	71	94.7	+13	+18.3	58.18	100.1	-1.70	-2.9	.5324	100.7	+	.0269	+5.1
1896	76	101.3	+ 8	+10.5	58.30	100.3	-1.82	-3.1	.5171	97.8	+	.0422	+8.2
1897	75	100.0	+ 9	+12.0	58.20	100.1	-1.72	-3.0	.5223	98.8	+	.0370	+7.1
1898	77	102.7	+ 7	+ 9.1	57.94	99.7	-1.46	-2.5	.5264	99.6	+	.0329	+6.3
1899	78	104.0	+ 6	+ 7.7	57.85	99.5	-1.37	-2.4	.5302	100.3	+	.0291	+5.5
1900	77	102.7	+ 7	+ 9.1	57.74	99.3	-1.26	-2.2	.5371	101.6	+	.0222	+4.1
1901	80	106.7	+ 4	+ 5.0	57.45	98.8	- 97	-1.7	.5446	103.0	+	.0147	+2.7
1902	82	109.3	+ 2	+ 2.4	57.22	98.4	- 74	-1.3	.5515	104.3	+	.0078	+1.4
1903	84	112.0	.....	.....	66.48	97.1	.....	.....	.5593	105.8	.....	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CLOTHING, MEN'S, CUSTOM WORK—Concluded.

PANTS MAKERS, Male.

[Data from 13 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	41	100.0			59.03	100.0			\$0.2490	100.0		
1890	40	97.6	+6	+12.2	59.25	100.4	-2.42	-4.1	.2479	99.6	+.0562	+22.7
1891	39	95.1	+7	+17.9	59.23	100.3	-2.62	-4.4	.2489	100.0	+.0552	+22.2
1892	40	97.6	+6	+15.0	59.25	100.4	-2.64	-4.5	.2476	99.4	+.0565	+22.8
1893	40	97.6	+6	+15.0	59.25	100.4	-2.64	-4.5	.2490	100.0	+.0551	+22.1
1894	38	92.7	+8	+21.1	59.21	100.3	-2.60	-4.4	.2487	99.9	+.0554	+22.3
1895	39	95.1	+7	+17.9	59.23	100.3	-2.62	-4.4	.2483	99.7	+.0558	+22.5
1896	42	102.4	+4	+9.5	59.14	100.2	-2.53	-4.3	.2478	99.5	+.0563	+22.7
1897	39	95.1	+7	+17.9	59.23	100.3	-2.62	-4.4	.2526	101.4	+.0515	+20.4
1898	40	97.6	+6	+15.0	58.05	98.3	-1.44	-2.5	.2616	105.1	+.0425	+16.2
1899	55	134.1	-9	-16.4	58.47	99.1	-1.86	-3.2	.2376	95.4	+.0665	+28.0
1900	43	104.9	+3	+7.0	57.21	96.9	-.60	-1.0	.2865	115.1	+.0176	+6.1
1901	45	109.8	+1	+2.2	57.33	97.1	-.72	-1.3	.2899	116.4	+.0142	+4.9
1902	45	109.8	+1	+2.2	57.33	97.1	-.72	-1.3	.2911	116.9	+.0130	+4.6
1903	46	112.2			56.61	95.9			.3041	122.1		

PANTS MAKERS, Female.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 2 establishments, 1890-1898, 1 establishment, 1899; 2 establishments, 1900-1903.]

Av. 1890-99.	17	100.0	+3	+17.6	56.02	100.0	-0.97	-1.7	\$0.1104	100.0	+.0176	+15.9
1890	16	94.1	+4	+25.0	56.31	100.5	-1.26	-2.2	.1141	103.4	+.0139	+12.2
1891	16	94.1	+4	+25.0	56.16	100.2	-1.11	-2.0	.1120	101.4	+.0160	+14.3
1892	16	94.1	+4	+25.0	56.31	100.5	-1.26	-2.2	.1141	103.4	+.0139	+12.2
1893	16	94.1	+4	+25.0	56.57	101.0	-1.52	-2.7	.1167	105.7	+.0113	+9.7
1894	16	94.1	+4	+25.0	56.31	100.5	-1.26	-2.2	.1077	97.6	+.0203	+18.8
1895	16	94.1	+4	+25.0	56.16	100.2	-1.11	-2.0	.1066	96.6	+.0214	+20.1
1896	18	105.9	+2	+11.1	56.14	100.2	-1.09	-1.9	.1099	99.5	+.0181	+16.5
1897	20	117.6			56.25	100.4	-1.20	-2.1	.1144	103.6	+.0136	+11.9
1898	20	117.6			56.00	100.0	-.95	-1.7	.1117	101.2	+.0163	+14.6
1899	20	117.6			54.00	96.4	+1.05	+1.9	.0967	87.6	+.0313	+32.4
1900	20	117.6			56.67	101.2	-1.62	-2.9	.1194	108.2	+.0086	+7.2
1901	19	111.8	+1	+5.3	57.08	101.9	-2.03	-3.6	.1205	109.1	+.0075	+6.2
1902	20	117.6			57.00	101.7	-1.95	-3.4	.1208	109.4	+.0072	+6.0
1903	20	117.6			55.05	98.3			.1280	115.9		

COOPERAGE.

COOPERS, SLACK BARRELS, Male.

[Data from 6 establishments.]

Av. 1890-99.	144	100.0	+30	+20.8	58.98	100.0	-0.34	-0.6	\$0.2303	100.0	+.0306	+13.3
1890	145	100.7	+29	+20.0	59.22	100.4	-.58	-1.0	.2319	100.7	+.0290	+12.5
1891	162	112.5	+12	+7.4	59.31	100.6	-.67	-1.1	.2332	101.3	+.0277	+11.9
1892	150	104.2	+24	+16.0	59.21	100.4	-.57	-1.0	.2187	95.0	+.0422	+19.3
1893	143	99.3	+31	+21.7	59.22	100.4	-.58	-1.0	.2232	96.9	+.0377	+16.9
1894	143	99.3	+31	+21.7	59.23	100.4	-.59	-1.0	.2436	105.8	+.0173	+7.1
1895	138	95.8	+36	+26.1	59.23	100.4	-.59	-1.0	.2434	105.7	+.0175	+7.2
1896	140	97.2	+34	+24.3	59.23	100.4	-.59	-1.0	.2357	102.3	+.0252	+10.7
1897	138	95.8	+36	+26.1	59.22	100.4	-.58	-1.0	.2259	98.1	+.0350	+15.5
1898	140	97.2	+34	+24.3	58.00	98.3	+.64	+1.1	.2216	96.2	+.0393	+17.7
1899	142	98.6	+32	+22.5	57.94	98.2	+.70	+1.2	.2260	98.1	+.0349	+15.4
1900	140	97.2	+34	+24.3	58.49	99.2	+.15	+.3	.2421	105.1	+.0188	+7.8
1901	156	108.3	+18	+11.5	58.58	99.3	+.06	+.1	.2371	103.0	+.0238	+10.0
1902	165	114.6	+9	+5.5	58.88	99.8	-.24	-.4	.2501	108.6	+.0108	+4.3
1903	174	120.8			58.64	99.4			.2609	113.3		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

COOPERAGE—Continued.

COOPERS, TIGHT BARRELS, Male.

[Data from 13 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	197	100.0	+19	+ 9.6	59.49	100.0	-1.99	-3.3	\$0.2122	100.0	+\$0.0222	+10.5
1890	168	85.3	+48	+28.6	59.56	100.1	-2.06	-3.5	.2169	102.2	+.0175	+ 8.1
1891	189	95.9	+27	+14.3	59.54	100.1	-2.04	-3.4	.2155	101.6	+.0189	+ 8.8
1892	195	99.0	+21	+10.8	59.56	100.1	-2.06	-3.5	.2130	100.4	+.0214	+10.0
1893	162	82.2	+54	+33.3	59.44	99.9	-1.94	-3.3	.2086	98.3	+.0258	+12.4
1894	209	106.1	+ 7	+ 3.3	59.59	100.2	-2.09	-3.5	.2081	98.1	+.0263	+12.6
1895	190	95.4	+26	+13.7	59.50	100.0	-2.00	-3.4	.2087	98.4	+.0257	+12.3
1896	199	101.0	+17	+ 8.5	59.49	100.0	-1.99	-3.3	.2155	101.6	+.0189	+ 8.8
1897	208	105.6	+ 8	+ 3.8	59.49	100.0	-1.99	-3.3	.2113	99.6	+.0231	+10.9
1898	212	107.6	+ 4	+ 1.9	59.32	99.7	-1.82	-3.1	.2115	99.7	+.0229	+10.8
1899	235	119.3	-19	- 8.1	59.38	99.8	-1.88	-3.2	.2131	100.4	+.0213	+10.0
1900	227	115.2	-11	- 4.8	59.03	99.2	-1.53	-2.6	.2158	101.7	+.0186	+ 8.6
1901	225	114.2	- 9	- 4.0	58.48	98.3	- .98	-1.7	.2247	105.9	+.0097	+ 4.3
1902	213	108.1	+ 3	+ 1.4	58.60	98.5	-1.10	-1.9	.2265	106.7	+.0079	+ 3.5
1903	216	109.6	.....	.....	57.50	96.7	.....	.....	.2344	110.5	.....	.....

CROZERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	-1	-16.7	58.35	100.0	-4.33	- 7.4	\$0.1968	100.0	+\$0.0715	+36.3
1890	6	100.0	-1	-16.7	60.00	102.9	-6.00	-10.0	.1718	87.3	+.0965	+56.2
1891	5	83.3	.....	.....	60.00	102.9	-6.00	-10.0	.1737	88.3	+.0946	+54.5
1892	5	83.3	.....	.....	60.00	102.9	-6.00	-10.0	.1955	99.3	+.0728	+37.2
1893	5	83.3	.....	.....	60.00	102.9	-6.00	-10.0	.1954	99.3	+.0729	+37.3
1894	5	83.3	.....	.....	60.00	102.9	-6.00	-10.0	.2040	103.7	+.0643	+31.5
1895	6	100.0	-1	-16.7	57.00	97.7	-3.00	- 5.3	.2312	117.5	+.0371	+16.0
1896	7	116.7	-2	-28.6	56.57	97.0	-2.57	- 4.5	.2049	104.1	+.0634	+30.9
1897	6	100.0	-1	-16.7	57.00	97.7	-3.00	- 5.3	.2009	102.1	+.0674	+33.5
1898	8	133.3	-3	-37.5	57.00	97.7	-3.00	- 5.3	.2098	106.6	+.0585	+27.9
1899	7	116.7	-2	-28.6	55.71	95.5	-1.71	- 3.1	.1804	91.7	+.0879	+48.7
1900	6	100.0	-1	-16.7	54.00	92.6	.....	.....	.1868	94.9	+.0815	+43.6
1901	7	116.7	-2	-28.6	54.00	92.6	.....	.....	.1933	98.2	+.0750	+38.8
1902	5	83.3	.....	.....	54.00	92.6	.....	.....	.2291	116.4	+.0392	+17.1
1903	5	83.3	.....	.....	54.00	92.6	.....	.....	.2683	136.3	.....	.....

HEADERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	26	100.0	- 5	-19.2	59.43	100.0	-5.43	- 9.1	\$0.2064	100.0	+\$0.0245	+11.9
1890	9	34.6	+12	+33.3	60.00	101.0	-6.00	-10.0	.1880	91.1	+.0429	+22.8
1891	8	30.8	+13	+102.5	60.00	101.0	-6.00	-10.0	.1848	89.5	+.0461	+24.9
1892	23	88.5	- 2	- 8.7	60.00	101.0	-6.00	-10.0	.2054	99.5	+.0255	+12.4
1893	20	76.9	+1	+ 5.0	60.00	101.0	-6.00	-10.0	.2155	104.4	+.0154	+ 7.1
1894	47	180.8	-26	-55.3	60.00	101.0	-6.00	-10.0	.2188	106.0	+.0121	+ 5.5
1895	29	111.5	- 8	-27.6	59.38	99.9	-5.38	- 9.1	.2166	104.9	+.0143	+ 6.6
1896	41	157.7	-20	-48.8	59.56	100.2	-5.56	- 9.3	.2195	106.3	+.0114	+ 5.2
1897	32	123.1	-11	-34.4	59.25	99.7	-5.25	- 8.9	.2156	104.5	+.0153	+ 7.1
1898	21	80.8	.....	.....	58.57	98.6	-4.57	- 7.8	.2048	99.2	+.0261	+12.7
1899	29	111.5	- 8	-27.6	57.52	96.8	-3.52	- 6.1	.1947	94.3	+.0362	+18.6
1900	27	103.8	- 6	-22.2	54.00	90.9	.....	.....	.1965	95.2	+.0344	+17.5
1901	20	76.9	+1	+ 5.0	54.00	90.9	.....	.....	.1859	90.1	+.0450	+24.2
1902	22	84.6	- 1	- 4.5	54.00	90.9	.....	.....	.2176	105.4	+.0133	+ 6.1
1903	21	80.8	.....	.....	54.00	90.9	.....	.....	.2309	111.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

COOPERAGE—Continued.

HEATERS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.				
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.		
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.	
Av. 1890-99.	8	100.0	+3	+37.5	58.85	100.0	-4.85	-8.2	\$0.1849	100.0	+\$0.0093	+5.0	
1890	11	137.5	.....	.....	60.00	102.0	-6.00	-10.0	.1673	90.5	+	.0269	+16.1
1891	8	100.0	+3	+37.5	60.00	102.0	-6.00	-10.0	.1714	92.7	+	.0228	+13.3
1892	9	112.5	+2	+22.2	60.00	102.0	-6.00	-10.0	.1647	89.1	+	.0295	+17.9
1893	9	112.5	+2	+22.2	60.00	102.0	-6.00	-10.0	.1589	85.9	+	.0353	+22.2
1894	7	87.5	+4	+57.1	60.00	102.0	-6.00	-10.0	.1715	92.8	+	.0227	+13.2
1895	6	75.0	+5	+83.3	58.00	98.6	-4.00	-6.9	.2244	121.4	—	.0302	-13.5
1896	8	100.0	+3	+37.5	53.50	99.4	-4.50	-7.7	.2065	111.7	—	.0123	-6.0
1897	6	75.0	+5	+83.3	58.00	98.6	-4.00	-6.9	.2126	115.0	—	.0184	-8.7
1898	8	100.0	+3	+37.5	57.00	96.9	-3.00	-5.3	.1976	106.9	—	.0034	-1.7
1899	8	100.0	+3	+37.5	57.00	96.9	-3.00	-5.3	.1789	94.1	+	.0203	+11.7
1900	7	87.5	+4	+57.1	54.00	91.8	.....	.....	.1782	96.4	+	.0160	+9.0
1901	9	112.5	+2	+22.2	54.00	91.8	.....	.....	.1700	91.9	+	.0242	+14.2
1902	9	112.5	+2	+22.2	54.00	91.8	.....	.....	.1775	96.0	+	.0167	+9.4
1903	11	137.5	.....	.....	54.00	91.8	.....	.....	.1942	105.0	.....	.....	.....

HOOPERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	-3	-50.0	59.33	100.0	-5.33	-9.0	\$0.2149	100.0	+\$0.0680	+27.0	
1890	4	66.7	-1	-25.0	60.00	101.1	-6.00	-10.0	.2150	100.0	+	.0579	+26.9
1891	4	66.7	-1	-25.0	60.00	101.1	-6.00	-10.0	.2188	101.8	+	.0541	+24.7
1892	6	100.0	-3	-50.0	60.00	101.1	-6.00	-10.0	.2001	93.1	+	.0728	+36.4
1893	6	100.0	-3	-50.0	60.00	101.1	-6.00	-10.0	.2110	98.2	+	.0619	+29.3
1894	6	100.0	-3	-50.0	60.00	101.1	-6.00	-10.0	.1928	89.7	+	.0801	+41.5
1895	8	133.3	-5	-62.5	59.25	99.9	-5.25	-8.9	.2293	106.7	+	.0436	+19.0
1896	7	116.7	-4	-57.1	59.14	99.7	-5.14	-8.7	.2214	103.0	+	.0515	+23.3
1897	7	116.7	-4	-57.1	58.29	98.2	-4.29	-7.4	.2158	100.4	+	.0571	+26.5
1898	7	116.7	-4	-57.1	58.29	98.2	-4.29	-7.4	.2201	102.4	+	.0528	+24.0
1899	7	116.7	-4	-57.1	58.29	98.2	-4.29	-7.4	.2246	104.5	+	.0483	+21.5
1900	5	83.3	-2	-40.0	54.00	91.0	.....	.....	.2584	120.2	+	.0145	+5.6
1901	4	66.7	-1	-25.0	54.00	91.0	.....	.....	.2386	111.0	+	.0343	+14.4
1902	8	133.3	-5	-62.5	54.00	91.0	.....	.....	.2327	108.3	+	.0402	+17.3
1903	3	50.0	.....	.....	54.00	91.0	.....	.....	.2729	127.0	.....	.....	.....

JOINTERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	7	100.0	+2	+ 28.6	59.35	100.0	- 5.35	- 9.0	\$0.1791	100.0	+\$0.1268	+70.8	
1890	4	57.1	+5	+125.0	60.00	101.1	-6.00	-10.0	.1815	101.3	+	.1244	+68.5
1891	5	71.4	+4	+ 80.0	60.00	101.1	-6.00	-10.0	.1945	108.6	+	.1114	+57.3
1892	10	142.9	-1	-10.0	60.00	101.1	-6.00	-10.0	.1856	103.6	+	.1203	+64.8
1893	7	100.0	+2	+ 28.6	60.00	101.1	-6.00	-10.0	.1616	90.2	+	.1443	+89.3
1894	11	157.1	-2	-18.2	60.00	101.1	-6.00	-10.0	.1718	95.9	+	.1341	+78.1
1895	8	114.3	+1	+12.5	58.50	98.6	-4.50	-7.7	.1669	93.2	+	.1390	+83.3
1896	10	142.9	-1	-10.0	58.80	99.1	-4.80	-8.2	.1653	92.3	+	.1406	+85.1
1897	7	100.0	+2	+ 28.6	59.14	99.6	-5.14	-8.7	.1767	98.7	+	.1292	+73.1
1898	5	71.4	+4	+ 80.0	58.80	99.1	-4.80	-8.2	.1996	111.4	+	.1063	+53.3
1899	7	100.0	+2	+ 28.6	58.29	98.2	-4.29	-7.4	.1871	104.5	+	.1188	+63.5
1900	8	114.3	+1	+12.5	54.00	91.0	.....	.....	.1807	100.9	+	.1252	+69.3
1901	6	85.7	+3	+ 50.0	54.00	91.0	.....	.....	.2802	156.4	+	.0257	+9.2
1902	10	142.9	-1	-10.0	54.00	91.0	.....	.....	.3348	186.9	-	.0289	-8.6
1903	9	128.6	.....	.....	54.00	91.0	.....	.....	.3059	170.8	.....	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

COOPERAGE—Continued.

LEVELERS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	7	100.0	+1	+ 14.3	59.28	100.0	-5.28	- 8.9	\$0.2588	100.0	+\$0.0080	+ 1.2
1890	7	100.0	+1	+ 14.3	60.00	101.2	-6.00	-10.0	.2817	91.3	+.0251	+10.8
1891	7	100.0	+1	+ 14.3	60.00	101.2	-6.00	-10.0	.2286	90.1	+.0282	+12.3
1892	5	71.4	+3	+ 60.0	60.00	101.2	-6.00	-10.0	.2290	90.2	+.0278	+12.1
1893	4	57.1	+4	+100.0	60.00	101.2	-6.00	-10.0	.2148	84.4	+.0425	+19.8
1894	6	85.7	+2	+ 33.3	60.00	101.2	-6.00	-10.0	.2172	85.6	+.0396	+18.2
1895	9	128.6	-1	- 11.1	58.67	99.0	-4.67	- 8.0	.2916	114.9	-.0348	-11.9
1896	9	128.6	-1	- 11.1	58.67	99.0	-4.67	- 8.0	.2953	116.4	-.0385	-13.0
1897	8	114.3	.....	.....	58.50	98.7	-4.50	- 7.7	.2962	116.7	-.0394	-13.3
1898	11	157.1	-3	- 27.3	58.91	99.4	-4.91	- 8.3	.2672	105.3	-.0104	- 3.9
1899	6	85.7	+2	+ 33.3	58.00	97.8	-4.00	- 6.9	.2669	105.2	-.0101	- 3.8
1900	6	85.7	+2	+ 33.3	54.00	91.1	.....	.....	.2651	104.5	-.0083	- 3.1
1901	9	128.6	-1	- 11.1	54.00	91.1	.....	.....	.2373	93.5	+.0195	+ 8.2
1902	8	114.3	.....	.....	54.00	91.1	.....	.....	.2275	89.6	+.0293	+12.9
1903	8	114.3	.....	.....	54.00	91.1	.....	.....	.2568	101.2	.....	.....

RAISERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	.....	.....	59.60	100.0	-5.60	- 9.4	\$0.2496	100.0	-\$0.0072	- 2.9	
1890	3	50.0	+3	+100.0	60.00	100.7	-6.00	-10.0	.2422	97.0	+	.0002	+ .1
1891	4	66.7	+2	+ 50.0	60.00	100.7	-6.00	-10.0	.2390	95.8	+	.0034	+ 1.4
1892	3	50.0	+3	+100.0	60.00	100.7	-6.00	-10.0	.2036	81.6	+	.0388	+19.1
1893	4	66.7	+2	+ 50.0	60.00	100.7	-6.00	-10.0	.2462	98.6	-	.0038	- 1.5
1894	5	83.3	+1	+ 20.0	60.00	100.7	-6.00	-10.0	.2159	86.5	+	.0265	+12.3
1895	8	133.3	-2	- 25.0	59.25	99.4	-5.25	- 8.9	.2980	119.4	-	.0556	-18.7
1896	7	116.7	-1	- 14.3	59.14	99.2	-5.14	- 8.7	.2605	104.4	-	.0181	- 6.9
1897	8	133.3	-2	- 25.0	59.25	99.4	-5.25	- 8.9	.2743	109.9	-	.0319	-11.6
1898	7	116.7	-1	- 14.3	59.14	99.2	-5.14	- 8.7	.2741	109.8	-	.0317	-11.6
1899	8	133.3	-2	- 25.0	59.25	99.4	-5.25	- 8.9	.2423	97.1	+	.0001	+ .04
1900	5	83.3	+1	+ 20.0	54.00	90.6	.....	.....	.3078	123.3	-	.0654	-21.2
1901	5	83.3	+1	+ 20.0	54.00	90.6	.....	.....	.2457	98.4	-	.0033	- 1.3
1902	6	100.0	.....	.....	54.00	90.6	.....	.....	.2738	109.7	-	.0314	-11.5
1903	6	100.0	.....	.....	54.00	90.6	.....	.....	.2424	97.1	.....	.....	.....

TRUSSERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	9	100.0	-1	-11.1	58.68	100.0	-4.68	- 8.0	\$0.1995	100.0	+\$0.1483	+ 74.3	
1890	9	100.0	-1	-11.1	60.00	102.2	-6.00	-10.0	.1761	88.3	+	.1717	+ 97.5
1891	9	100.0	-1	-11.1	60.00	102.2	-6.00	-10.0	.1685	84.5	+	.1793	+106.4
1892	7	77.8	+1	+14.3	60.00	102.2	-6.00	-10.0	.1675	84.0	+	.1803	+107.6
1893	12	133.3	-4	-33.3	60.00	102.2	-6.00	-10.0	.1877	94.1	+	.1601	+ 85.3
1894	5	55.6	+3	+60.0	60.00	102.2	-6.00	-10.0	.1798	90.1	+	.1680	+ 93.4
1895	12	133.3	-4	-33.3	58.00	98.8	-4.00	- 6.9	.2496	125.1	+	.0982	+ 39.3
1896	12	133.3	-4	-33.3	57.50	98.0	-3.50	- 6.1	.2170	108.8	-	.1308	+ 60.3
1897	9	100.0	-1	-11.1	58.00	98.8	-4.00	- 6.9	.2419	121.3	+	.1059	+ 43.8
1898	9	100.0	-1	-11.1	57.33	97.7	-3.33	- 5.8	.2193	109.9	-	.1285	+ 58.6
1899	9	100.0	-1	-11.1	56.00	95.4	-2.00	- 3.6	.1871	93.8	+	.1607	+ 85.9
1900	10	111.1	-2	-20.0	54.00	92.0	.....	.....	.2421	121.4	+	.1057	+ 43.7
1901	11	122.2	-3	-27.3	54.00	92.0	.....	.....	.1935	97.0	+	.1543	+ 79.7
1902	15	166.7	-7	-46.7	54.00	92.0	.....	.....	.2683	134.5	+	.0795	+ 29.6
1903	8	88.9	.....	.....	54.00	92.0	.....	.....	.3478	174.3	.....	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

COOPERAGE—Concluded.

TURNERS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	7	100.0	.....	.....	58.68	100.0	-4.68	-8.0	\$0.1800	100.0	+\$0.0548	+30.2
1890	5	71.4	+2	+40.0	60.00	102.2	-6.00	-10.0	.1682	93.4	+.0661	+39.3
1891	7	109.0	.....	.....	60.00	102.2	-6.00	-10.0	.1693	94.1	+.0650	+38.4
1892	5	71.4	+2	+40.0	60.00	102.2	-6.00	-10.0	.1844	102.4	+.0499	+27.1
1893	6	85.7	+1	+16.7	60.00	102.2	-6.00	-10.0	.1776	98.7	+.0567	+31.9
1894	3	42.9	+4	+133.3	60.00	102.2	-6.00	-10.0	.1627	90.4	+.0716	+44.0
1895	10	142.9	-3	-30.0	57.60	98.2	-3.60	-6.3	.1884	104.7	+.0459	+24.4
1896	9	128.6	-2	-22.2	58.00	98.8	-4.00	-6.9	.1854	103.0	+.0489	+26.4
1897	9	128.6	-2	-22.2	57.33	97.7	-3.33	-5.8	.1840	102.2	+.0503	+27.3
1898	10	142.9	-3	-30.0	57.60	98.2	-3.60	-6.3	.1977	109.8	+.0366	+18.5
1899	8	114.3	-1	-12.5	56.25	95.9	-2.25	-4.0	.1819	101.1	+.0524	+28.8
1900	7	100.0	.....	.....	54.00	92.0	.....	.....	.1992	110.7	+.0351	+17.6
1901	6	85.7	+1	+16.7	54.00	92.0	.....	.....	.2007	111.5	+.0336	+16.7
1902	7	100.0	.....	.....	54.00	92.0	.....	.....	.2399	133.3	-.0056	-2.3
1903	7	100.0	.....	.....	54.00	92.0	.....	.....	.2343	130.2	.....	.....

COTTON GOODS.

CARDING-MACHINE TENDERS, Male.

[Data for employees from 21 establishments for entire period. Data for hours and wages from 21 establishments, 1890; 22 establishments, 1891; 23 establishments, 1892-1903.]

Av. 1890-99.	215	100.0	+31	+14.4	61.34	100.0	+0.15	+0.2	\$0.0911	100.0	+\$0.0081	+8.9
1890	186	86.5	+60	+32.3	61.77	100.7	-.28	-.5	.0893	98.0	+.0099	+11.1
1891	204	94.9	+42	+20.6	62.01	101.1	-.62	-.8	.0909	99.8	+.0083	+9.1
1892	219	101.9	+27	+12.3	62.08	101.2	-.59	-1.0	.0906	99.5	+.0086	+9.5
1893	216	100.6	+30	+13.9	61.09	99.6	+.40	+.7	.0924	101.4	+.0068	+7.4
1894	218	101.4	+28	+12.8	60.02	97.8	+1.47	+2.4	.0930	102.1	+.0062	+6.7
1895	213	99.1	+33	+15.5	61.17	99.7	+.32	+.5	.0924	101.4	+.0068	+7.4
1896	221	102.8	+25	+11.3	61.31	100.0	+.18	+.3	.0928	101.9	+.0064	+6.9
1897	215	100.0	+31	+14.4	60.68	98.9	+.81	+1.3	.0918	100.8	+.0074	+8.1
1898	222	103.3	+24	+10.8	61.67	100.5	-.18	-.3	.0891	97.8	+.0101	+11.3
1899	232	107.9	+14	+6.9	61.62	100.5	-.13	-.2	.0884	97.0	+.0108	+12.2
1900	239	111.2	+7	+2.9	61.63	100.5	-.14	-.2	.0952	104.5	+.0040	+4.2
1901	237	110.2	+9	+3.8	61.83	100.8	-.34	-.6	.0940	103.2	+.0052	+5.5
1902	237	110.2	+9	+3.8	61.45	100.2	+.04	+.1	.0987	108.3	+.0005	+.5
1903	246	114.4	.....	.....	61.49	100.2	.....	.....	.0992	108.9	.....	.....

DYERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890, 1891; 7 establishments, 1892-1903.]

Av. 1890-99.	54	100.0	+10	+18.5	63.02	100.0	-0.78	-1.2	\$0.1097	100.0	+\$0.0084	+7.7
1890	63	116.7	+1	+1.6	62.48	99.1	-.24	-.4	.1166	106.3	+.0015	+1.3
1891	64	118.5	.....	.....	62.34	98.9	-.10	-.2	.1176	107.2	+.0005	+.4
1892	61	113.0	+3	+4.9	62.81	99.7	-.57	-.9	.1153	105.1	+.0028	+2.4
1893	54	100.0	+10	+18.5	62.79	99.6	-.55	-.9	.1142	104.1	+.0039	+3.4
1894	49	90.7	+15	+30.6	63.18	100.3	-.94	-1.5	.1049	95.6	+.0132	+12.6
1895	48	88.9	+16	+33.3	63.48	100.7	-1.24	-2.0	.1012	92.3	+.0169	+16.7
1896	52	96.3	+12	+23.1	63.14	100.2	-.90	-1.4	.1044	95.2	+.0137	+13.1
1897	47	87.0	+17	+36.2	63.37	100.6	-1.13	-1.8	.1063	96.9	+.0118	+11.1
1898	49	90.7	+15	+30.6	63.21	100.3	-.97	-1.5	.1090	99.4	+.0091	+8.3
1899	50	92.6	+14	+28.0	63.44	100.7	-1.20	-1.9	.1073	97.8	+.0108	+10.1
1900	55	101.9	+9	+16.4	63.36	100.5	-1.12	-1.8	.1107	100.9	+.0074	+6.7
1901	56	103.7	+8	+14.3	63.08	100.0	-.79	-1.3	.1122	102.3	+.0059	+5.3
1902	65	120.4	-1	-1.5	62.12	98.6	+.12	+.2	.1175	107.1	+.0006	+.5
1903	64	118.5	.....	.....	62.24	98.8	.....	.....	.1181	107.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

COTTON GOODS—Continued.

LOOM FIXERS, Male.

[Data for employees from 22 establishments for entire period. Data for hours and wages from 22 establishments, 1890; 23 establishments, 1891; 24 establishments, 1892-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	318	100.0	+ 94	+29.6	60.99	100.0	-0.14	-0.2	\$0.1646	100.0	+\$0.0187	+11.4
1890	285	89.6	+127	+44.0	61.26	100.4	- .41	- .7	.1639	102.6	+ .0144	+ 8.5
1891	294	92.5	+118	+40.1	61.58	101.0	- .73	-1.2	.1653	100.4	+ .0180	+10.9
1892	310	97.5	+102	+32.9	61.50	100.8	- .65	-1.1	.1665	101.2	+ .0163	+10.1
1893	308	95.3	+109	+36.0	60.91	99.9	- .66	- .1	.1710	103.9	+ .0123	+ 7.2
1894	314	98.7	+ 96	+31.2	59.41	97.4	+1.44	+2.4	.1639	99.2	+ .0200	+12.2
1895	325	102.2	+ 87	+26.8	60.77	99.6	+ .08	+ .1	.1613	98.0	+ .0220	+13.6
1896	317	99.7	+ 95	+30.0	60.90	99.9	- .05	- .1	.1655	100.5	+ .0178	+10.8
1897	345	108.5	+ 67	+19.4	60.54	99.3	+ .31	+ .5	.1645	99.9	+ .0185	+11.4
1898	353	111.0	+ 59	+16.7	61.42	100.7	- .57	- .9	.1606	97.6	+ .0227	+14.1
1899	336	105.7	+ 76	+22.6	61.56	100.9	- .71	-1.2	.1587	96.4	+ .0240	+15.5
1900	358	112.6	+ 54	+15.1	61.38	100.6	- .53	- .8	.1740	105.7	+ .0093	+ 5.3
1901	372	117.0	+ 40	+10.8	61.31	100.5	- .46	- .8	.1741	106.8	+ .0092	+ 5.3
1902	397	124.8	+ 15	+ 3.8	60.83	99.7	+ .02	+ .03	.1815	110.3	+ .0018	+ 1.0
1903	412	129.6	.....	.....	60.85	99.8	.....	.....	.1839	111.4	.....	.....

SPINNERS, FRAME, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 8 establishments, 1890, 1897; 9 establishments, 1891, 1893, 1898, 1901; 10 establishments, 1894, 1896, 1899, 1903; 11 establishments, 1892, 1895, 1900, 1902.]

Av. 1890-99.	72	100.0	-10	-13.9	62.53	100.0	-2.22	-3.6	\$0.0467	100.0	+\$0.0401	+ 85.9
1890	26	36.1	+36	+138.5	60.84	97.3	- .53	- .9	.0521	111.6	+ .0347	+ 66.6
1891	73	101.4	-11	-15.1	62.83	100.5	-2.52	-4.0	.0419	89.7	+ .0449	+107.2
1892	60	83.3	+2	+3.3	64.00	102.4	-3.69	-5.8	.0428	91.6	+ .0440	+102.8
1893	73	101.4	-11	-15.1	62.68	100.2	-2.37	-3.8	.0420	89.9	+ .0448	+106.7
1894	62	72.2	+10	+19.2	62.76	100.4	-2.45	-3.9	.0400	85.7	+ .0468	+117.0
1895	51	70.8	+7	+12.6	63.07	100.9	-2.76	-4.4	.0426	91.2	+ .0442	+103.8
1896	69	95.8	-11	-10.1	61.45	98.3	-1.17	-1.9	.0593	127.0	+ .0275	+ 46.4
1897	87	120.8	-25	-28.7	62.05	99.2	-1.74	-2.8	.0510	109.2	+ .0358	+ 70.2
1898	113	156.9	-51	-45.1	62.83	100.5	-2.52	-4.0	.0462	98.9	+ .0406	+ 87.9
1899	116	161.1	-54	-46.6	62.71	100.3	-2.40	-3.8	.0494	105.8	+ .0374	+ 75.7
1900	125	173.6	-63	-50.4	62.56	100.0	-2.25	-3.6	.0600	128.5	+ .0268	+ 44.7
1901	86	119.4	-24	-27.9	61.92	99.0	-1.62	-2.6	.0634	135.8	+ .0234	+ 36.9
1902	121	168.1	-59	-48.8	61.29	98.0	- .98	-1.6	.0688	147.3	+ .0180	+ 26.2
1903	62	86.1	.....	.....	60.31	96.4	.....	.....	.0868	185.9	.....	.....

SPINNERS, FRAME, Female.

[Data for employees from 20 establishments for entire period. Data for hours and wages from 20 establishments, 1890; 21 establishments, 1891; 22 establishments, 1892-1903.]

Av. 1890-99.	1,338	100.0	+267	+20.0	61.60	100.0	-0.67	-1.1	\$0.0656	100.0	+\$0.0158	+23.3
1890	1,189	88.8	+417	+35.1	61.71	100.2	- .78	-1.3	.0653	99.5	+ .0156	+23.9
1891	1,187	88.7	+418	+35.2	62.20	101.0	-1.27	-2.0	.0650	99.1	+ .0159	+24.5
1892	1,236	92.4	+369	+29.9	62.55	101.5	-1.62	-2.6	.0623	95.0	+ .0186	+29.9
1893	1,257	93.9	+348	+27.7	61.81	100.3	- .88	-1.4	.0668	101.8	+ .0141	+21.1
1894	1,276	95.4	+329	+25.8	60.44	98.1	+ .49	+ .8	.0640	97.6	+ .0169	+26.4
1895	1,263	94.4	+342	+27.1	61.57	100.0	- .64	-1.0	.0651	99.2	+ .0158	+24.3
1896	1,296	97.0	+307	+23.7	61.37	99.6	- .44	- .7	.0708	107.9	+ .0101	+14.3
1897	1,484	110.9	+121	+8.2	60.87	98.8	+ .06	+ .1	.0681	103.8	+ .0128	+18.8
1898	1,604	119.9	+ 1	+ .1	61.69	100.1	- .76	-1.2	.0638	97.3	+ .0171	+26.8
1899	1,584	118.4	+ 21	+ 1.3	61.75	100.2	- .82	-1.3	.0649	98.9	+ .0160	+24.7
1900	1,442	107.8	+163	+11.3	61.66	100.1	- .73	-1.2	.0711	108.4	+ .0098	+13.3
1901	1,541	115.2	+ 64	+4.2	61.32	99.5	- .39	- .6	.0731	111.4	+ .0078	+10.7
1902	1,479	110.5	+126	+ 8.5	61.13	99.2	- .20	- .3	.0766	116.8	+ .0043	+ 5.6
1903	1,605	120.0	.....	.....	60.93	98.9	.....	.....	.0809	123.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

COTTON GOODS—Concluded.

SPINNERS, MULE, Male.

[Data from 11 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	210	100.0	-33	-15.7	59.43	100.0	-0.58	-1.0	\$0.1856	100.0	+\$0.0283	+15.2
1890	220	104.8	-43	-19.5	60.00	101.0	-1.15	-1.9	.1696	91.4	+.0443	+26.1
1891	223	106.2	-46	-20.6	60.00	101.0	-1.15	-1.9	.1730	93.2	+.0409	+23.6
1892	194	92.4	-17	-8.8	60.00	101.0	-1.15	-1.9	.2055	110.7	+.0084	+4.1
1893	199	94.8	-22	-11.1	59.23	99.7	-.38	-.6	.2119	114.2	+.0020	+.9
1894	236	112.4	-59	-25.0	59.06	99.4	-.21	-.4	.1786	96.2	+.0353	+19.8
1895	216	102.9	-39	-18.1	59.27	99.7	-.42	-.7	.1815	97.8	+.0324	+17.9
1896	207	98.6	-30	-14.5	58.95	99.2	-.10	-.2	.1847	99.5	+.0292	+15.8
1897	200	95.2	-28	-11.5	59.24	99.7	-.39	-.7	.1898	102.8	+.0241	+12.7
1898	209	99.5	-32	-15.3	59.28	99.7	-.43	-.7	.1822	98.2	+.0317	+17.4
1899	191	91.0	-14	-7.3	59.23	99.7	-.38	-.6	.1789	96.4	+.0350	+19.6
1900	201	95.7	-24	-11.9	59.28	99.7	-.43	-.7	.2042	110.0	+.0097	+4.8
1901	207	98.6	-30	-14.5	59.26	99.7	-.41	-.7	.2042	110.0	+.0097	+4.8
1902	187	89.0	-10	-5.3	58.79	98.9	+.06	+.1	.2163	116.5	-.0024	-1.1
1903	177	84.3	.....	.....	58.85	99.0	.....	.....	.2139	115.2	.....	.....

WEAVERS, Male.

[Data for employees from 16 establishments for entire period. Data for hours and wages from 17 establishments, 1890; 19 establishments, 1891-1893, 1897, 1903; 20 establishments, 1892, 1894-1896, 1898-1902.]

Av. 1890-99.	1,333	100.0	+229	+17.2	61.61	100.0	-0.70	-1.1	\$0.1145	100.0	+\$0.0209	+18.3
1890	1,070	80.3	+492	+46.0	61.11	99.2	-.20	-.3	.1300	113.5	+.0054	+4.2
1891	1,072	80.4	+490	+45.7	62.00	100.6	-1.09	-1.8	.1180	103.1	+.0174	+14.7
1892	1,127	84.5	+435	+38.6	62.56	101.5	-1.65	-2.6	.1133	99.0	+.0221	+19.5
1893	1,309	98.2	+253	+19.3	61.29	99.5	-.38	-.6	.1232	107.6	+.0122	+9.9
1894	1,266	95.0	+296	+23.4	61.02	99.0	-.11	-.2	.1129	98.6	+.0225	+19.9
1895	1,307	98.0	+255	+19.5	61.44	99.7	-.53	-.9	.1106	96.6	+.0248	+22.4
1896	1,336	100.2	+226	+16.9	61.15	99.3	-.24	-.4	.1178	102.9	+.0176	+14.9
1897	1,561	117.1	+1	+.1	61.70	100.1	-.79	-1.3	.1091	95.3	+.0263	+24.1
1898	1,609	120.7	-47	-2.9	61.89	100.5	-.98	-1.6	.1048	91.5	+.0306	+29.2
1899	1,672	125.4	-110	-6.6	61.89	100.5	-.98	-1.6	.1055	92.1	+.0299	+28.3
1900	1,657	124.3	-95	-5.7	61.64	100.0	-.73	-1.2	.1203	105.1	+.0151	+12.6
1901	1,550	116.3	+12	+.8	61.76	100.2	-.85	-1.4	.1193	104.2	+.0161	+13.5
1902	1,617	121.3	-55	-3.4	61.28	99.5	-.37	-.6	.1267	110.7	+.0087	+6.9
1903	1,562	117.2	.....	.....	60.91	98.9	.....	.....	.1354	118.3	.....	.....

WEAVERS, Female.

[Data for employees from 19 establishments for entire period. Data for hours and wages from 19 establishments, 1890; 20 establishments, 1891; 21 establishments, 1892-1903.]

Av. 1890-99.	3,504	100.0	-437	-12.5	60.27	100.0	-0.26	-0.4	\$0.1106	100.0	+\$0.0158	+14.3
1890	3,459	98.7	-392	-11.3	60.96	101.1	-.95	-1.6	.1096	99.1	+.0168	+15.3
1891	3,635	103.7	-568	-15.6	61.20	101.5	-1.19	-1.9	.1090	98.6	+.0174	+16.0
1892	3,560	101.6	-493	-13.8	61.34	101.8	-1.33	-2.2	.1103	99.7	+.0161	+14.6
1893	3,555	101.5	-488	-13.7	60.42	100.2	-.41	-.7	.1163	105.2	+.0101	+8.7
1894	3,588	102.7	-531	-14.8	58.24	96.6	+1.77	+3.0	.1102	98.6	+.0162	+14.7
1895	3,587	102.4	-520	-14.5	60.14	99.8	-.13	-.2	.1090	98.6	+.0174	+16.0
1896	3,491	99.6	-424	-12.1	60.04	99.6	-.03	-.05	.1145	103.5	+.0119	+10.4
1897	3,407	97.2	-340	-10.0	59.41	98.6	+.60	+1.0	.1115	100.3	+.0149	+13.4
1898	3,421	97.6	-354	-10.3	60.46	100.3	-.45	-.7	.1082	98.4	+.0176	+16.2
1899	3,325	94.9	-255	-7.8	60.46	100.3	-.45	-.7	.1071	96.8	+.0192	+18.0
1900	3,401	97.1	-334	-9.8	60.33	100.1	-.32	-.5	.1214	109.8	+.0050	+4.1
1901	3,213	91.7	-146	-4.5	60.18	99.9	-.17	-.3	.1212	109.6	+.0052	+4.3
1902	3,259	93.0	-192	-5.9	60.00	99.6	+.01	+.02	.1241	112.2	+.0023	+1.9
1903	3,067	87.5	.....	.....	60.01	99.6	.....	.....	.1264	114.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 715.]

DYEING, FINISHING, AND PRINTING TEXTILES.

BLEACHERS, Male.

[Data from 6 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	108	100.0	+ 92	+ 85.2	59.19	100.0	-0.13	-0.2	\$0.1155	100.0	+\$0.0348	+ 4.2
1890	86	79.6	+114	+132.6	60.00	101.4	-.94	-1.6	.1153	99.8	+.0950	+ 4.3
1891	88	81.5	+112	+127.3	60.00	101.4	-.94	-1.6	.1093	94.6	+.0110	+10.1
1892	104	96.3	+ 96	+ 92.3	59.60	100.7	-.54	-.9	.1129	97.7	+.0074	+ 6.6
1893	116	107.4	+ 84	+ 72.4	58.98	99.6	+.08	+ 1	.1151	99.7	+.0052	+ 4.5
1894	103	95.4	+ 97	+ 94.2	58.76	99.3	+.30	+ 5	.1146	99.2	+.0057	+ 5.0
1895	114	105.6	+ 86	+ 75.4	58.98	99.6	+.08	+ 1	.1157	100.2	+.0046	+ 4.0
1896	108	100.0	+ 92	+ 85.2	58.94	99.6	+.12	+ 2	.1184	102.5	+.0019	+ 1.6
1897	122	113.0	+ 78	+ 63.9	58.61	99.0	+.45	+ 8	.1174	101.6	+.0029	+ 2.5
1898	110	101.9	+ 90	+ 81.8	59.00	99.7	+.06	+ 1	.1186	102.7	+.0017	+ 1.4
1899	125	115.7	+ 75	+ 60.0	59.06	99.8	.....	.....	.1175	101.7	+.0028	+ 2.4
1900	132	122.2	+ 68	+ 51.5	59.08	99.8	-.02	-.03	.1189	102.9	+.0014	+ 1.2
1901	150	138.9	+ 50	+ 33.3	58.89	99.5	+.17	+ 3	.1180	102.2	+.0023	+ 1.9
1902	172	159.3	+ 28	+ 16.3	58.91	99.5	+.16	+ 3	.1193	103.3	+.0010	+ .8
1903	209	185.2	.....	.....	59.06	99.8	.....	.....	.1203	104.2	.....	.....

CALENDREERS, Male.

[Data from 8 establishments.]

Av. 1890-99.	82	100.0	+39	+47.6	59.51	100.0	+0.10	+0.2	\$0.1318	100.0	+\$0.0079	+6.6
1890	77	93.9	+44	+57.1	60.08	101.0	-.47	-.8	.1302	98.8	+.0095	+7.3
1891	81	98.8	+40	+49.4	60.07	100.9	-.46	-.8	.1309	99.3	+.0088	+6.7
1892	84	102.4	+37	+44.0	59.80	100.5	-.19	-.3	.1319	100.1	+.0078	+5.9
1893	82	100.0	+39	+47.6	59.41	99.8	+.20	+ 3	.1336	101.4	+.0061	+4.6
1894	76	92.7	+45	+59.2	58.79	98.8	+.82	+1.4	.1312	99.5	+.0085	+6.5
1895	78	95.1	+43	+55.1	59.41	99.8	+.20	+ 3	.1302	98.8	+.0095	+7.3
1896	76	92.7	+45	+59.2	59.45	99.9	+.16	+ 3	.1322	100.3	+.0075	+5.7
1897	84	102.4	+37	+44.0	59.02	99.2	+.59	+1.0	.1330	100.9	+.0067	+5.0
1898	87	106.1	+34	+39.1	59.51	100.0	+.10	+ 2	.1332	101.1	+.0065	+4.9
1899	96	117.1	+25	+26.0	59.51	100.0	+.10	+ 2	.1318	100.0	+.0079	+6.0
1900	101	123.2	+20	+19.8	59.54	100.1	+.07	+ 1	.1358	103.0	+.0039	+2.9
1901	104	126.8	+17	+16.3	59.59	100.1	+.02	+ .03	.1372	104.1	+.0025	+1.8
1902	109	132.9	+12	+11.0	59.61	100.2	.....	.....	.1390	105.5	+.0007	+ .5
1903	121	147.6	.....	.....	59.61	100.2	.....	.....	.1397	106.0	.....	.....

COLOR MIXERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages, from 3 establishments, 1890, 1891; 4 establishments, 1892-1903.]

Av. 1890-99.	71	100.0	+ 9	+12.7	58.55	100.0	-0.55	-0.9	\$0.1213	100.0	+\$0.0072	+5.9
1890	75	105.6	+ 5	+ 6.7	60.00	102.5	-2.00	-3.3	.1180	97.3	+.0105	+8.9
1891	71	100.0	+ 9	+12.7	60.00	102.5	-2.00	-3.3	.1198	98.8	+.0087	+7.3
1892	68	95.8	+12	+17.6	59.46	101.6	-1.46	-2.5	.1215	100.2	+.0070	+5.8
1893	69	97.2	+11	+15.9	58.00	99.1	.....	.....	.1232	101.6	+.0053	+4.3
1894	66	93.0	+14	+21.2	58.00	99.1	.....	.....	.1182	97.4	+.0103	+8.7
1895	72	101.4	+ 8	+11.1	58.00	99.1	.....	.....	.1217	100.3	+.0068	+5.6
1896	75	105.6	+ 5	+ 6.7	58.00	99.1	.....	.....	.1225	101.0	+.0060	+4.9
1897	77	108.5	+ 3	+ 3.9	58.00	99.1	.....	.....	.1220	100.6	+.0065	+5.3
1898	77	108.5	+ 3	+ 3.9	58.00	99.1	.....	.....	.1237	102.0	+.0048	+3.9
1899	74	104.2	+ 6	+ 8.1	58.00	99.1	.....	.....	.1220	100.6	+.0065	+5.3
1900	67	94.4	+13	+19.4	58.00	99.1	.....	.....	.1275	105.1	+.0010	+ .8
1901	75	105.6	+ 5	+ 6.7	58.00	99.1	.....	.....	.1258	103.7	+.0027	+2.1
1902	82	115.6	- 2	- 2.4	58.00	99.1	.....	.....	.1263	104.1	+.0022	+1.7
1903	80	112.7	.....	.....	58.00	99.1	.....	.....	.1285	105.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

DYEING, FINISHING, AND PRINTING TEXTILES—Concluded.**DYERS, Male.**

[Data from 11 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	595	100.0	+39	+ 6.6	58.85	100.0	+0.06	+0.1	\$0.1359	100.0	+\$0.0103	+ 7.6
1890	567	95.3	+67	+11.8	60.00	102.0	-1.09	-1.8	.1351	99.4	+ .0111	+ 8.2
1891	684	115.0	-50	- 7.3	60.00	102.0	-1.09	-1.8	.1311	96.5	+ .0151	+11.5
1892	632	106.2	+ 2	+ 1.3	59.59	101.3	- .68	-1.1	.1338	98.5	+ .0124	+ 9.3
1893	623	104.7	+11	+ 1.8	58.76	99.8	+ .15	+ .3	.1383	101.8	+ .0079	+ 5.7
1894	586	98.5	+48	+ 8.2	57.25	97.3	+1.66	+2.9	.1341	98.7	+ .0121	+ 9.0
1895	567	95.3	+67	+11.8	58.78	99.9	+ .13	+ .2	.1344	98.9	+ .0118	+ 8.8
1896	580	97.5	+54	+ 9.3	58.82	99.9	+ .09	+ .2	.1383	101.8	+ .0079	+ 5.7
1897	587	98.7	+47	+ 8.0	57.44	97.6	+1.47	+2.6	.1378	101.4	+ .0084	+ 6.1
1898	562	94.5	+72	+12.8	58.91	100.1	.....	.....	.1377	101.3	+ .0085	+ 6.2
1899	564	94.8	+70	+12.4	58.97	100.2	- .06	- .1	.1381	101.6	+ .0081	+ 5.9
1900	557	93.6	+77	+13.8	58.96	100.2	- .05	- .1	.1426	104.9	+ .0036	+ 2.5
1901	639	107.4	- 6	- 1.8	58.90	100.1	+ .01	+ .02	.1410	103.8	+ .0052	+ 3.7
1902	590	99.2	+44	+ 7.4	58.92	100.1	- .01	- .02	.1440	106.0	+ .0022	+ 1.5
1903	634	106.6	.....	.....	58.91	100.1	.....	.....	.1462	107.6	.....	.....

ENGRAVERS, Male.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 4 establishments, 1890, 1891; 5 establishments, 1892-1903.]

Av. 1890-99.	57	100.0	+ 2	+ 3.5	58.92	100.0	-0.61	-1.0	\$0.4056	100.0	+\$0.0241	+5.9
1890	58	101.8	+ 1	+ 1.7	60.00	101.8	-1.69	-2.8	.4027	99.3	+ .0270	+6.7
1891	56	98.2	+ 3	+ 5.4	60.00	101.8	-1.69	-2.8	.3981	98.2	+ .0316	+7.9
1892	58	101.8	+ 1	+ 1.7	59.67	101.3	-1.36	-2.3	.4018	99.1	+ .0279	+6.9
1893	54	94.7	+ 5	+ 9.3	58.48	99.3	- .17	- .3	.3924	96.7	+ .0373	+9.5
1894	52	91.2	+ 7	+13.5	58.46	99.2	- .15	- .3	.3999	98.6	+ .0248	+7.5
1895	45	78.9	+14	+31.1	58.41	99.1	- .10	- .2	.4053	99.9	+ .0244	+6.0
1896	57	100.0	+ 2	+ 3.5	58.51	99.3	- .20	- .3	.4071	100.4	+ .0226	+5.6
1897	58	101.8	+ 1	+ 1.7	58.52	99.3	- .21	- .4	.4106	101.2	+ .0191	+4.7
1898	62	108.8	- 3	- 4.8	58.58	99.4	- .27	- .5	.4208	103.7	+ .0089	+2.1
1899	70	122.8	-11	-15.7	58.54	99.4	- .23	- .4	.4170	102.8	+ .0127	+3.0
1900	79	138.6	-20	-25.3	58.49	99.3	- .18	- .3	.4203	103.6	+ .0094	+2.2
1901	66	115.8	- 7	-10.6	58.57	99.4	- .26	- .4	.4319	106.5	+ .0022	- .5
1902	71	124.6	-12	-16.9	58.51	99.3	- .20	- .3	.4293	105.8	+ .0004	+ .1
1903	59	103.5	.....	.....	58.31	99.0	.....	.....	.4297	105.9	.....	.....

PRINTERS, Male.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890, 1891; 6 establishments, 1892-1903.]

Av. 1890-99.	55	100.0	+ 7	+12.7	58.99	100.0	-0.41	-0.7	\$0.4600	100.0	+\$0.0014	+0.3
1890	59	107.3	+ 3	+ 5.1	60.00	101.7	-1.42	-2.4	.4461	97.0	+ .0153	+3.4
1891	55	100.0	+ 7	+12.7	60.00	101.7	-1.42	-2.4	.4500	97.8	+ .0114	+2.5
1892	52	94.5	+10	+19.2	59.63	101.1	-1.05	-1.8	.4637	100.8	+ .0023	- .5
1893	54	98.2	+ 8	+14.8	58.61	99.4	- .03	- .1	.4726	102.7	+ .0112	-2.4
1894	47	85.5	+15	+31.9	58.62	99.4	- .04	- .1	.4746	103.2	+ .0132	-2.8
1895	53	96.4	+ 9	+17.0	58.63	99.4	- .05	- .1	.4581	99.6	+ .0033	+ .7
1896	53	96.4	+ 9	+17.0	58.59	99.3	- .01	- .02	.4612	100.3	+ .0002	+ .04
1897	56	101.8	+ 6	+10.7	58.57	99.3	+ .01	+ .02	.4614	100.3	.....	.....
1898	59	107.3	+ 3	+ 5.1	58.62	99.4	- .04	- .1	.4512	98.1	+ .0102	+2.3
1899	61	110.9	+ 1	+ 1.6	58.60	99.3	- .02	- .03	.4615	100.3	+ .0001	- .02
1900	57	103.6	+ 5	+ 8.8	58.55	99.3	+ .03	+ .1	.4625	100.5	+ .0011	- .2
1901	61	110.9	+ 1	+ 1.6	58.64	99.4	- .06	- .1	.4630	100.7	+ .0016	- .3
1902	69	125.5	- 7	-10.1	58.63	99.4	- .05	- .1	.4635	100.8	+ .0021	- .5
1903	62	112.7	.....	.....	58.58	99.3	.....	.....	.4614	100.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

ELECTRICAL APPARATUS AND SUPPLIES.

ARMATURE WINDERS, Male.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	41	100.0	+50	+122.0	57.75	100.0	−3.12	−5.4	\$0.2152	100.0	+\$0.0275	+12.8
1890	28	68.3	+63	+225.0	58.29	100.9	−3.66	−6.3	.2116	98.3	+.0311	+14.7
1891	23	56.1	+68	+295.7	58.13	100.7	−3.50	−6.0	.2169	100.8	+.0258	+11.9
1892	26	63.4	+65	+250.0	58.23	100.8	−3.60	−6.2	.2138	99.3	+.0289	+13.5
1893	26	63.4	+65	+250.0	58.23	100.8	−3.60	−6.2	.2111	98.1	+.0316	+15.0
1894	40	97.6	+51	+127.5	58.50	101.3	−3.87	−6.6	.2022	94.0	+.0405	+20.0
1895	47	114.6	+44	+93.6	58.57	101.4	−3.94	−6.7	.2059	95.7	+.0368	+17.9
1896	56	136.6	+35	+62.5	56.79	98.3	−2.16	−3.8	.2330	108.3	+.0097	+4.2
1897	53	129.3	+38	+71.7	57.04	98.8	−2.41	−4.2	.2194	102.0	+.0233	+10.6
1898	53	129.3	+38	+71.7	56.66	98.1	−2.08	−3.6	.2192	101.9	+.0235	+10.7
1899	56	136.6	+35	+62.5	57.02	98.7	−2.39	−4.2	.2186	101.6	+.0241	+11.0
1900	72	175.6	+19	+26.4	57.38	99.4	−2.75	−4.8	.2145	99.7	+.0282	+13.1
1901	72	175.6	+19	+26.4	54.67	94.7	−.04	−.1	.2403	111.7	+.0024	+1.0
1902	77	187.8	+14	+18.2	54.69	94.7	−.06	−.1	.2360	109.7	+.0067	+2.8
1903	91	222.0	.....	.....	54.63	94.6	.....	.....	.2427	112.8	.....	.....

BRASS FINISHERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	16	100.0	+26	+162.5	59.00	100.0	−4.00	−6.8	\$0.2534	100.0	+\$0.0133	+5.2
1890	8	50.0	+34	+425.0	59.00	100.0	−4.00	−6.8	.2563	101.1	+.0104	+4.1
1891	9	56.3	+33	+366.7	59.00	100.0	−4.00	−6.8	.2533	100.0	+.0134	+5.3
1892	9	56.3	+33	+366.7	59.00	100.0	−4.00	−6.8	.2533	100.0	+.0134	+5.3
1893	10	62.5	+32	+320.0	59.00	100.0	−4.00	−6.8	.2510	99.1	+.0157	+6.3
1894	10	62.5	+32	+320.0	59.00	100.0	−4.00	−6.8	.2500	98.7	+.0167	+6.7
1895	12	75.0	+30	+250.0	59.00	100.0	−4.00	−6.8	.2467	97.4	+.0200	+8.1
1896	23	143.8	+19	+82.6	59.00	100.0	−4.00	−6.8	.2496	98.5	+.0171	+6.9
1897	25	156.3	+17	+68.0	59.00	100.0	−4.00	−6.8	.2560	101.0	+.0107	+4.2
1898	19	118.8	+23	+121.1	59.00	100.0	−4.00	−6.8	.2632	103.9	+.0035	+1.3
1899	32	200.0	+10	+31.3	59.00	100.0	−4.00	−6.8	.2550	100.6	+.0117	+4.6
1900	29	181.3	+13	+44.8	59.00	100.0	−4.00	−6.8	.2659	104.9	+.0008	+.3
1901	33	206.3	+9	+27.3	55.00	93.2	.....	.....	.2630	103.8	+.0037	+1.4
1902	41	256.3	+1	+2.4	55.00	93.2	.....	.....	.2659	104.9	+.0008	+.3
1903	42	262.5	.....	.....	55.00	93.2	.....	.....	.2667	105.2	.....	.....

MACHINISTS, Male.

[Data from 4 establishments.]

Av. 1890-99.	135	100.0	+222	+164.4	57.93	100.0	−2.78	−4.8	\$0.2473	100.0	+\$0.0216	+8.7
1890	68	50.4	+289	+425.0	57.87	99.0	−2.22	−3.9	.2499	101.1	+.0190	+7.6
1891	78	57.8	+279	+357.7	57.58	99.4	−2.43	−4.2	.2476	100.1	+.0213	+8.6
1892	79	58.5	+278	+351.9	57.59	99.4	−2.44	−4.2	.2457	99.4	+.0232	+9.4
1893	63	61.5	+274	+330.1	57.66	99.5	−2.51	−4.4	.2457	99.4	+.0232	+9.4
1894	111	82.2	+246	+221.6	58.00	100.1	−2.85	−4.9	.2378	96.2	+.0311	+13.1
1895	152	112.6	+205	+134.9	58.09	100.3	−2.94	−5.1	.2522	102.0	+.0167	+6.6
1896	155	114.8	+202	+130.3	57.99	100.1	−2.84	−4.9	.2422	97.9	+.0267	+11.0
1897	186	137.8	+171	+91.9	58.30	100.6	−3.15	−5.4	.2158	99.4	+.0231	+9.4
1898	212	157.0	+145	+68.4	58.35	100.7	−3.20	−5.5	.2508	101.4	+.0181	+7.2
1899	224	165.9	+133	+59.4	58.33	100.7	−3.18	−5.5	.2544	103.3	+.0135	+5.3
1900	279	206.7	+78	+28.0	58.49	101.0	−3.34	−5.7	.2632	106.4	+.0037	+2.2
1901	298	220.7	+59	+19.8	55.19	95.3	−.04	−.1	.2739	110.8	+.0050	+1.8
1902	349	258.5	+8	+2.3	55.17	95.2	−.02	−.04	.2656	107.4	+.0033	+1.2
1903	357	264.4	.....	.....	55.13	95.2	.....	.....	.2639	108.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

ELECTRICAL APPARATUS AND SUPPLIES—Concluded.**PATTERN MAKERS, Male.**

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	4	100.0	+6	+150.0	59.00	100.0	-4.00	-6.8	\$0.3191	100.0	+\$0.0519	+16.3
1890	2	50.0	+8	+400.0	59.00	100.0	-4.00	-6.8	.8000	94.0	+ .0710	+23.7
1891	2	50.0	+8	+400.0	59.00	100.0	-4.00	-6.8	.8000	94.0	+ .0710	+23.7
1892	2	50.0	+8	+400.0	59.00	100.0	-4.00	-6.8	.8000	94.0	+ .0710	+23.7
1893	3	75.0	+7	+233.3	59.00	100.0	-4.00	-6.8	.8000	94.0	+ .0710	+23.7
1894	3	75.0	+7	+233.3	59.00	100.0	-4.00	-6.8	.8000	94.0	+ .0710	+23.7
1895	4	100.0	+6	+150.0	59.00	100.0	-4.00	-6.8	.8000	94.0	+ .0710	+23.7
1896	5	125.0	+6	+100.0	59.00	100.0	-4.00	-6.8	.8000	94.0	+ .0710	+23.7
1897	5	125.0	+6	+100.0	59.00	100.0	-4.00	-6.8	.8500	109.7	+ .0210	+ 6.0
1898	5	125.0	+5	+100.0	59.00	100.0	-4.00	-6.8	.8700	116.0	+ .0010	+ .3
1899	7	175.0	+3	+42.9	59.00	100.0	-4.00	-6.8	.8714	116.4	— .0004	— .1
1900	10	250.0	.....	.....	59.00	100.0	-4.00	-6.8	.3170	99.3	+ .0540	+17.0
1901	10	250.0	.....	.....	55.00	93.2	.....	.....	.3350	105.0	+ .0360	+10.7
1902	9	225.0	+1	+11.1	55.00	93.2	.....	.....	.8422	107.2	+ .0288	+ 8.4
1903	10	250.0	.....	.....	55.00	93.2	.....	.....	.3710	116.3	.....	.....

FLOUR.**BOLTERS, Male.**

[Data from 11 establishments.]

Av. 1890-99.	23	100.0	+2	+ 8.7	70.18	100.0	+0.14	+0.2	\$0.1657	100.0	+\$0.0107	+6.5
1890	22	95.7	+3	+13.6	70.09	99.9	+ .23	+ .3	.1672	100.9	+ .0092	+5.5
1891	22	95.7	+3	+13.6	70.09	99.9	+ .23	+ .3	.1672	100.9	+ .0092	+5.5
1892	22	95.7	+3	+13.6	70.09	99.9	+ .23	+ .3	.1680	101.4	+ .0084	+5.0
1893	22	95.7	+3	+13.6	70.09	99.9	+ .23	+ .3	.1680	101.4	+ .0084	+5.0
1894	22	95.7	+3	+13.6	70.09	99.9	+ .23	+ .3	.1651	99.6	+ .0113	+6.8
1895	22	95.7	+3	+13.6	70.09	99.9	+ .23	+ .3	.1663	100.4	+ .0101	+6.1
1896	24	104.3	+1	+ 4.2	70.25	100.1	+ .07	+ .1	.1637	98.8	+ .0127	+7.8
1897	25	108.7	.....	.....	70.32	100.2	.....	.....	.1635	98.7	+ .0129	+7.9
1898	25	108.7	.....	.....	70.32	100.2	.....	.....	.1641	99.0	+ .0123	+7.5
1899	25	108.7	.....	.....	70.32	100.2	.....	.....	.1641	99.0	+ .0123	+7.5
1900	25	108.7	.....	.....	70.32	100.2	.....	.....	.1670	100.8	+ .0094	+5.6
1901	25	108.7	.....	.....	70.32	100.2	.....	.....	.1718	103.7	+ .0046	+2.7
1902	25	108.7	.....	.....	70.32	100.2	.....	.....	.1766	106.6	— .0002	— .1
1903	25	108.7	.....	.....	70.32	100.2	.....	.....	.1764	106.5	.....	.....

LABORERS, Male.

[Data from 7 establishments.]

Av. 1890-99.	176	100.0	+55	+31.3	62.11	100.0	-1.90	-3.1	\$0.1512	100.0	+\$0.0272	+18.0
1890	143	81.3	+86	+61.5	62.43	100.5	-2.22	-3.6	.1467	97.0	+ .0317	+21.6
1891	145	82.4	+86	+59.3	62.40	100.5	-2.19	-3.5	.1471	97.3	+ .0313	+21.3
1892	146	83.0	+85	+58.2	62.38	100.4	-2.17	-3.5	.1472	97.4	+ .0312	+21.2
1893	149	84.7	+82	+55.0	62.34	100.4	-2.13	-3.4	.1479	97.8	+ .0305	+20.6
1894	148	84.1	+83	+56.1	62.35	100.4	-2.14	-3.4	.1479	97.8	+ .0305	+20.6
1895	155	88.1	+76	+49.0	62.25	100.2	-2.04	-3.3	.1499	99.1	+ .0285	+19.0
1896	209	118.8	+22	+10.5	61.78	99.5	-1.57	-2.5	.1559	103.1	+ .0225	+14.4
1897	210	119.3	+21	+10.0	61.77	99.5	-1.56	-2.5	.1558	103.0	+ .0226	+14.5
1898	227	129.0	+4	+ 1.8	61.69	99.3	-1.45	-2.4	.1570	103.8	+ .0214	+13.6
1899	224	127.3	+7	+ 3.1	61.71	99.4	-1.50	-2.4	.1565	103.5	+ .0219	+14.0
1900	225	127.8	+6	+ 2.7	61.71	99.4	-1.50	-2.4	.1571	103.9	+ .0213	+13.6
1901	236	134.1	-5	- 2.1	61.12	98.4	- .91	-1.5	.1741	115.1	+ .0043	+ 2.5
1902	236	134.1	-5	- 2.1	60.20	96.9	+ .01	+ .02	.1778	117.6	+ .0006	+ .3
1903	231	131.3	.....	.....	60.21	96.9	.....	.....	.1784	118.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

FLOUR—Concluded.**MILLERS, Male.**

[Data from 33 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	173	100.0	+33	+19.1	65.90	100.0	-4.59	-7.0	\$0.2506	100.0	+\$0.0268	+10.7
1890	160	92.5	+46	+28.8	65.70	99.7	-4.39	-6.7	.2517	100.4	+.0257	+10.2
1891	160	92.5	+46	+28.8	65.70	99.7	-4.39	-6.7	.2521	100.6	+.0253	+10.0
1892	164	94.8	+42	+25.6	65.85	99.9	-4.54	-6.9	.2514	100.3	+.0260	+10.3
1893	164	94.8	+42	+25.6	65.82	99.9	-4.51	-6.9	.2516	100.4	+.0258	+10.3
1894	167	96.5	+39	+23.4	65.93	100.0	-4.62	-7.0	.2503	99.9	+.0271	+10.8
1895	167	96.5	+39	+23.4	65.93	100.0	-4.62	-7.0	.2510	100.2	+.0264	+10.5
1896	184	106.4	+22	+12.0	66.07	100.3	-4.76	-7.2	.2490	99.4	+.0234	+11.4
1897	184	106.4	+22	+12.0	66.20	100.5	-4.89	-7.4	.2474	98.7	+.0300	+12.1
1898	189	109.2	+17	+9.0	66.03	100.2	-4.72	-7.1	.2505	100.0	+.0269	+10.7
1899	192	111.0	+14	+7.3	65.78	99.8	-4.47	-6.8	.2511	100.2	+.0263	+10.5
1900	194	112.1	+12	+6.2	65.78	99.8	-4.47	-6.8	.2544	101.5	+.0230	+9.0
1901	193	111.6	+13	+6.7	65.75	99.8	-4.44	-6.8	.2559	102.1	+.0215	+8.4
1902	201	116.2	+5	+2.5	62.84	95.4	-1.53	-2.4	.2701	107.8	+.0073	+2.7
1903	206	119.1	.....	.....	61.31	93.0	.....	.....	.2774	110.7	.....	.....

MILLWRIGHTS, Male.

[Data from 18 establishments.]

Av. 1890-99.	48	100.0	+2	+ 4.2	63.15	100.0	+0.21	+0.3	\$0.2583	100.0	+\$0.0160	+6.2
1890	45	93.8	+5	+11.1	63.20	100.1	+ .16	+ .3	.2588	99.7	+.0155	+6.0
1891	42	87.5	+8	+19.0	63.43	100.4	- .07	- .1	.2576	99.7	+.0167	+6.5
1892	45	93.8	+5	+11.1	63.20	100.1	+ .16	+ .3	.2601	100.7	+.0142	+5.5
1893	55	114.6	-5	- 9.1	62.62	99.2	+ .74	+1.2	.2633	101.9	+.0110	+4.2
1894	46	95.8	+4	+ 8.7	63.13	100.0	+ .23	+ .4	.2579	99.8	+.0164	+6.4
1895	44	91.7	+6	+13.6	63.27	100.2	+ .09	+ .1	.2545	98.5	+.0198	+7.8
1896	48	100.0	+2	+ 4.2	63.00	99.8	+ .36	+ .6	.2539	98.3	+.0204	+8.0
1897	45	93.8	+5	+11.1	63.73	100.9	- .37	- .6	.2547	98.6	+.0196	+7.7
1898	58	120.8	-8	-13.8	62.90	99.6	+ .46	+ .7	.2618	101.4	+.0125	+4.8
1899	55	114.6	-5	- 9.1	63.05	99.8	+ .31	+ .5	.2605	100.9	+.0138	+5.3
1900	53	110.4	-3	- 5.7	63.17	100.0	+ .19	+ .3	.2657	102.9	+.0086	+3.2
1901	49	102.1	+1	+ 2.0	63.43	100.4	- .07	- .1	.2675	103.6	+.0068	+2.5
1902	51	106.3	-1	- 2.0	63.29	100.2	+ .07	+ .1	.2722	105.4	+.0021	+ .8
1903	50	104.2	.....	.....	63.36	100.3	.....	.....	.2743	106.2	.....	.....

PACKERS, Male.

[Data from 15 establishments.]

Av. 1890-99.	108	100.0	+61	+56.5	60.17	100.0	-1.20	-2.0	\$0.2107	100.0	+\$0.0307	+14.6
1890	95	88.0	+74	+77.9	60.32	101.1	-1.85	-3.0	.2075	98.5	+.0339	+16.3
1891	96	88.9	+73	+76.0	60.06	99.8	-1.09	-1.8	.2168	102.9	+.0246	+11.3
1892	98	90.7	+71	+72.4	60.43	100.4	-1.46	-2.4	.2141	101.6	+.0273	+12.8
1893	98	90.7	+71	+72.4	60.80	101.0	-1.83	-3.0	.2039	96.8	+.0375	+18.4
1894	99	91.7	+70	+70.7	60.91	101.2	-1.94	-3.2	.2031	96.4	+.0383	+18.9
1895	97	89.8	+72	+74.2	60.80	101.0	-1.83	-3.0	.1982	94.1	+.0432	+21.8
1896	111	102.8	+58	+52.3	60.16	100.0	-1.19	-2.0	.2096	99.5	+.0318	+15.2
1897	116	107.4	+53	+45.7	59.74	99.3	- .77	-1.3	.2140	101.6	+.0274	+12.8
1898	128	118.5	+41	+32.0	59.20	98.4	- .23	- .4	.2131	103.5	+.0233	+10.7
1899	137	126.9	+32	+23.4	58.82	97.8	+ .15	+ .3	.2219	105.3	+.0195	+8.8
1900	145	134.3	+24	+16.6	58.47	97.2	+ .50	+ .9	.2264	107.5	+.0150	+6.6
1901	158	146.3	+11	+7.0	58.67	97.5	+ .30	+ .5	.2395	113.7	+.0019	+ .8
1902	164	151.9	+5	+3.0	58.72	97.6	+ .25	+ .4	.2413	114.5	+.0001	+ .04
1903	169	156.5	.....	.....	58.97	98.0	.....	.....	.2414	114.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

FOUNDRY AND MACHINE SHOP.

BLACKSMITHS, Male.

[Data from 166 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	576	100.0	+242	+42.0	59.09	100.0	-2.44	-4.1	\$0.2639	100.0	+\$0.0323	+12.2
1890	573	99.5	+245	+42.8	59.41	100.5	-2.76	-4.6	.2677	101.4	+	.0235
1891	579	100.5	+239	+41.9	59.20	100.2	-2.55	-4.3	.2681	101.6	+	.0281
1892	583	101.2	+235	+40.9	59.37	100.6	-2.72	-4.6	.2672	101.3	+	.0230
1893	586	101.7	+230	+40.2	59.03	99.9	-2.58	-4.0	.2677	101.4	+	.0235
1894	510	88.5	+308	+53.6	58.68	99.3	-2.08	-3.5	.2611	98.9	+	.0351
1895	541	93.9	+277	+48.1	59.18	100.2	-2.53	-4.3	.2692	98.6	+	.0360
1896	548	95.1	+270	+47.0	58.93	99.7	-2.26	-3.9	.2643	100.2	+	.0319
1897	541	93.9	+277	+48.1	58.96	99.8	-2.31	-3.9	.2694	98.7	+	.0358
1898	635	110.2	+183	+31.6	59.20	100.2	-2.55	-4.3	.2587	98.0	+	.0375
1899	665	115.5	+153	+26.4	58.98	99.8	-2.33	-4.0	.2637	99.9	+	.0325
1900	695	120.7	+123	+21.3	58.87	99.6	-2.22	-3.8	.2685	101.7	+	.0377
1901	753	130.7	+65	+11.3	57.78	97.8	-1.13	-2.0	.2797	104.5	+	.0205
1902	802	139.2	+16	+2.8	57.17	96.8	—	—	.2844	107.8	+	.0118
1903	818	142.0	—	—	56.65	95.9	—	—	.2902	112.2	—	—

BOILER MAKERS, Male.

[Data from 97 establishments.]

Av. 1890-99.	1,263	100.0	+563	+34.6	53.55	100.0	-2.31	-3.9	\$0.2609	100.0	+\$0.0239	+9.2
1890	1,356	105.8	+364	+27.2	59.25	101.2	-3.01	-5.1	.2594	99.4	+	.0254
1891	1,291	102.2	+409	+31.7	59.23	101.2	-2.99	-5.0	.2577	98.8	+	.0271
1892	1,327	105.1	+373	+28.1	58.88	100.6	-2.64	-4.5	.2585	99.1	+	.0263
1893	1,280	101.3	+420	+32.8	58.39	99.7	-2.15	-3.7	.2583	99.0	+	.0265
1894	1,105	87.5	+595	+53.8	58.83	100.5	-2.59	-4.4	.2614	100.2	+	.0294
1895	1,136	89.9	+564	+49.6	58.47	99.9	-2.23	-3.8	.2629	100.8	+	.0219
1896	1,236	97.9	+464	+37.5	58.02	99.1	-1.78	-3.1	.2626	100.7	+	.0222
1897	1,197	94.8	+502	+42.0	58.11	99.2	-1.87	-3.2	.2607	99.9	+	.0241
1898	1,354	107.2	+346	+25.6	58.30	99.6	-2.06	-3.5	.2617	100.3	+	.0231
1899	1,369	108.4	+331	+24.2	58.06	99.2	-1.82	-3.1	.2634	101.7	+	.0194
1900	1,477	116.9	+225	+15.1	57.56	98.0	-1.12	-2.0	.2773	106.3	+	.0075
1901	1,585	125.5	+115	+7.9	56.82	97.0	—	—	.2794	107.1	+	.0054
1902	1,624	128.6	+76	+4.7	56.33	96.2	—	—	.2800	107.3	+	.0048
1903	1,700	134.6	—	—	56.24	96.1	—	—	.2848	109.2	—	—

BOILER RIVETERS, Male.

[Data from 8 establishments.]

Av. 1890-99.	79	100.0	+39	+49.4	58.08	100.0	-4.17	-7.2	\$0.2268	100.0	+\$0.0296	+13.1
1890	67	84.8	+51	+64.1	59.13	101.8	-5.22	-8.8	.2427	107.0	+	.0137
1891	104	131.6	+14	+13.5	59.08	101.7	-5.17	-8.8	.2108	92.9	+	.0456
1892	49	62.0	+69	+86.8	58.04	99.9	-4.13	-7.1	.2461	108.5	+	.0103
1893	93	117.7	+25	+26.9	58.54	100.8	-4.63	-7.9	.2116	93.3	+	.0448
1894	78	98.7	+40	+51.3	58.40	100.9	-4.69	-8.0	.2139	94.3	+	.0425
1895	75	94.9	+43	+57.3	58.52	100.8	-4.61	-7.9	.2245	99.0	+	.0319
1896	79	100.0	+39	+49.4	57.87	99.6	-3.96	-6.8	.2195	96.8	+	.0369
1897	61	77.2	+57	+72.3	57.62	99.2	-3.71	-6.4	.2328	102.6	+	.0236
1898	71	89.9	+47	+66.2	57.75	99.4	-3.84	-6.6	.2180	96.1	+	.0384
1899	112	141.8	+6	+6.4	55.63	95.8	-1.72	-3.1	.2485	109.6	+	.0079
1900	105	132.9	+13	+12.4	56.96	98.1	-3.05	-5.4	.2151	94.8	+	.0413
1901	133	168.4	-15	-11.3	56.43	97.2	-2.52	-4.5	.2303	101.5	+	.0261
1902	81	102.5	+37	+45.7	54.35	93.6	—	—	.2616	115.3	—	.0052
1903	118	149.4	—	—	53.91	92.8	—	—	.2564	113.1	—	—

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

FOUNDRY AND MACHINE SHOP—Continued.

BRASS FINISHERS, Male.

[Data from 20 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	356	100.0	+151	+42.4	59.07	100.0	-4.18	-7.1	\$0.2419	100.0	+\$0.0289	+11.9
1890	387	108.7	+120	+31.0	59.03	99.9	-4.14	-7.0	.2437	100.7	+.0271	+11.1
1891	373	104.8	+134	+35.9	59.02	99.9	-4.13	-7.0	.2473	102.2	+.0235	+9.5
1892	365	102.6	+142	+38.9	59.14	100.1	-4.25	-7.2	.2452	101.4	+.0256	+10.4
1893	367	103.1	+140	+38.1	59.18	100.2	-4.29	-7.2	.2417	99.9	+.0291	+12.0
1894	308	86.5	+199	+64.6	58.92	99.7	-4.05	-6.8	.2446	101.1	+.0262	+10.7
1895	336	94.4	+171	+50.9	58.92	99.7	-4.05	-6.8	.2441	100.9	+.0287	+10.9
1896	319	89.6	+188	+58.9	59.03	99.9	-4.14	-7.0	.2419	100.0	+.0289	+11.9
1897	343	96.3	+164	+47.8	59.06	100.0	-4.17	-7.1	.2371	98.0	+.0337	+14.2
1898	364	102.2	+143	+39.3	59.19	100.2	-4.30	-7.3	.2358	97.5	+.0350	+14.8
1899	397	111.5	+110	+27.7	59.16	100.2	-4.27	-7.2	.2376	98.2	+.0332	+14.0
1900	386	108.4	+121	+31.3	58.21	98.5	-3.32	-5.7	.2467	102.0	+.0341	+9.8
1901	430	120.8	+77	+17.9	58.24	98.6	-3.35	-5.8	.2513	104.1	+.0190	+7.5
1902	454	127.5	+53	+11.7	56.18	95.1	-1.29	-2.3	.2652	109.6	+.0056	+2.1
1903	507	142.4	.....	.....	54.89	92.9	.....	.....	.2708	111.9	.....	.....

CORE MAKERS, Male.

[Data for employees from 40 establishments for entire period. Data for hours and wages from 40 establishments, 1890-1901; 41 establishments, 1902, 1903.]

Av. 1890-99.	164	100.0	+90	+54.9	59.73	100.0	-2.56	-4.3	\$0.2072	100.0	+\$0.0270	+13.0
1890	157	95.7	+97	+61.8	59.87	100.2	-2.70	-4.5	.2077	100.2	+.0265	+12.8
1891	159	97.0	+95	+59.7	59.82	100.2	-2.65	-4.4	.2078	100.3	+.0264	+12.7
1892	159	97.0	+95	+59.7	59.83	100.2	-2.66	-4.4	.2091	100.9	+.0251	+12.0
1893	163	102.4	+86	+51.2	59.87	100.2	-2.70	-4.5	.2052	99.0	+.0290	+14.1
1894	157	95.7	+97	+61.8	59.65	99.9	-2.48	-4.2	.2015	97.2	+.0327	+16.2
1895	157	95.7	+97	+61.8	59.87	100.2	-2.70	-4.5	.2032	98.1	+.0310	+15.3
1896	157	95.7	+97	+61.8	59.79	100.1	-2.62	-4.4	.2078	100.3	+.0264	+12.7
1897	152	92.7	+102	+67.1	59.40	99.4	-2.23	-3.8	.2096	101.2	+.0246	+11.7
1898	176	107.3	+78	+44.3	59.59	99.8	-2.42	-4.1	.2096	101.2	+.0246	+11.7
1899	200	122.0	+54	+27.0	59.56	99.7	-2.39	-4.0	.2100	101.4	+.0242	+11.5
1900	220	134.1	+34	+15.5	59.43	99.5	-2.26	-3.8	.2133	102.9	+.0209	+9.8
1901	220	134.1	+34	+15.5	58.78	98.4	-1.61	-2.7	.2217	107.0	+.0125	+5.6
1902	254	154.9	.....	.....	58.25	97.5	-1.08	-1.9	.2202	106.3	+.0140	+6.4
1903	254	154.9	.....	.....	57.17	95.7	.....	.....	.2342	113.0	.....	.....

CORE MAKERS, Female.

[Data from 2 establishments.]

Av. 1890-99.	7	100.0	+6	+85.7	59.66	100.0	+0.11	+0.2	\$0.0912	100.0	-\$0.0027	-3.0
1890	10	142.9	+3	+30.0	59.80	100.2	-.03	-.1	.0760	83.3	+.0125	+16.4
1891	6	85.7	+7	+116.7	59.67	100.0	+0.10	+2	.0933	102.3	+.0048	+5.1
1892	5	71.4	+8	+160.0	59.60	99.9	+0.17	+3	.1000	109.6	+.0115	+11.5
1893	4	57.1	+9	+225.0	59.50	99.7	+0.27	+5	.1063	116.6	+.0178	+16.7
1894	6	85.7	+7	+116.7	59.67	100.0	+0.10	+2	.0958	105.0	+.0073	+7.6
1895	6	85.7	+7	+116.7	59.67	100.0	+0.10	+2	.0962	105.5	+.0077	+8.0
1896	5	71.4	+8	+160.0	59.60	99.9	+0.17	+3	.0984	107.9	+.0099	+10.1
1897	7	100.0	+6	+85.7	59.71	100.1	+0.06	+1	.0889	97.5	+.0004	+.4
1898	8	114.3	+5	+62.5	59.75	100.2	+0.02	+0.3	.0881	96.6	+.0004	+.5
1899	12	171.4	+1	+8.3	59.67	100.0	+0.10	+2	.0688	75.4	+.0197	+28.6
1900	11	157.1	+2	+18.2	59.82	100.3	-.06	-1	.0809	88.7	+.0076	+9.4
1901	8	114.3	+5	+62.5	59.75	100.2	+0.02	+0.3	.0866	93.9	+.0029	+3.4
1902	13	185.7	.....	.....	59.77	100.2	.....	.....	.0789	86.5	+.0096	+12.2
1903	13	185.7	.....	.....	59.77	100.2	.....	.....	.0886	97.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

FOUNDRY AND MACHINE SHOP—Continued.

LABORERS, Male.

[Data from 128 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	3,558	100.0	+1,931	+54.3	59.45	100.0	-2.36	-4.0	\$0.1419	100.0	+\$0.0166	+11.7
1890	3,651	102.6	+1,838	+50.8	59.63	100.3	-2.54	-4.3	.1413	99.6	+ .0172	+12.2
1891	3,564	100.2	+1,925	+54.0	59.59	100.2	-2.50	-4.2	.1442	101.6	+ .0143	+ .99
1892	3,672	103.2	+1,817	+49.5	59.56	100.2	-2.47	-4.1	.1450	102.2	+ .0135	+ 9.8
1893	3,502	98.4	+1,987	+56.7	59.50	100.1	-2.41	-4.1	.1443	101.7	+ .0142	+ 9.8
1894	2,887	81.1	+2,602	+90.1	59.10	99.4	-2.01	-3.4	.1393	98.2	+ .0192	+13.8
1895	3,335	93.7	+2,154	+64.6	59.53	100.1	-2.44	-4.1	.1395	98.3	+ .0190	+13.6
1896	3,490	97.8	+2,009	+57.7	59.42	99.9	-2.33	-3.9	.1414	99.6	+ .0171	+12.1
1897	3,343	94.0	+2,146	+64.2	59.16	99.5	-2.07	-3.5	.1417	99.9	+ .0168	+11.9
1898	3,881	109.1	+1,608	+41.4	59.40	99.9	-2.31	-3.9	.1407	99.2	+ .0178	+12.7
1899	4,263	119.8	+1,226	+28.8	59.60	100.3	-2.51	-4.2	.1418	99.9	+ .0167	+11.8
1900	4,513	126.8	+ 976	+21.6	59.27	99.7	-2.18	-3.7	.1458	102.7	+ .0127	+ 8.7
1901	4,825	135.6	+ 664	+13.8	58.10	97.7	-1.01	-1.7	.1486	104.7	+ .0099	+ 6.7
1902	5,106	143.5	+ 883	+ 7.5	57.71	97.1	- .62	-1.1	.1519	107.0	+ .0066	+ 4.3
1903	5,489	154.3	.....	.....	57.09	96.0	.....	.....	.1585	111.7	.....	.....

MACHINISTS, Male.

[Data from 218 establishments.]

Av. 1890-99.	5,414	100.0	+3,162	+58.4	59.12	100.0	-3.00	-5.1	\$0.2404	100.0	+\$0.0305	+12.7
1890	5,302	97.9	+3,274	+61.8	59.52	100.7	-3.40	-5.7	.2413	100.4	+ .0296	+12.3
1891	5,414	100.0	+3,162	+58.4	59.47	100.6	-3.35	-5.6	.2435	101.3	+ .0274	+11.3
1892	5,409	99.9	+3,167	+58.6	59.24	100.2	-3.12	-5.3	.2459	102.3	+ .0250	+10.2
1893	5,677	104.9	+2,899	+51.1	59.03	99.8	-2.91	-4.9	.2450	101.9	+ .0259	+10.6
1894	4,839	80.1	+4,237	+77.6	59.07	99.9	-2.95	-5.0	.2347	97.6	+ .0362	+15.4
1895	4,917	90.8	+3,659	+74.4	59.08	99.9	-2.96	-5.0	.2347	97.6	+ .0362	+15.4
1896	5,176	95.6	+3,490	+65.7	59.01	99.8	-2.89	-4.9	.2397	99.7	+ .0312	+13.0
1897	5,059	93.4	+3,517	+69.5	58.96	99.7	-2.84	-4.8	.2397	99.7	+ .0312	+13.0
1898	6,058	111.9	+2,518	+41.6	59.11	100.0	-2.99	-5.1	.2377	98.9	+ .0332	+14.0
1899	6,793	125.5	+1,783	+26.2	58.72	99.3	-2.60	-4.4	.2417	100.5	+ .0252	+12.1
1900	7,088	130.9	+1,488	+21.0	58.56	99.1	-2.44	-4.2	.2485	103.4	+ .0224	+ 9.0
1901	7,646	141.2	+ 930	+12.2	57.37	97.0	-1.25	-2.2	.2555	106.3	+ .0154	+ 6.0
1902	8,221	151.8	+ 355	+ 4.3	56.56	95.7	- .44	- .8	.2646	110.1	+ .0063	+ 2.4
1903	8,576	158.4	.....	.....	56.12	94.9	.....	.....	.2709	112.7	.....	.....

MOLDERS, BRASS, Male.

[Data from 38 establishments.]

Av. 1890-99.	220	100.0	+ 94	+42.7	58.71	100.0	-3.03	-5.2	\$0.2577	100.0	+\$0.0439	+17.0
1890	199	90.5	+115	+57.8	58.69	100.0	-3.01	-5.1	.2536	98.4	+ .0480	+18.9
1891	213	96.8	+101	+47.4	58.58	99.8	-2.90	-5.0	.2571	99.8	+ .0445	+17.3
1892	222	100.9	+ 92	+41.4	58.76	100.1	-3.08	-5.2	.2635	102.3	+ .0381	+14.5
1893	222	100.9	+ 92	+41.4	58.69	100.0	-3.01	-5.1	.2616	101.5	+ .0400	+15.3
1894	200	90.9	+114	+57.0	58.70	100.0	-3.02	-5.1	.2539	98.5	+ .0477	+13.8
1895	206	93.6	+108	+52.4	58.78	100.1	-3.10	-5.3	.2479	96.2	+ .0537	+21.7
1896	203	92.3	+111	+54.7	58.71	100.0	-3.03	-5.2	.2605	101.1	+ .0411	+15.8
1897	215	97.7	+ 99	+46.0	58.75	100.1	-3.07	-5.2	.2584	100.3	+ .0432	+16.7
1898	251	114.1	+ 63	+25.1	58.64	99.9	-2.96	-5.0	.2599	100.9	+ .0417	+16.0
1899	270	122.7	+ 44	+16.3	58.79	100.1	-3.11	-5.3	.2606	101.1	+ .0410	+15.7
1900	255	115.9	+ 59	+23.1	58.40	99.5	-2.72	-4.7	.2651	102.9	+ .0365	+13.8
1901	293	133.2	+ 21	+ 7.2	58.18	99.1	-2.50	-4.3	.2769	107.5	+ .0247	+ 8.9
1902	302	137.3	+ 12	+ 4.0	56.83	96.8	-1.15	-2.0	.2937	114.0	+ .0079	+ 2.7
1903	314	142.7	.....	.....	55.68	94.8	.....	.....	.3016	117.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

FOUNDRY AND MACHINE SHOP—Concluded.

MOLDERS, IRON, Male.

[Data from 183 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	2,974	100.0	+1,244	+41.8	59.31	100.0	-2.51	-4.2	\$0.2526	100.0	+\$0.0510	+20.2
1890	2,962	99.6	+1,256	+42.4	59.51	100.3	-2.71	-4.6	.2540	100.6	+.0496	+19.5
1891	2,952	99.3	+1,266	+42.9	59.60	100.5	-2.80	-4.7	.2565	101.5	+.0471	+18.4
1892	3,032	102.0	+1,186	+39.1	59.49	100.3	-2.69	-4.5	.2548	100.9	+.0488	+19.2
1893	3,181	107.0	+1,037	+32.6	59.18	99.8	-2.38	-4.0	.2567	101.2	+.0479	+18.7
1894	2,519	84.7	+1,699	+67.4	59.10	99.6	-2.30	-3.9	.2472	97.9	+.0564	+22.8
1895	2,781	93.5	+1,437	+51.7	59.29	100.0	-2.49	-4.2	.2476	98.0	+.0560	+22.6
1896	2,909	97.8	+1,309	+45.0	59.24	99.9	-2.44	-4.1	.2507	99.2	+.0529	+21.1
1897	2,732	91.9	+1,186	+54.4	59.17	99.8	-2.37	-4.0	.2525	100.0	+.0511	+20.2
1898	3,234	108.7	+	+84	59.34	100.1	-2.54	-4.3	.2503	99.1	+.0533	+21.3
1899	3,439	115.6	+779	+22.7	59.14	99.7	-2.34	-4.0	.2568	101.7	+.0468	+18.2
1900	3,790	127.4	+428	+11.3	59.07	99.6	-2.27	-3.8	.2694	106.7	+.0342	+12.7
1901	3,793	127.5	+425	+11.2	58.47	98.6	-1.67	-2.9	.2739	108.4	+.0297	+10.8
1902	3,968	133.4	+250	+6.3	57.65	97.2	-.85	-1.5	.2894	114.6	+.0142	+4.9
1903	4,218	141.8	.....	.....	56.80	95.8	.....	.....	.3096	120.2	.....	.....

PATTERN MAKERS, Male.

[Data from 161 establishments.]

Av. 1890-99.	727	100.0	+239	+32.9	59.07	100.0	-3.07	-5.2	\$0.2775	100.0	+\$0.0450	+16.2
1890	670	92.2	+296	+44.2	59.43	100.6	-3.43	-5.8	.2784	100.3	+.0441	+15.8
1891	684	94.1	+282	+41.2	59.40	100.6	-3.40	-5.7	.2802	101.0	+.0423	+15.1
1892	686	94.4	+280	+40.8	59.35	100.5	-3.35	-5.6	.2804	101.0	+.0421	+15.0
1893	737	101.4	+229	+31.1	58.96	99.8	-2.96	-5.0	.2834	102.1	+.0391	+13.8
1894	624	85.8	+342	+54.8	59.06	100.0	-3.06	-5.2	.2683	96.7	+.0542	+20.2
1895	718	98.8	+248	+34.5	59.04	99.9	-3.04	-5.1	.2711	97.7	+.0514	+19.0
1896	728	100.1	+238	+32.7	58.89	99.7	-2.89	-4.9	.2771	99.9	+.0454	+16.4
1897	701	96.4	+265	+37.8	58.79	99.5	-2.79	-4.7	.2760	99.5	+.0465	+16.8
1898	829	114.0	+137	+16.5	59.10	100.1	-3.10	-5.2	.2805	101.1	+.0420	+15.0
1899	889	122.3	+77	+8.7	58.64	99.3	-2.64	-4.5	.2799	100.9	+.0426	+15.2
1900	902	124.1	+64	+7.1	58.44	98.9	-2.44	-4.2	.2895	104.3	+.0330	+11.4
1901	874	120.2	+92	+10.5	57.69	97.7	-1.69	-2.9	.2964	106.8	+.0261	+8.8
1902	921	126.7	+45	+4.9	56.90	96.3	-.90	-1.6	.3091	111.4	+.0134	+4.3
1903	966	132.9	.....	.....	56.00	94.8	.....	.....	.3225	116.2	.....	.....

FRUITS AND VEGETABLES, CANNING AND PRESERVING.

CANNERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	8	100.0	+2	+25.0	70.00	100.0	.....	.....	\$0.1700	100.0	+\$0.0050	+2.9
1890	10	125.0	.....	.....	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1891	10	125.0	.....	.....	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1892	10	125.0	.....	.....	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1893	10	125.0	.....	.....	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1894	8	100.0	+2	+25.0	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1895	8	100.0	+2	+25.0	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1896	6	75.0	+4	+66.7	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1897	6	75.0	+4	+66.7	70.00	100.0	.....	.....	.1500	88.2	+.0250	+16.7
1898	6	75.0	+4	+66.7	70.00	100.0	.....	.....	.1500	88.2	+.0250	+16.7
1899	6	75.0	+4	+66.7	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1900	8	100.0	+2	+25.0	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1901	8	100.0	+2	+25.0	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1902	10	125.0	.....	.....	70.00	100.0	.....	.....	.1750	102.9	.....	.....
1903	10	125.0	.....	.....	70.00	100.0	.....	.....	.1750	102.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

FRUITS AND VEGETABLES, CANNING AND PRESERVING— Concluded.

CANNERS, Female.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	61	100.0	-1	-1.6	81.52	100.0	+0.15	+0.2	\$0.1164	100.0	+\$0.0021	+1.8
1890	60	98.4			81.67	100.2			.1163	99.9	+.0022	+1.9
1891	60	98.4			81.67	100.2			.1163	99.9	+.0022	+1.9
1892	60	98.4			81.67	100.2			.1163	99.9	+.0022	+1.9
1893	60	98.4			81.67	100.2			.1163	99.9	+.0022	+1.9
1894	60	98.4			81.67	100.2			.1163	99.9	+.0022	+1.9
1895	60	98.4			81.67	100.2			.1163	99.9	+.0022	+1.9
1896	62	101.6	-2	-3.2	81.29	99.7	+ .38	+ .5	.1166	100.2	+.0019	+1.6
1897	62	101.6	-2	-3.2	81.29	99.7	+ .38	+ .5	.1166	100.2	+.0019	+1.6
1898	62	101.6	-2	-3.2	81.29	99.7	+ .38	+ .5	.1166	100.2	+.0019	+1.6
1899	62	101.6	-2	-3.2	81.29	99.7	+ .38	+ .5	.1166	100.2	+.0019	+1.6
1900	62	101.6	-2	-3.2	81.29	99.7	+ .38	+ .5	.1166	100.2	+.0019	+1.6
1901	62	101.6	-2	-3.2	81.29	99.7	+ .38	+ .5	.1166	100.2	+.0019	+1.6
1902	60	98.4			81.67	100.2			.1163	99.9	+.0022	+1.9
1903	60	98.4			81.67	100.2			.1185	101.8		

COOKERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	45	100.0	-4	- 8.9	72.18	100.0	-0.13	-0.2	\$0.1578	100.0	+\$0.0209	+13.2
1890	46	102.2	-5	-10.9	71.83	99.5	+ .22	+ .3	.1565	99.2	+.0222	+14.2
1891	50	111.1	-9	-18.0	72.80	100.9	- .75	-1.0	.1600	101.4	+.0187	+11.7
1892	50	111.1	-9	-18.0	72.80	100.9	- .75	-1.0	.1600	101.4	+.0187	+11.7
1893	50	111.1	-9	-18.0	72.80	100.9	- .75	-1.0	.1600	101.4	+.0187	+11.7
1894	46	102.2	-5	-10.9	71.83	99.5	+ .22	+ .3	.1565	99.2	+.0222	+14.2
1895	41	91.1			72.05	99.8			.1573	99.7	+.0214	+13.6
1896	41	91.1			72.05	99.8			.1573	99.7	+.0214	+13.6
1897	41	91.1			72.05	99.8			.1573	99.7	+.0214	+13.6
1898	40	88.9	+1	+ 2.5	71.75	99.4	+ .30	+ .4	.1563	99.1	+.0224	+14.3
1899	46	102.2	-5	-10.9	71.83	99.5	+ .22	+ .3	.1565	99.2	+.0222	+14.2
1900	46	102.2	-5	-10.9	71.83	99.5	+ .22	+ .3	.1565	99.2	+.0222	+14.2
1901	41	91.1			72.05	99.8			.1787	113.2		
1902	41	91.1			72.05	99.8			.1787	113.2		
1903	41	91.1			72.05	99.8			.1787	113.2		

FURNITURE.

CABINETMAKERS, Male.

[Data for employees from 50 establishments for entire period. Data for hours and wages from 50 establishments, 1890-1892; 51 establishments, 1893-1903.]

Av. 1890-99.	797	101.0	+205	+25.7	57.92	100.0	-1.90	-3.3	\$0.2076	100.0	+\$0.0350	+16.9
1890	733	92.0	+269	+36.7	58.62	101.2	-2.60	-4.4	.2114	101.8	+.0312	+14.7
1891	730	91.6	+272	+37.3	58.22	100.5	-2.20	-3.8	.2123	102.3	+.0303	+14.3
1892	814	102.1	+188	+23.1	57.73	99.7	-1.71	-3.0	.2170	104.5	+.0256	+11.8
1893	807	101.3	+195	+24.2	57.58	99.4	-1.56	-2.7	.2150	103.6	+.0276	+12.8
1894	764	95.9	+238	+31.2	57.02	98.4	-1.00	-1.8	.2078	100.1	+.0348	+16.7
1895	749	92.8	+262	+35.4	57.83	99.8	-1.81	-3.1	.2039	98.2	+.0887	+19.0
1896	772	96.9	+230	+29.8	57.82	99.8	-1.80	-3.1	.2018	97.2	+.0408	+20.2
1897	840	105.4	+162	+19.3	57.82	99.8	-1.80	-3.1	.2036	98.1	+.0390	+19.2
1898	823	103.3	+179	+21.7	58.34	100.7	-2.32	-4.0	.1982	95.7	+.0439	+22.1
1899	943	118.3	+ 59	+ 6.3	58.18	100.4	-2.16	-3.7	.2047	98.6	+.0879	+18.5
1900	899	112.8	+103	+11.5	57.89	99.9	-1.87	-3.2	.2084	100.4	+.0342	+16.4
1901	864	108.4	+138	+16.0	56.93	98.3	- .91	-1.6	.2225	107.2	+.0201	+ 9.0
1902	953	119.6	+ 49	+ 5.1	56.05	96.8	- .03	- .1	.2390	115.1	+.0036	+ 1.5
1903	1,002	125.7			56.02	96.7			.2426	116.9		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

FURNITURE—Continued.

CARVERS, HAND, Male.

[Data from 20 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	78	100.0	+16	+20.5	56.95	100.0	-0.13	-0.2	\$0.2476	100.0	+\$0.0315	+12.7
1890	66	83.3	+29	+44.6	58.74	103.1	-1.92	-3.3	.2402	97.0	+ .0339	+16.2
1891	74	94.9	+20	+27.0	56.84	99.8	-0.02	-0.04	.2554	103.2	+ .0237	+ 9.3
1892	95	121.8	-1	-1.1	54.65	96.0	+2.17	+4.0	.2814	113.7	- .0023	- .8
1893	74	94.9	+20	+27.0	58.41	102.6	-1.59	-2.7	.2419	97.7	+ .0372	+15.4
1894	71	91.0	+23	+32.4	56.49	99.2	+ .33	+ 6	.2366	95.6	+ .0425	+18.0
1895	77	98.7	+17	+22.1	58.18	102.2	-1.36	-2.3	.2095	84.6	+ .0696	+33.2
1896	71	91.0	+23	+32.4	57.87	101.6	-1.05	-1.8	.2358	95.2	+ .0433	+18.4
1897	78	100.0	+16	+20.5	56.65	99.5	+ .17	+ 3	.2500	101.0	+ .0291	+11.6
1898	80	102.6	-4	-5.1	56.81	99.8	+ .01	+ .02	.2409	99.7	+ .0322	+13.0
1899	99	126.9	-15	-27.0	54.90	96.4	+1.92	+3.5	.2780	112.3	+ .0011	+ .4
1900	74	94.9	+20	+27.0	57.66	101.2	- .84	-1.5	.2531	102.2	+ .0260	+10.3
1901	79	101.3	+15	+19.0	56.61	99.4	+ .21	+ 4	.2781	112.3	+ .0010	+ .4
1902	97	124.4	-3	-3.1	55.37	97.2	+1.45	+2.6	.2947	119.0	- .0156	- 5.3
1903	94	120.5	.....	.....	56.82	99.8	.....	.....	.2791	112.7	.....	.....

FINISHERS, Male.

[Data from 8 establishments.]

Av. 1890-99.	78	100.0	- 9	-11.5	57.54	100.0	-3.40	-5.9	\$0.1863	100.0	+\$0.0769	+41.3
1890	75	96.2	- 6	- 8.0	58.00	100.8	-3.86	-6.7	.1819	97.6	+ .0813	+44.7
1891	76	97.4	- 7	- 9.2	57.82	100.5	-3.68	-6.4	.1949	104.6	+ .0683	+35.0
1892	82	105.1	-13	-15.9	57.22	99.4	-3.08	-5.4	.1880	100.9	+ .0752	+40.0
1893	86	110.3	-17	-19.8	56.87	98.8	-2.73	-4.8	.1902	102.1	+ .0780	+38.4
1894	83	106.4	-14	-16.9	56.65	98.3	-2.41	-4.3	.1851	99.4	+ .0781	+42.2
1895	76	97.4	- 7	- 9.2	56.70	98.5	-2.56	-4.5	.1808	96.8	+ .0829	+46.0
1896	75	96.2	- 6	- 8.0	57.95	100.7	-3.81	-6.6	.1864	100.1	+ .0768	+41.2
1897	73	93.6	- 4	- 5.6	57.82	100.5	-3.68	-6.4	.1868	100.3	+ .0764	+40.9
1898	72	92.3	- 3	- 4.2	57.94	100.7	-3.80	-6.6	.1832	98.3	+ .0800	+43.7
1899	81	103.8	-12	-14.8	58.52	101.7	-4.38	-7.5	.1861	99.9	+ .0771	+41.4
1900	74	94.9	- 6	- 8.0	57.64	100.2	-3.50	-6.1	.1906	102.3	+ .0726	+35.1
1901	84	107.7	-15	-17.9	56.89	98.0	-2.25	-4.0	.2157	115.8	+ .0475	+22.0
1902	90	115.4	-21	-23.3	54.87	95.4	- .73	-1.3	.2379	127.7	+ .0253	+10.6
1903	69	88.5	.....	.....	54.14	94.1	.....	.....	.2632	141.3	.....	.....

MACHINE WOODWORKERS, Male.

[Data for employees from 41 establishments for entire period. Data for hours and wages from 41 establishments, 1890-1892; 42 establishments, 1893-1903.]

Av. 1890-99.	794	100.0	+125	+15.7	58.50	100.0	+0.16	+0.3	\$0.1681	100.0	+\$0.0205	+12.2
1890	789	99.4	+130	+16.5	59.29	101.4	- .60	-1.0	.1692	100.7	+ .0194	+11.5
1891	790	99.5	+129	+16.3	59.06	101.0	- .37	- .6	.1699	101.1	+ .0187	+11.0
1892	780	98.2	+139	+17.8	58.50	100.0	+ .19	+ .3	.1704	101.4	+ .0182	+10.7
1893	765	96.3	+154	+20.1	58.49	100.0	+ .20	+ .3	.1678	99.8	+ .0208	+12.4
1894	745	93.8	+174	+23.4	57.32	98.0	+1.87	+2.4	.1657	98.6	+ .0229	+13.8
1895	771	97.1	+148	+19.2	58.17	99.4	+ .52	+ .9	.1658	98.6	+ .0228	+13.8
1896	817	102.9	+102	+12.5	58.47	99.9	+ .22	+ .4	.1667	99.2	+ .0219	+13.1
1897	829	104.4	+ 90	+10.9	58.10	99.3	+ .59	+1.0	.1687	100.4	+ .0199	+11.8
1898	811	102.1	+108	+13.3	58.63	100.2	+ .06	+ .1	.1673	99.5	+ .0213	+12.7
1899	828	105.5	+ 81	+ 9.7	58.98	100.8	- .29	- .5	.1699	101.1	+ .0187	+11.0
1900	889	112.0	+ 30	+ 3.4	58.97	100.8	- .28	- .5	.1717	102.1	+ .0169	+ 9.8
1901	943	118.8	+ 24	+ 2.5	59.12	101.1	- .43	- .7	.1731	103.0	+ .0155	+ 8.9
1902	916	115.4	+ 3	+ .03	58.86	100.6	- .17	- .3	.1828	108.7	+ .0058	+ 3.2
1903	919	115.7	.....	.....	58.69	100.3	.....	.....	.1886	112.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

FURNITURE—Continued.

SAWYERS, BAND, Male.

[Data for employees from 25 establishments for entire period. Data for hours and wages from 25 establishments, 1890-1892; 26 establishments, 1893-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	54	100.0	+19	+35.2	58.33	100.0	+0.40	+0.7	\$0.1899	100.0	+\$0.0110	+5.8
1890	51	94.4	+22	+43.1	59.12	101.4	— .39	— .7	.1997	105.2	+.0012	+.6
1891	51	94.4	+22	+43.1	58.53	100.3	+ .20	+ .3	.1948	102.6	+.0061	+3.1
1892	50	92.6	+23	+46.0	58.02	99.5	+ .71	+1.2	.1951	102.7	+.0058	+3.0
1893	58	98.1	+20	+37.7	58.61	100.5	+ .12	+ .2	.1921	101.2	+.0088	+4.6
1894	49	90.7	+24	+49.0	56.20	96.3	+1.53	+2.7	.1881	99.1	+.0128	+6.8
1895	52	96.3	+21	+40.4	57.92	99.3	+ .81	+1.4	.1876	98.3	+.0133	+7.1
1896	55	101.9	+18	+32.7	58.79	100.8	— .06	— .1	.1855	97.7	+.0154	+8.3
1897	55	101.9	+18	+32.7	58.34	100.0	+ .39	+ .7	.1869	98.4	+.0140	+7.5
1898	61	113.0	+12	+19.7	58.31	100.0	+ .42	+ .7	.1843	97.1	+.0166	+9.0
1899	64	118.5	+9	+14.1	59.42	101.9	— .69	—1.2	.1851	97.5	+.0158	+8.5
1900	67	124.1	+6	+9.0	59.10	101.3	— .37	— .6	.1908	100.5	+.0101	+5.3
1901	70	129.6	+3	+4.3	58.81	100.8	— .08	— .1	.1970	103.7	+.0039	+2.0
1902	74	137.0	— 1	— 1.4	58.80	100.8	— .07	— .1	.1982	104.4	+.0027	+1.4
1903	73	135.2	.....	.....	58.73	100.7	.....	.....	.2009	105.8	.....	.....

SAWYERS, CIRCULAR, Male.

[Data for employees from 25 establishments for entire period. Data for hours and wages from 25 establishments, 1890-1892; 26 establishments, 1893-1903.]

Av. 1890-99.	110	100.0	+22	+20.0	59.08	100.0	-0.54	-0.9	\$0.1792	100.0	+\$0.0240	+13.4
1890	100	90.9	+32	+32.0	59.39	100.5	— .85	-1.4	.1822	101.7	+.0210	+11.5
1891	100	90.9	+32	+32.0	59.30	100.4	— .76	-1.3	.1832	102.2	+.0200	+10.9
1892	101	91.8	+31	+30.7	59.25	100.3	— .71	-1.2	.1838	102.6	+.0194	+10.6
1893	102	92.7	+30	+29.4	59.28	100.3	— .74	-1.2	.1827	102.0	+.0205	+11.2
1894	102	92.7	+30	+29.4	56.86	96.2	+1.68	+3.0	.1754	97.9	+.0278	+15.8
1895	109	99.1	+23	+21.1	59.32	100.4	— .78	-1.3	.1768	98.7	+.0264	+14.9
1896	120	109.1	+12	+10.0	59.24	100.3	— .70	-1.2	.1756	98.0	+.0276	+15.7
1897	117	106.4	+15	+12.8	59.37	100.5	— .83	-1.4	.1781	99.4	+.0251	+14.1
1898	121	110.0	+11	+9.1	59.24	100.3	— .70	-1.2	.1764	98.4	+.0268	+15.2
1899	125	113.6	+7	+5.6	59.55	100.8	-1.01	-1.7	.1778	99.2	+.0254	+14.3
1900	126	114.5	+6	+4.8	59.00	99.9	— .46	— .8	.1844	102.9	+.0183	+10.2
1901	119	108.2	+13	+10.9	58.64	99.3	— .10	— .2	.1920	107.1	+.0112	+5.8
1902	121	110.0	+11	+9.1	58.41	98.9	+ .13	+ .2	.1997	111.4	+.0035	+1.8
1903	132	120.0	.....	.....	58.54	99.1	.....	.....	.2032	113.4	.....	.....

SAWYERS, JIG, Male.

[Data from 6 establishments.]

Av. 1890-99.	6	100.0	.....	.....	57.52	100.0	-3.96	-6.9	\$0.2218	100.0	+\$0.0535	+24.1
1890	6	100.0	.....	.....	57.83	100.4	-4.16	-7.2	.2061	92.9	+.0692	+33.6
1891	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2228	100.5	+.0525	+23.6
1892	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2186	98.6	+.0567	+25.9
1893	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2239	100.9	+.0514	+23.0
1894	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2239	100.9	+.0514	+23.0
1895	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2224	100.3	+.0529	+23.8
1896	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2186	98.6	+.0567	+25.9
1897	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2261	101.9	+.0492	+21.8
1898	6	100.0	.....	.....	57.67	100.1	-4.00	-6.9	.2239	100.9	+.0514	+23.0
1899	6	103.0	.....	.....	57.00	98.9	-3.33	-5.8	.2316	104.4	+.0437	+18.9
1900	6	100.0	.....	.....	55.17	95.7	-1.50	-2.7	.2386	107.6	+.0367	+15.4
1901	6	100.0	.....	.....	54.50	94.6	— .83	-1.5	.2523	113.8	+.0230	+9.1
1902	6	100.0	.....	.....	53.67	93.1	.....	.....	.2753	124.1	.....	.....
1903	6	100.0	.....	.....	53.67	93.1	.....	.....	.2753	124.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

FURNITURE—Concluded.

UPHOLSTERERS, Male.

[Data from 11 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	149	100.0	+18	+12.1	58.81	100.0	-4.62	-7.9	\$0.2359	100.0	+\$0.0596	+25.3
1890	150	100.7	+17	+11.8	59.09	100.5	-4.90	-8.3	.2346	99.4	+ .0609	+26.0
1891	148	99.3	+19	+12.8	59.01	100.3	-4.82	-8.2	.2392	101.4	+ .0563	+23.5
1892	160	107.4	+7	+4.4	58.76	99.9	-4.57	-7.8	.2364	100.2	+ .0591	+25.0
1893	149	100.0	+18	+12.1	58.99	100.3	-4.80	-8.1	.2317	98.2	+ .0638	+27.5
1894	147	98.7	+20	+13.6	58.92	100.2	-4.73	-8.0	.2372	100.6	+ .0583	+24.6
1895	139	93.3	+28	+20.1	58.85	100.1	-4.66	-7.9	.2356	99.9	+ .0599	+25.4
1896	146	98.0	+21	+14.4	58.61	99.7	-4.42	-7.5	.2313	98.1	+ .0642	+27.8
1897	146	98.0	+21	+14.4	58.64	99.7	-4.45	-7.6	.2302	97.6	+ .0653	+28.4
1898	150	100.7	+17	+11.3	58.61	99.7	-4.42	-7.5	.2372	100.6	+ .0583	+24.6
1899	158	106.0	+9	+5.7	58.60	99.6	-4.41	-7.5	.2454	104.0	+ .0501	+20.4
1900	159	105.7	+8	+5.0	57.79	98.3	-3.60	-6.2	.2501	106.0	+ .0454	+18.2
1901	169	113.4	-2	-1.2	55.50	94.4	-1.31	-2.4	.2857	121.1	+ .0093	+3.4
1902	169	113.4	-2	-1.2	55.82	94.9	-1.63	-2.9	.2958	125.2	+ .0002	+ .1
1903	167	112.1	.....	.....	54.19	92.1	.....	.....	.2955	125.3	.....	.....

VARNISHERS, Male.

[Data for employees from 35 establishments for entire period. Data for hours and wages from 35 establishments, 1890-1892; 36 establishments, 1893-1903.]

Av. 1890-99.	329	100.0	+123	+37.4	58.42	100.0	-0.88	-1.4	\$0.1740	100.0	+\$0.0208	+12.0
1890	238	86.0	+169	+59.7	59.28	101.5	-1.69	-2.9	.1712	98.4	+ .0236	+13.8
1891	296	90.0	+156	+52.7	58.90	100.8	-1.31	-2.2	.1734	99.7	+ .0214	+12.3
1892	321	97.6	+131	+40.8	58.57	100.3	-.98	-1.7	.1712	98.4	+ .0236	+13.8
1893	305	92.7	+147	+48.2	58.33	99.8	-.74	-1.3	.1730	99.4	+ .0218	+12.6
1894	287	87.2	+165	+57.5	57.04	97.6	+ .55	+1.0	.1751	100.6	+ .0197	+11.3
1895	297	90.3	+155	+52.2	58.52	100.2	-.98	-1.6	.1701	97.8	+ .0247	+14.5
1896	313	95.1	+139	+44.4	58.57	100.3	-.98	-1.7	.1652	94.9	+ .0296	+17.9
1897	330	115.5	+72	+18.9	58.01	99.3	-.42	-.7	.1823	104.8	+ .0125	+6.9
1898	332	116.1	+70	+18.3	58.74	100.5	-1.15	-2.0	.1698	97.6	+ .0250	+14.7
1899	421	128.0	+31	+7.4	58.27	99.7	-.68	-1.2	.1891	108.7	+ .0057	+3.0
1900	429	130.4	+23	+5.4	58.39	99.9	-.80	-1.4	.1830	105.2	+ .0118	+6.4
1901	441	134.0	+11	+2.5	58.15	99.5	-.56	-1.0	.1886	108.4	+ .0062	+3.3
1902	471	143.2	-19	-4.0	57.45	98.3	+ .14	+ .2	.2007	115.3	+ .0059	-2.9
1903	452	137.4	.....	.....	57.59	98.6	.....	.....	.1948	112.0	.....	.....

GAS.

CHARGERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	106	100.0	-18	-17.0	79.34	100.0	-4.49	-5.7	\$0.2461	100.0	+\$0.0063	+2.8
1890	154	145.3	-66	-62.9	79.42	100.1	-4.57	-5.8	.2434	98.9	+ .0095	+3.9
1891	140	132.1	-52	-57.1	79.54	100.3	-4.69	-5.9	.2422	98.4	+ .0107	+4.4
1892	117	110.4	-29	-24.8	80.34	101.3	-5.49	-6.9	.2445	99.5	+ .0081	+3.3
1893	95	89.6	-7	-7.4	80.65	101.9	-6.07	-7.4	.2460	100.0	+ .0069	+2.8
1894	81	85.8	-8	-8.3	80.92	102.0	-6.07	-7.5	.2465	100.2	+ .0064	+2.6
1895	90	84.9	-12	-12.2	80.70	101.7	-5.85	-7.2	.2473	100.5	+ .0056	+2.3
1896	99	93.4	-11	-11.1	80.64	101.6	-5.79	-7.2	.2475	100.6	+ .0054	+2.2
1897	97	91.5	-9	-9.3	80.30	101.2	-5.45	-6.8	.2467	100.2	+ .0062	+2.5
1898	82	77.4	+6	+7.3	77.68	97.9	-2.83	-3.6	.2480	100.8	+ .0049	+2.0
1899	93	87.7	-6	-6.4	73.01	92.0	+1.84	+2.5	.2489	100.9	+ .0046	+1.9
1900	95	89.5	-7	-7.4	73.24	92.3	+1.61	+2.2	.2557	103.9	+ .0028	+1.1
1901	109	102.8	-21	-19.3	74.69	94.1	+ .16	+ .2	.2251	91.5	+ .0278	+12.4
1902	94	88.7	-6	-6.4	73.13	92.2	+1.72	+2.4	.2416	98.2	+ .0113	+4.7
1903	88	83.0	.....	.....	74.85	94.3	.....	.....	.2529	102.8	.....	.....

TABLE 1.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

GAS—Concluded.

LABORERS, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	70	100.0	+58	+ 82.9	60.00	100.0	.....	.....	\$0.1558	100.0	-\$0.0014	-0.9
1890.....	73	104.3	+55	+ 75.3	60.00	100.0	.....	.....	.1537	98.7+	.0007	+0.5
1891.....	48	68.6	+80	+166.7	60.00	100.0	.....	.....	.1529	98.1+	.0015	+1.0
1892.....	46	65.7	+82	+178.3	60.00	100.0	.....	.....	.1466	94.1+	.0078	+5.3
1893.....	40	57.1	+88	+220.0	60.00	100.0	.....	.....	.1555	99.8-	.0011	- .7
1894.....	84	120.0	+44	+ 52.4	60.00	100.0	.....	.....	.1619	103.9-	.0075	-4.6
1895.....	58	82.9	+70	+120.7	60.00	100.0	.....	.....	.1528	98.1+	.0016	+1.0
1896.....	47	67.1	+81	+172.2	60.00	100.0	.....	.....	.1610	103.3-	.0066	-4.1
1897.....	115	164.3	+13	+ 11.3	60.00	100.0	.....	.....	.1613	103.5-	.0069	-4.3
1898.....	122	174.3	+ 6	+ 4.9	60.00	100.0	.....	.....	.1538	98.7+	.0006	+ .4
1899.....	71	101.4	+57	+ 80.3	60.00	100.0	.....	.....	.1585	101.7-	.0041	-2.6
1900.....	97	138.6	+31	+ 32.0	60.00	100.0	.....	.....	.1505	96.6+	.0039	+2.6
1901.....	78	111.4	+50	+ 64.1	60.00	100.0	.....	.....	.1644	105.5-	.0100	-6.1
1902.....	95	135.7	+33	+ 34.7	60.00	100.0	.....	.....	.1553	99.7-	.0009	- .6
1903.....	128	182.9	.....	.....	60.00	100.0	.....	.....	.1544	99.1	.....	.....

PIPE FITTERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	61	100.0	+20	+ 32.8	60.00	100.0	-1.48	-2.5	\$0.2447	100.0	+\$0.0073	+ 3.0
1890.....	42	68.9	+39	+ 92.9	60.00	100.0	-1.48	-2.5	.2504	102.3+	.0016	+ .6
1891.....	37	60.7	+44	+118.9	60.00	100.0	-1.48	-2.5	.2505	102.4+	.0015	+ .6
1892.....	44	72.1	+37	+ 84.1	60.00	100.0	-1.48	-2.5	.2488	101.7+	.0032	+ 1.3
1893.....	53	86.9	+28	+ 52.8	60.00	100.0	-1.48	-2.5	.2059	102.5+	.0011	+ .4
1894.....	58	95.1	+23	+ 39.7	60.00	100.0	-1.48	-2.5	.2487	101.6+	.0033	+ 1.3
1895.....	68	111.5	+13	+ 19.1	60.00	100.0	-1.48	-2.5	.2489	101.7+	.0031	+ 1.2
1896.....	64	104.9	+17	+ 26.6	60.00	100.0	-1.48	-2.5	.2480	101.3+	.0040	+ 1.6
1897.....	56	91.8	+25	+ 44.6	60.00	100.0	-1.48	-2.5	.2436	99.6+	.0084	+ 3.4
1898.....	122	200.0	-41	- 33.6	60.00	100.0	-1.48	-2.5	.2240	91.5+	.0280	+12.5
1899.....	70	114.8	+11	+ 15.7	60.00	100.0	-1.48	-2.5	.2335	95.4+	.0185	+ 7.9
1900.....	67	109.8	+14	+ 20.9	60.00	100.0	-1.48	-2.5	.2450	100.1+	.0070	+ 2.9
1901.....	67	109.8	+14	+ 20.9	60.00	100.0	-1.48	-2.5	.2319	94.8+	.0201	+ 8.7
1902.....	115	188.5	-34	- 29.6	60.00	100.0	-1.48	-2.5	.2406	98.3+	.0114	+ 4.7
1903.....	81	132.8	.....	.....	58.52	97.5	.....	.....	.2520	103.0	.....	.....

RETORT MEN, Male.

[Data from 5 establishments.]

Av. 1890-99.	218	100.0	-46	-21.1	74.96	100.0	-5.12	-6.8	\$0.2353	100.0	+\$0.0002	+ 0.1
1890.....	266	122.0	-94	-35.3	76.55	102.1	-6.71	-8.8	.2310	98.2+	.0045	+ 1.9
1891.....	262	120.2	-90	-34.4	76.70	102.3	-6.86	-8.9	.2287	97.2+	.0068	+ 3.0
1892.....	255	117.0	-85	-32.5	76.80	102.5	-6.96	-9.1	.2421	102.9-	.0066	- .7
1893.....	224	102.8	-52	-23.2	76.64	102.2	-6.80	-8.9	.2385	99.2+	.0020	+ 2.9
1894.....	220	100.9	-48	-21.8	76.29	101.8	-6.45	-8.5	.2355	99.2+	.0020	+ 2.9
1895.....	225	103.2	-53	-23.6	75.80	101.1	-5.96	-7.9	.2317	98.5+	.0038	+ 1.6
1896.....	234	107.3	-62	-26.5	76.38	101.9	-6.54	-8.6	.2328	98.9+	.0027	+ 1.2
1897.....	210	96.3	-38	-18.1	76.37	101.9	-6.53	-8.6	.2336	99.3+	.0019	+ .8
1898.....	147	67.4	+25	+17.0	68.29	91.1	+1.55	+2.3	.2433	103.4-	.0078	- 3.2
1899.....	136	62.4	+36	+26.5	69.76	93.1	+ .08	+ .1	.2425	103.1-	.0070	- 2.9
1900.....	170	78.0	+ 2	+ 1.2	65.20	87.0	+4.64	+7.1	.2459	104.5-	.0104	- 4.2
1901.....	157	72.0	+15	+ 9.6	71.67	95.6	-1.83	-2.6	.2217	94.2+	.0138	+ 6.2
1902.....	156	71.6	+16	+10.3	66.74	89.0	+3.10	+4.6	.2902	123.3-	.0647	-18.8
1903.....	172	78.9	.....	.....	69.84	93.2	.....	.....	.2355	100.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

GLASS.

BATCH MAKERS, Male.

[Data from 8 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per-cent.			Num-ber.	Per-cent.			Amount.	Per-cent.
Av. 1890-99.	29	100.0	.....	.....	54.03	100.0	+0.04	+0.1	\$0.1904	100.0	+\$0.0058	+3.0
1890	26	89.7	+3	+11.5	54.77	101.4	— .70	— 1.3	.1878	98.6	+ .0084	+4.5
1891	30	103.4	— 1	— 3.3	54.27	100.4	— .20	— .4	.1877	98.6	+ .0085	+4.5
1892	30	103.4	— 1	— 3.3	54.27	100.4	— .20	— .4	.1877	98.6	+ .0085	+4.5
1893	30	103.4	— 1	— 3.3	54.27	100.4	— .20	— .4	.1892	99.4	+ .0070	+3.7
1894	26	89.7	+3	+11.5	53.38	98.8	+ .69	+1.3	.1940	101.9	+ .0022	+1.1
1895	26	89.7	+3	+11.5	53.38	98.8	+ .69	+1.3	.1936	101.7	+ .0026	+1.3
1896	26	89.7	+3	+11.5	53.38	98.8	+ .69	+1.3	.1940	101.9	+ .0022	+1.1
1897	30	103.4	— 1	— 3.3	54.27	100.4	— .20	— .4	.1892	99.4	+ .0070	+3.7
1898	30	103.4	— 1	— 3.3	54.27	100.4	— .20	— .4	.1902	99.9	+ .0060	+3.2
1899	32	110.3	— 3	— 9.4	54.06	100.1	+ .01	+ .02	.1907	100.2	+ .0055	+2.9
1900	30	103.4	— 1	— 3.3	54.27	100.4	— .20	— .4	.1913	100.5	+ .0049	+2.6
1901	30	103.4	— 1	— 3.3	54.27	100.4	— .20	— .4	.1908	100.2	+ .0054	+2.8
1902	31	106.9	— 2	— 6.5	53.87	99.7	+ .20	+ .4	.1915	100.6	+ .0047	+2.5
1903	29	100.0	.....	.....	54.07	100.1	.....	.....	.1962	103.0	.....	.....

BLOWERS, FLINT GLASS, Male.

[Data from 5 establishments.]

Av. 1890-99.	225	100.0	+136	+ 60.4	50.39	100.0	—0.27	—0.5	\$0.5401	100.0	+\$0.0367	+ 6.8
1890	241	107.1	+120	+ 49.8	50.29	99.8	— .17	— .3	.5248	97.2	+ .0520	+ 9.9
1891	278	123.6	+ 83	+ 29.9	50.25	99.7	— .13	— .3	.5317	98.4	+ .0451	+ 8.5
1892	219	97.3	+142	+ 64.8	50.34	99.9	— .22	— .4	.5235	96.9	+ .0533	+10.2
1893	155	68.9	+206	+132.9	50.47	100.2	— .35	— .7	.5323	98.6	+ .0445	+ 8.4
1894	226	100.4	+135	+ 59.7	50.43	100.1	— .31	— .6	.5702	105.6	+ .0066	+ 1.2
1895	213	94.7	+143	+ 69.5	50.44	100.1	— .32	— .6	.5340	98.9	+ .0428	+ 8.0
1896	242	107.6	+119	+ 49.2	50.39	100.0	— .27	— .5	.5523	102.3	+ .0245	+ 4.4
1897	212	94.2	+149	+ 70.3	50.45	100.1	— .33	— .7	.5586	103.4	+ .0182	+ 3.3
1898	218	96.9	+143	+ 65.6	50.41	100.0	— .29	— .6	.5210	96.5	+ .0558	+10.7
1899	246	109.3	+115	+ 46.7	50.42	100.1	— .30	— .6	.5527	102.3	+ .0241	+ 4.4
1900	227	100.9	+134	+ 53.0	50.40	100.0	— .28	— .6	.5475	101.4	+ .0293	+ 5.4
1901	317	140.9	+ 44	+ 13.9	50.23	99.7	— .11	— .2	.5728	106.1	+ .0040	+ .7
1902	333	148.0	+ 28	+ 8.4	50.20	99.6	— .08	— .2	.5700	105.5	+ .0068	+ 1.2
1903	361	160.4	.....	.....	50.12	99.5	.....	.....	.5768	106.8	.....	.....

BLOWERS, GREEN GLASS, Male.

[Data from 4 establishments.]

Av. 1890-99.	222	100.0	+203	+ 91.4	51.98	100.0	—0.98	—1.9	\$0.5056	100.0	+\$0.1022	+20.2
1890	136	61.3	+289	+212.5	52.65	101.3	—1.65	—3.1	.5119	101.1	+ .0968	+18.9
1891	243	109.5	+182	+ 74.9	51.71	99.5	— .71	—1.4	.4990	98.7	+ .1088	+21.8
1892	162	73.0	+263	+162.3	52.07	100.2	—1.07	—2.1	.5382	106.4	+ .0696	+12.9
1893	135	59.9	+292	+219.5	52.92	101.8	—1.92	—3.6	.5025	99.4	+ .1053	+21.0
1894	145	65.3	+280	+132.1	51.81	99.7	— .81	—1.6	.5065	100.2	+ .1013	+20.0
1895	170	76.6	+255	+150.0	51.64	99.3	— .65	—1.2	.4959	97.9	+ .1128	+22.8
1896	256	115.3	+169	+ 66.0	51.65	99.4	— .65	—1.3	.5021	99.3	+ .1057	+21.1
1897	239	134.7	+126	+ 42.1	51.84	99.7	— .84	—1.6	.4856	96.0	+ .1222	+25.2
1898	301	135.6	+124	+ 23.2	52.74	101.5	—1.74	—3.3	.4787	94.7	+ .1291	+27.0
1899	375	168.9	+ 50	+ 13.3	50.77	97.7	+ .23	+ .5	.5378	106.4	+ .0700	+13.0
1900	435	195.9	— 10	— 2.3	51.00	98.1	.....	.....	.5933	117.3	+ .0145	+ 2.4
1901	389	175.2	+ 36	+ 9.3	51.00	98.1	.....	.....	.6330	125.2	+ .0252	+ 4.0
1902	384	173.0	+ 41	+ 10.7	51.00	98.1	.....	.....	.5669	118.1	+ .0109	+ 1.8
1903	425	191.4	.....	.....	51.00	98.1	.....	.....	.6078	120.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

GLASS—Continued.

BLOWERS, WINDOW GLASS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	24	100.0	—1	—4.2	36.66	100.0	+0.12	+0.3	\$0.7404	100.0	+\$0.4334	+58.5
1890	24	100.0	—1	—4.2	36.63	99.9	+ .15	+ .4	.8202	110.8	+ .3536	+ 43.1
1891	23	120.8	—6	—20.7	36.66	100.0	+ .12	+ .3	.7740	104.5	+ .3998	+ 51.7
1892	26	108.3	—3	—11.5	36.65	100.0	+ .13	+ .4	.8133	109.8	+ .3605	+ 44.3
1893	25	104.2	—2	—8.0	36.68	100.1	+ .10	+ .3	.7701	104.0	+ .4037	+ 52.4
1894	25	104.2	—2	—8.0	36.64	99.9	+ .14	+ .4	.7002	94.6	+ .4736	+ 67.6
1895	23	95.8	.....	.....	36.70	100.1	+ .08	+ .2	.5560	75.1	+ .6173	+ 111.1
1896	21	87.6	+2	+9.5	36.67	100.1	+ .11	+ .3	.6536	88.3	+ .5202	+ 79.6
1897	20	83.3	+3	+15.0	36.70	100.1	+ .08	+ .2	.6948	93.8	+ .4790	+ 68.9
1898	25	104.2	—2	—8.0	36.64	99.9	+ .14	+ .4	.8149	110.1	+ .3589	+ 44.0
1899	25	104.2	—2	—8.0	36.64	99.9	+ .14	+ .4	.8067	109.0	+ .3671	+ 45.5
1900	24	100.0	—1	—4.2	36.63	99.9	+ .15	+ .4	.9731	131.4	+ .2007	+ 20.6
1901	25	104.2	—2	—8.0	36.64	99.9	+ .14	+ .4	.8260	111.6	+ .3478	+ 42.1
1902	26	108.3	—3	—11.5	36.69	100.1	+ .09	+ .2	1.0728	144.9	+ .1010	+ 9.4
1903	23	95.8	.....	.....	36.78	100.8	.....	.....	1.1738	158.5	.....	.....

CUTTERS, WINDOW GLASS, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 2 establishments, 1890-1899; 1 establishment, 1900; 2 establishments, 1901-1903.]

Av. 1890-99.	8	100.0	.....	.....	58.68	100.0	—0.68	—1.2	\$0.3899	100.0	+\$0.0933	+23.9
1890	8	100.0	.....	.....	58.00	98.8	.....	.....	.4821	110.8	+ .0511	+11.8
1891	8	100.0	.....	.....	58.36	99.5	— .36	— .6	.4153	106.5	+ .0679	+16.3
1892	8	100.0	.....	.....	58.36	99.5	— .36	— .6	.4197	107.6	+ .0635	+15.1
1893	8	100.0	.....	.....	58.00	98.8	.....	.....	.3971	101.3	+ .0861	+21.7
1894	8	100.0	.....	.....	58.30	100.2	— .80	—1.4	.4027	103.3	+ .0805	+20.0
1895	8	100.0	.....	.....	59.33	101.1	—1.33	—2.2	.3119	80.0	+ .1713	+54.9
1896	8	100.0	.....	.....	59.33	101.1	—1.33	—2.2	.3568	91.5	+ .1264	+35.4
1897	8	100.0	.....	.....	59.33	101.1	—1.33	—2.2	.3556	91.2	+ .1276	+35.9
1898	8	100.0	.....	.....	58.00	98.8	.....	.....	.3910	100.3	+ .0922	+23.6
1899	8	100.0	.....	.....	59.33	101.1	—1.33	—2.2	.4165	106.8	+ .0667	+16.0
1900	8	100.0	.....	.....	60.00	102.2	—2.00	—3.3	.3935	100.9	+ .0897	+22.8
1901	9	112.5	—1	—11.1	58.91	100.4	— .91	—1.6	.4448	114.1	+ .0384	+ 8.6
1902	9	112.5	—1	—11.1	58.91	100.4	— .91	—1.6	.4653	119.3	+ .0179	+ 3.8
1903	8	100.0	.....	.....	58.00	98.8	.....	.....	.4832	123.9	.....	.....

FLATTENERS, WINDOW GLASS, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	.....	.....	68.48	100.0	—0.48	—0.7	\$0.4077	100.0	+\$0.1791	+43.9
1890	6	100.0	.....	.....	68.00	99.3	.....	.....	.4409	108.1	+ .1459	+33.1
1891	6	100.0	.....	.....	68.00	99.3	.....	.....	.4337	106.4	+ .1531	+35.3
1892	6	100.0	.....	.....	68.00	99.3	.....	.....	.4297	105.4	+ .1571	+36.6
1893	6	100.0	.....	.....	68.00	99.3	.....	.....	.4353	106.8	+ .1515	+34.8
1894	6	100.0	.....	.....	68.00	99.3	.....	.....	.3957	97.1	+ .1911	+48.3
1895	5	83.3	+1	+20.0	69.60	101.6	—1.60	—2.3	.3025	74.2	+ .2843	+94.0
1896	5	83.3	+1	+20.0	69.60	101.6	—1.60	—2.3	.3501	85.9	+ .2267	+67.6
1897	5	83.3	+1	+20.0	69.60	101.6	—1.60	—2.3	.3909	95.9	+ .1959	+50.1
1898	6	100.0	.....	.....	68.00	99.3	.....	.....	.4415	108.3	+ .1453	+32.9
1899	6	100.0	.....	.....	68.00	99.3	.....	.....	.4563	111.9	+ .1305	+28.6
1900	5	83.3	+1	+20.0	69.60	101.6	—1.60	—2.3	.5096	125.0	+ .0772	+15.1
1901	6	100.0	.....	.....	68.00	99.3	.....	.....	.4745	116.4	+ .1123	+23.7
1902	6	100.0	.....	.....	68.00	99.3	.....	.....	.5785	141.9	+ .0083	+ 1.4
1903	6	100.0	.....	.....	68.00	99.3	.....	.....	.5368	143.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

GLASS—Continued.

GAFFERS, FLINT GLASS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	39	100.0	+5	+12.8	49.40	100.0	+0.01	+0.02	\$0.5483	100.0	+\$0.0307	+5.6
1890	44	112.8	.....	.....	49.43	100.1	— .02	— .04	.5340	97.4	+ .0450	+8.4
1891	43	110.3	+1	+ 2.3	49.40	100.0	+ .01	+ .02	.5468	99.7	+ .0322	+5.9
1892	45	115.4	—1	— 2.2	49.40	100.0	+ .01	+ .02	.5374	98.0	+ .0416	+7.7
1893	46	118.0	—2	— 4.3	49.39	100.0	+ .02	+ .04	.5402	98.5	+ .0388	+7.2
1894	37	94.9	+7	+18.9	49.41	100.0	.....	.....	.5478	99.9	+ .0312	+5.7
1895	36	92.3	+8	+22.2	49.39	100.0	+ .02	+ .04	.5540	101.0	+ .0250	+4.5
1896	35	89.7	+9	+25.7	49.40	100.0	+ .01	+ .02	.5571	101.6	+ .0219	+3.9
1897	35	89.7	+9	+25.7	49.40	100.0	+ .01	+ .02	.5574	101.7	+ .0216	+3.9
1898	36	92.3	+8	+22.2	49.39	100.0	+ .02	+ .04	.5540	101.0	+ .0250	+4.5
1899	35	89.7	+9	+25.7	49.40	100.0	+ .01	+ .02	.5538	101.0	+ .0252	+4.6
1900	36	92.3	+8	+22.2	49.39	100.0	+ .02	+ .04	.5586	101.9	+ .0204	+3.7
1901	39	100.0	+5	+12.8	49.38	100.0	+ .08	+ .1	.5671	103.4	+ .0119	+2.1
1902	43	110.3	+1	+ 2.3	49.42	100.0	— .01	— .02	.5774	105.3	+ .0016	+ .3
1903	44	112.8	.....	.....	49.41	100.0	.....	.....	.5790	105.6	.....	.....

GATHERERS, FLINT GLASS, Male.

[Data from 3 establishments.]

Av. 1890-99.	112	100.0	+122	+108.9	49.46	100.0	+0.02	+0.04	\$0.2799	100.0	+\$0.0402	+14.4
1890	141	125.9	+ 93	+ 66.0	49.48	100.0	.....	.....	.2696	96.3	+ .0505	+18.7
1891	140	125.0	+ 94	+ 67.1	49.46	100.0	+ .02	+ .04	.2719	97.1	+ .0482	+17.7
1892	108	96.4	+126	+116.7	49.45	100.0	+ .03	+ .1	.2735	97.7	+ .0466	+17.0
1893	103	92.0	+131	+127.2	49.45	100.0	+ .03	+ .1	.2754	98.4	+ .0447	+16.2
1894	94	83.9	+140	+148.9	49.46	100.0	+ .02	+ .04	.2827	101.0	+ .0374	+13.2
1895	103	92.0	+131	+127.2	49.47	100.0	+ .01	+ .02	.2793	99.8	+ .0408	+14.6
1896	103	92.0	+131	+127.2	49.47	100.0	+ .01	+ .02	.2811	100.4	+ .0390	+13.9
1897	103	92.0	+131	+127.2	49.47	100.0	+ .01	+ .02	.2878	102.8	+ .0323	+11.2
1898	112	100.0	+122	+108.9	49.46	100.0	+ .02	+ .04	.2868	102.5	+ .0333	+11.6
1899	116	103.6	+118	+101.7	49.47	100.0	+ .01	+ .02	.2907	103.9	+ .0294	+10.1
1900	151	134.8	+ 83	+ 55.0	49.47	100.0	+ .01	+ .02	.2915	104.1	+ .0286	+ 9.3
1901	164	146.4	+ 70	+ 42.7	49.47	100.0	+ .01	+ .02	.2948	105.3	+ .0253	+ 8.6
1902	181	161.6	+ 53	+ 29.3	49.48	100.0	.....	.....	.3070	109.7	+ .0131	+ 4.3
1903	234	208.9	.....	.....	49.48	100.0	.....	.....	.3201	114.4	.....	.....

GATHERERS, WINDOW GLASS, Male.

[Data from 2 establishments.]

Av. 1890-99.	25	100.0	—1	— 4.0	36.68	100.0	—0.01	—0.03	\$0.4765	100.0	+\$0.3764	+ 79.0
1890	24	96.0	.....	.....	36.67	100.0	.....	.....	.4998	104.9	+ .3531	+ 70.6
1891	29	116.0	—5	—17.2	36.69	100.0	— .02	— .1	.4686	98.3	+ .3843	+ 82.0
1892	27	108.0	—3	—11.1	36.67	100.0	.....	.....	.4922	103.3	+ .3607	+ 73.3
1893	26	104.0	—2	— 7.7	36.69	100.0	— .02	— .1	.4794	100.5	+ .3735	+ 77.9
1894	26	104.0	—2	— 7.7	36.69	100.0	— .02	— .1	.4418	92.7	+ .4111	+ 93.1
1895	24	96.0	.....	.....	36.67	100.0	.....	.....	.3660	76.8	+ .4869	+133.0
1896	22	88.0	+2	+ 9.1	36.68	100.0	— .01	— .03	.4386	92.0	+ .4143	+ 94.5
1897	21	84.0	+3	+14.3	36.67	100.0	.....	.....	.4796	100.7	+ .3733	+ 77.8
1898	27	108.0	—3	—11.1	36.67	100.0	.....	.....	.5495	115.3	+ .3034	+ 55.2
1899	27	108.0	—3	—11.1	36.67	100.0	.....	.....	.5497	115.4	+ .3032	+ 55.2
1900	22	88.0	+2	+ 9.1	36.68	100.0	— .01	— .03	.6387	134.0	+ .2142	+ 33.5
1901	25	100.0	—1	— 4.0	36.68	100.0	— .01	— .03	.5837	122.5	+ .2692	+ 46.1
1902	26	104.0	—2	— 7.7	36.69	100.0	— .02	— .1	.7865	165.1	+ .0664	+ 8.4
1903	24	96.0	.....	.....	36.67	100.0	.....	.....	.8529	179.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

GLASS—Continued.

GATHERING BOYS (BIT), Male.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	41	100.0	-12	-29.3	51.26	100.0	+0.57	+1.1	\$0.1284	100.0	+\$0.0033	+2.6
1890	41	100.0	-12	-29.3	51.27	100.0	+ .56	+1.1	.1280	99.7	+ .0037	+2.9
1891	41	100.0	-12	-29.3	51.27	100.0	+ .56	+1.1	.1280	99.7	+ .0037	+2.9
1892	43	104.9	-14	-32.6	51.21	99.9	+ .62	+1.2	.1276	99.4	+ .0041	+3.2
1893	44	107.3	-15	-34.1	51.18	99.8	+ .65	+1.3	.1274	99.2	+ .0043	+3.4
1894	44	107.3	-15	-34.1	51.18	99.8	+ .65	+1.3	.1274	99.2	+ .0043	+3.4
1895	51	124.4	-22	-43.1	51.06	99.6	+ .77	+1.5	.1263	98.4	+ .0054	+4.3
1896	49	119.5	-20	-40.8	51.10	99.7	+ .73	+1.4	.1266	98.6	+ .0051	+4.0
1897	34	82.9	-5	-14.7	51.47	100.4	+ .36	+ .7	.1298	101.1	+ .0019	+1.5
1898	33	80.5	-4	-12.1	51.52	100.5	+ .31	+ .6	.1301	101.3	+ .0016	+1.2
1899	29	70.7	.....	.....	51.83	100.2	+ .45	+ .9	.1323	103.0	- .0005	- .5
1900	29	70.7	.....	.....	51.83	101.1	.....	.....	.1312	102.2	+ .0005	+ .4
1901	29	70.7	.....	.....	51.83	101.1	.....	.....	.1312	102.2	+ .0005	+ .4
1902	29	70.7	.....	.....	51.83	101.1	.....	.....	.1312	102.2	+ .0005	+ .4
1903	29	70.7	.....	.....	51.83	101.1	.....	.....	.1317	102.6	.....	.....

LABORERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	49	100.0	+ 4	+ 8.2	60.00	100.0	.....	.....	\$0.1435	100.0	+\$0.0131	+ 9.1
1890	42	85.7	+11	+26.2	60.00	100.0	.....	.....	.1388	93.2	+ .0228	+17.0
1891	42	85.7	+11	+26.2	60.00	100.0	.....	.....	.1388	93.2	+ .0228	+17.0
1892	42	85.7	+11	+26.2	60.00	100.0	.....	.....	.1388	93.2	+ .0228	+17.0
1893	42	85.7	+11	+26.2	60.00	100.0	.....	.....	.1388	93.2	+ .0228	+17.0
1894	35	71.4	+18	+51.4	60.00	100.0	.....	.....	.1321	92.1	+ .0245	+18.5
1895	38	77.6	+15	+39.5	60.00	100.0	.....	.....	.1289	89.8	+ .0277	+21.5
1896	45	91.8	+ 8	+17.8	60.00	100.0	.....	.....	.1293	90.1	+ .0273	+21.1
1897	50	102.0	+ 3	+ 6.0	60.00	100.0	.....	.....	.1340	93.4	+ .0226	+16.9
1898	79	161.2	-26	-32.9	60.00	100.0	.....	.....	.1332	92.8	+ .0234	+17.6
1899	79	161.2	-26	-32.9	60.00	100.0	.....	.....	.1332	92.8	+ .0234	+17.6
1900	86	175.5	-33	-38.4	60.00	100.0	.....	.....	.1343	93.6	+ .0223	+16.6
1901	56	114.3	- 3	- 5.4	60.00	100.0	.....	.....	.1402	97.7	+ .0164	+11.7
1902	53	108.2	.....	.....	60.00	100.0	.....	.....	.1406	98.0	+ .0160	+11.4
1903	53	108.2	.....	.....	60.00	100.0	.....	.....	.1566	109.1	.....	.....

LEERSMEN, Male.

[Data from 10 establishments.]

Av. 1890-99.	57	100.0	+2	+ 3.5	59.15	100.0	-0.30	-0.5	\$0.1790	100.0	+\$0.0055	+3.1
1890	62	108.8	-3	- 4.8	59.23	100.1	- .38	- .6	.1797	100.4	+ .0048	+2.7
1891	62	108.8	-3	- 4.8	59.23	100.1	- .38	- .6	.1797	100.4	+ .0048	+2.7
1892	65	114.0	-6	- 9.2	59.26	100.2	- .41	- .7	.1797	100.4	+ .0048	+2.7
1893	62	108.8	-3	- 4.8	59.23	100.1	- .38	- .6	.1796	99.8	+ .0059	+3.3
1894	50	87.7	+9	+18.0	59.04	99.8	- .19	- .3	.1789	99.9	+ .0056	+3.1
1895	53	93.0	+6	+11.3	59.09	99.9	- .24	- .4	.1791	100.1	+ .0054	+3.0
1896	53	93.0	+6	+11.3	59.09	99.9	- .24	- .4	.1797	99.8	+ .0068	+3.2
1897	54	94.7	+5	+ 9.3	59.11	99.9	- .26	- .4	.1780	99.4	+ .0065	+3.7
1898	55	96.5	+4	+ 7.2	59.13	100.0	- .28	- .5	.1788	99.9	+ .0067	+3.2
1899	51	89.5	+8	+15.7	59.06	99.8	- .21	- .4	.1787	99.8	+ .0068	+3.2
1900	57	100.0	+2	+ 3.5	59.16	100.0	- .31	- .5	.1757	98.2	+ .0088	+5.0
1901	63	110.5	-4	- 6.3	59.24	100.2	- .39	- .7	.1788	99.9	+ .0057	+3.2
1902	61	107.0	-2	- 3.3	58.99	99.6	- .04	- .1	.1809	101.1	+ .0036	+2.0
1903	59	103.5	.....	.....	58.85	99.5	.....	.....	.1845	103.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

GLASS—Concluded.

PACKERS, Male.

[Data from 5 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	100	100.0	-9	-9.0	55.45	100.0	-0.26	-0.5	\$0.1857	100.0	+\$0.0117	+6.3
1890	102	102.0	-11	-10.8	56.01	101.0	-.82	-1.4	.1854	99.8	+.0120	+6.5
1891	103	103.0	-12	-11.7	55.47	100.0	-.25	-.5	.1850	99.6	+.0124	+6.7
1892	107	107.0	-16	-15.0	55.50	100.1	-.31	-.6	.1865	100.4	+.0109	+5.8
1893	108	108.0	-17	-15.7	55.44	100.0	-.25	-.5	.1870	100.7	+.0104	+5.6
1894	98	98.0	-7	-7.1	55.63	100.3	-.44	-.8	.1851	99.7	+.0123	+6.6
1895	85	85.0	+6	+7.1	54.63	98.3	+.66	+1.2	.1905	102.6	+.0068	+3.6
1896	88	88.0	+9	+8.4	55.03	99.2	+.16	+.3	.1871	100.8	+.0102	+5.5
1897	102	102.0	-11	-10.8	55.70	100.5	-.51	-.9	.1829	98.5	+.0145	+7.9
1898	100	100.0	-9	-9.0	55.54	100.2	-.35	-.6	.1841	99.1	+.0133	+7.2
1899	106	106.0	-15	-14.2	55.69	100.4	-.50	-.9	.1829	98.5	+.0145	+7.9
1900	103	103.0	-12	-11.7	55.85	100.7	-.68	-1.2	.1823	98.2	+.0151	+8.3
1901	102	102.0	-9	-10.8	55.77	100.6	-.58	-1.0	.1875	101.0	+.0099	+5.3
1902	100	100.0	-11	-9.0	55.79	100.6	-.60	-1.1	.1864	100.4	+.0110	+5.9
1903	91	91.0	.....	.....	55.19	99.5	.....	.....	.1974	106.3	.....	.....

TEASERS, Male.

[Data from 9 establishments.]

Av. 1890-99.	59	100.0	-3	-5.1	79.13	100.0	-0.25	-0.3	\$0.1648	100.0	+\$0.0054	+3.3
1890	60	101.7	-4	-6.7	79.22	100.1	-.34	-.4	.1703	103.3	+.0001	+.1
1891	64	108.5	-8	-12.5	79.52	100.5	-.64	-.8	.1673	101.5	+.0029	+1.7
1892	64	108.5	-8	-12.5	79.52	100.5	-.64	-.8	.1673	101.5	+.0029	+1.7
1893	63	106.8	-7	-11.1	79.44	100.4	-.56	-.7	.1686	102.3	+.0016	+.9
1894	57	96.6	-1	-1.8	78.96	99.8	-.08	-.1	.1653	100.3	+.0049	+3.0
1895	58	98.3	-2	-3.4	79.05	99.9	-.17	-.2	.1649	100.1	+.0053	+3.2
1896	56	94.9	.....	.....	78.88	99.7	.....	.....	.1635	99.2	+.0067	+4.1
1897	57	96.6	-1	-1.8	78.96	99.8	-.08	-.1	.1626	98.7	+.0076	+4.7
1898	53	89.8	+3	+5.7	78.58	99.3	+.30	+.4	.1570	95.3	+.0132	+8.4
1899	59	100.0	-3	-5.1	79.14	100.0	-.26	-.3	.1609	97.6	+.0093	+5.8
1900	57	96.6	-1	-1.8	78.96	99.8	-.08	-.1	.1636	99.3	+.0066	+4.0
1901	57	96.6	-1	-1.8	78.96	99.8	-.08	-.1	.1636	99.3	+.0066	+4.0
1902	59	100.0	-3	-5.1	79.14	100.0	-.26	-.3	.1624	98.5	+.0073	+4.8
1903	56	94.9	.....	.....	78.88	99.7	.....	.....	.1702	103.3	.....	.....

GLASS, PLATE.

CASTERS, Male.

[No data, 1890-1897; data from 1 establishment, 1898-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	50	(a)	-6	-12.0	43.00	(a)	.....	.....	\$0.2250	(a)	+\$0.0264	+11.7
1899	50	(a)	-6	-12.0	43.00	(a)	.....	.....	.2250	(a)	+.0264	+11.7
1900	46	(a)	-2	-4.3	48.00	(a)	.....	.....	.2383	(a)	+.0131	+5.5
1901	46	(a)	-2	-4.3	48.00	(a)	.....	.....	.2383	(a)	+.0131	+5.5
1902	44	(a)	.....	.....	48.00	(a)	.....	.....	.2514	(a)	.....	.....
1903	44	(a)	.....	.....	48.00	(a)	.....	.....	.2514	(a)	.....	.....

CUTTERS, Male.

[No data, 1890-1897; data from 1 establishment, 1898-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	6	(a)	+3	+50.0	64.00	(a)	+.0.67	+1.0	\$0.2131	(a)	-\$0.0169	-7.9
1899	9	(a)	.....	.....	64.00	(a)	+.67	+1.0	.1934	(a)	+.0028	+1.4
1900	9	(a)	.....	.....	64.00	(a)	+.67	+1.0	.2045	(a)	+.0083	+4.1
1901	10	(a)	-1	-10.0	64.20	(a)	+.47	+.7	.1936	(a)	+.0026	+1.3
1902	9	(a)	.....	.....	64.00	(a)	+.67	+1.0	.1981	(a)	+.0022	+1.1
1903	9	(a)	.....	.....	64.67	(a)	.....	.....	.1962	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

GLASS, PLATE—Continued.**DRAWERS, Male.**

[No data, 1890-1897; data from 1 establishment, 1898-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	15	(a)	+7	+46.7	60.00	(a)	.....	.....	\$0.1610	(a)	+\$0.0140	+8.7
1899	15	(a)	+7	+46.7	60.00	(a)	.....	.....	.1787	(a)	-.0037	-2.1
1900	21	(a)	+1	+4.8	60.00	(a)	.....	.....	.1862	(a)	-.0112	-6.0
1901	30	(a)	-8	-26.7	60.00	(a)	.....	.....	.1788	(a)	-.0038	-2.1
1902	28	(a)	-6	-21.4	60.00	(a)	.....	.....	.1825	(a)	-.0075	-4.1
1903	22	(a)	.....	.....	60.00	(a)	.....	.....	.1750	(a)	.....	.....

GRINDERS, Male.

[No data, 1890-1897; data from 2 establishments, 1898-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	87	(a)	+20	+23.0	62.59	(a)	+8.37	+13.4	\$0.1910	(a)	+\$0.0172	+9.0
1899	95	(a)	+12	+12.6	63.13	(a)	+7.83	+12.4	.1906	(a)	+.0176	+9.2
1900	94	(a)	+13	+13.8	63.26	(a)	+7.70	+12.2	.1968	(a)	+.0114	+5.8
1901	113	(a)	-6	-5.3	64.22	(a)	+6.74	+10.5	.1951	(a)	+.0131	+6.7
1902	123	(a)	-16	-13.0	70.71	(a)	+.25	+.4	.2002	(a)	+.0080	+4.0
1903	107	(a)	.....	.....	70.96	(a)	.....	.....	.2082	(a)	.....	.....

LAYERS, POLISHING ROOM, Male.

[No data 1890-1897; data from 1 establishment, 1898-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	20	(a)	+21	+105.0	69.00	(a)	.....	.....	\$0.1922	(a)	+\$0.0136	+7.1
1899	33	(a)	+8	+24.2	69.00	(a)	.....	.....	.2067	(a)	-.0009	-.4
1900	37	(a)	+4	+10.8	69.00	(a)	.....	.....	.1968	(a)	+.0090	+4.6
1901	32	(a)	+9	+23.1	69.00	(a)	.....	.....	.2043	(a)	+.0015	+.7
1902	40	(a)	+1	+2.5	69.00	(a)	.....	.....	.2049	(a)	+.0009	+.4
1903	41	(a)	.....	.....	69.00	(a)	.....	.....	.2058	(a)	.....	.....

MELTERS, Male.

[No data, 1890-1897; data from 1 establishment, 1898-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	3	(a)	+1	+33.3	70.00	(a)	.....	.....	\$0.2187	(a)	.....	.....
1899	2	(a)	+2	+100.0	70.00	(a)	.....	.....	.2187	(a)	.....	.....
1900	2	(a)	+2	+100.0	70.00	(a)	.....	.....	.2137	(a)	.....	.....
1901	4	(a)	.....	.....	70.00	(a)	.....	.....	.2137	(a)	.....	.....
1902	4	(a)	.....	.....	70.00	(a)	.....	.....	.2137	(a)	.....	.....
1903	4	(a)	.....	.....	70.00	(a)	.....	.....	.2137	(a)	.....	.....

POLISHERS, Male.

[No data, 1890-1897; data from 2 establishments, 1898-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	36	(a)	+1	+2.8	61.00	(a)	+10.43	+17.1	\$0.1959	(a)	-\$0.0278	-14.2
1899	39	(a)	-2	-5.1	61.62	(a)	+9.81	+15.9	.1908	(a)	-.0227	-11.9
1900	36	(a)	+1	+2.8	61.50	(a)	+9.93	+16.1	.1841	(a)	-.0160	-8.7
1901	34	(a)	+3	+8.8	61.06	(a)	+10.37	+17.0	.1872	(a)	-.0191	-10.2
1902	36	(a)	+1	+2.8	71.67	(a)	-.24	-.3	.1697	(a)	-.0016	-.9
1903	37	(a)	.....	.....	71.43	(a)	.....	.....	.1681	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

GLASS, PLATE—Concluded.

TABLEMEN, Male.

[No data, 1890-1897; data from 1 establishment, 1898-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	22	(a)	+ 8	+ 36.4	60.00	(a)	.....	.....	\$0.1627	(a)	+\$0.0016	+1.0
1899	19	(a)	+11	+67.9	60.00	(a)	.....	.....	.1871	(a)	— .0028	-1.5
1900	46	(a)	-16	-34.8	60.00	(a)	.....	.....	.1873	(a)	— .0035	-1.9
1901	36	(a)	-6	-16.7	60.00	(a)	.....	.....	.1862	(a)	— .0020	-1.1
1902	20	(a)	+10	+50.0	60.00	(a)	.....	.....	.1872	(a)	— .0030	-1.6
1903	30	(a)	.....	.....	60.00	(a)	.....	.....	.1843	(a)	.....	.....

WAGON MEN, Male.

[No data, 1890-1897; data from 1 establishment 1898-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1898	24	(a)	- 2	- 8.8	60.00	(a)	.....	.....	\$0.1671	(a)	+\$0.0277	+16.6
1899	20	(a)	+ 2	+10.0	60.00	(a)	.....	.....	.1895	(a)	+ .0053	+ 2.8
1900	23	(a)	- 1	- 4.3	60.00	(a)	.....	.....	.1889	(a)	+ .0059	+ 3.1
1901	36	(a)	-14	-38.9	60.00	(a)	.....	.....	.1858	(a)	+ .0093	+ 5.1
1902	18	(a)	+ 4	+22.2	60.00	(a)	.....	.....	.1886	(a)	+ .0062	+ 3.3
1903	22	(a)	.....	.....	60.00	(a)	.....	.....	.1948	(a)	.....	.....

HARNESS.

COLLAR MAKERS, Male.

[Data from 17 establishments.]

Av. 1890-99.	144	100.0	+17	+11.8	59.28	100.0	-0.99	-1.7	\$0.2084	100.0	+\$0.0318	+15.8
1890	133	92.4	+28	+21.1	59.51	100.4	-1.22	-2.1	.2100	100.8	+ .0302	+14.4
1891	131	91.0	+30	+22.9	59.50	100.4	-1.21	-2.0	.2093	100.4	+ .0309	+14.8
1892	133	92.4	+28	+21.1	59.37	100.2	-1.08	-1.8	.2113	101.4	+ .0289	+13.7
1893	138	95.8	+23	+16.7	59.13	99.7	- .84	-1.4	.2099	100.7	+ .0303	+14.4
1894	135	93.8	+26	+19.3	59.21	99.9	- .92	-1.6	.2085	100.0	+ .0317	+15.2
1895	147	102.1	+14	+9.5	59.27	100.0	- .98	-1.7	.2054	98.6	+ .0348	+16.9
1896	158	109.7	+ 3	+ 1.9	59.23	99.9	- .94	-1.6	.2080	99.8	+ .0322	+15.5
1897	156	108.3	+ 5	+ 3.2	59.29	100.0	-1.00	-1.7	.2067	99.2	+ .0335	+16.2
1898	157	109.0	+ 4	+ 2.5	59.26	100.0	- .97	-1.6	.2068	99.2	+ .0334	+16.2
1899	149	108.5	+12	+ 8.1	58.98	99.5	- .69	-1.2	.2083	100.0	+ .0319	+15.3
1900	166	115.3	- 5	- 3.6	59.08	99.7	- .79	-1.3	.2127	102.1	+ .0275	+12.0
1901	160	111.1	+ 1	+ .8	58.94	99.4	- .65	-1.1	.2243	107.6	+ .0159	+ 7.1
1902	166	115.3	- 5	- 3.0	58.78	99.2	- .49	- .8	.2277	109.3	+ .0125	+ 5.5
1903	161	111.8	.....	.....	58.29	98.8	.....	.....	.2402	115.3	.....	.....

CUTTERS, Male.

[Data from 21 establishments.]

Av. 1890-99.	87	100.0	+19	+21.8	58.88	100.0	-1.81	-2.2	\$0.2574	100.0	+\$0.0479	+18.6
1890	80	92.0	+26	+32.5	59.00	100.2	-1.43	-2.4	.2598	100.9	+ .0455	+17.5
1891	81	93.1	+25	+30.9	59.02	100.2	-1.45	-2.5	.2585	100.4	+ .0468	+18.1
1892	85	97.7	+21	+24.7	59.06	100.3	-1.49	-2.5	.2564	99.6	+ .0489	+19.1
1893	85	97.7	+21	+24.7	58.86	100.0	-1.29	-2.2	.2583	100.3	+ .0470	+18.2
1894	86	98.9	+20	+23.3	58.81	99.9	-1.24	-2.1	.2561	99.5	+ .0492	+19.2
1895	83	95.4	+23	+27.7	58.83	99.9	-1.26	-2.1	.2587	100.5	+ .0466	+18.0
1896	88	101.1	+18	+20.5	58.84	99.9	-1.27	-2.2	.2566	99.7	+ .0487	+19.0
1897	91	104.6	+15	+16.5	58.88	100.0	-1.31	-2.2	.2546	98.9	+ .0507	+19.9
1898	93	106.9	+13	+14.0	58.78	99.8	-1.21	-2.1	.2577	100.1	+ .0476	+18.5
1899	102	117.2	+ 4	+ 3.9	58.70	99.7	-1.13	-1.9	.2572	99.9	+ .0481	+18.7
1900	101	116.1	+ 5	+ 5.0	58.84	99.9	-1.27	-2.2	.2609	101.4	+ .0444	+17.0
1901	101	116.1	+ 5	+ 5.0	58.70	99.7	-1.13	-1.9	.2685	104.3	+ .0368	+13.7
1902	108	124.1	- 2	- 1.9	58.11	98.7	- .54	- .9	.2728	106.0	+ .0325	+11.9
1903	106	121.8	.....	.....	57.57	97.8	.....	.....	.3053	118.6	.....	.....

* Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

HARNESSES—Continued.

FITTERS AND FINISHERS, Male.

[Data from 14 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	110	100.0	+68	+61.8	58.88	100.0	-2.48	-4.2	\$0.2124	100.0	+\$0.0520	+24.5
1890	96	87.3	+82	+85.4	59.38	100.8	-2.98	-5.0	.2122	99.9	+ .0522	+24.6
1891	104	94.5	+74	+71.2	59.40	100.9	-3.00	-5.1	.2164	101.9	+ .0480	+22.2
1892	100	90.9	+78	+78.0	59.42	100.9	-3.02	-5.1	.2152	101.8	+ .0492	+22.9
1893	97	88.2	+81	+83.9	59.39	100.9	-2.99	-5.0	.2137	100.6	+ .0507	+23.7
1894	94	85.5	+84	+89.4	59.22	100.6	-2.82	-4.8	.2088	98.9	+ .0556	+26.6
1895	109	99.1	+69	+63.3	58.51	99.4	-2.11	-3.6	.2091	98.4	+ .0553	+26.4
1896	122	110.9	+56	+45.9	58.26	98.9	-1.86	-3.2	.2042	96.1	+ .0602	+29.5
1897	123	111.8	+55	+44.7	58.42	99.2	-2.02	-3.5	.2068	97.4	+ .0576	+27.9
1898	119	108.2	+59	+49.0	58.58	99.5	-2.18	-3.7	.2168	102.1	+ .0476	+22.0
1899	140	127.3	+38	+27.1	58.17	98.8	-1.77	-3.0	.2209	103.7	+ .0441	+20.0
1900	138	120.9	+45	+33.8	58.33	99.1	-1.93	-3.3	.2209	104.0	+ .0435	+19.7
1901	143	130.0	+35	+24.5	57.99	98.5	-1.59	-2.6	.2344	110.4	+ .0300	+12.8
1902	167	151.8	+11	+ 6.6	57.58	97.8	-1.18	-2.0	.2434	114.6	+ .0210	+ 8.6
1903	178	161.8	.....	.....	56.40	95.8	.....	.....	.2644	124.5	.....	.....

HARNESSES MAKERS, Male.

[Data from 14 establishments.]

Av. 1890-99.	215	100.0	+71	+33.0	59.54	100.0	-0.32	-0.5	\$0.2116	100.0	+\$0.0125	+5.9
1890	193	89.8	+93	+48.2	59.80	100.4	- .58	-1.0	.2098	92.1	+ .0143	+6.8
1891	197	91.6	+89	+45.2	59.80	100.4	- .58	-1.0	.2108	99.6	+ .0133	+6.3
1892	188	87.4	+98	+52.1	59.59	100.1	- .87	- .6	.2112	99.8	+ .0129	+6.1
1893	194	90.2	+92	+47.4	59.50	99.9	- .28	- .5	.2130	100.7	+ .0111	+5.2
1894	191	88.8	+95	+49.7	59.49	99.9	- .27	- .5	.2099	99.2	+ .0142	+6.8
1895	209	97.2	+77	+36.8	59.41	99.8	- .19	- .3	.2089	98.7	+ .0152	+7.3
1896	226	105.1	+60	+26.5	59.39	99.7	- .17	- .3	.2106	99.5	+ .0135	+6.4
1897	238	110.7	+48	+20.2	59.40	99.8	- .18	- .3	.2114	99.9	+ .0127	+6.0
1898	248	115.3	+38	+15.3	59.45	99.8	- .23	- .4	.2160	102.1	+ .0081	+3.8
1899	268	124.7	+18	+ 6.7	59.55	100.0	- .33	- .6	.2145	101.4	+ .0096	+4.5
1900	278	129.3	+ 8	+ 2.9	59.53	100.0	- .31	- .5	.2156	101.9	+ .0085	+3.9
1901	276	128.4	+10	+ 3.6	59.42	99.8	- .20	- .3	.2162	102.2	+ .0079	+3.7
1902	276	128.4	+10	+ 3.6	59.17	99.4	+ .05	+ .1	.2173	102.7	+ .0068	+3.1
1903	286	133.0	.....	.....	59.22	99.5	.....	.....	.2241	105.9	.....	.....

STITCHERS, HAND, Male.

[Data from 9 establishments.]

Av. 1890-99.	32	100.0	+19	+59.4	59.80	100.0	-0.47	-0.8	\$0.1973	100.0	+\$0.0319	+16.1
1890	29	90.6	+22	+75.9	59.79	100.0	- .46	- .8	.1988	100.5	+ .0309	+15.5
1891	29	90.6	+22	+75.9	59.79	100.0	- .46	- .8	.1988	100.5	+ .0309	+15.5
1892	31	96.9	+20	+64.5	59.81	100.0	- .48	- .8	.2005	101.4	+ .0292	+14.6
1893	33	103.1	+18	+64.5	59.82	100.0	- .49	- .8	.2012	101.7	+ .0285	+14.2
1894	33	103.1	+18	+64.5	59.64	99.7	- .31	- .5	.1941	98.1	+ .0356	+18.3
1895	32	100.0	+19	+59.4	59.81	100.0	- .48	- .8	.1927	97.4	+ .0370	+19.2
1896	30	93.8	+21	+70.0	53.80	100.0	- .47	- .8	.1956	98.8	+ .0342	+17.5
1897	31	96.9	+20	+64.5	59.81	100.0	- .48	- .8	.2013	101.8	+ .0284	+14.1
1898	36	112.5	+15	+41.7	59.83	100.1	- .50	- .8	.1980	100.1	+ .0317	+15.0
1899	40	125.0	+11	+27.5	59.85	100.1	- .52	- .9	.1967	99.4	+ .0330	+16.8
1900	43	134.4	+ 8	+18.6	59.86	100.1	- .53	- .9	.1980	100.1	+ .0317	+16.0
1901	49	153.1	+ 2	+ 4.1	59.84	100.1	- .51	- .9	.2003	101.3	+ .0294	+14.7
1902	52	162.5	- 1	- 1.9	59.85	100.1	- .52	- .9	.2154	108.9	+ .0143	+ 6.6
1903	51	159.4	.....	.....	59.33	99.2	.....	.....	.2297	116.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

HARNESS—Concluded.

STITCHERS, MACHINE, Male.

[Data from 20 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	100	100.0	+45	+45.0	59.17	100.0	-1.43	-2.4	\$0.2269	100.0	+\$0.0323	+14.2
1890	94	94.0	+51	+54.3	59.47	100.5	-1.73	-2.9	.2267	99.9	+.0325	+14.3
1891	90	90.0	+55	+61.1	59.43	100.4	-1.69	-2.8	.2288	100.8	+.0304	+13.3
1892	99	99.0	+46	+46.5	59.12	99.9	-1.38	-2.3	.2264	99.8	+.0328	+14.5
1893	90	90.0	+55	+61.1	59.04	99.8	-1.30	-2.2	.2320	102.2	+.0272	+11.7
1894	97	97.0	+48	+49.5	59.05	99.8	-1.31	-2.2	.2249	99.1	+.0343	+15.3
1895	102	102.0	+43	+42.2	59.07	99.8	-1.33	-2.3	.2207	97.3	+.0385	+17.4
1896	105	105.0	+40	+38.1	59.14	99.9	-1.40	-2.4	.2225	98.1	+.0367	+16.5
1897	108	108.0	+42	+40.8	59.08	99.8	-1.34	-2.3	.2259	99.6	+.0333	+14.7
1898	109	109.0	+36	+33.0	59.12	99.9	-1.35	-2.3	.2275	100.3	+.0317	+13.9
1899	108	108.0	+37	+34.3	59.13	99.9	-1.39	-2.4	.2335	102.9	+.0257	+11.0
1900	131	131.0	+14	+10.7	59.11	99.9	-1.37	-2.3	.2327	102.6	+.0265	+11.4
1901	132	132.0	+13	+9.8	58.85	99.5	-1.11	-1.9	.2449	107.9	+.0143	+5.8
1902	132	132.0	+13	+9.8	58.45	98.8	-.71	-1.2	.2506	110.4	+.0086	+3.4
1903	145	145.0	.....	.....	57.74	97.6	.....	.....	.2592	114.2	.....	.....

HATS, FUR.

BLOCKERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	52	100.0	+10	+19.2	58.40	100.0	-4.64	-7.9	\$0.3036	100.0	+\$0.0340	+11.2
1890	39	75.0	+23	+59.0	59.46	101.8	-5.70	-9.6	.3229	106.4	+.0147	+4.6
1891	42	80.8	+20	+47.6	59.36	101.6	-5.60	-9.4	.2972	97.9	+.0404	+13.6
1892	45	86.5	+17	+37.8	58.82	100.7	-5.06	-8.6	.3045	100.3	+.0331	+10.9
1893	48	92.3	+14	+29.2	59.29	101.5	-5.53	-9.3	.2820	92.9	+.0556	+19.7
1894	59	113.5	+3	+5.1	58.93	100.9	-5.17	-8.8	.3001	98.8	+.0375	+12.5
1895	51	98.1	+11	+21.6	58.96	101.0	-5.20	-8.8	.2791	91.9	+.0585	+21.0
1896	50	96.2	+12	+24.0	59.30	101.5	-5.54	-9.3	.2836	93.4	+.0540	+19.0
1897	53	101.9	+9	+17.0	59.28	101.5	-5.52	-9.3	.2900	95.5	+.0476	+16.4
1898	60	115.4	+2	+3.3	55.20	94.5	-1.44	-2.6	.3340	110.0	+.0036	+1.1
1899	70	134.6	-8	-11.4	55.40	94.9	-1.64	-3.0	.3426	112.8	+.0050	-1.5
1900	58	111.5	+4	+6.9	55.33	94.7	-1.57	-2.8	.3450	113.6	+.0074	+2.1
1901	63	121.2	-1	-1.6	55.24	94.6	-1.48	-2.7	.3246	106.9	+.0130	+4.0
1902	61	117.3	+1	+1.6	54.44	93.2	-.68	-1.2	.3437	113.2	+.0061	-1.8
1903	62	119.2	.....	.....	53.76	92.1	.....	.....	.3376	111.2	.....	.....

COLORERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	24	100.0	+7	+29.2	59.01	100.0	-5.56	-9.4	\$0.1752	100.0	+\$0.0212	+12.1
1890	24	100.0	+7	+29.2	59.04	100.0	-5.56	-9.4	.1799	102.7	+.0165	+9.2
1891	27	112.5	+4	+14.8	59.26	100.4	-5.78	-9.8	.1719	98.1	+.0245	+14.2
1892	23	95.8	+8	+34.8	59.26	100.4	-5.78	-9.8	.1678	95.8	+.0286	+17.0
1893	31	129.2	.....	.....	59.10	100.1	-5.62	-9.5	.1689	96.4	+.0275	+16.3
1894	32	133.3	-1	-3.1	58.66	99.4	-5.18	-8.8	.1733	98.9	+.0231	+13.3
1895	19	79.2	+12	+63.2	58.84	99.7	-5.36	-9.1	.1763	100.6	+.0201	+11.4
1896	19	79.2	+12	+63.2	59.06	100.0	-5.57	-9.4	.1863	106.3	+.0101	+5.4
1897	19	79.2	+12	+63.2	59.05	100.0	-5.57	-9.4	.1776	101.4	+.0188	+10.6
1898	21	87.5	+10	+47.0	59.10	100.1	-5.62	-9.5	.1766	100.8	+.0198	+11.2
1899	25	104.2	+6	+24.0	59.04	100.0	-5.56	-9.4	.1734	99.0	+.0230	+13.3
1900	21	87.5	+10	+47.6	58.86	99.7	-5.38	-9.1	.1759	100.4	+.0205	+11.7
1901	27	112.5	+4	+14.8	58.74	99.5	-5.26	-9.0	.1762	100.6	+.0202	+11.5
1902	28	116.7	+3	+10.7	54.46	92.2	-.98	-1.8	.1920	109.6	+.0044	+2.3
1903	31	129.2	.....	.....	53.48	90.6	.....	.....	.1964	112.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

HATS, FUR—Continued.

CONERS, Male.

[Data from 5 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	22	100.0	+ 9	+40.9	59.09	100.0	-5.41	-9.2	\$0.2045	100.0	+\$0.0620	+30.3
1890	19	86.4	+12	+63.2	59.42	100.6	-5.74	-9.7	.2039	99.7	+.0626	+30.7
1891	22	100.0	+ 9	+40.9	59.50	100.7	-5.82	-9.8	.2034	99.5	+.0631	+31.0
1892	22	100.0	+ 9	+40.9	59.50	100.7	-5.82	-9.8	.2034	99.5	+.0631	+31.0
1893	24	109.1	+ 7	+29.2	59.33	100.4	-5.65	-9.5	.2063	100.9	+.0602	+29.2
1894	23	104.5	+ 8	+34.8	59.30	100.4	-5.62	-9.5	.2029	99.2	+.0636	+31.3
1895	19	86.4	+12	+63.2	59.16	100.1	-5.48	-9.3	.2036	99.6	+.0629	+30.9
1896	19	86.4	+12	+63.2	59.42	100.6	-5.74	-9.7	.1929	94.3	+.0736	+38.2
1897	22	100.0	+ 9	+40.9	58.86	99.6	-5.18	-8.8	.2172	106.2	+.0493	+22.7
1898	23	104.5	+ 8	+34.8	58.91	99.7	-5.28	-8.9	.2043	99.9	+.0622	+30.4
1899	26	118.2	+ 5	+19.2	57.50	97.3	-3.82	-6.6	.2072	101.3	+.0593	+28.6
1900	30	136.4	+ 1	+ 3.8	57.37	97.1	-3.69	-6.4	.2100	102.7	+.0565	+26.9
1901	34	154.5	- 3	- 8.3	57.53	97.4	-3.85	-6.7	.2108	103.1	+.0557	+26.4
1902	31	140.9	.....	.....	54.74	92.6	-1.06	-1.9	.2456	120.1	+.0209	+ 8.5
1903	31	140.9	.....	.....	53.68	90.8	.....	.....	.2665	130.3	.....	.....

CURLERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	21	100.0	+ 7	+33.3	55.12	100.0	-0.33	-0.6	\$0.3805	100.0	+\$0.0277	+ 7.3
1890	16	76.2	+12	+75.0	55.19	100.1	- .40	- .7	.4220	110.9	+.0138	- 3.3
1891	16	76.2	+12	+75.0	55.31	100.3	- .52	- .9	.4446	116.8	+.0364	- 8.2
1892	17	81.0	+11	+64.7	55.18	100.1	- .39	- .7	.4300	113.0	+.0218	- 5.1
1893	18	85.7	+10	+55.6	55.22	100.2	- .43	- .8	.3861	101.5	+.0221	+ 5.7
1894	23	109.5	+ 5	+21.7	55.09	99.9	- .30	- .5	.3746	98.4	+.0396	+ 9.0
1895	20	95.2	+ 8	+40.0	55.05	99.9	- .26	- .5	.3545	93.2	+.0537	+15.1
1896	22	104.8	+ 6	+27.3	55.14	100.0	- .35	- .6	.3547	93.2	+.0535	+15.1
1897	24	114.3	+ 4	+16.7	55.04	99.9	- .25	- .5	.3442	90.5	+.0640	+18.6
1898	23	109.5	+ 5	+21.7	55.17	100.1	- .38	- .7	.3506	92.1	+.0576	+16.4
1899	30	142.9	- 2	- 6.7	54.83	99.5	- .04	- .1	.3493	90.4	+.0644	+18.7
1900	26	123.8	+ 2	+ 7.7	54.88	99.6	- .09	- .2	.3430	90.1	+.0652	+19.0
1901	26	123.8	+ 2	+ 7.7	55.04	99.9	- .25	- .5	.3875	101.8	+.0207	+ 5.3
1902	21	100.0	+ 7	+33.3	54.76	99.3	+ .03	+ .1	.4052	106.5	+.0080	+ .7
1903	23	133.3	.....	.....	54.79	99.4	.....	.....	.4082	107.3	.....	.....

FEEDERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	+6	+100.0	56.93	100.0	-1.68	-3.0	\$0.0857	100.0	+\$0.0168	+19.6
1890	4	66.7	+8	+200.0	57.50	101.0	-2.25	-3.9	.0788	91.9	+.0237	+30.0
1891	5	83.3	+7	+140.0	57.00	100.1	-1.75	-3.1	.0828	96.6	+.0197	+23.8
1892	5	83.3	+7	+140.0	57.00	100.1	-1.75	-3.1	.0774	90.3	+.0251	+32.4
1893	5	83.3	+7	+140.0	57.00	100.1	-1.75	-3.1	.0792	92.4	+.0233	+29.4
1894	6	100.0	+6	+100.0	56.83	99.8	-1.58	-2.8	.0856	99.9	+.0169	+19.7
1895	5	83.3	+7	+140.0	57.00	100.1	-1.75	-3.1	.0882	102.9	+.0143	+16.2
1896	4	66.7	+8	+200.0	57.50	101.0	-2.25	-3.9	.0833	97.2	+.0192	+23.0
1897	8	133.3	+4	+ 50.0	56.50	99.2	-1.25	-2.2	.1070	124.9	+.0045	- 4.2
1898	5	83.3	+7	+140.0	57.00	100.1	-1.75	-3.1	.0864	100.8	+.0161	+18.6
1899	11	183.3	+1	+ 9.1	56.00	98.4	- .75	-1.3	.0830	102.7	+.0145	+16.5
1900	12	200.0	.....	.....	56.17	98.7	- .92	-1.6	.0870	101.5	+.0155	+17.8
1901	13	216.7	-1	- 7.7	56.31	98.9	-1.06	-1.9	.0860	100.4	+.0165	+19.2
1902	12	200.0	.....	.....	55.25	97.0	.....	.....	.1027	119.8	+.0002	- .2
1903	12	200.0	.....	.....	55.25	97.0	.....	.....	.1025	119.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

HATS, FUR—Continued.

FEEDERS, Female.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 8 establishments, 1890-1892, 1894, 1897-1903; 4 establishments, 1893, 1895, 1896.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	19	100.0	+3	+15.8	52.65	100.0	-6.42	-10.8	\$0.0926	100.0	+\$0.0144	+15.6
1890	17	89.5	+5	+29.4	59.88	100.4	-6.65	-11.1	.0933	100.8	+ .0137	+14.7
1891	20	105.3	+2	+10.0	59.90	100.4	-6.67	-11.1	.0918	99.1	+ .0152	+16.6
1892	20	105.3	+2	+10.0	59.90	100.4	-6.67	-11.1	.0918	99.1	+ .0152	+16.6
1893	20	105.3	+2	+10.0	59.71	100.1	-6.48	-10.9	.0918	99.1	+ .0152	+16.6
1894	21	110.5	+1	+4.8	59.90	100.4	-6.67	-11.1	.0914	98.7	+ .0156	+17.1
1895	16	84.2	+6	+67.5	59.65	100.0	-6.42	-10.8	.0933	100.8	+ .0137	+14.7
1896	17	89.5	+5	+29.4	59.67	100.0	-6.44	-10.8	.0922	99.6	+ .0148	+16.1
1897	17	89.5	+5	+29.4	59.88	100.4	-6.65	-11.1	.0928	100.2	+ .0142	+15.3
1898	20	105.3	+2	+10.0	59.85	100.3	-6.62	-11.1	.0928	100.2	+ .0142	+15.3
1899	18	94.7	+4	+22.2	58.17	97.5	-5.42	-8.5	.0950	102.6	+ .0120	+12.6
1900	17	89.5	+5	+29.4	58.35	97.8	-5.19	-8.8	.0942	101.7	+ .0128	+13.6
1901	20	105.3	+2	+10.0	58.60	98.2	-5.37	-9.2	.0925	99.9	+ .0145	+15.7
1902	23	121.1	-1	-4.3	54.39	91.2	-1.16	-2.1	.1047	113.1	+ .0028	+2.2
1903	22	115.8	.....	.....	53.23	89.2	.....	.....	.1070	115.6	.....	.....

FINISHERS, Male.

[Data from 6 establishments.]

Av. 1890-99.	277	100.0	+231	+83.4	56.50	100.0	-2.44	-2.1	\$0.2585	100.0	+\$0.0427	+16.8
1890	293	105.8	+215	+73.4	56.73	100.4	-2.67	-4.7	.2617	103.2	+ .0945	+13.2
1891	265	95.7	+243	+91.7	56.08	99.3	-2.02	-3.6	.2478	97.6	+ .0489	+19.8
1892	261	94.2	+247	+94.6	56.36	99.8	-2.30	-4.1	.2513	99.1	+ .0449	+17.9
1893	254	91.7	+254	+100.0	56.36	99.8	-2.30	-4.1	.2495	98.4	+ .0467	+18.7
1894	236	85.2	+272	+115.3	56.72	100.4	-2.66	-4.7	.2552	100.7	+ .0410	+16.1
1895	238	85.9	+270	+113.4	56.52	100.0	-2.46	-4.4	.2567	101.3	+ .0395	+15.4
1896	257	92.8	+251	+97.7	56.54	100.1	-2.48	-4.4	.2529	99.8	+ .0433	+17.1
1897	289	104.3	+219	+75.8	56.27	99.6	-2.21	-3.9	.2485	98.0	+ .0477	+19.2
1898	303	109.4	+205	+67.7	56.63	100.2	-2.57	-4.5	.2502	98.7	+ .0460	+18.4
1899	373	134.7	+135	+36.2	56.77	100.5	-2.71	-4.8	.2620	103.4	+ .0342	+13.1
1900	392	141.5	+116	+29.6	56.64	100.2	-2.58	-4.6	.2609	102.9	+ .0353	+13.5
1901	414	149.5	+94	+22.7	56.80	100.5	-2.74	-4.8	.2698	105.4	+ .0264	+9.8
1902	471	170.0	+37	+7.9	55.63	98.5	-1.57	-2.8	.2905	114.6	+ .0057	+2.0
1903	508	183.4	.....	.....	54.06	95.7	.....	.....	.2962	116.8	.....	.....

FLANGERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	14	100.0	+20	+142.9	57.14	100.0	-4.32	-7.6	\$0.3326	100.0	-\$0.0156	-4.7
1890	13	92.9	+21	+161.5	57.62	100.8	-4.80	-8.3	.4125	124.0	+ .0955	+23.2
1891	11	78.6	+23	+209.1	57.36	100.4	-4.54	-7.9	.3386	101.8	+ .0216	+6.4
1892	11	78.6	+23	+209.1	57.36	100.4	-4.54	-7.9	.3641	109.5	+ .0471	+12.9
1893	10	71.4	+24	+240.0	56.80	99.4	-3.98	-7.0	.3063	91.8	+ .0117	+3.8
1894	13	92.9	+21	+161.5	56.85	99.5	-4.08	-7.1	.3781	113.7	+ .0611	+16.2
1895	11	78.6	+23	+209.1	56.91	99.6	-4.09	-7.2	.2935	88.2	+ .0235	+8.0
1896	12	85.7	+22	+183.3	57.08	99.9	-4.26	-7.5	.3244	97.5	+ .0074	+2.3
1897	11	78.6	+23	+209.1	57.36	100.4	-4.54	-7.9	.3077	92.5	+ .0098	+3.0
1898	20	142.9	+14	+70.0	57.30	100.3	-4.45	-7.8	.2973	89.4	+ .0197	+6.6
1899	25	178.6	+9	+36.0	56.76	99.3	-3.94	-6.9	.3048	91.6	+ .0122	+4.0
1900	35	250.0	-1	-2.9	57.11	99.9	-4.29	-7.5	.3012	90.6	+ .0158	+5.2
1901	42	300.0	-8	-19.0	56.36	98.6	-3.54	-6.3	.3058	91.9	+ .0112	+3.7
1902	35	250.0	-1	-2.9	54.71	95.7	-1.89	-3.5	.3621	108.9	+ .0451	+12.5
1903	34	242.9	.....	.....	52.82	92.4	.....	.....	.3170	95.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

HATS, FUR—Continued.

FUR BLOWERS, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	10	100.0	+10	+100.0	59.67	100.0	-6.27	-10.5	\$0.1288	100.0	+\$0.0401	+31.1
1890	9	90.0	+11	+122.2	59.78	100.2	-6.38	-10.7	.1338	103.9	+.0351	+26.2
1891	10	100.0	+10	+100.0	59.80	100.2	-6.40	-10.7	.1238	96.1	+.0451	+36.4
1892	12	120.0	+8	+66.7	59.83	100.3	-6.43	-10.7	.1241	96.4	+.0443	+36.1
1893	10	100.0	+10	+100.0	59.80	100.2	-6.40	-10.7	.1238	100.0	+.0401	+31.1
1894	8	80.0	+12	+150.0	59.75	100.1	-6.35	-10.6	.1235	95.9	+.0454	+36.8
1895	9	90.0	+11	+122.2	59.78	100.2	-6.38	-10.7	.1301	101.0	+.0388	+29.8
1896	9	90.0	+11	+122.2	59.78	100.2	-6.38	-10.7	.1301	101.0	+.0388	+29.8
1897	8	80.0	+12	+150.0	59.75	100.1	-6.35	-10.6	.1297	100.7	+.0392	+30.2
1898	9	90.0	+11	+122.2	59.78	100.2	-6.38	-10.7	.1246	95.7	+.0443	+35.6
1899	13	130.0	+7	+53.8	58.69	98.4	-5.29	-9.0	.1390	108.4	+.0293	+21.0
1900	19	190.0	+1	+5.3	58.84	98.6	-5.44	-9.2	.1381	107.2	+.0308	+23.3
1901	20	200.0	.....	.....	58.90	98.7	-5.50	-9.3	.1371	106.4	+.0318	+23.2
1902	19	190.0	+1	+5.3	54.42	91.2	-1.02	-1.9	.1540	119.6	+.0149	+9.7
1903	20	200.0	.....	.....	53.40	89.5	.....	.....	.1689	131.1	.....	.....

HARDENERS, Male.

[Data from 5 establishments.]

Av. 1890-99.	21	100.0	+4	+19.0	59.14	100.0	-4.58	-7.7	\$0.2484	100.0	+\$0.0249	+10.0
1890	19	90.5	+6	+31.6	59.42	100.5	-4.86	-8.2	.2659	107.0	+.0074	+2.8
1891	22	104.8	+3	+13.6	59.50	100.6	-4.94	-8.3	.2498	100.6	+.0234	+9.4
1892	22	104.8	+3	+13.6	59.50	100.6	-4.94	-8.3	.2549	102.6	+.0184	+7.2
1893	22	104.8	+3	+13.6	59.50	100.6	-4.94	-8.3	.2492	100.3	+.0241	+9.7
1894	22	104.8	+3	+13.6	59.50	100.6	-4.94	-8.3	.2465	100.0	+.0248	+10.0
1895	18	85.7	+7	+38.9	59.39	100.4	-4.88	-8.1	.2561	103.1	+.0172	+6.7
1896	21	100.0	+4	+19.0	59.24	100.2	-4.68	-7.9	.2420	97.4	+.0315	+12.9
1897	22	104.8	+3	+13.6	58.86	99.5	-4.30	-7.3	.2481	99.9	+.0252	+10.2
1898	23	109.5	+2	+8.7	58.91	99.6	-4.55	-7.4	.2368	96.3	+.0365	+15.4
1899	23	109.5	+2	+8.7	57.61	97.4	-3.05	-5.3	.2327	93.7	+.0406	+17.4
1900	23	109.5	+2	+8.7	57.52	97.3	-2.96	-5.1	.2348	94.5	+.0385	+16.4
1901	26	123.8	-1	-3.8	57.88	97.9	-3.32	-5.7	.2402	96.7	+.0331	+13.3
1902	25	119.0	.....	.....	54.66	92.3	.....	.....	.2708	109.0	+.0025	.....
1903	25	119.0	.....	.....	51.66	92.3	.....	.....	.2733	110.0	.....	.....

POUNCERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	24	100.0	+67	+279.2	59.33	100.0	-6.03	-10.2	\$0.2388	100.0	-\$0.0085	-3.6
1890	25	104.2	+66	+264.0	59.44	100.2	-6.14	-10.3	.2445	104.6	-.0192	-7.9
1891	24	100.0	+67	+279.2	59.33	100.1	-6.08	-10.2	.2484	106.2	-.0231	-9.3
1892	22	91.7	+69	+313.6	59.59	100.4	-6.29	-10.6	.2024	86.6	+.0229	+11.3
1893	27	112.5	+64	+237.0	59.48	100.3	-6.18	-10.4	.2236	95.6	+.0017	+.8
1894	27	112.5	+64	+237.0	59.48	100.3	-6.18	-10.4	.2153	92.1	+.0100	+4.6
1895	22	91.7	+69	+313.6	59.41	100.1	-6.11	-10.3	.2194	93.8	+.0059	+2.7
1896	20	83.3	+71	+355.0	59.20	99.8	-5.90	-10.0	.2500	106.9	-.0247	-9.9
1897	17	70.8	+74	+435.3	59.18	99.7	-5.88	-9.9	.2469	105.6	-.0216	-8.7
1898	26	108.3	+65	+250.0	59.04	99.5	-5.74	-9.7	.2595	111.0	-.0342	-13.2
1899	33	137.9	+58	+175.8	59.12	99.6	-5.82	-9.3	.2277	97.4	-.0024	-1.1
1900	51	212.5	+40	+78.4	59.43	100.2	-6.13	-10.3	.2339	100.0	-.0086	-3.7
1901	66	275.0	+25	+37.9	59.48	100.3	-6.18	-10.4	.2119	90.6	+.0134	+6.3
1902	92	383.3	-1	-1.1	54.23	91.4	-.93	-1.7	.2074	83.7	+.0179	+8.6
1903	91	379.2	.....	.....	53.30	89.8	.....	.....	.2233	96.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

HATS, FUR—Continued.

SIZERS, Male.

[Data from 5 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	303	100.0	+159	+ 52.5	58.04	100.0	-4.61	-7.9	\$0.2144	100.0	+\$0.0602	+28.1
1890	270	89.1	+192	+ 71.1	59.15	101.9	-5.72	-9.7	.2351	109.7	+.0395	+16.8
1891	296	97.7	+166	+ 56.1	58.85	101.4	-5.42	-8.2	.2252	105.0	+.0494	+21.9
1892	216	71.3	+246	+113.9	58.77	101.3	-5.34	-8.1	.2378	110.9	+.0368	+15.4
1893	268	88.4	+184	+ 72.4	58.65	101.1	-5.22	-8.9	.2066	96.4	+.0680	+32.9
1894	323	106.6	+139	+ 43.0	58.28	100.4	-4.85	-8.3	.2197	102.5	+.0549	+25.0
1895	303	100.0	+159	+ 52.5	58.23	100.3	-4.80	-8.2	.2116	98.7	+.0630	+28.8
1896	316	104.3	+146	+ 46.2	58.63	101.0	-5.20	-8.9	.1914	89.3	+.0832	+43.5
1897	311	102.6	+151	+ 48.6	58.60	101.0	-5.17	-8.8	.1958	91.3	+.0788	+40.2
1898	351	116.8	+108	+ 33.0	55.68	95.9	-2.25	-4.0	.2070	96.5	+.0676	+32.7
1899	377	124.4	+ 83	+ 22.5	55.60	95.8	-2.17	-3.9	.2142	99.9	+.0604	+28.2
1900	456	150.5	+ 6	+ 1.3	56.07	96.6	-2.64	-4.7	.2323	108.3	+.0423	+18.2
1901	471	155.4	- 9	- 1.9	56.23	96.9	-2.80	-5.0	.2381	111.1	+.0365	+15.3
1902	430	141.9	+ 32	+ 7.4	54.58	94.0	-1.15	-2.1	.2446	114.1	+.0300	+12.3
1903	462	152.5	.....	.....	53.43	92.1	.....	.....	.2746	128.1	.....	.....

STIFFENERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	5	100.0	.....	.....	56.92	100.0	-1.32	-3.4	\$0.2987	100.0	+\$0.0622	+20.8
1890	4	80.0	+1	+25.0	57.25	100.6	-3.25	-5.7	.2731	91.4	+.0878	+32.1
1891	4	80.0	+1	+25.0	57.25	100.6	-3.25	-5.7	.2562	85.8	+.1047	+40.9
1892	4	80.0	+1	+25.0	57.25	100.6	-3.25	-5.7	.2773	92.8	+.0836	+30.1
1893	6	120.0	-1	-16.7	56.67	99.6	-2.67	-4.7	.2810	94.1	+.0799	+28.4
1894	4	80.0	+1	+25.0	57.25	100.6	-3.25	-5.7	.3038	101.7	+.0571	+18.8
1895	5	100.0	.....	.....	57.00	100.1	-3.00	-5.3	.3104	103.9	+.0505	+16.3
1896	7	140.0	-2	-23.6	56.57	99.4	-2.57	-4.5	.3229	108.1	+.0380	+11.8
1897	7	140.0	-2	-23.6	56.57	99.4	-2.57	-4.5	.3187	106.7	+.0422	+13.2
1898	6	120.0	-1	-16.7	56.67	99.6	-2.67	-4.7	.3234	108.3	+.0375	+11.6
1899	6	120.0	-1	-16.7	56.67	99.6	-2.67	-4.7	.3205	107.3	+.0404	+12.6
1900	6	120.0	-1	-16.7	56.67	99.6	-2.67	-4.7	.3375	113.0	+.0234	+ 6.9
1901	3	60.0	+2	+66.7	58.00	101.9	-4.00	-6.9	.3725	124.7	+.0116	- 3.1
1902	5	100.0	.....	.....	55.00	96.8	-1.00	-1.8	.3109	104.1	+.0500	+16.1
1903	5	100.0	.....	.....	55.00	96.6	.....	.....	.3609	120.8	.....	.....

TRIMMERS, Female.

[Data from 4 establishments.]

Av. 1890-99.	155	100.0	+ 72	+ 46.5	57.16	100.0	-3.55	-6.2	\$0.1413	100.0	-\$0.0022	-1.6
1890	99	63.9	+128	+129.3	57.81	101.1	-4.20	-7.3	.1526	103.0	-.0135	-8.8
1891	122	78.7	+105	+ 86.1	58.03	101.5	-4.42	-7.6	.1484	105.0	-.0093	-6.3
1892	110	71.0	+117	+106.4	57.76	101.0	-4.15	-7.2	.1497	105.9	-.0106	-7.1
1893	140	90.3	+ 87	+ 62.1	56.91	99.6	-3.30	-5.8	.1444	102.2	-.0053	-3.7
1894	177	114.2	+ 50	+ 28.2	56.79	99.4	-3.18	-5.6	.1375	97.3	+.0016	+1.2
1895	145	93.5	+ 82	+ 56.6	56.93	99.6	-3.32	-5.8	.1268	89.7	+.0123	+9.7
1896	153	98.7	+ 74	+ 48.4	56.39	98.7	-2.78	-4.9	.1378	97.5	+.0013	+ .9
1897	180	116.1	+ 47	+ 23.1	56.84	99.4	-3.23	-5.7	.1377	97.5	+.0014	+1.0
1898	191	123.2	+ 36	+ 18.8	57.12	99.9	-3.51	-6.1	.1376	97.4	+.0015	+1.1
1899	235	151.6	- 8	- 3.4	57.06	99.8	-3.45	-6.0	.1408	99.6	-.0017	-1.2
1900	256	165.2	- 29	- 11.3	57.17	100.0	-3.56	-6.2	.1468	103.9	-.0077	-5.2
1901	257	165.8	- 30	- 11.7	57.20	100.1	-3.59	-6.3	.1389	98.3	+.0002	+ .1
1902	235	151.6	- 8	- 3.4	55.00	96.2	-1.39	-2.6	.1415	100.1	-.0024	-1.7
1903	227	146.5	.....	.....	53.61	93.8	.....	.....	.1391	98.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

HATS, FUR—Concluded.**WEIGHERS, Female.**

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.				
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount	Per cent.	
Av. 1890-99.	6	100.0	+4	+ 66.7	59.62	100.0	-6.72	-11.3	\$0.1076	100.0	+\$0.0156	+14.5	
1890	5	83.3	+5	+100.0	59.80	100.3	-6.90	-11.5	.1103	102.5	+	.0129	+11.7
1891	7	116.7	+3	+ 42.9	59.86	100.4	-6.96	-11.6	.1098	102.0	+	.0134	+12.2
1892	6	100.0	+4	+ 66.7	59.83	100.4	-6.93	-11.6	.1058	98.3	+	.0174	+16.4
1893	7	116.7	+3	+ 42.9	59.86	100.4	-6.96	-11.6	.1074	99.8	+	.0158	+14.7
1894	6	100.0	+4	+ 66.7	59.83	100.4	-6.93	-11.6	.1031	95.8	+	.0201	+19.5
1895	6	100.0	+4	+ 66.7	59.83	100.4	-6.93	-11.6	.1058	98.3	+	.0174	+16.4
1896	6	100.0	+4	+ 66.7	59.83	100.4	-6.93	-11.6	.1086	100.9	+	.0146	+13.4
1897	6	100.0	+4	+ 66.7	59.83	100.4	-6.93	-11.6	.1058	98.3	+	.0174	+16.4
1898	7	116.7	+3	+ 42.9	59.86	100.4	-6.96	-11.6	.1074	99.8	+	.0158	+14.7
1899	7	116.7	+3	+ 42.9	57.71	96.8	-4.81	- 8.3	.1119	104.0	+	.0113	+10.1
1900	7	116.7	+3	+ 42.9	57.71	96.8	-4.81	- 8.3	.1143	106.2	+	.0089	+ 7.8
1901	9	150.0	+1	+ 11.1	57.67	96.7	-4.77	- 8.3	.1142	106.1	+	.0090	+ 7.9
1902	10	166.7	.....	.....	54.40	91.2	-1.50	- 2.8	.1213	112.7	+	.0019	+ 1.6
1903	10	166.7	.....	.....	52.90	88.7	.....	.....	.1232	114.5	.....	.....	.....

HOSIERY AND KNIT GOODS.**BOARDERS, Male.**

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1901; 6 establishments, 1902, 1903.]

Av. 1890-99.	76	100.0	+ 2	+ 2.6	59.16	100.0	-1.07	-1.8	\$0.1197	100.0	+\$0.0304	+25.4	
1890	75	98.7	+ 3	+ 4.0	59.92	101.3	-1.83	-3.1	.1291	107.9	+	.0210	+16.3
1891	79	103.9	- 1	- 1.3	59.92	101.3	-1.83	-3.1	.1200	100.3	+	.0301	+25.1
1892	80	105.3	- 2	- 2.5	59.93	101.3	-1.84	-3.1	.1081	90.3	+	.0420	+38.9
1893	91	119.7	-13	-14.3	58.99	99.7	- 90	-1.5	.1278	106.8	+	.0223	+17.4
1894	58	76.3	+20	+24.5	58.09	98.2	.....	.....	.1095	91.5	+	.0406	+37.1
1895	82	107.9	- 4	- 4.9	58.78	99.4	- 69	-1.2	.1326	110.8	+	.0175	+13.2
1896	71	93.4	+ 7	+ 9.9	58.96	99.7	- 87	-1.5	.1196	99.9	+	.0305	+25.5
1897	64	84.2	+14	+21.9	59.00	99.7	- 91	-1.5	.1185	99.0	+	.0316	+26.7
1898	83	109.2	- 5	- 6.0	58.96	99.7	- 87	-1.5	.1189	99.3	+	.0312	+26.2
1899	81	106.6	- 3	- 3.7	59.06	99.8	- 97	-1.6	.1127	94.2	+	.0374	+33.2
1900	85	111.8	- 7	- 8.2	58.94	99.6	- 85	-1.4	.1100	91.9	+	.0401	+36.5
1901	80	105.3	- 2	- 2.5	58.70	99.2	- 61	-1.0	.1391	116.2	+	.0110	+ 7.9
1902	90	118.4	-12	-13.3	58.67	99.2	- 58	-1.0	.1290	107.8	+	.0211	+16.4
1903	78	102.6	.....	.....	58.09	98.2	.....	.....	.1501	125.4	.....	.....	.....

FINISHERS, Female.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1901; 6 establishments, 1902, 1903.]

Av. 1890-99.	196	100.0	+44	+22.4	59.14	100.0	-2.39	-4.0	\$0.0892	100.0	+\$0.0190	+21.3	
1890	149	76.0	+91	+61.1	59.88	101.3	-3.13	-5.2	.0951	106.6	+	.0131	+13.8
1891	180	91.8	+60	+33.3	59.90	101.3	-3.15	-5.3	.1010	113.2	+	.0072	+ 7.1
1892	269	137.2	-29	-10.8	59.93	101.3	-3.18	-5.3	.0938	105.2	+	.0144	+15.4
1893	197	100.5	+43	+21.8	59.72	101.0	-2.97	-5.0	.0869	97.4	+	.0213	+24.5
1894	155	79.1	+85	+54.8	53.97	91.3	+2.78	+5.2	.0824	92.4	+	.0258	+31.3
1895	193	98.5	+47	+24.4	59.79	101.1	-3.04	-5.1	.0833	93.4	+	.0249	+29.9
1896	206	105.1	+34	+16.5	59.63	100.8	-2.88	-4.8	.0900	100.9	+	.0182	+20.2
1897	195	99.5	+45	+23.1	59.61	100.8	-2.86	-4.8	.0881	98.8	+	.0201	+22.8
1898	214	109.2	+26	+12.1	59.51	100.6	-2.76	-4.6	.0894	100.7	+	.0183	+21.0
1899	198	101.0	+42	+21.2	59.48	100.6	-2.73	-4.6	.0823	92.3	+	.0259	+31.5
1900	239	121.9	+ 1	+ 4	57.99	98.1	-1.24	-2.1	.0836	99.3	+	.0196	+22.1
1901	227	115.8	+13	+ 5.7	57.84	97.8	-1.09	-1.9	.0922	103.4	+	.0160	+17.4
1902	225	114.8	+15	+ 6.7	58.01	98.1	-1.26	-2.2	.1059	118.7	+	.0023	+ 2.2
1903	240	122.4	.....	.....	56.75	96.0	.....	.....	.1082	121.3	.....	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 713.]

HOSIERY AND KNIT GOODS—Continued.

KNITTERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890-1901; 4 establishments, 1902, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	44	100.0	+41	+ 93.2	58.39	100.0	-1.53	-2.6	\$0.1628	100.0	+\$0.0389	+23.9
1890	21	47.7	+64	+304.8	60.00	102.8	-3.14	-5.2	.1758	107.7	+.0264	+15.1
1891	26	59.1	+59	+226.9	60.00	102.8	-3.14	-5.2	.1981	118.6	+.0086	+4.5
1892	37	84.1	+48	+129.7	60.00	102.8	-3.14	-5.2	.1625	99.8	+.0392	+24.1
1893	33	75.0	+52	+157.6	58.67	100.5	-1.81	-3.1	.1846	113.4	+.0171	+9.3
1894	25	56.8	+60	+240.0	53.32	91.3	+3.54	+6.6	.1790	110.0	+.0227	+12.7
1895	36	81.8	+49	+136.1	58.56	100.3	-1.70	-2.9	.1827	112.2	+.0190	+10.4
1896	51	115.9	+34	+66.7	58.47	100.1	-1.61	-2.8	.1471	90.4	+.0546	+37.1
1897	61	138.6	+24	+39.3	58.39	99.9	-1.47	-2.5	.1331	81.8	+.0686	+51.5
1898	78	177.3	+7	+9.0	58.28	99.8	-1.42	-2.4	.1390	85.4	+.0627	+45.1
1899	73	165.9	+12	+16.4	58.27	99.8	-1.41	-2.4	.1314	80.7	+.0703	+58.5
1900	80	181.8	+5	+6.3	57.63	98.7	— .77	-1.3	.1480	90.9	+.0537	+36.3
1901	97	220.5	-12	-12.4	57.66	98.7	— .80	-1.4	.1508	92.3	+.0514	+34.2
1902	89	202.3	-4	-4.5	57.66	98.7	— .80	-1.4	.1558	95.7	+.0459	+29.5
1903	85	193.2	.....	.....	56.86	97.4	.....	.....	.2017	123.9	.....	.....

KNITTERS, Female.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 7 establishments, 1890-1895; 6 establishments, 1896, 1897, 1902, 1903; 5 establishments, 1898-1901.]

Av. 1890-99.	290	100.0	+62	+21.4	59.51	100.0	-0.82	-1.4	\$0.0896	100.0	+\$0.0149	+16.6
1890	238	82.1	+114	+47.9	59.81	100.5	-1.12	-1.9	.0940	104.9	+.0105	+11.2
1891	318	109.7	+34	+10.7	59.84	100.6	-1.15	-1.9	.0939	104.8	+.0106	+11.3
1892	312	107.6	+40	+12.8	59.84	100.6	-1.15	-1.9	.0887	99.0	+.0158	+17.8
1893	362	124.8	-10	-2.8	59.78	100.5	-1.09	-1.8	.0873	97.4	+.0172	+19.7
1894	261	90.0	+91	+34.9	56.96	95.7	+1.73	+3.0	.0906	101.1	+.0139	+15.3
1895	234	97.9	+68	+23.9	59.74	100.4	-1.05	-1.8	.0937	104.6	+.0108	+11.5
1896	230	96.6	+72	+25.7	59.79	100.5	-1.10	-1.8	.0883	98.5	+.0162	+18.3
1897	251	86.6	+101	+40.2	59.78	100.5	-1.09	-1.8	.0884	98.7	+.0161	+18.2
1898	285	98.3	+67	+23.5	59.78	100.5	-1.09	-1.8	.0862	96.2	+.0183	+21.2
1899	306	105.5	+46	+15.0	59.79	100.5	-1.10	-1.8	.0847	94.5	+.0198	+23.4
1900	308	106.2	+44	+14.3	59.07	99.3	— .38	— .6	.0820	91.5	+.0225	+27.4
1901	291	100.3	+61	+21.0	59.26	99.6	— .57	-1.0	.0924	103.1	+.0121	+13.1
1902	318	109.7	+34	+10.7	59.09	99.3	— .40	— .7	.1007	112.4	+.0038	+3.8
1903	352	121.4	.....	.....	58.69	98.6	.....	.....	.1046	116.6	.....	.....

LOOPERS, Female.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 4 establishments, 1890-1893; 5 establishments, 1894-1902; 6 establishments, 1903.]

Av. 1890-99.	58	100.0	-2	-3.4	58.71	100.0	-1.08	-1.8	\$0.1206	100.0	+\$0.0073	+6.1
1890	55	94.8	+1	+1.8	59.84	101.9	-2.21	-3.7	.1203	99.8	+.0076	+6.3
1891	81	139.7	-25	-30.9	59.89	102.0	-2.26	-3.8	.1246	103.3	+.0033	+2.6
1892	83	143.1	-27	-32.5	59.89	102.0	-2.26	-3.8	.1206	100.0	+.0073	+6.1
1893	77	132.8	-21	-27.3	59.65	101.6	-2.02	-3.4	.1257	104.2	+.0022	+1.8
1894	41	70.7	+15	+86.6	53.72	91.5	+3.91	+7.8	.1157	95.9	+.0122	+10.5
1895	44	75.9	+12	+27.3	59.50	101.3	-1.87	-3.1	.1287	106.7	—.0008	— .6
1896	40	69.0	+16	+10.0	58.63	99.9	-1.00	-1.7	.1416	117.4	—.0137	-9.7
1897	48	82.8	+8	+16.7	58.63	99.9	-1.00	-1.7	.1097	91.0	+.0182	+16.6
1898	51	87.9	+5	+9.8	58.64	99.9	-1.01	-1.7	.1125	93.3	+.0154	+13.7
1899	56	96.6	.....	.....	58.68	99.9	-1.05	-1.8	.1067	88.5	+.0212	+19.9
1900	67	115.5	-11	-16.4	57.70	98.3	— .07	— .1	.0973	80.7	+.0306	+31.4
1901	51	87.9	+5	+9.8	57.66	98.2	— .03	— .1	.1137	94.3	+.0142	+12.5
1902	48	82.8	+8	+16.7	57.63	98.2	.....	.....	.1120	92.9	+.0159	+14.2
1903	56	96.6	.....	.....	57.63	98.2	.....	.....	.1279	106.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

HOSIERY AND KNIT GOODS—Continued.

MENDERS, Female.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1901; 6 establishments, 1902, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	83	100.0	+ 9	+ 10.8	58.95	100.0	-0.82	-1.4	\$0.1086	100.0	+\$0.0114	+10.5
1890	71	85.5	+21	+29.6	60.00	101.8	-1.87	-3.1	.1183	108.9	+ .0017	+ 1.4
1891	79	95.2	+13	+16.5	60.00	101.8	-1.87	-3.1	.1146	105.5	+ .0054	+ 4.7
1892	138	166.3	-46	-33.3	60.00	101.8	-1.87	-3.1	.1082	99.6	+ .0118	+10.9
1893	91	109.6	+ 1	+ 1.1	58.68	99.5	- .55	- .9	.1095	100.8	+ .0106	+ 9.6
1894	92	110.8	.....	.....	56.62	95.9	+1.61	+2.8	.1004	92.4	+ .0196	+19.5
1895	74	89.2	+18	+24.3	58.62	99.4	- .49	- .8	.1232	113.4	+ .0083	- 2.6
1896	62	74.7	+36	+48.4	58.77	99.7	- .64	-1.1	.1062	97.8	+ .0138	+13.0
1897	57	68.7	+35	+61.4	59.02	100.1	- .89	-1.5	.1000	92.1	+ .0208	+20.0
1898	100	120.5	- 8	- 8.0	59.08	100.2	- .95	-1.6	.1040	95.8	+ .0160	+15.4
1899	70	84.3	+22	+31.4	58.83	99.8	- .79	-1.2	.1019	93.6	+ .0181	+17.8
1900	88	106.0	+ 4	+ 5.4	58.50	99.2	- .37	- .6	.1130	104.7	+ .0070	+ 6.2
1901	97	116.9	- 5	- 5.2	58.26	98.5	- .12	- .2	.1002	92.3	+ .0198	+19.8
1902	100	120.5	- 8	- 8.0	58.38	99.0	- .25	- .4	.1218	112.2	+ .0018	- 1.5
1903	92	110.8	.....	.....	58.13	98.6	.....	.....	.1200	110.5	.....	.....

PRESSERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890, 1891, 1902, 1903; 4 establishments, 1892-1901.]

A v. 1890-99.	17	100.0	+ 7	+41.2	59.36	100.0	-0.40	-0.7	\$0.1584	100.0	+\$0.0257	+16.2
1890	16	94.1	+ 8	+60.0	60.00	101.1	-1.04	-1.7	.1702	107.4	+ .0139	+ 8.2
1891	13	76.5	+11	+84.6	60.00	101.1	-1.04	-1.7	.1667	105.2	+ .0174	+10.4
1892	20	117.6	+ 4	+20.0	60.00	101.1	-1.04	-1.7	.1467	92.6	+ .0874	+25.5
1893	20	117.6	+ 4	+20.0	59.82	100.8	- .86	-1.4	.1567	98.9	+ .0274	+17.5
1894	19	111.8	+ 5	+26.3	54.81	92.3	+4.15	+7.6	.1499	94.6	+ .0842	+22.8
1895	16	94.1	+ 8	+60.0	59.78	100.7	- .82	-1.4	.1495	94.4	+ .0846	+23.1
1896	18	105.9	+ 6	+33.3	59.80	100.7	- .84	-1.4	.1598	100.9	+ .0243	+15.2
1897	17	100.0	+ 7	+41.2	59.79	100.7	- .83	-1.4	.1596	100.8	+ .0245	+15.4
1898	16	94.1	+ 8	+60.0	59.78	100.7	- .82	-1.4	.1645	103.9	+ .0196	+11.9
1899	18	105.9	+ 6	+33.3	59.80	100.7	- .84	-1.4	.1606	101.4	+ .0235	+14.6
1900	19	111.8	+ 5	+26.3	58.88	98.3	+ .58	+1.0	.1688	106.6	+ .0153	+ 9.1
1901	16	94.1	+ 8	+60.0	57.82	97.4	+1.14	+2.0	.1641	103.6	+ .0200	+12.2
1902	20	117.6	+ 4	+20.0	58.75	99.0	+ .21	+ .4	.1696	107.1	+ .0145	+ 8.5
1903	24	141.2	.....	.....	58.96	99.8	.....	.....	.1841	116.2	.....	.....

PRESSERS, Female.

[Data from 2 establishments.]

Av. 1890-99.	20	100.0	+ 7	+ 35.0	58.60	100.0	- 0.60	- 0.1	\$0.0815	100.0	+\$0.0007	+ 0.9
1890	9	45.0	+18	+200.0	60.00	102.4	- 2.00	- 3.3	.0903	110.8	+ .0081	- 9.0
1891	5	25.0	+22	+440.0	60.00	102.4	- 2.00	- 3.3	.0834	102.3	+ .0012	- 1.4
1892	26	130.0	+ 1	+ 3.8	60.00	102.4	- 2.00	- 3.3	.0827	101.5	+ .0005	- .6
1893	32	160.0	- 5	- 15.6	58.00	99.0			.0813	99.8	+ .0009	+ 1.1
1894	11	55.0	+16	+145.5	58.00	99.0			.0893	109.6	+ .0071	- 8.0
1895	31	155.0	- 4	- 12.9	58.00	99.0			.0745	91.4	+ .0077	+10.3
1896	17	85.0	+10	+ 58.8	58.00	99.0			.0859	105.4	+ .0037	+ 4.3
1897	16	80.0	+11	+ 68.8	58.00	99.0			.0793	97.9	+ .0024	+ 3.0
1898	23	115.0	+ 4	+ 17.4	58.00	99.0			.0724	88.8	+ .0098	+13.5
1899	25	125.0	+ 2	+ 8.0	58.00	99.0			.0757	92.9	+ .0065	+ 8.6
1900	27	135.0			58.00	99.0			.0873	107.1	+ .0051	- 5.8
1901	60	250.0	-23	- 46.0	58.00	99.0			.0848	104.0	+ .0026	- 3.1
1902	27	135.0			58.00	99.0			.0899	110.3	+ .0077	- 8.6
1903	27	135.0			58.00	99.0			.0822	100.9		- .6

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

HOSIERY AND KNIT GOODS—Concluded.

RIBBERS, Female.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	40	100.0	+ 3	+ 7.5	60.00	100.0	.....	.....	\$0.1371	100.0	+\$0.0261	+19.0
1890	43	107.5	.....	.....	60.00	100.0	.....	.....	.1378	100.5	+.0254	+13.4
1891	41	102.5	+ 2	+ 4.9	60.00	100.0	.....	.....	.1543	112.3	+.0089	+ 5.8
1892	45	112.5	- 2	- 4.4	60.00	100.0	.....	.....	.1414	103.1	+.0218	+15.4
1893	43	107.5	.....	.....	60.00	100.0	.....	.....	.1417	103.4	+.0215	+15.2
1894	41	102.5	+ 2	+ 4.9	60.00	100.0	.....	.....	.1259	91.8	+.0373	+29.6
1895	39	97.5	+ 4	+10.3	60.00	100.0	.....	.....	.1355	98.8	+.0277	+20.4
1896	37	92.5	+ 6	+16.2	60.00	100.0	.....	.....	.1196	87.2	+.0436	+36.5
1897	39	97.5	+ 4	+10.3	60.00	100.0	.....	.....	.1261	92.0	+.0371	+29.4
1898	36	90.0	+ 7	+19.4	60.00	100.0	.....	.....	.1321	96.4	+.0311	+23.5
1899	32	80.0	+11	+34.4	60.00	100.0	.....	.....	.1568	114.4	+.0064	+ 4.1
1900	39	97.5	+ 4	+10.3	60.00	100.0	.....	.....	.1510	110.1	+.0122	+ 8.1
1901	38	95.0	+ 5	+13.2	60.00	100.0	.....	.....	.1547	112.8	+.0085	+ 5.5
1902	36	90.0	+ 7	+19.4	60.00	100.0	.....	.....	.1658	120.9	-.0026	- 1.6
1903	43	107.5	.....	.....	60.00	100.0	.....	.....	.1632	119.0	.....	.....

IRON AND STEEL, BAR IRON.

CATCHERS, Male.

[Data for employees from 12 establishments for entire period. Data for hours and wages from 13 establishments, 1890, 1894, 1895; 14 establishments, 1891-1893, 1896-1898; 15 establishments, 1899; 16 establishments, 1900-1903.]

Av. 1890-99.	32	100.0	+ 6	+18.8	63.61	100.0	-1.07	-1.7	\$0.2826	100.0	+\$0.1262	+44.7
1890	30	93.8	+ 8	+26.7	65.38	102.8	-2.84	-4.9	.3232	116.1	+.0806	+24.6
1891	30	93.8	+ 8	+26.7	64.49	101.4	-1.95	-3.0	.2961	104.8	+.1127	+38.1
1892	31	96.9	+ 7	+22.6	64.49	101.4	-1.95	-3.0	.2819	99.8	+.1269	+45.0
1893	36	112.5	+ 2	+ 5.6	64.09	100.8	-1.55	-2.4	.2594	91.8	+.1494	+57.6
1894	33	103.1	+ 5	+15.2	64.41	101.3	-1.87	-2.9	.2469	87.4	+.1619	+65.6
1895	35	109.4	+ 3	+ 8.6	63.61	100.0	-1.07	-1.7	.2450	87.3	+.1608	+64.8
1896	28	87.5	+10	+35.7	64.11	100.8	-1.57	-2.4	.2373	101.7	+.1215	+42.3
1897	31	96.9	+ 7	+22.6	62.20	97.8	+ .34	+ .5	.2732	98.4	+.1306	+46.9
1898	32	100.0	+ 6	+18.8	62.10	97.6	+ .44	+ .7	.2657	94.0	+.1451	+53.9
1899	33	103.1	+ 5	+15.2	61.19	96.2	+1.35	+2.2	.3345	118.4	+.0743	+22.2
1900	33	103.1	+ 5	+15.2	61.72	97.0	+ .82	+1.3	.3426	121.2	+.0662	+19.3
1901	33	103.1	+ 5	+15.2	61.63	96.9	+ .91	+1.6	.3412	120.7	+.0676	+19.8
1902	36	112.5	+ 2	+ 5.6	62.59	98.4	- .05	- .1	.3383	137.4	+.0205	+ 5.3
1903	38	118.8	.....	.....	62.54	98.3	.....	.....	.4088	144.7	.....	.....

HEATERS, Male.

[Data for employees from 12 establishments for entire period. Data for hours and wages from 13 establishments, 1890, 1894, 1895; 14 establishments, 1891-1893, 1896-1898; 15 establishments, 1899; 16 establishments, 1900-1903.]

Av. 1890-99.	49	100.0	+4	+ 8.2	64.57	100.0	-0.52	-0.8	\$0.4700	100.0	+\$0.0992	+21.1
1890	47	95.9	+6	+12.8	66.69	103.3	-2.64	-4.0	.5492	116.9	+.0200	+ 3.6
1891	49	100.0	+4	+ 8.2	65.76	101.8	-1.71	-2.6	.5006	106.5	+.0686	+13.7
1892	48	98.0	+5	+10.4	65.96	102.2	-1.91	-2.9	.4608	98.0	+.1084	+23.5
1893	49	100.0	+4	+ 8.2	65.07	101.7	-1.62	-2.5	.4330	92.1	+.1362	+31.5
1894	45	91.8	+8	+17.8	65.74	101.8	-1.69	-2.6	.4429	94.2	+.1263	+28.5
1895	51	104.1	+2	+ 3.9	65.24	101.0	-1.19	-1.8	.4137	88.0	+.1555	+37.6
1896	46	93.9	+7	+15.2	65.43	101.3	-1.98	-2.1	.4436	96.4	+.1206	+26.9
1897	52	106.1	+1	+ 1.9	61.81	95.7	+2.24	+3.6	.4589	97.6	+.1103	+24.0
1898	49	100.0	+4	+ 8.2	61.95	95.0	+2.09	+3.4	.4623	93.5	+.1064	+23.0
1899	50	102.0	+3	+ 6.0	61.43	95.1	+2.62	+4.3	.5293	112.6	+.0399	+ 7.5
1900	54	110.2	-1	- 1.9	62.21	96.3	+1.84	+3.0	.5625	119.7	+.0067	+ 1.2
1901	46	93.9	+7	+15.2	64.35	99.7	- .30	- .5	.5162	109.8	+.0530	+10.3
1902	47	95.9	+6	+12.8	64.49	99.9	- .44	- .7	.5493	116.9	+.0199	+ 3.6
1903	53	108.2	.....	.....	64.05	99.2	.....	.....	.5692	121.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BAR IRON—Continued.

HEATERS' HELPERS, Male.

[Data for employees from 11 establishments for entire period. Data for hours and wages from 12 establishments, 1890, 1894, 1895; 13 establishments, 1891-1893, 1896-1898; 14 establishments, 1899; 15 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	53	100.0	—4	—7.5	64.93	100.0	+0.46	+0.7	\$0.2051	100.0	+\$0.0735	+35.8
1890	53	100.0	—4	—7.5	67.44	103.9	—2.05	—3.0	.2425	118.2	+ .0361	+14.9
1891	56	105.7	—7	—12.5	66.48	102.4	—1.09	—1.6	.2086	101.7	+ .0700	+33.6
1892	55	103.8	—6	—10.9	66.59	102.6	—1.20	—1.8	.2038	99.1	+ .0753	+37.0
1893	57	107.5	—8	—14.0	66.56	102.5	—1.17	—1.9	.1982	96.6	+ .0804	+40.6
1894	55	103.8	—6	—10.9	65.10	100.3	+ .29	+ .4	.1865	90.9	+ .0921	+49.4
1895	51	96.2	—2	—3.9	65.50	100.9	— .11	— .2	.1917	93.5	+ .0869	+45.3
1896	49	92.5	—4	—6.3	65.00	100.1	+ .39	+ .6	.1973	96.2	+ .0813	+41.2
1897	51	96.2	—2	—3.9	62.39	96.1	+3.00	+4.8	.1946	94.9	+ .0840	+43.2
1898	51	96.2	—2	—3.9	62.35	96.0	+3.04	+4.9	.1988	95.9	+ .0798	+40.1
1899	52	98.1	—3	—5.8	61.86	95.3	+3.53	+5.7	.2294	111.8	+ .0492	+21.4
1900	54	101.9	—5	—9.3	63.85	98.3	+1.54	+2.4	.2441	119.0	+ .0345	+14.1
1901	46	86.8	+3	+6.6	65.64	101.1	— .25	— .4	.2392	116.6	+ .0394	+16.5
1902	48	90.6	+1	+2.1	65.55	101.0	— .16	— .2	.2622	127.8	+ .0164	+6.3
1903	49	92.5	—4	—6.3	65.39	100.7	— .17	— .3	.2786	135.8	— .0143	—5.3

HOT STRAIGHTENERS, Male.

[Data for employees from 11 establishments for entire period. Data for hours and wages from 11 establishments, 1890; 12 establishments, 1891-1899; 13 establishments, 1900-1903.]

Av. 1890-99.	67	100.0	+10	+14.9	64.78	100.0	—2.93	—4.5	\$0.1566	100.0	+\$0.0565	+36.1
1890	68	101.5	+9	+13.2	66.59	102.8	—4.74	—7.1	.1598	102.0	+ .0533	+33.4
1891	68	101.5	+9	+13.2	65.67	101.4	—3.82	—5.8	.1606	102.6	+ .0525	+32.7
1892	68	101.5	+9	+13.2	65.74	101.5	—3.89	—5.9	.1517	96.9	+ .0614	+40.5
1893	68	101.5	+9	+13.2	65.74	101.5	—3.89	—5.9	.1549	98.9	+ .0582	+37.6
1894	65	97.0	+12	+18.5	65.97	101.8	—4.12	—6.2	.1364	87.1	+ .0757	+56.2
1895	67	100.0	+10	+14.9	65.40	101.0	—3.55	—5.4	.1624	103.7	+ .0507	+31.2
1896	67	100.0	+10	+14.9	65.55	101.2	—3.70	—5.6	.1694	108.2	+ .0437	+25.8
1897	64	95.5	+13	+20.3	63.56	98.1	—1.71	—2.7	.1456	91.7	+ .0695	+48.4
1898	66	98.5	+11	+16.7	61.81	95.4	+ .04	+ .1	.1507	96.2	+ .0624	+41.4
1899	69	103.0	+8	+11.6	61.77	95.4	+ .08	+ .1	.1768	112.9	+ .0363	+20.5
1900	75	111.9	+2	+2.7	62.26	96.1	— .41	— .7	.1733	110.7	+ .0396	+23.0
1901	75	111.9	+2	+2.7	62.29	96.2	— .44	— .7	.1879	120.0	+ .0252	+13.4
1902	76	113.4	+1	+1.3	62.57	96.6	— .72	—1.2	.2197	140.3	— .0066	—3.0
1903	77	114.9	—1	—1.5	61.85	95.5	— .17	— .3	.2131	136.1	— .0143	—5.3

ROLLERS, Male.

[Data for employees from 12 establishments for entire period. Data for hours and wages from 13 establishments, 1890, 1894, 1895; 14 establishments, 1891-1893, 1896-1899; 15 establishments, 1900-1903.]

Av. 1890-99.	29	100.0	+4	+13.8	63.68	100.0	—0.72	—1.1	\$0.6087	100.0	+\$0.2244	+36.9
1890	30	103.4	+4	+10.0	61.63	101.5	—1.67	—2.6	.6262	102.9	+ .2069	+33.0
1891	27	93.1	+6	+22.2	64.48	101.3	—1.52	—2.4	.6401	105.2	+ .1930	+30.2
1892	28	96.6	+5	+17.9	64.71	101.6	—1.75	—2.7	.6066	99.7	+ .2265	+37.3
1893	34	117.2	—1	—2.9	63.70	100.0	— .74	—1.2	.5636	92.6	+ .2695	+47.8
1894	30	103.4	+3	+10.0	64.35	101.1	—1.39	—2.2	.5418	89.0	+ .2913	+53.8
1895	30	103.4	+3	+10.0	64.00	100.5	—1.04	—1.6	.5434	89.3	+ .2897	+53.3
1896	27	93.1	+6	+22.2	64.25	100.9	—1.29	—2.0	.6013	98.8	+ .2318	+35.5
1897	28	96.6	+5	+17.9	62.24	97.7	+ .72	+1.2	.6456	106.1	+ .1875	+29.0
1898	28	96.6	+5	+17.9	62.24	97.7	+ .72	+1.2	.6210	102.0	+ .2121	+34.2
1899	29	100.0	+4	+13.8	62.17	97.6	+ .74	+1.3	.6970	114.5	+ .1361	+19.5
1900	33	113.8	—1	—2.9	62.82	98.6	+ .14	+ .2	.7277	119.5	+ .1054	+14.5
1901	30	103.4	+3	+10.0	63.02	99.0	— .06	— .1	.7806	125.0	+ .0725	+9.5
1902	32	110.3	+1	+3.1	63.02	99.0	— .06	— .1	.8161	134.1	+ .0170	+2.1
1903	33	113.8	—1	—2.9	62.96	98.9	— .17	— .3	.8331	136.9	— .0143	—5.3

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BAR IRON—Concluded.

ROUGHERS, Male.

Data for employees from 12 establishments for entire period. Data for hours and wages from 13 establishments, 1890, 1894, 1895; 14 establishments, 1891-1893, 1896-1898; 15 establishments, 1899; 16 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per-cent.			Num-ber.	Per-cent.			Amount.	Per-cent.
v. 1890-99.	57	100.0	+4	+ 7.0	62.85	100.0	-1.55	-2.5	\$0.3102	100.0	+\$0.1377	+44.4
990	58	101.8	+3	+ 5.2	64.06	101.9	-2.76	-4.3	.3276	105.6	+ .1203	+36.7
991	55	96.5	+6	+10.9	63.66	101.3	-2.86	-3.7	.3379	108.9	+ .1100	+32.6
992	53	93.0	+8	+15.1	63.82	101.5	-2.52	-3.9	.3304	106.5	+ .1175	+35.6
993	55	96.5	+6	+10.9	63.83	101.6	-2.53	-4.0	.3170	102.2	+ .1309	+41.3
994	58	101.8	+3	+ 5.2	63.65	101.3	-2.55	-3.7	.2854	92.0	+ .1625	+56.9
995	62	108.8	-1	- 1.6	63.44	100.9	-2.14	-3.4	.2715	87.5	+ .1764	+65.0
996	55	96.5	+6	+10.9	63.77	101.5	-2.47	-3.9	.2964	95.6	+ .1515	+51.1
997	54	94.7	+7	+13.0	61.13	97.3	+ .17	+ 3	.3085	99.5	+ .1394	+45.2
998	61	107.0	.....	.....	60.86	96.8	+ .44	+ 7	.2792	90.0	+ .1687	+60.4
999	59	103.5	+2	+ 3.4	60.26	95.9	+1.04	+1.7	.3478	112.1	+ .1001	+23.8
900	64	112.3	-3	- 4.7	61.13	97.3	+ .17	+ 3	.3701	119.3	+ .0778	+21.0
901	60	105.3	+1	+ 1.7	61.36	97.6	- .06	- 1	.3913	126.1	+ .0566	+14.5
902	58	101.8	+3	+ 5.2	61.46	97.8	- .16	- 3	.4361	140.6	+ .0118	+ 2.7
903	61	107.0	.....	.....	61.80	97.5	.....	.....	.4479	144.4	.....	.....

IRON AND STEEL, BESSEMER CONVERTING.

BLOWERS, Male.

Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890; 7 establishments, 1891, 1894-1896; 8 establishments, 1892, 1893, 1897-1900; 9 establishments, 1901-1903.]

v. 1890-99.	12	100.0	+3	+25.0	66.96	100.0	-7.01	-10.5	\$0.4218	100.0	+\$0.1871	+44.4
990	11	91.7	+4	+36.4	69.82	104.3	-9.87	-14.1	.3600	85.3	+ .2489	+69.1
991	12	100.0	+3	+25.0	65.14	97.3	-5.19	- 8.0	.4271	101.3	+ .1818	+42.6
992	12	100.0	+3	+25.0	63.00	101.6	-3.05	-11.8	.3897	92.4	+ .2192	+56.2
993	12	100.0	+3	+25.0	66.40	99.2	-6.45	- 9.7	.4138	98.1	+ .1951	+47.1
994	12	100.0	+3	+25.0	66.46	99.3	-6.51	- 9.8	.4122	97.7	+ .1967	+47.7
995	12	100.0	+3	+25.0	66.86	99.9	-6.91	-10.3	.4303	102.0	+ .1786	+41.5
996	12	100.0	+3	+25.0	66.86	99.9	-6.91	-10.3	.4568	108.3	+ .1521	+33.3
997	12	100.0	+3	+25.0	66.69	99.6	-6.74	-10.1	.4223	101.1	+ .1866	+44.2
998	12	100.0	+3	+25.0	66.69	99.6	-6.74	-10.1	.4387	104.0	+ .1702	+38.8
999	12	100.0	+3	+25.0	66.69	99.6	-6.74	-10.1	.4673	110.8	+ .1416	+30.3
900	14	116.7	+1	+ 7.1	59.28	88.5	+ .67	+ 1.1	.5122	121.4	+ .0967	+18.9
901	14	116.7	+1	+ 7.1	60.55	90.4	- .60	- 1.0	.5465	129.6	+ .0624	+11.4
902	14	116.7	+1	+ 7.1	60.55	90.4	- .60	- 1.0	.5683	134.7	+ .0406	+ 7.1
903	15	125.0	.....	.....	59.95	89.5	.....	.....	.6089	144.4	.....	.....

BOTTOM MAKERS, Male.

Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890; 7 establishments, 1891-1893, 1897-1900; 6 establishments, 1894-1896; 8 establishments, 1901-1903.]

v. 1890-99.	12	100.0	-1	-8.3	67.33	100.0	-0.23	-0.3	\$0.2780	100.0	+\$0.0606	+22.2
990	11	91.7	.....	.....	69.82	103.7	-2.72	-3.9	.3441	126.0	- .0105	- 3.1
991	12	100.0	-1	-8.3	67.20	99.8	- .10	- 1	.3213	117.7	+ .0123	+ 3.3
992	12	100.0	-1	-8.3	68.40	101.6	-1.30	-1.9	.3234	120.3	+ .0052	+ 1.6
993	12	100.0	-1	-8.3	67.80	100.7	- .70	-1.0	.2888	105.8	+ .0448	+15.5
994	12	100.0	-1	-8.3	66.86	99.3	+ .24	+ 4	.2692	98.6	+ .0644	+23.9
995	12	100.0	-1	-8.3	66.86	99.3	+ .24	+ 4	.2742	100.4	+ .0594	+21.7
996	12	100.0	-1	-8.3	66.86	99.3	+ .24	+ 4	.2598	95.2	+ .0738	+28.4
997	12	100.0	-1	-8.3	66.45	98.7	+ .65	+1.0	.2135	78.2	+ .1201	+56.3
998	12	100.0	-1	-8.3	66.56	98.9	+ .54	+ 8	.2178	79.8	+ .1156	+53.2
999	12	100.0	-1	-8.3	66.45	98.7	+ .65	+1.0	.2129	78.0	+ .1207	+56.7
900	12	100.0	-1	-8.3	63.29	94.0	+3.81	+6.0	.2462	90.2	+ .0874	+35.5
901	12	100.0	-1	-8.3	63.90	94.9	+3.20	+5.0	.2881	105.5	+ .0455	+15.3
902	12	100.0	-1	-8.3	63.90	94.9	+3.20	+5.0	.3151	115.4	+ .0185	+ 5.8
903	11	91.7	.....	.....	67.10	99.7	.....	.....	.3336	122.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BESSEMER CONVERTING—Continued.

LADLE LINERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from establishments, 1890; 7 establishments, 1891, 1894-1896; 8 establishments, 1892, 1893, 1897-1900; establishments, 1901-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	15	100.0	+3	+20.0	65.56	100.0	-0.10	-0.2	\$0.3172	100.0	+\$0.0877	+27.
1890	16	106.7	+2	+12.5	60.00	91.5	+5.46	+9.1	.3884	122.4	+ .0165	+ 4.
1891	15	100.0	+3	+20.0	66.29	101.1	- .83	-1.3	.3534	111.4	+ .0515	+14.
1892	15	100.0	+3	+20.0	66.00	100.7	-1.54	- .8	.3734	117.7	+ .0315	+ 8.
1893	16	106.7	+2	+12.5	64.00	97.6	+1.46	+2.3	.3606	113.7	+ .0443	+12.
1894	15	100.0	+3	+20.0	67.76	103.4	-2.30	-3.4	.2930	92.4	+ .1119	+38.
1895	15	100.0	+3	+20.0	67.76	103.4	-2.30	-3.4	.3016	95.1	+ .1033	+34.
1896	15	100.0	+3	+20.0	67.76	103.4	-2.30	-3.4	.2839	89.5	+ .1210	+42.
1897	16	106.7	+2	+12.5	64.27	98.0	+1.19	+1.9	.2741	86.4	+ .1308	+47.
1898	15	100.0	+3	+20.0	67.45	102.9	-1.99	-3.0	.2577	81.2	+ .1472	+57.
1899	16	106.7	+2	+12.5	64.27	98.0	+1.19	+1.9	.2855	90.0	+ .1194	+41.
1900	17	113.3	+1	+ 5.9	61.48	93.8	+3.98	+6.5	.3203	101.0	+ .0846	+26.
1901	17	113.3	+1	+ 5.9	62.32	95.1	+3.14	+5.0	.3440	108.4	+ .0609	+17.
1902	17	113.3	+1	+ 5.9	62.32	95.1	+3.14	+5.0	.3692	116.4	+ .0357	+ 9.
1903	18	120.0	.....	.....	65.46	99.8	.....	.....	.4049	127.6	.....	.....

MELTERS, Male.

[Data for employees from 5 establishments for entire period. Data for hours and wages from establishments, 1890; 6 establishments, 1891, 1894-1896; 7 establishments, 1892, 1893, 1897-1900; establishments, 1901-1903.]

Av. 1890-99.	14	100.0	+3	+21.4	58.44	100.0	+3.18	+ 5.4	\$0.4659	100.0	+\$0.1040	+22.
1890	14	100.0	+3	+21.4	54.86	93.9	+6.76	+12.3	.5469	117.4	+ .0230	+ 4.
1891	17	121.4	.....	.....	55.58	95.1	+6.04	+10.9	.5664	121.6	+ .0035	+ .
1892	14	100.0	+3	+21.4	61.33	104.9	+ .29	+ .5	.5254	112.8	+ .0445	+ 8.
1893	14	100.0	+3	+21.4	59.33	101.5	+2.29	+ 3.9	.4774	102.5	+ .0925	+19.
1894	14	100.0	+3	+21.4	58.50	100.1	+3.12	+ 5.3	.4342	93.2	+ .1357	+31.
1895	14	100.0	+3	+21.4	58.50	100.1	+3.12	+ 5.3	.4385	94.1	+ .1314	+30.
1896	14	100.0	+3	+21.4	58.50	100.1	+3.12	+ 5.3	.3979	85.4	+ .1720	+43.
1897	14	100.0	+3	+21.4	59.28	101.4	+2.34	+ 3.9	.4053	87.0	+ .1646	+40.
1898	14	100.0	+3	+21.4	59.28	101.4	+2.34	+ 3.9	.4305	92.4	+ .1394	+32.
1899	14	100.0	+3	+21.4	59.28	101.4	+2.34	+ 3.9	.4369	93.8	+ .1330	+30.
1900	21	150.0	-4	-19.0	54.20	92.7	+7.42	+13.7	.4977	106.8	+ .0722	+14.
1901	17	121.4	.....	.....	61.62	105.4	.....	.....	.4536	97.4	+ .1163	+25.
1902	17	121.4	.....	.....	61.62	105.4	.....	.....	.5113	109.7	+ .0586	+11.
1903	17	121.4	.....	.....	61.62	105.4	.....	.....	.5699	122.3	.....	.....

STEEL POURERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from establishments, 1890; 7 establishments, 1891, 1894-1896; 8 establishments, 1892, 1893, 1897-1900; establishments, 1901-1903.]

Av. 1890-99.	17	100.0	+3	+17.6	64.65	100.0	-7.92	-12.3	\$0.3485	100.0	+\$0.1298	+37.
1890	17	100.0	+3	+17.6	62.12	96.1	-6.89	-8.7	.3846	112.0	+ .0887	+23.
1891	17	100.0	+3	+17.6	63.16	97.7	-6.43	-10.2	.4228	123.1	+ .0505	+11.
1892	17	100.0	+3	+17.6	65.40	101.2	-8.67	-13.3	.4061	118.2	+ .0672	+16.
1893	17	100.0	+3	+17.6	63.20	97.8	-6.47	-10.2	.3670	106.8	+ .1063	+29.
1894	17	100.0	+3	+17.6	63.16	97.7	-6.43	-10.2	.3259	94.9	+ .1474	+45.
1895	17	100.0	+3	+17.6	63.16	97.7	-6.43	-10.2	.3241	94.4	+ .1492	+46.
1896	16	94.1	+4	+25.0	66.67	103.1	-9.94	-14.9	.2808	81.7	+ .1525	+68.
1897	16	94.1	+4	+25.0	66.55	102.9	-9.82	-14.8	.2974	86.6	+ .1759	+59.
1898	16	94.1	+4	+25.0	66.56	102.9	-9.82	-14.8	.3023	88.0	+ .1710	+56.
1899	16	94.1	+4	+25.0	66.55	102.9	-9.82	-14.8	.3249	94.3	+ .1493	+46.
1900	20	117.6	.....	.....	55.46	85.8	+1.27	+ 2.3	.3745	109.0	+ .0586	+28.
1901	20	117.6	.....	.....	56.73	87.7	.....	.....	.4197	122.2	+ .0144	+12.
1902	20	117.6	.....	.....	56.73	87.7	.....	.....	.4589	133.6	+ .0144	+ 3.
1903	20	117.6	.....	.....	56.73	87.7	.....	.....	.4733	137.8	.....	.....

TABLE L.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716. for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BESSEMER CONVERTING—Concluded.

VESSEL MEN, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890; 7 establishments, 1901, 1894-1897; 8 establishments, 1892, 1898, 1897-1900; 9 establishments, 1901-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	14	100.0	+2	+14.3	65.54	100.0	-3.97	-6.1	\$0.4161	100.0	+\$0.1509	+36.3
1890	15	107.1	+1	+ 6.7	65.60	100.1	-4.03	-6.1	.4863	116.9	+ .0807	+16.6
1891	15	107.1	+1	+ 6.7	64.00	97.7	-2.43	-3.8	.4997	120.1	+ .0673	+13.5
1892	15	107.1	+1	+ 6.7	66.00	100.7	-4.43	-6.7	.4636	112.6	+ .0984	+21.0
1893	15	107.1	+1	+ 6.7	64.35	98.2	-2.78	-4.3	.4424	106.3	+ .1246	+28.2
1894	14	100.0	+2	+14.3	66.00	100.7	-4.43	-6.7	.4163	100.0	+ .1507	+36.2
1895	14	100.0	+2	+14.3	66.00	100.7	-4.43	-6.7	.4078	98.0	+ .1592	+39.0
1896	14	100.0	+2	+14.3	66.00	100.7	-4.43	-6.7	.3946	94.8	+ .1724	+43.7
1897	14	100.0	+2	+14.3	65.83	100.4	-4.26	-6.5	.3258	78.3	+ .2412	+74.0
1898	14	100.0	+2	+14.3	65.83	100.4	-4.26	-6.5	.3465	83.3	+ .2205	+63.6
1899	14	100.0	+2	+14.3	65.83	100.4	-4.26	-6.5	.3728	89.6	+ .1942	+52.1
1900	16	114.3	.....	.....	60.77	92.7	+ .80	+1.3	.4524	108.7	+ .1146	+25.8
1901	16	114.3	.....	.....	61.57	93.9	.....	.....	.4813	115.7	+ .0857	+17.8
1902	16	114.3	.....	.....	61.57	93.9	.....	.....	.5244	126.0	+ .0426	+ 8.1
1903	16	114.3	.....	.....	61.57	93.9	.....	.....	.5670	136.3	.....	.....

IRON AND STEEL, BLAST FURNACE.

CINDER SNAPPERS, Male.

[Data for employees from 18 establishments for entire period. Data for hours and wages from 19 establishments, 1890-1893, 1896-1903; 18 establishments, 1894, 1895.]

Av. 1890-99.	159	100.0	- 3	- 1.9	84.00	100.0	.....	.....	\$0.1258	100.0	+\$0.0212	+16.9
1890	165	103.8	- 9	- 5.5	84.00	100.0	.....	.....	.1291	102.6	+ .0179	+13.9
1891	159	100.0	- 3	- 1.9	84.00	100.0	.....	.....	.1292	102.7	+ .0178	+13.8
1892	163	102.5	- 7	- 4.3	84.00	100.0	.....	.....	.1330	105.7	+ .0140	+10.5
1893	155	97.5	+ 1	+ .6	84.00	100.0	.....	.....	.1295	102.9	+ .0175	+13.5
1894	154	96.9	+ 2	+ 1.3	84.00	100.0	.....	.....	.1142	90.8	+ .0323	+28.7
1895	160	100.6	- 4	- 2.5	84.00	100.0	.....	.....	.1236	98.3	+ .0234	+18.9
1896	158	99.4	- 2	- 1.3	84.00	100.0	.....	.....	.1289	102.5	+ .0181	+14.0
1897	156	98.1	.....	.....	84.00	100.0	.....	.....	.1175	93.4	+ .0295	+25.1
1898	158	99.4	- 2	- 1.3	84.00	100.0	.....	.....	.1199	95.3	+ .0271	+22.6
1899	160	100.6	- 4	- 2.5	84.00	100.0	.....	.....	.1335	106.1	+ .0135	+10.1
1900	162	101.9	- 6	- 3.7	84.00	100.0	.....	.....	.1383	109.9	+ .0087	+ 6.3
1901	171	107.5	-15	- 8.8	84.00	100.0	.....	.....	.1420	112.9	+ .0050	+ 3.5
1902	155	97.5	+ 1	+ .6	84.00	100.0	.....	.....	.1421	113.0	+ .0049	+ 3.4
1903	156	98.1	.....	.....	84.00	100.0	.....	.....	.1470	116.9	.....	.....

HOT BLAST MEN, Male.

[Data for employees from 17 establishments for entire period. Data for hours and wages from 18 establishments, 1890-1893, 1896-1903; 17 establishments, 1894, 1895.]

Av. 1890-99.	66	100.0	+ 9	+13.6	84.00	100.0	.....	.....	\$0.1391	100.0	+\$0.0251	+18.0
1890	64	97.0	+11	+17.2	84.00	100.0	.....	.....	.1446	104.0	+ .0196	+13.6
1891	65	98.5	+10	+15.4	84.00	100.0	.....	.....	.1448	104.1	+ .0194	+13.4
1892	69	104.5	+ 6	+ 8.7	84.00	100.0	.....	.....	.1472	105.8	+ .0170	+11.5
1893	67	101.5	+ 8	+11.9	84.00	100.0	.....	.....	.1450	104.2	+ .0192	+13.2
1894	65	98.5	+10	+15.4	84.00	100.0	.....	.....	.1286	92.5	+ .0356	+27.7
1895	64	97.0	+11	+17.2	84.00	100.0	.....	.....	.1318	94.8	+ .0324	+24.6
1896	67	101.5	+ 8	+11.9	84.00	100.0	.....	.....	.1378	99.1	+ .0264	+19.2
1897	65	98.5	+10	+15.4	84.00	100.0	.....	.....	.1339	96.3	+ .0303	+22.6
1898	67	101.5	+ 8	+11.9	84.00	100.0	.....	.....	.1341	96.4	+ .0301	+22.4
1899	67	101.5	+ 8	+11.9	84.00	100.0	.....	.....	.1431	102.9	+ .0211	+14.7
1900	69	104.5	+ 6	+ 8.7	84.00	100.0	.....	.....	.1516	109.0	+ .0126	+ 8.3
1901	70	106.1	+ 5	+ 7.1	84.00	100.0	.....	.....	.1518	109.1	+ .0124	+ 8.2
1902	74	112.1	+ 1	+ 1.4	84.00	100.0	.....	.....	.1583	113.8	+ .0059	+ 3.7
1903	75	113.6	.....	.....	84.00	100.0	.....	.....	.1642	118.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BLAST FURNACE—Concluded.

KEEPERS, Male.

[Data for employees from 18 establishments for entire period. Data for hours and wages from 19 establishments, 1890-1893, 1896-1903; 18 establishments, 1894, 1895.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	82	100.0	+11	+13.4	84.00	100.0	.....	.....	\$0.1735	100.0	+\$0.0205	+11.8
1890	76	92.7	+17	+22.4	84.00	100.0	.....	.....	.1844	106.3	+ .0096	+ 5.2
1891	78	95.1	+15	+19.2	84.00	100.0	.....	.....	.1882	108.5	+ .0058	+ 3.1
1892	87	106.1	+ 6	+ 6.9	84.00	100.0	.....	.....	.1888	108.3	+ .0052	+ 2.8
1893	81	98.8	+12	+14.8	84.00	100.0	.....	.....	.1847	106.5	+ .0093	+ 5.0
1894	82	100.0	+11	+13.4	84.00	100.0	.....	.....	.1605	92.5	+ .0335	+20.9
1895	82	100.0	+11	+13.4	84.00	100.0	.....	.....	.1689	97.3	+ .0251	+14.9
1896	79	96.3	+14	+17.7	84.00	100.0	.....	.....	.1717	99.0	+ .0223	+13.0
1897	79	96.3	+14	+17.7	84.00	100.0	.....	.....	.1583	91.2	+ .0357	+22.6
1898	86	104.9	+ 7	+ 8.1	84.00	100.0	.....	.....	.1580	91.1	+ .0360	+22.8
1899	87	106.1	+ 6	+ 6.9	84.00	100.0	.....	.....	.1712	98.7	+ .0228	+13.3
1900	86	104.9	+ 7	+ 8.1	84.00	100.0	.....	.....	.1798	103.6	+ .0142	+ 7.9
1901	90	109.8	+ 3	+ 3.8	84.00	100.0	.....	.....	.1807	104.1	+ .0133	+ 7.4
1902	94	114.6	— 1	— 1.1	84.00	100.0	.....	.....	.1839	108.9	+ .0051	+ 2.7
1903	93	113.4	.....	.....	84.00	100.0	.....	.....	.1940	111.8	.....	.....

KEEPERS' HELPERS, Male.

[Data for employees from 18 establishments for entire period. Data for hours and wages from 19 establishments, 1890-1893, 1896-1903; 18 establishments, 1894, 1895.]

Av. 1890-99.	223	100.0	+16	+ 7.2	84.00	100.0	.....	.....	\$0.1380	100.0	+\$0.0185	+13.4
1890	200	89.7	+39	+19.5	84.00	100.0	.....	.....	.1450	105.1	+ .0115	+ 7.9
1891	200	89.7	+39	+19.5	84.00	100.0	.....	.....	.1478	107.1	+ .0087	+ 5.9
1892	241	108.1	— 2	— .8	84.00	100.0	.....	.....	.1495	108.3	+ .0070	+ 4.7
1893	221	99.1	+18	+ 8.1	84.00	100.0	.....	.....	.1475	106.9	+ .0090	+ 6.1
1894	222	99.6	+17	+ 7.7	84.00	100.0	.....	.....	.1223	88.6	+ .0342	+23.0
1895	219	98.2	+20	+ 9.1	84.00	100.0	.....	.....	.1361	98.6	+ .0204	+15.0
1896	220	98.7	+19	+ 8.6	84.00	100.0	.....	.....	.1392	100.9	+ .0173	+12.4
1897	222	99.6	+17	+ 7.7	84.00	100.0	.....	.....	.1255	90.9	+ .0310	+24.7
1898	236	105.8	+ 3	+ 1.3	84.00	100.0	.....	.....	.1272	92.2	+ .0293	+23.0
1899	244	109.4	— 5	— 2.0	84.00	100.0	.....	.....	.1399	101.4	+ .0166	+11.9
1900	240	107.6	— 1	— .4	84.00	100.0	.....	.....	.1453	105.3	+ .0112	+ 7.7
1901	254	113.9	—15	— 5.9	84.00	100.0	.....	.....	.1457	105.6	+ .0108	+ 7.4
1902	256	114.8	—17	— 6.6	84.00	100.0	.....	.....	.1515	109.8	+ .0050	+ 3.3
1903	239	107.2	.....	.....	84.00	100.0	.....	.....	.1565	113.4	.....	.....

TOP FILLERS, Male.

[Data for employees from 16 establishments for entire period. Data for hours and wages from 17 establishments, 1890-1893, 1896-1903; 16 establishments, 1894, 1895.]

Av. 1890-99.	168	100.0	—40	—23.8	84.00	100.0	.....	.....	\$0.1419	100.0	+\$0.0170	+12.0
1890	147	87.5	—19	—12.9	84.00	100.0	.....	.....	.1473	103.8	+ .0116	+ 7.9
1891	155	92.3	—27	—17.4	84.00	100.0	.....	.....	.1474	103.9	+ .0115	+ 7.8
1892	184	109.5	—56	—30.4	84.00	100.0	.....	.....	.1515	106.8	+ .0074	+ 4.9
1893	171	101.8	—43	—25.1	84.00	100.0	.....	.....	.1495	105.4	+ .0094	+ 6.3
1894	175	104.2	—47	—26.9	84.00	100.0	.....	.....	.1312	92.5	+ .0277	+21.1
1895	177	105.4	—49	—27.7	84.00	100.0	.....	.....	.1330	93.7	+ .0259	+19.5
1896	166	98.8	—38	—22.9	84.00	100.0	.....	.....	.1406	99.1	+ .0183	+13.0
1897	166	98.8	—38	—22.9	84.00	100.0	.....	.....	.1349	95.1	+ .0240	+17.8
1898	170	101.2	—42	—24.7	84.00	100.0	.....	.....	.1344	94.7	+ .0245	+18.2
1899	173	103.0	—45	—26.0	84.00	100.0	.....	.....	.1491	105.1	+ .0098	+ 6.6
1900	171	101.8	—43	—25.1	84.00	100.0	.....	.....	.1542	108.7	+ .0047	+ 3.0
1901	160	95.2	—32	—20.0	84.00	100.0	.....	.....	.1541	108.6	+ .0048	+ 3.1
1902	138	82.1	—10	— 7.2	84.00	100.0	.....	.....	.1565	110.3	+ .0024	+ 1.5
1903	128	76.2	.....	.....	84.00	100.0	.....	.....	.1589	112.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BLOOMING MILL.

CATCHERS, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	2	100.0	+1	+50.0	69.60	100.0	-21.60	-31.0	\$0.3160	100.0	+\$0.1282	+40.6
1890	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.2888	91.4	+.1554	+53.8
1891	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.3045	96.4	+.1397	+45.9
1892	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.3225	102.1	+.1217	+37.7
1893	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.3377	106.9	+.1065	+31.5
1894	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.2922	92.5	+.1520	+52.0
1895	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.3128	99.0	+.1314	+42.0
1896	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.3260	103.2	+.1182	+36.3
1897	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.3303	104.5	+.1139	+34.5
1898	2	100.0	+1	+50.0	72.00	103.4	-24.00	-33.3	.3117	98.6	+.1325	+42.5
1899	3	150.0	.....	.....	48.00	69.0	.....	.....	.3335	105.5	+.1107	+33.2
1900	3	150.0	.....	.....	48.00	69.0	.....	.....	.3536	111.9	+.0906	+25.6
1901	3	150.0	.....	.....	48.00	69.0	.....	.....	.4348	137.6	+.0094	+ 2.2
1902	3	150.0	.....	.....	48.00	69.0	.....	.....	.4897	155.0	-.0455	- 9.3
1903	3	150.0	.....	.....	48.00	69.0	.....	.....	.4442	140.6	.....	.....

CHARGERS, Male.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890, 1894-1896; 6 establishments, 1891-1893, 1897-1903.]

Av. 1890-99.	38	100.0	- 6	-15.8	59.08	100.0	-1.03	-1.7	\$0.2852	100.0	+\$0.0342	+12.0
1890	39	102.6	- 7	-17.9	57.23	96.9	+ .82	+1.4	.2882	101.1	+.0312	+10.8
1891	42	110.5	-10	-23.8	56.16	95.1	+1.89	+3.4	.3048	106.9	+.0146	+ 4.8
1892	45	118.4	-13	-28.9	57.88	98.0	+ .17	+ .3	.3320	116.4	-.0126	- 3.8
1893	46	121.1	-14	-30.4	58.42	98.9	+ .37	+ .6	.3184	111.6	+.0010	+ .3
1894	38	100.0	- 6	-15.8	60.63	102.6	-2.58	-4.3	.2558	89.7	+.0636	+24.9
1895	35	92.1	- 3	- 8.6	59.66	101.0	-1.61	-2.7	.2936	102.9	+.0258	+ 8.8
1896	34	89.5	- 2	- 5.9	59.29	100.4	-1.24	-2.1	.3090	108.3	+.0104	+ 3.4
1897	35	92.1	- 3	- 8.6	60.64	102.6	-2.59	-4.3	.2369	83.1	+.0825	+34.8
1898	35	92.1	- 3	- 8.6	60.64	102.6	-2.59	-4.3	.2518	88.3	+.0676	+26.8
1899	33	86.8	- 1	- 3.0	60.20	101.9	-2.15	-3.6	.2617	91.8	+.0577	+22.0
1900	31	81.6	+ 1	+ 3.2	64.02	108.4	-5.97	-9.3	.2399	105.2	+.0195	+ 6.5
1901	37	97.4	- 5	-13.5	59.18	100.2	-1.13	-1.9	.2710	95.0	+.0484	+17.9
1902	32	84.2	.....	.....	58.76	99.5	- .71	-1.2	.2872	100.7	+.0322	+11.2
1903	32	84.2	.....	.....	58.06	98.3	.....	.....	.3194	112.0	.....	.....

DRAWERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	11	100.0	-2	-18.2	63.09	100.0	+ 8.91	+14.1	\$0.2670	100.0	+\$0.0276	+10.3
1890	15	136.4	-6	-40.0	48.00	76.1	+24.00	+50.0	.3425	128.3	-.0479	-14.0
1891	15	136.4	-6	-40.0	48.00	76.1	+24.00	+50.0	.2356	110.7	-.0010	- .3
1892	14	127.3	-5	-35.7	51.43	81.5	+20.57	+40.0	.3306	123.8	-.0360	-10.9
1893	14	127.3	-5	-35.7	51.43	81.5	+20.57	+40.0	.3152	118.1	-.0206	- 6.5
1894	10	90.9	-1	-10.0	72.00	114.1	.....	.....	.2154	80.7	+.0792	+36.8
1895	9	81.8	.....	.....	72.00	114.1	.....	.....	.2380	89.1	+.0566	+23.8
1896	9	81.8	.....	.....	72.00	114.1	.....	.....	.2624	98.3	+.0322	+12.3
1897	9	81.8	.....	.....	72.00	114.1	.....	.....	.2044	76.6	+.0902	+44.1
1898	9	81.8	.....	.....	72.00	114.1	.....	.....	.2067	77.4	+.0879	+42.5
1899	9	81.8	.....	.....	72.00	114.1	.....	.....	.2582	97.1	+.0354	+13.7
1900	9	81.8	.....	.....	72.00	114.1	.....	.....	.2939	110.1	+.0007	+ .2
1901	9	81.8	.....	.....	72.00	114.1	.....	.....	.2820	106.6	+.0126	+ 4.5
1902	9	81.8	.....	.....	72.00	114.1	.....	.....	.3279	122.8	-.0333	-10.2
1903	9	81.8	.....	.....	72.00	114.1	.....	.....	.2946	110.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BLOOMING MILL—Continued.

HEATERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890, 1894-1896; 7 establishments, 1891-1893, 1897-1899; 8 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	27	100.0	-1	- 3.7	64.47	100.0	-6.32	- 9.8	\$0.4257	100.0	+\$0.1858	+43.6
1890	33	122.2	-7	-21.2	64.73	100.4	-6.58	-10.2	.4192	98.5	+ .1923	+45.9
1891	33	122.2	-7	-21.2	64.00	99.3	-5.85	- 9.1	.4394	103.0	+ .1731	+39.5
1892	32	118.5	-6	-18.8	64.42	99.9	-6.27	- 9.7	.4485	105.4	+ .1630	+36.8
1893	28	103.7	-2	- 7.1	63.53	98.5	-5.38	- 8.5	.4747	111.5	+ .1368	+28.8
1894	22	81.5	+4	+18.2	65.45	101.5	-7.30	-11.2	.3883	91.2	+ .2232	+57.5
1895	24	88.9	+2	+ 8.3	66.00	102.4	-7.85	-11.9	.4291	100.8	+ .1824	+42.5
1896	22	81.5	+4	+18.2	65.45	101.5	-7.30	-11.2	.4347	102.1	+ .1768	+40.7
1897	22	81.5	+4	+18.2	65.46	101.5	-7.31	-11.2	.3772	88.6	+ .2343	+62.1
1898	23	85.2	+3	+13.0	65.70	101.9	-7.55	-11.5	.3972	93.8	+ .2143	+54.0
1899	27	100.0	-1	- 3.7	59.91	92.9	-1.76	- 2.9	.4497	105.6	+ .1618	+36.0
1900	26	96.3	.....	.....	62.38	96.8	-4.23	- 6.8	.4924	115.7	+ .1191	+24.2
1901	27	100.0	-1	- 3.7	58.54	90.8	- 3.9	- 7	.5417	127.2	+ .0698	+12.9
1902	26	96.3	.....	.....	58.15	90.2	.....	.....	.5973	140.3	+ .0142	+ 2.4
1903	26	96.3	.....	.....	58.15	90.2	.....	.....	.6115	143.6	.....	.....

HEATER'S HELPERS, Male.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 4 establishments, 1890, 1894-1896; 5 establishments, 1891-1893, 1897-1899; 6 establishments, 1900-1903.]

Av. 1890-99.	49	100.0	-23	-46.9	70.57	100.0	-7.52	-10.7	\$0.1918	100.0	+\$0.1060	+55.8
1890	81	165.3	-55	-67.9	71.41	101.2	-8.36	-11.7	.1597	83.3	+ .1381	+86.5
1891	76	155.1	-50	-65.8	71.50	101.3	-8.45	-11.8	.1676	87.4	+ .1302	+77.7
1892	70	142.9	-44	-62.9	72.00	102.0	-8.95	-12.4	.1680	87.6	+ .1298	+77.3
1893	52	106.1	-26	-50.0	72.00	102.0	-8.95	-12.4	.2083	108.6	+ .0895	+43.0
1894	31	63.3	-5	-16.1	72.00	102.0	-8.95	-12.4	.1949	101.6	+ .1029	+52.8
1895	41	83.7	-15	-36.6	72.00	102.0	-8.95	-12.4	.1897	98.9	+ .1081	+57.0
1896	31	63.3	-5	-16.1	72.00	102.0	-8.95	-12.4	.1892	98.6	+ .1086	+57.4
1897	31	63.3	-5	-16.1	69.71	98.8	-6.66	- 9.6	.1889	98.5	+ .1089	+57.6
1898	36	73.5	-10	-27.8	69.92	99.1	-6.87	- 9.8	.1966	102.5	+ .1012	+51.5
1899	44	89.8	-18	-40.9	63.19	89.5	- 1.14	- 2	.2555	133.2	+ .0423	+16.6
1900	35	71.4	-9	-25.7	65.95	93.5	-2.90	- 4.4	.2462	128.4	+ .0516	+21.0
1901	31	63.3	-5	-16.1	64.35	91.2	-1.30	- 2.0	.2658	138.6	+ .0320	+12.0
1902	26	53.1	.....	.....	64.06	90.8	-1.01	- 1.6	.3197	166.7	+ .0219	- 6.9
1903	26	53.1	.....	.....	63.05	89.8	.....	.....	.2978	155.3	.....	.....

ROLLERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890, 1894-1896; 7 establishments, 1891-1893, 1897-1899; 8 establishments, 1900-1903.]

Av. 1890-99.	19	100.0	+6	+31.6	60.78	100.0	-6.61	-10.9	\$0.4973	100.0	+\$0.1795	+36.1
1890	17	89.5	+8	+47.1	62.12	102.2	-7.95	-12.8	.4555	91.6	+ .2213	+48.6
1891	18	94.7	+7	+38.9	60.00	98.7	-5.83	- 9.7	.5657	113.8	+ .1111	+19.6
1892	18	94.7	+7	+38.9	61.20	100.7	-7.03	-11.5	.6281	126.3	+ .0487	+ 7.8
1893	19	100.0	+6	+31.6	61.71	101.5	-7.54	-12.2	.5470	110.0	+ .1298	+23.7
1894	19	100.0	+6	+31.6	60.63	99.8	-6.46	-10.7	.4378	88.0	+ .2390	+54.6
1895	19	100.0	+6	+31.6	60.63	99.8	-6.46	-10.7	.4864	97.8	+ .1904	+39.1
1896	20	105.3	+5	+25.0	61.20	100.7	-7.03	-11.5	.5055	101.6	+ .1713	+33.9
1897	20	105.3	+5	+25.0	61.59	101.3	-7.42	-12.0	.4345	87.4	+ .2423	+55.8
1898	20	105.3	+5	+25.0	61.59	101.3	-7.42	-12.0	.4554	91.6	+ .2214	+48.6
1899	23	121.1	+2	+ 8.7	57.08	93.9	-2.91	- 5.1	.4570	91.9	+ .2198	+48.1
1900	23	121.1	+2	+ 8.7	58.19	95.7	-4.02	- 6.9	.5336	107.3	+ .1432	+26.8
1901	25	131.6	.....	.....	54.17	89.1	.....	.....	.5940	119.4	+ .0828	+13.9
1902	25	131.6	.....	.....	54.17	89.1	.....	.....	.6044	121.5	+ .0724	+12.0
1903	25	131.6	.....	.....	54.17	89.1	.....	.....	.6768	136.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BLOOMING MILL—Concluded.

TABLEMEN, Male.

[Data for employees from 2 establishments for entire period. Data for hours and wages from 2 establishments, 1890-1899; 3 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99	3	100.0	+1	+ 33.3	70.80	100.0	+1.20	+1.7	\$0.1625	100.0	+\$0.0269	+16.6
1890	4	133.3	.....	.....	66.00	93.2	+6.00	+9.1	.1906	117.3	-.0012	-.6
1891	4	133.3	.....	.....	66.00	93.2	+6.00	+9.1	.1810	111.4	+.0084	+ 4.6
1892	4	133.3	.....	.....	72.00	101.7	.....	.....	.1519	93.5	+.0375	+24.7
1893	4	133.3	.....	.....	72.00	101.7	.....	.....	.1651	101.6	+.0243	+14.7
1894	3	100.0	+1	+ 33.3	72.00	101.7	.....	.....	.1442	88.7	+.0452	+31.3
1895	3	100.0	+1	+ 33.3	72.00	101.7	.....	.....	.1379	84.9	+.0515	+37.3
1896	3	100.0	+1	+ 33.3	72.00	101.7	.....	.....	.1641	101.0	+.0258	+15.4
1897	3	100.0	+1	+ 33.3	72.00	101.7	.....	.....	.1640	100.9	+.0254	+15.5
1898	2	66.7	+2	+100.0	72.00	101.7	.....	.....	.1550	95.4	+.0344	+22.2
1899	3	100.0	+1	+ 33.3	72.00	101.7	.....	.....	.1713	105.4	+.0181	+10.6
1900	4	133.3	.....	.....	72.00	101.7	.....	.....	.1546	95.1	+.0348	+22.5
1901	4	133.3	.....	.....	72.00	101.7	.....	.....	.1731	106.5	+.0163	+ 9.4
1902	4	133.3	.....	.....	72.00	101.7	.....	.....	.1833	112.8	+.0061	+ 3.3
1903	4	133.3	.....	.....	72.00	101.7	.....	.....	.1894	116.6	.....	.....

IRON AND STEEL, MUCK BAR.

CATCHERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890-1898; 10 establishments, 1899; 11 establishments, 1900; 12 establishments 1901-1903.]

Av. 1890-99	28	100.0	.....	.....	59.41	100.0	+0.57	+1.0	\$0.2190	100.0	+\$0.0736	+33.6
1890	25	89.3	+3	+12.0	59.60	100.3	+ .38	+ 6	.2420	110.5	+.0506	+20.9
1891	27	96.4	+1	+ 3.7	59.63	100.4	+ .35	+ 6	.2352	107.4	+.0574	+24.4
1892	28	100.0	.....	.....	59.64	100.4	+ .34	+ 6	.2256	103.0	+.0670	+29.7
1893	28	100.0	.....	.....	59.64	100.4	+ .34	+ 6	.2234	102.0	+.0692	+31.0
1894	30	107.1	-2	- 6.7	59.67	100.4	+ .31	+ 5	.2084	95.2	+.0842	+40.4
1895	30	107.1	-2	- 6.7	59.67	100.4	+ .31	+ 5	.1980	88.1	+.0996	+51.6
1896	28	100.0	.....	.....	58.21	98.0	+1.77	+3.0	.2073	94.9	+.0843	+40.8
1897	33	117.9	-5	-15.2	59.09	99.5	+ .89	+1.5	.2095	95.7	+.0831	+39.7
1898	29	103.6	-1	- 3.4	59.66	100.4	+ .32	+ 5	.2119	96.8	+.0807	+38.1
1899	25	89.3	+3	+12.0	59.30	99.8	+ .68	+1.1	.2328	106.3	+.0598	+25.7
1900	28	100.0	.....	.....	61.47	103.5	-1.49	-2.4	.2344	116.2	+.0382	+15.0
1901	27	96.4	+1	+ 3.7	60.13	101.2	- .16	- 2	.2473	112.9	+.0453	+18.3
1902	26	92.9	+2	+ 7.7	59.97	100.9	+ .01	+ .02	.2657	121.3	+.0269	+10.1
1903	28	100.0	.....	.....	59.98	101.0	.....	.....	.2926	133.6	.....	.....

HOOKERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890-1898; 10 establishments, 1899; 11 establishments, 1900; 12 establishments, 1901-1903.]

Av. 1890-99	23	100.0	.....	.....	58.73	100.0	+0.33	+0.6	\$0.1534	100.0	+\$0.0721	+47.0
1890	23	100.0	.....	.....	59.04	100.5	+ .02	+ .03	.1462	95.3	+.0793	+54.2
1891	24	104.3	-1	- 4.2	59.08	100.6	+ .02	+ .03	.1468	95.7	+.0787	+53.6
1892	22	95.7	+1	+ 4.5	59.00	100.5	+ .06	+ 1	.1474	96.1	+.0781	+53.0
1893	23	100.0	.....	.....	59.04	100.5	+ .02	+ .03	.1421	92.6	+.0834	+58.7
1894	23	100.0	.....	.....	59.21	100.8	- .15	- 3	.1301	84.8	+.0954	+73.3
1895	25	108.7	-2	- 8.0	59.12	100.7	- .06	- 1	.1440	93.9	+.0815	+56.6
1896	21	91.3	+2	+ 9.5	57.05	97.1	+2.01	+3.5	.1619	105.5	+.0636	+39.3
1897	22	95.7	+1	+ 4.5	58.09	98.9	+ .97	+1.7	.1600	108.8	+.0586	+35.1
1898	20	87.0	+3	+15.0	58.90	100.3	+ .16	+ 3	.1714	111.7	+.0541	+31.6
1899	24	104.3	-1	- 4.2	58.80	100.1	+ .26	+ 4	.1775	115.7	+.0480	+27.0
1900	24	104.3	-1	- 4.2	60.57	103.1	-1.51	-2.5	.2088	136.1	+.0167	+ 8.0
1901	23	100.0	.....	.....	59.06	100.6	.....	.....	.194	126.6	+.0313	+16.1
1902	26	113.0	-3	-11.5	58.97	100.4	+ .09	+ .2	.1945	126.8	+.0310	+15.9
1903	23	100.0	.....	.....	59.06	100.6	.....	.....	.2255	147.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, MUCK BAR—Continued.

PUDDLERS, Male.

[Data for employees from 11 establishments for entire period. Data for hours and wages from 11 establishments, 1890-1899; 12 establishments, 1900; 13 establishments, 1901-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	425	100.0	+ 78	+18.4	57.76	100.0	+1.87	+3.2	\$0.3515	100.0	+\$0.0164	+4.7
1890	461	108.5	+ 42	+ 9.1	57.66	99.8	+1.97	+3.4	.3758	106.9	— .0079	- 2.1
1891	461	108.5	+ 42	+ 9.1	57.54	99.6	+2.09	+3.6	.3692	105.0	— .0013	- 4
1892	517	121.6	— 14	- 2.7	57.13	98.9	+2.50	+4.4	.3603	102.5	+ .0076	+ 2.1
1893	417	98.1	+ 86	+ 20.6	57.28	99.2	+2.35	+4.1	.3970	112.9	— .0291	- 7.3
1894	397	93.4	+106	+26.7	58.83	101.9	+ .80	+1.4	.3298	93.8	+ .0381	+11.6
1895	372	87.5	+131	+35.2	58.51	101.3	+1.12	+1.9	.3439	97.8	+ .0240	+ 7.0
1896	424	99.8	+ 79	+18.6	55.77	96.6	+3.86	+6.9	.3417	97.2	+ .0262	+ 7.7
1897	403	94.8	+100	+24.8	58.03	100.5	+1.60	+2.8	.3309	94.1	+ .0370	+11.2
1898	390	91.8	+113	+29.0	58.66	101.6	+ .97	+1.7	.3304	94.0	+ .0375	+11.3
1899	410	96.5	+ 93	+22.7	58.20	100.8	+1.43	+2.5	.3362	95.6	+ .0317	+ 8.4
1900	434	102.1	+ 69	+15.9	60.98	105.6	-1.35	-2.2	.3361	95.6	+ .0318	+ 8.5
1901	437	102.8	+ 66	+15.1	59.61	103.2	+ .02	+ .03	.3415	97.2	+ .0264	+ 7.7
1902	442	104.0	+ 61	+13.8	59.63	103.2	.....	.....	.3633	103.4	+ .0046	+ 1.3
1903	503	118.4	.....	.....	59.63	103.2	.....	.....	.3679	104.7	.....	.....

PUDDLERS' HELPERS, Male.

[Data for employees from 11 establishments for entire period. Data for hours and wages from 11 establishments, 1890-1899; 12 establishments, 1900; 13 establishments, 1901-1903.]

Av. 1890-99.	409	100.0	+ 74	+18.1	57.68	100.0	+1.93	+3.3	\$0.2161	100.0	+\$0.0271	+12.5
1890	439	107.3	+ 44	+10.0	57.54	99.8	+2.07	+3.6	.2253	104.3	+ .0179	+ 7.9
1891	456	111.5	+ 27	+ 5.9	57.51	99.7	+2.10	+3.7	.2177	100.7	+ .0255	+11.7
1892	497	121.5	— 14	- 2.8	57.02	98.9	+2.59	+4.5	.2157	99.8	+ .0275	+12.7
1893	388	94.9	+ 95	+24.5	57.08	99.0	+2.53	+4.4	.2481	114.8	— .0049	- 2.0
1894	382	93.4	+101	+26.4	58.80	101.9	+ .81	+1.4	.2044	94.6	+ .0388	+19.0
1895	355	86.8	+128	+36.1	58.43	101.3	+1.18	+2.0	.2168	100.8	+ .0264	+12.2
1896	417	102.0	+ 66	+15.8	55.70	96.6	+3.91	+7.0	.2114	97.8	+ .0318	+15.0
1897	402	98.3	+ 81	+20.1	58.02	100.6	+1.59	+2.7	.2020	93.5	+ .0412	+20.4
1898	355	86.8	+128	+36.1	58.54	101.5	+1.07	+1.8	.2142	99.1	+ .0290	+13.5
1899	396	96.8	+ 87	+22.0	58.14	100.8	+1.47	+2.5	.2052	95.0	+ .0380	+18.5
1900	410	100.2	+ 73	+17.8	61.03	105.8	- 1.42	-2.3	.2375	109.9	+ .0057	+ 2.4
1901	426	104.2	+ 57	+13.4	59.60	103.3	+ .01	+ .02	.2385	110.4	+ .0047	+ 2.0
1902	423	103.4	+ 60	+14.2	59.62	103.4	- .01	- .02	.2497	115.5	— .0065	- 2.6
1903	483	118.1	.....	.....	59.61	103.3	.....	.....	.2432	112.5	.....	.....

ROLLERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890-1899; 10 establishments, 1900; 11 establishments, 1901-1903.]

Av. 1890-99.	22	100.0	+1	+4.5	60.72	100.0	+0.66	+1.1	\$0.3690	100.0	+\$0.1719	+46.6
1890	23	104.5	.....	.....	60.96	100.4	+ .42	+ .7	.3775	102.3	+ .1634	+43.3
1891	22	100.0	+1	+4.5	61.00	100.5	+ .38	+ .6	.3882	105.2	+ .1527	+39.3
1892	21	95.5	+2	+9.5	61.05	100.5	+ .38	+ .6	.3714	100.7	+ .1695	+45.6
1893	22	100.0	+1	+4.5	61.00	100.5	+ .38	+ .6	.3933	106.6	+ .1476	+37.5
1894	24	109.1	-1	-4.2	60.92	100.3	+ .46	+ .8	.3538	95.9	+ .1371	+52.9
1895	22	100.0	+1	+4.5	61.00	100.5	+ .38	+ .6	.3414	92.5	+ .1995	+58.4
1896	21	95.5	+2	+9.5	59.14	97.4	+2.24	+3.8	.3414	92.5	+ .1995	+58.4
1897	22	100.0	+1	+4.5	60.09	99.0	+1.29	+2.1	.3543	96.0	+ .1866	+52.7
1898	22	100.0	+1	+4.5	61.00	100.5	+ .38	+ .6	.3783	102.5	+ .1626	+43.0
1899	22	100.0	+1	+4.5	61.00	100.5	+ .38	+ .6	.3906	105.9	+ .1503	+38.5
1900	23	104.5	.....	.....	62.59	103.1	- 1.21	-1.9	.4313	130.4	+ .0596	+12.4
1901	23	104.5	.....	.....	61.59	101.4	- .21	- .3	.4827	130.8	+ .0582	+12.1
1902	23	104.5	.....	.....	61.38	101.1	.....	.....	.4980	135.0	+ .0429	+ 8.6
1903	25	104.5	.....	.....	61.38	101.1	.....	.....	.5409	146.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, MUCK BAR—Concluded.

ROUGHERS, Male.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1898; 6 establishments, 1899; 7 establishments, 1900; 8 establishments, 1901-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	13	100.0	+1	+ 7.7	58.23	100.0	+2.77	+4.8	\$0.3136	100.0	+\$0.0896	+ 28.6
1890	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.3233	103.1	+.0799	+ 24.7
1891	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.3202	102.1	+.0830	+ 25.9
1892	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.3198	102.0	+.0834	+ 26.1
1893	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.3128	99.7	+.0904	+ 28.9
1894	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.3007	95.9	+.1025	+ 34.1
1895	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.2792	89.0	+.1240	+ 44.4
1896	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.2872	91.6	+.1160	+ 40.4
1897	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.3027	96.5	+.1005	+ 33.2
1898	13	100.0	+1	+ 7.7	58.31	100.1	+2.69	+4.6	.3163	100.9	+.0869	+ 27.5
1899	12	92.3	+2	+16.7	57.50	98.7	+3.50	+6.1	.3740	119.3	+.0292	+ 7.8
1900	13	100.0	+1	+ 7.7	61.39	105.4	— .39	— .6	.3677	117.3	+.0355	+ 9.7
1901	13	100.0	+1	+ 7.7	61.32	105.3	— .32	— .5	.3643	116.2	+.0389	+ 10.7
1902	14	107.7	.....	.....	61.00	104.8	.....	.....	.3519	112.2	+.0513	+ 14.6
1903	14	107.7	.....	.....	61.00	104.8	.....	.....	.4032	128.6	.....	.....

IRON AND STEEL, OPEN HEARTH STEEL.

LABLE LINERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890-1893; 4 establishments, 1894-1903.]

Av. 1890-99.	7	100.0	—2	—28.6	73.54	100.0	—0.21	—0.3	\$0.1980	100.0	+\$0.0905	+45.7
1890	7	100.0	—2	—28.6	73.71	100.2	— .38	— .5	.1941	98.0	+.0944	+48.6
1891	7	100.0	—2	—28.6	73.71	100.2	— .38	— .5	.1941	98.0	+.0944	+48.6
1892	7	100.0	—2	—28.6	73.71	100.2	— .38	— .5	.1941	98.0	+.0944	+48.6
1893	7	100.0	—2	—28.6	73.71	100.2	— .38	— .5	.1941	98.0	+.0944	+48.6
1894	7	100.0	—2	—28.6	73.50	99.9	— .17	— .2	.1790	90.4	+.1095	+61.2
1895	7	100.0	—2	—28.6	73.50	99.9	— .17	— .2	.2081	105.1	+.0804	+38.6
1896	7	100.0	—2	—28.6	73.50	99.9	— .17	— .2	.2029	102.5	+.0856	+42.2
1897	7	100.0	—2	—28.6	73.50	99.9	— .17	— .2	.1975	94.7	+.0910	+46.1
1898	7	100.0	—2	—28.6	73.33	99.7	.....	.....	.2040	103.0	+.0845	+41.4
1899	7	100.0	—2	—28.6	73.20	99.5	+ .13	+ .2	.2123	107.2	+.0762	+35.9
1900	5	71.4	.....	.....	73.50	99.9	— .17	— .2	.2548	128.7	+.0337	+13.2
1901	5	71.4	.....	.....	73.33	99.7	.....	.....	.2513	126.9	+.0372	+14.8
1902	5	71.4	.....	.....	73.33	99.7	.....	.....	.2558	129.2	+.0327	+12.8
1903	5	71.4	.....	.....	73.33	99.7	.....	.....	.2885	145.7	.....	.....

LABLE MEN, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890-1899; 10 establishments, 1900-1903.]

Av. 1890-99.	30	100.0	+1	+ 3.3	71.97	100.0	+0.39	+0.5	\$0.2045	100.0	+\$0.0531	+26.0
1890	30	100.0	+1	+ 3.3	71.60	99.5	+ .76	+1.1	.2321	113.5	+.0255	+11.0
1891	35	116.7	—4	—11.4	71.66	99.6	+ .70	+1.0	.2157	105.5	+.0419	+19.4
1892	34	113.3	—3	— 8.8	71.65	99.6	+ .71	+1.0	.2058	100.6	+.0518	+25.2
1893	34	113.3	—3	— 8.8	71.65	99.6	+ .71	+1.0	.1964	96.0	+.0612	+31.2
1894	33	110.0	—2	— 6.1	71.64	99.5	+ .72	+1.0	.1845	90.2	+.0731	+39.6
1895	28	93.3	+3	+10.7	71.57	99.4	+ .79	+1.1	.2022	98.9	+.0554	+27.4
1896	24	80.0	+7	+29.2	72.50	100.7	— .14	— .2	.2114	103.4	+.0462	+21.9
1897	25	83.3	+6	+24.0	72.48	100.7	— .12	— .2	.1982	98.9	+.0594	+30.0
1898	26	86.7	+5	+19.2	72.46	100.7	— .10	— .1	.1943	95.0	+.0633	+32.6
1899	27	90.0	+4	+14.8	72.44	100.7	— .08	— .1	.2043	99.9	+.0533	+26.1
1900	25	83.3	+6	+24.0	72.44	100.7	— .08	— .1	.2377	116.2	+.0199	+ 8.4
1901	25	83.3	+6	+24.0	72.44	100.7	— .08	— .1	.2475	121.0	+.0101	+ 4.1
1902	27	90.0	+4	+14.8	72.41	100.6	— .05	— .1	.2553	124.8	+.0023	+ .9
1903	31	103.3	.....	.....	72.36	100.5	.....	.....	.2576	126.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, OPEN HEARTH STEEL—Concluded.

MELTERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890-1899; 10 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	48	100.0	— 9	—18.8	73.87	100.0	+0.18	+0.2	\$0.3707	100.0	+\$0.0887	+23.9
1890	51	106.3	—12	—23.5	73.88	100.0	+ .17	+ .2	.3811	102.8	+ .0783	+20.5
1891	56	116.7	—17	—30.4	73.50	99.5	+ .55	+ .7	.3915	105.6	+ .0679	+17.3
1892	54	112.5	—15	—27.8	73.78	99.9	+ .27	+ .4	.3492	94.2	+ .1102	+31.6
1893	56	116.7	—17	—30.4	73.71	99.8	+ .34	+ .6	.3478	93.8	+ .1116	+32.1
1894	56	116.7	—17	—30.4	73.50	99.5	+ .55	+ .7	.3366	90.8	+ .1228	+36.5
1895	40	83.3	—1	— 2.5	74.10	100.3	— .05	— .1	.3603	97.2	+ .0991	+27.5
1896	42	87.5	— 3	— 7.1	74.00	100.2	+ .05	+ .1	.3643	98.3	+ .0951	+26.1
1897	39	81.3	.....	.....	74.15	100.4	— .10	— .1	.3770	101.7	+ .0824	+21.9
1898	40	83.3	— 1	— 2.5	74.10	100.3	— .05	— .1	.3895	105.1	+ .0699	+17.9
1899	43	89.6	— 4	— 9.3	73.95	100.1	+ .10	+ .1	.4096	110.5	+ .0498	+12.2
1900	42	87.5	— 3	— 7.1	73.91	100.1	+ .14	+ .2	.4371	117.9	+ .0223	+ 5.1
1901	42	87.5	— 3	— 7.1	73.91	100.1	+ .14	+ .2	.4459	120.3	+ .0135	+ 3.0
1902	41	85.4	— 2	— 4.9	73.95	100.1	+ .10	+ .1	.4581	123.6	+ .0013	+ .3
1903	39	81.3	.....	.....	74.05	100.2	.....	.....	.4594	123.9	.....	.....

MELTERS' HELPERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890-1899; 10 establishments, 1900-1903.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.	Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.	Wages per hour.
			Num-ber.	Per cent.			Amount.
Av. 1890-99.	124	100.0	+41	+33.1	71.99	100.0	+\$0.0887
1890	97	78.2	+68	+70.1	72.62	100.9	+0.0872
1891	110	88.7	+55	+60.0	72.11	100.2	+0.0862
1892	108	87.1	+57	+62.8	72.11	100.2	+0.0957
1893	112	90.3	+53	+47.3	72.11	100.2	+0.0946
1894	110	88.7	+55	+60.0	72.11	100.2	+0.1172
1895	122	98.4	+43	+35.2	72.10	100.2	+0.1026
1896	137	110.5	+28	+20.4	71.74	99.7	+0.0812
1897	133	107.3	+32	+24.1	71.73	99.6	+0.0822
1898	141	113.7	+24	+17.0	71.74	99.7	+0.0861
1899	166	133.9	— 1	— 6	71.49	99.3	+0.0586
1900	168	135.5	— 3	— 1.8	71.55	99.4	+0.0851
1901	170	137.1	— 5	— 2.9	71.60	99.5	+0.0451
1902	170	137.1	— 5	— 2.9	71.61	99.5	+0.0156
1903	165	133.1	.....	.....	72.06	100.1	.....

PITMEN, Male.

[Data for employees from 8 establishments for entire period. Data for hours and wages from 8 establishments, 1890-1899; 9 establishments, 1900-1903.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.	Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.	Wages per hour.
			Num-ber.	Per cent.			Amount.
Av. 1890-99.	86	100.0	+1	+ 1.2	72.66	100.0	+\$0.0827
1890	81	94.2	+6	+ 7.4	73.33	100.9	+0.0181
1891	93	108.1	—6	— 6.5	73.16	100.7	+0.0202
1892	96	111.6	—9	— 9.4	72.88	100.3	+0.0314
1893	94	109.3	—7	— 7.4	72.64	100.0	+0.0328
1894	82	95.3	+5	+ 6.1	73.02	100.5	+0.0466
1895	79	91.9	+8	+10.1	72.46	99.7	+0.0419
1896	86	100.0	+1	+ 1.2	72.42	99.7	+0.0337
1897	80	93.0	+7	+ 8.8	72.15	99.3	+0.0386
1898	82	95.3	+5	+ 6.1	72.44	99.7	+0.0379
1899	91	105.8	—4	— 4.4	72.13	99.3	+0.0261
1900	87	101.2	.....	.....	72.13	99.3	+0.0152
1901	88	102.5	—1	— 1.1	71.87	98.9	+0.0170
1902	81	94.2	+6	+ 7.4	71.86	98.9	+0.0054
1903	87	101.2	.....	.....	73.48	101.1	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 713.]

IRON AND STEEL, RAILS.

CATCHERS, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	1	100.0	.....	.....	72.00	100.0	.....	.....	\$0.3391	100.0	+\$0.2506	+ 73.9
1890	1	100.0	.....	.....	72.00	100.0	.....	.....	.8526	104.0	+ .2371	+ 67.2
1891	1	100.0	.....	.....	72.00	100.0	.....	.....	.8718	109.6	+ .2179	+ 58.6
1892	1	100.0	.....	.....	72.00	100.0	.....	.....	.8346	113.4	+ .2051	+ 53.3
1893	1	100.0	.....	.....	72.00	100.0	.....	.....	.8141	92.6	+ .2756	+ 87.7
1894	1	100.0	.....	.....	72.00	100.0	.....	.....	.8333	98.3	+ .2564	+ 76.9
1895	1	100.0	.....	.....	72.00	100.0	.....	.....	.8526	104.0	+ .2371	+ 67.2
1896	1	100.0	.....	.....	72.00	100.0	.....	.....	.8526	104.0	+ .2371	+ 67.2
1897	1	100.0	.....	.....	72.00	100.0	.....	.....	.8333	98.3	+ .2564	+ 76.9
1898	1	100.0	.....	.....	72.00	100.0	.....	.....	.8077	90.7	+ .2820	+ 91.6
1899	1	100.0	.....	.....	72.00	100.0	.....	.....	.2885	85.1	+ .3012	+104.4
1900	1	100.0	.....	.....	72.00	100.0	.....	.....	.5513	162.6	+ .0384	+ 7.0
1901	1	100.0	.....	.....	72.00	100.0	.....	.....	.5256	155.0	+ .0641	+ 12.2
1902	1	100.0	.....	.....	72.00	100.0	.....	.....	.6026	177.7	— .0129	— 2.1
1903	1	100.0	.....	.....	72.00	100.0	.....	.....	.5897	173.9	.....	.....

CHARGERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	9	100.0	.....	.....	68.80	100.0	+ 3.20	+ 4.7	\$0.2111	100.0	+\$0.0402	+19.0
1890	9	100.0	.....	.....	56.00	81.4	+16.00	+28.6	.2428	115.0	+ .0085	+ 3.5
1891	9	100.0	.....	.....	56.00	81.4	+16.00	+28.6	.2135	101.1	+ .0378	+17.7
1892	7	77.8	+2	+28.6	72.00	104.7	.....	.....	.3083	143.7	+ .0520	+17.1
1893	7	77.8	+2	+28.6	72.00	104.7	.....	.....	.2058	97.5	+ .0455	+22.1
1894	9	100.0	.....	.....	72.00	104.7	.....	.....	.1866	92.7	+ .0557	+28.5
1895	9	100.0	.....	.....	72.00	104.7	.....	.....	.1996	94.6	+ .0517	+25.9
1896	9	100.0	.....	.....	72.00	104.7	.....	.....	.2123	100.6	+ .0890	+18.4
1897	9	100.0	.....	.....	72.00	104.7	.....	.....	.1587	75.2	+ .0926	+58.3
1898	9	100.0	.....	.....	72.00	104.7	.....	.....	.1854	87.8	+ .0659	+35.5
1899	9	100.0	.....	.....	72.00	104.7	.....	.....	.1941	91.9	+ .0572	+29.5
1900	9	100.0	.....	.....	72.00	104.7	.....	.....	.2497	118.5	+ .0016	+ .6
1901	9	100.0	.....	.....	72.00	104.7	.....	.....	.2494	118.1	+ .0019	+ .8
1902	9	100.0	.....	.....	72.00	104.7	.....	.....	.2743	129.9	— .0230	— 8.4
1903	9	100.0	.....	.....	72.00	104.7	.....	.....	.2513	119.0	.....	.....

HEATERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	11	100.0	+1	+ 9.1	69.18	100.0	—3.18	—4.6	\$0.4130	100.0	+\$0.1264	+30.6
1890	13	118.2	—1	— 7.7	60.92	88.1	+5.08	+8.3	.5388	130.5	+ .0006	+ .1
1891	13	118.2	—1	— 7.7	60.92	88.1	+5.08	+8.3	.4572	110.7	+ .0822	+18.0
1892	7	63.6	+5	+11.4	72.00	104.1	—6.00	—8.3	.4778	115.7	+ .0616	+12.9
1893	7	63.6	+5	+11.4	72.00	104.1	—6.00	—8.3	.3853	93.3	+ .1541	+40.0
1894	11	100.0	+1	+ 9.1	72.00	104.1	—6.00	—8.3	.3668	88.3	+ .1726	+47.1
1895	11	100.0	+1	+ 9.1	72.00	104.1	—6.00	—8.3	.4230	102.4	+ .1164	+27.5
1896	11	100.0	+1	+ 9.1	72.00	104.1	—6.00	—8.3	.4410	106.8	+ .0984	+22.3
1897	11	100.0	+1	+ 9.1	72.00	104.1	—6.00	—8.3	.2385	82.0	+ .2009	+59.4
1898	11	100.0	+1	+ 9.1	72.00	104.1	—6.00	—8.3	.3552	88.0	+ .1842	+51.9
1899	12	109.1	.....	.....	66.00	95.4	.....	.....	.3468	84.0	+ .1926	+55.5
1900	12	109.1	.....	.....	66.00	95.4	.....	.....	.5190	125.9	+ .0195	+ 3.8
1901	12	109.1	.....	.....	66.00	95.4	.....	.....	.4948	119.8	+ .0446	+ 9.0
1902	12	109.1	.....	.....	66.00	95.4	.....	.....	.5828	141.1	— .0434	— 7.4
1903	12	109.1	.....	.....	66.00	95.4	.....	.....	.5294	130.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, RAILS—Continued.

LEVER MEN, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	7	100.0	+2	+28.6	68.60	100.0	-12.60	-18.4	\$0.2623	100.0	+\$0.1077	+41.1
1890	8	114.3	+1	+12.5	63.00	91.8	-7.00	-11.1	.3055	116.5	+.0645	+21.1
1891	8	114.3	+1	+12.5	63.00	91.8	-7.00	-11.1	.2563	97.7	+.1137	+44.4
1892	7	100.0	+2	+28.6	72.00	105.0	-16.00	-22.2	.2948	112.4	+.0752	+25.5
1893	7	100.0	+2	+28.6	72.00	105.0	-16.00	-22.2	.2578	98.3	+.1122	+43.5
1894	7	100.0	+2	+28.6	72.00	105.0	-16.00	-22.2	.2503	95.4	+.1197	+47.8
1895	7	100.0	+2	+28.6	72.00	105.0	-16.00	-22.2	.2857	108.9	+.0843	+29.5
1896	7	100.0	+2	+28.6	72.00	105.0	-16.00	-22.2	.2686	102.4	+.1014	+37.8
1897	7	100.0	+2	+28.6	72.00	105.0	-16.00	-22.2	.2351	89.6	+.1349	+57.4
1898	7	100.0	+2	+28.6	72.00	105.0	-16.00	-22.2	.2367	90.2	+.1333	+56.3
1899	9	128.6	.....	.....	56.00	81.6	.....	.....	.2322	88.5	+.1378	+59.3
1900	9	128.6	.....	.....	56.00	81.6	.....	.....	.3125	119.1	+.0575	+18.4
1901	9	128.6	.....	.....	56.00	81.6	.....	.....	.3412	130.1	+.0288	+8.4
1902	9	128.6	.....	.....	56.00	81.6	.....	.....	.4088	155.9	-.0388	-9.5
1903	9	128.6	.....	.....	56.00	81.6	.....	.....	.3700	141.1	.....	.....

ROLLERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	5	100.0	+1	+20.0	70.80	100.0	-10.80	-15.3	\$0.5184	100.0	+\$0.2075	+40.0
1890	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.6067	117.0	+.1192	+19.6
1891	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.5504	106.2	+.1755	+31.9
1892	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.5378	103.7	+.1881	+35.0
1893	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.5633	108.7	+.1626	+28.9
1894	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.5084	98.1	+.2175	+42.8
1895	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.4871	94.0	+.2388	+49.0
1896	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.4971	95.9	+.2288	+46.0
1897	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.4717	91.0	+.2542	+53.9
1898	5	100.0	+1	+20.0	72.00	101.7	-12.00	-16.7	.4661	89.9	+.2598	+55.7
1899	6	120.0	.....	.....	60.00	84.7	.....	.....	.4958	95.5	+.2306	+46.6
1900	6	120.0	.....	.....	60.00	84.7	.....	.....	.6129	118.2	+.1130	+18.4
1901	6	120.0	.....	.....	60.00	84.7	.....	.....	.6722	129.7	+.0537	+8.0
1902	6	120.0	.....	.....	60.00	84.7	.....	.....	.7769	149.9	-.0510	-6.6
1903	6	120.0	.....	.....	60.00	84.7	.....	.....	.7259	140.0	.....	.....

ROUGHERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	3	100.0	.....	.....	68.40	100.0	+3.60	+5.3	\$0.3744	100.0	+\$0.0294	+7.9
1890	4	133.3	-1	-25.0	54.00	78.9	+18.00	+33.3	.4704	125.6	-.0666	-14.2
1891	4	133.3	-1	-25.0	54.00	78.9	+18.00	+33.3	.3494	93.3	+.0544	+15.6
1892	3	100.0	.....	.....	72.00	105.3	.....	.....	.4015	107.2	+.0023	+.6
1893	3	100.0	.....	.....	72.00	105.3	.....	.....	.3769	100.7	+.0269	+7.1
1894	3	100.0	.....	.....	72.00	105.3	.....	.....	.3799	101.5	+.0239	+6.3
1895	3	100.0	.....	.....	72.00	105.3	.....	.....	.4260	113.8	-.0222	-5.2
1896	3	100.0	.....	.....	72.00	105.3	.....	.....	.4487	119.8	-.0449	-10.0
1897	3	100.0	.....	.....	72.00	105.3	.....	.....	.2759	78.7	+.1279	+46.4
1898	3	100.0	.....	.....	72.00	105.3	.....	.....	.2899	77.4	+.1139	+39.3
1899	3	100.0	.....	.....	72.00	105.3	.....	.....	.3254	86.9	+.0784	+24.1
1900	3	100.0	.....	.....	72.00	105.3	.....	.....	.4636	123.8	-.0598	-12.9
1901	3	100.0	.....	.....	72.00	105.3	.....	.....	.4404	117.6	-.0866	-8.3
1902	3	100.0	.....	.....	72.00	105.3	.....	.....	.5042	134.7	-.1004	-19.9
1903	3	100.0	.....	.....	72.00	105.3	.....	.....	.4038	107.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, RAILS—Concluded.

STRAIGHTENERS, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	29	100.0	+10	+34.5	63.01	100.0	+2.22	+3.5	\$0.3778	100.0	+\$0.0495	+13.1
1890	26	89.7	+13	+50.0	56.31	89.4	+8.92	+15.8	.4567	120.9	+.0294	—6.4
1891	26	89.7	+13	+50.0	56.31	89.4	+8.92	+15.8	.8951	104.6	+.0322	+8.1
1892	26	89.7	+13	+50.0	64.62	102.6	+.61	+.9	.4317	114.3	+.0044	—1.0
1893	26	89.7	+13	+50.0	64.62	102.6	+.61	+.9	.3988	105.6	+.0285	+7.1
1894	26	89.7	+13	+50.0	64.62	102.6	+.61	+.9	.8739	99.0	+.0534	+14.3
1895	28	96.6	+11	+39.3	65.14	103.4	+.09	+.1	.3589	95.0	+.0684	+19.1
1896	31	106.9	+8	+25.8	61.26	102.0	+.97	+1.5	.3657	96.8	+.0616	+16.8
1897	31	106.9	+8	+25.8	64.26	102.0	+.97	+1.5	.3529	93.4	+.0744	+21.1
1898	31	106.9	+8	+25.8	64.26	102.0	+.97	+1.5	.3306	87.5	+.0567	+29.2
1899	38	131.0	+1	+2.6	65.68	104.2	— .45	— .7	.3139	83.1	+.1134	+36.1
1900	39	134.5			65.23	103.5			.3465	91.7	+.0808	+23.3
1901	39	134.5			65.23	103.5			.3891	103.0	+.0382	+9.8
1902	39	134.5			65.23	103.5			.4362	115.5	— .0089	—2.0
1903	39	134.5			65.23	103.5			.4273	113.1		

LEATHER.

COLORERS, Male.

[Data from 14 establishments.]

Av. 1890-99.	106	100.0	+5	+4.7	59.41	100.0	—0.25	—0.4	\$0.1538	100.0	+\$0.0163	+10.6
1890	100	94.8	+11	+11.0	59.47	100.1	— .31	— .5	.1468	95.4	+.0234	+15.9
1891	97	91.5	+14	+14.4	59.40	100.0	— .24	— .4	.1494	97.1	+.0208	+13.9
1892	118	111.3	—7	—5.9	59.24	99.7	— .08	— .1	.1511	98.2	+.0191	+12.6
1893	79	74.5	+32	+40.5	59.52	100.2	— .36	— .6	.1535	99.7	+.0167	+10.9
1894	126	118.9	—15	—11.9	59.37	99.9	— .21	— .4	.1515	98.4	+.0187	+12.3
1895	117	110.4	—6	—5.1	59.33	99.9	— .17	— .3	.1527	99.2	+.0175	+11.5
1896	86	81.1	+25	+29.1	59.45	100.1	— .29	— .5	.1584	102.9	+.0118	+7.4
1897	94	88.7	+17	+18.1	59.48	100.1	— .32	— .5	.1622	105.4	+.0080	+4.9
1898	108	101.9	+3	+2.8	59.48	100.1	— .32	— .5	.1576	102.4	+.0126	+8.0
1899	134	126.4	—23	—17.2	59.35	99.9	— .19	— .3	.1558	101.2	+.0144	+9.2
1900	127	119.8	—16	—12.6	59.40	100.0	— .24	— .4	.1595	103.6	+.0107	+6.7
1901	111	104.7			59.24	99.7	— .08	— .1	.1625	105.6	+.0077	+4.7
1902	101	95.5	+10	+9.9	59.13	99.5	+.03	+.1	.1677	109.0	+.0025	+1.5
1903	111	104.7			59.16	99.6			.1702	110.6		

FLESHERS, Male.

[Data for employees from 31 establishments for entire period. Data for hours and wages from 31 establishments, 1890, 1891; 32 establishments, 1892-1903.]

Av. 1890-99.	182	100.0	+40	+22.0	59.37	100.0	+0.40	+0.7	\$0.1720	100.0	+\$0.0092	+5.3
1890	189	103.8	+33	+17.5	59.39	100.0	+.38	+.6	.1819	105.8	— .0007	— .4
1891	180	98.9	+42	+23.3	59.33	99.9	+.44	+.7	.1799	104.6	+.0013	+.7
1892	193	106.0	+29	+15.0	59.33	99.9	+.44	+.7	.1795	104.4	+.0017	+.9
1893	180	98.9	+42	+23.3	59.38	100.0	+.39	+.7	.1780	103.8	+.0026	+1.6
1894	179	98.4	+43	+24.0	59.35	100.0	+.42	+.7	.1672	97.2	+.0140	+8.4
1895	138	103.3	+34	+18.1	59.41	100.1	+.36	+.6	.1646	95.7	+.0166	+10.1
1896	172	94.5	+50	+29.1	59.40	100.1	+.37	+.6	.1639	98.2	+.0123	+7.3
1897	170	95.4	+52	+30.6	59.43	100.1	+.34	+.6	.1653	96.1	+.0159	+9.6
1898	172	94.5	+50	+29.1	59.43	100.1	+.34	+.6	.1672	97.2	+.0140	+8.4
1899	200	109.9	+22	+11.0	59.29	99.9	+.48	+.8	.1673	97.3	+.0139	+5.3
1900	134	106.6	+28	+14.4	59.34	99.9	+.43	+.7	.1738	101.0	+.0074	+4.3
1901	181	104.9	+31	+16.2	59.36	100.0	+.41	+.7	.1761	102.4	+.0051	+2.9
1902	203	111.5	+19	+9.4	59.37	100.0	+.40	+.7	.1779	103.4	+.0033	+1.9
1903	222	122.0			59.77	100.7			.1812	105.3		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

LEATHER—Continued.

GLAZERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 10 establishments, 1890, 1891; 9 establishments, 1892, 1893; 10 establishments, 1894-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	189	100.0	+135	+ 71.4	59.15	100.0	+0.14	+0.2	\$0.1517	100.0	+\$0.0456	+30.1
1890	111	58.7	+213	+191.9	59.07	99.9	+ .22	+ .4	.1488	97.8	+ .0490	+33.0
1891	147	77.8	+177	+120.4	59.09	99.9	+ .20	+ .3	.1463	96.4	+ .0510	+34.9
1892	164	86.8	+160	+ 97.6	59.02	99.8	+ .27	+ .5	.1492	98.4	+ .0481	+32.2
1893	141	74.6	+183	+129.8	59.06	99.8	+ .23	+ .4	.1385	91.3	+ .0588	+42.5
1894	195	103.2	+129	+ 66.2	59.09	99.9	+ .20	+ .3	.1456	96.0	+ .0517	+35.5
1895	191	101.1	+133	+ 69.6	59.19	100.1	+ .10	+ .2	.1611	106.2	+ .0362	+22.5
1896	243	128.6	+ 81	+ 33.8	59.25	100.2	+ .04	+ .1	.1530	100.9	+ .0448	+29.0
1897	239	126.5	+ 85	+ 35.6	59.28	100.2	+ .01	+ .02	.1534	101.1	+ .0439	+28.6
1898	208	110.1	+116	+ 55.8	59.24	100.2	+ .05	+ .1	.1602	105.6	+ .0371	+23.2
1899	254	134.4	+ 70	+ 27.6	59.16	100.0	+ .13	+ .2	.1615	106.5	+ .0358	+22.2
1900	269	142.8	+ 55	+ 20.4	59.16	100.0	+ .13	+ .2	.1594	105.1	+ .0379	+23.8
1901	252	133.3	+ 72	+ 28.6	59.25	100.2	+ .04	+ .1	.1737	114.5	+ .0236	+13.6
1902	241	127.5	+ 83	+ 34.4	59.18	100.1	+ .11	+ .2	.1783	117.5	+ .0190	+10.7
1903	324	171.4	.....	.....	59.29	100.2	.....	.....	.1978	130.1	.....	.....

GLAZERS, Female.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment 1890, 1891; 2 establishments, 1892-1894; 3 establishments, 1895-1903.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.
Av. 1890-99.	41	100.0	+58 + 141.5	59.97	100.0	.....	\$0.0801	100.0	+\$0.0201 +25.1
1890	7	17.1	+92 +1314.3	60.00	100.1	-0.03 -0.1	.0810	101.1	+ .0192 +23.7
1891	19	46.3	+80 + 421.1	60.00	100.1	- .03 - .1	.0789	98.5	+ .0213 +27.0
1892	20	48.8	+79 + 395.0	60.00	100.1	- .03 - .1	.0758	94.6	+ .0244 +32.2
1893	5	12.2	+94 +1880.0	60.00	100.1	- .03 - .1	.0741	92.5	+ .0261 +35.2
1894	10	24.4	+89 + 890.0	60.00	100.1	- .03 - .1	.0786	98.1	+ .0216 +27.5
1895	35	85.4	+64 + 182.9	59.92	99.9	+ .05 + .1	.0783	97.8	+ .0219 +28.0
1896	28	68.3	+71 + 253.6	59.93	99.9	+ .04 + .1	.0852	106.4	+ .0150 +17.6
1897	45	109.8	+54 + 120.0	59.94	99.9	+ .03 + .1	.0872	108.9	+ .0130 +14.9
1898	149	363.4	-50 - 33.6	59.96	100.0	+ .01 + .02	.0781	97.5	+ .0221 +28.3
1899	95	231.7	+ 4 + 4.2	59.94	99.9	+ .03 + .1	.0836	104.4	+ .0166 +19.9
1900	107	261.0	- 8 - 7.5	59.96	100.0	+ .01 + .02	.0859	107.2	+ .0143 +16.6
1901	87	212.2	+12 + 13.8	59.97	100.0	.....	.0933	116.5	+ .0069 + 7.4
1902	69	168.3	+30 + 43.5	59.95	100.0	+ .02 + .03	.1014	126.6	+ .0012 - 1.2
1903	99	241.5	.....	59.97	100.0	.....	.1002	125.1	.....

LINERS, Male.

[Data for employees from 23 establishments for entire period. Data for hours and wages from 25 establishments, 1890, 1891; 33 establishments, 1892-1903.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.
Av. 1890-99.	186	100.0	+ 90 +48.4	59.02	100.0	+0.19 +0.3	\$0.1587	100.0	+\$0.0102 + 6.4
1890	171	91.9	+105 +61.4	58.77	99.6	+ .44 + .7	.1675	105.5	+ .0014 + .8
1891	178	95.7	+ 98 +55.1	58.78	99.6	+ .43 + .7	.1643	103.5	+ .0046 + 2.8
1892	191	102.7	+ 85 +44.5	58.84	99.7	+ .37 + .6	.1655	104.3	+ .0034 + 2.1
1893	162	87.1	+114 +70.4	58.81	99.6	+ .40 + .7	.1631	102.8	+ .0053 + 3.0
1894	176	94.6	+100 +56.8	58.92	99.8	+ .29 + .5	.1562	98.4	+ .0127 + 8.1
1895	183	98.4	+ 93 +50.8	59.07	100.1	+ .14 + .2	.1554	97.9	+ .0135 + 8.5
1896	179	96.2	+ 97 +54.2	59.05	100.1	+ .16 + .3	.1525	96.1	+ .0164 +10.8
1897	197	105.9	+ 79 +40.1	59.35	100.6	- .14 - .2	.1516	95.5	+ .0173 +11.1
1898	193	103.8	+ 83 +43.0	59.32	100.5	- .11 - .2	.1520	95.8	+ .0169 +11.1
1899	229	123.1	+ 47 +20.5	59.29	100.5	- .08 - .1	.1586	99.9	+ .0103 + 6.1
1900	224	120.4	+ 52 +23.2	59.34	100.5	- .13 - .2	.1617	101.9	+ .0072 + 4.6
1901	234	125.8	+ 42 +17.9	59.37	100.6	- .16 - .3	.1609	101.4	+ .0080 + 5.0
1902	245	133.9	+ 27 +10.8	59.35	100.6	- .14 - .2	.1668	105.1	+ .0021 + 1.3
1903	276	148.4	.....	59.21	100.3	.....	.1689	106.4	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

LEATHER—Continued.

ROLLERS, Male.

[Data from 6 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	19	100.0	+4	+21.1	59.83	100.0	.....	.....	\$0.1415	100.0	+\$0.0086	+6.1
1890	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1415	100.0	+ .0086	+6.1
1891	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1415	100.0	+ .0086	+6.1
1892	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1415	100.0	+ .0086	+6.1
1893	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1409	99.6	+ .0092	+6.5
1894	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1409	99.6	+ .0092	+6.5
1895	20	105.3	+3	+15.0	59.80	99.9	+ .03	+ .1	.1430	101.1	+ .0071	+5.0
1896	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1409	99.6	+ .0092	+6.5
1897	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1409	99.6	+ .0092	+6.5
1898	19	100.0	+4	+21.1	59.84	100.0	—0.01	—0.02	.1409	99.6	+ .0092	+6.5
1899	20	105.3	+3	+15.0	59.80	99.9	+ .03	+ .1	.1430	101.1	+ .0071	+5.0
1900	21	110.5	+2	+ 9.5	59.81	100.0	+ .02	+ .03	.1418	100.2	+ .0083	+5.9
1901	23	121.1	.....	.....	59.83	100.0	.....	.....	.1465	103.5	+ .0036	+2.5
1902	23	121.1	.....	.....	59.83	100.0	.....	.....	.1501	106.1	.....	.....
1903	23	121.1	.....	.....	59.83	100.0	.....	.....	.1501	106.1	.....	.....

SETTERS OUT, Male.

[Data from 15 establishments.]

Av. 1890-99.	268	100.0	+ 40	+14.9	59.37	100.0	—0.23	—0.4	\$0.1553	100.0	+\$0.0086	+ 5.5
1890	225	84.0	+ 33	+36.9	59.50	100.2	— .36	— .6	.1609	103.6	+ .0080	+ 1.9
1891	246	91.8	+ 62	+25.2	59.45	100.1	— .31	— .5	.1600	103.0	+ .0089	+ 2.4
1892	314	117.2	— 6	— 1.9	59.36	100.0	— .22	— .4	.1532	98.6	+ .0107	+ 7.0
1893	179	66.8	+129	+72.1	59.65	100.5	— .51	— .9	.1674	107.8	— .0085	— 2.1
1894	312	116.4	— 4	— 1.8	59.33	99.9	— .19	— .3	.1498	96.5	+ .0141	+ 9.4
1895	286	106.7	+ 22	+ 7.7	59.35	100.0	— .21	— .4	.1499	96.5	+ .0140	+ 9.3
1896	170	63.4	+133	+81.2	59.44	100.1	— .30	— .5	.1552	99.9	+ .0087	+ 5.6
1897	317	118.3	— 9	— 2.8	59.28	99.8	— .14	— .2	.1505	96.9	+ .0134	+ 8.9
1898	288	107.5	+ 20	+ 6.9	59.29	99.9	— .15	— .3	.1482	95.4	+ .0157	+10.6
1899	341	127.2	— 33	— 9.7	59.02	99.4	+ .12	+ .2	.1583	101.9	+ .0056	+ 3.5
1900	333	124.3	— 25	— 7.5	59.09	99.5	+ .05	+ .1	.1577	101.5	+ .0062	+ 3.9
1901	351	131.0	— 43	—12.3	59.13	99.6	+ .01	+ .02	.1599	103.0	+ .0040	+ 2.5
1902	327	122.0	— 19	— 5.8	59.14	99.6	.....	.....	.1595	102.7	+ .0044	+ 2.8
1903	308	114.9	.....	.....	59.14	99.6	.....	.....	.1639	105.5	.....	.....

SHAVERS, Male.

[Data from 16 establishments.]

Av. 1890-99.	90	100.0	+ 8	+ 8.9	59.41	100.0	.....	.....	\$0.2223	100.0	—\$0.0133	— 5.7
1890	86	95.6	+12	+14.0	59.64	100.4	.....	.....	.2007	112.2	— .0417	—16.0
1891	104	115.6	— 6	— 5.8	59.70	100.5	.....	.....	.2443	114.5	— .0458	—17.3
1892	103	114.4	— 5	— 4.3	59.61	100.4	.....	.....	.2600	111.4	— .0420	—15.8
1893	87	96.7	+11	+11.6	59.18	99.6	— .11	— .2	.2672	115.0	— .0452	—18.0
1894	88	97.8	+10	+11.4	59.14	99.5	+ .38	+ .6	.2346	101.0	— .0158	— 6.6
1895	85	94.4	+13	+15.3	59.12	99.5	+ .42	+ .7	.2259	97.2	— .0069	— 3.1
1896	71	78.9	+27	+38.0	58.92	99.2	+ .64	+1.1	.2068	89.0	+ .0122	+ 5.9
1897	79	87.8	+19	+25.7	59.67	100.3	.....	.....	.2049	86.5	+ .0150	+ 9.0
1898	100	111.1	— 2	— 2.0	59.62	100.4	.....	.....	.1988	84.5	+ .0222	+11.3
1899	94	104.4	+ 4	+ 4.6	59.64	100.2	.....	.....	.1988	84.5	+ .0222	+11.3
1900	101	112.2	+ 3	+ 3.0	59.59	100.3	.....	.....	.2032	87.5	+ .0158	+ 9.0
1901	102	113.3	— 4	— 3.9	59.55	100.2	+ .01	+ .02	.2077	89.4	+ .0113	+ 5.4
1902	88	97.8	+10	+11.4	59.57	100.3	— .01	— .02	.2143	92.3	+ .0047	+ 2.2
1903	98	108.9	.....	.....	59.56	100.3	.....	.....	.2190	94.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

LEATHER—Concluded.

STAKERS, Male.

[Data from 8 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Relative.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	167	100.0	-27	-16.2	59.20	100.0	+0.16	+0.3	\$0.2334	100.0	-\$0.0621	-26.6
1890	116	69.5	+24	+20.7	59.24	100.1	+12	+2	.2150	92.1	-.0437	-20.8
1891	149	89.2	-9	-6.0	59.17	99.9	+19	+3	.2353	100.8	-.0640	-27.2
1892	188	112.6	-48	-25.5	59.12	99.9	+24	+4	.2458	105.3	-.0745	-30.3
1893	178	106.6	-38	-21.8	59.14	99.9	+22	+4	.2450	105.0	-.0737	-30.1
1894	174	104.2	-34	-19.5	59.19	100.0	+17	+3	.2382	102.1	-.0669	-28.1
1895	186	111.4	-46	-24.7	59.18	100.0	+18	+3	.2389	102.4	-.0676	-28.8
1896	150	89.8	-10	-6.7	59.19	100.0	+17	+3	.2335	100.0	-.0622	-26.6
1897	161	96.4	-21	-13.0	59.26	100.1	+10	+2	.2240	96.0	-.0527	-23.5
1898	179	107.2	-39	-21.8	59.30	100.2	+06	+1	.2215	94.9	-.0502	-22.7
1899	191	114.4	-51	-26.7	59.18	100.0	+18	+3	.2371	101.6	-.0658	-27.8
1900	144	86.2	-4	-2.8	59.26	100.1	+10	+2	.1671	71.6	+.0042	+2.5
1901	206	123.4	-66	-32.0	59.26	100.1	+10	+2	.1784	76.5	+.0071	+4.0
1902	180	77.8	+10	+7.7	59.33	100.2	+03	+1	.1729	74.1	+.0016	+.9
1903	140	83.8	.....	.....	59.36	100.3	.....	.....	.1713	73.4	.....	.....

TANNERS, Male.

[Data from 19 establishments.]

Av. 1890-99.	444	100.0	+61	+13.7	59.08	100.0	+0.15	+0.3	\$0.1366	100.0	+\$0.0097	+7.1
1890	407	91.7	+98	+24.1	58.79	99.5	+44	+7	.1414	103.5	+.0049	+3.5
1891	411	92.6	+94	+22.9	58.68	99.2	+60	+1.0	.1436	105.1	+.0027	+1.9
1892	452	101.8	+53	+11.7	58.73	99.4	+50	+8	.1439	105.3	+.0024	+1.7
1893	455	102.5	+50	+11.0	58.85	99.6	+38	+6	.1418	103.8	+.0045	+3.2
1894	434	97.7	+71	+16.4	58.92	99.7	+31	+5	.1342	98.2	+.0121	+9.0
1895	438	98.6	+67	+15.3	59.06	100.0	+17	+3	.1320	96.6	+.0143	+10.8
1896	412	92.8	+93	+22.6	59.21	100.2	+02	+03	.1325	97.0	+.0138	+10.4
1897	435	98.0	+70	+16.1	59.45	100.6	-.22	-.4	.1336	97.8	+.0127	+9.5
1898	494	111.3	+11	+2.2	59.71	101.1	-.48	-.8	.1304	95.5	+.0159	+12.2
1899	499	112.4	+6	+1.2	59.40	100.5	-.17	-.3	.1325	97.0	+.0138	+10.4
1900	483	108.8	+22	+4.6	59.37	100.5	-.14	-.2	.1369	100.2	+.0094	+6.9
1901	506	114.0	-1	-2	59.40	100.5	-.17	-.3	.1379	101.0	+.0084	+6.1
1902	484	109.0	+21	+4.3	59.37	100.5	-.14	-.2	.1428	104.5	+.0035	+2.5
1903	505	113.7	.....	.....	59.23	100.3	.....	.....	.1463	107.1	.....	.....

UNHAIRERS, Male.

[Data from 11 establishments.]

Av. 1890-99.	179	100.0	+48	+26.3	59.39	100.0	-0.13	-0.2	\$0.1561	100.0	+\$0.0091	+5.8
1890	164	91.6	+63	+35.4	59.40	99.5	+16	+3	.1648	105.6	+.0004	+.2
1891	160	89.4	+67	+41.9	59.13	99.6	+12	+2	.1630	104.4	+.0022	+1.3
1892	171	95.5	+56	+32.7	59.02	99.4	+24	+4	.1630	104.4	+.0022	+1.3
1893	185	103.4	+42	+22.7	59.05	99.4	+21	+4	.1592	102.0	+.0080	+3.8
1894	170	95.0	+57	+33.5	59.18	99.6	+08	+1	.1492	95.6	+.0160	+10.7
1895	169	94.4	+58	+34.3	59.50	100.2	-.24	-.4	.1508	96.6	+.0144	+9.5
1896	183	102.2	+44	+24.0	59.43	99.9	-.05	-.1	.1536	98.4	+.0116	+7.6
1897	191	106.5	+34	+18.3	59.87	100.3	-.61	-1.0	.1556	92.7	+.0096	+6.2
1898	201	112.3	+26	+14.5	59.88	100.3	-.60	-1.0	.1517	97.2	+.0125	+8.9
1899	195	108.9	+32	+17.4	59.88	100.3	-.60	-1.0	.1498	96.0	+.0154	+10.3
1900	205	114.5	+22	+10.7	59.83	100.7	-.57	-1.0	.1547	99.1	+.0105	+6.8
1901	222	124.0	+5	+2.3	59.87	100.8	-.51	-1.0	.1579	101.2	+.0073	+4.6
1902	231	129.1	-4	-1.7	59.83	100.7	-.57	-1.0	.1649	105.6	+.0003	+.2
1903	227	126.8	.....	.....	59.26	99.8	.....	.....	.1652	105.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

LIQUORS, DISTILLED.

COOKER MEN, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	3	100.0	+1	+ 33.3	64.20	100.0	-1.20	-1.9	\$0.1804	100.0	+\$0.0175	+ 9.7
1890	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1801	99.8	+.0178	+ 9.9
1891	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1801	99.8	+.0178	+ 9.9
1892	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1801	99.8	+.0178	+ 9.9
1893	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1801	99.8	+.0178	+ 9.9
1894	2	66.7	+2	+100.0	66.00	102.8	-3.00	-4.5	.1868	103.5	+.0111	+ 5.9
1895	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1801	99.8	+.0178	+ 9.9
1896	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1847	102.4	+.0132	+ 7.1
1897	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1786	96.2	+.0243	+14.0
1898	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1786	96.2	+.0243	+14.0
1899	3	100.0	+	+ 33.3	64.00	99.7	-1.00	-1.6	.1847	102.4	+.0132	+ 7.1
1900	2	66.7	+2	+100.0	66.00	102.8	-3.00	-4.5	.1938	107.4	+.0041	+ 2.1
1901	4	133.3	.....	.....	63.00	98.1	.....	.....	.1979	109.7	.....	.....
1902	4	133.3	.....	.....	63.00	98.1	.....	.....	.1979	109.7	.....	.....
1903	4	133.3	.....	.....	63.00	98.1	.....	.....	.1979	109.7	.....	.....

LABORERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	39	100.0	+17	+43.6	62.51	100.0	+0.06	+0.1	\$0.1370	100.0	+\$0.0130	+ 9.5
1890	33	84.6	+23	+69.7	62.91	100.6	— .34	— .5	.1364	99.6	+.0136	+10.0
1891	35	89.7	+21	+60.0	62.74	100.4	— .17	— .3	.1357	99.1	+.0143	+10.5
1892	35	89.7	+21	+60.0	62.74	100.4	— .17	— .3	.1357	99.1	+.0143	+10.5
1893	32	82.1	+24	+75.0	63.00	100.8	— .43	— .7	.1367	99.8	+.0138	+ 9.7
1894	52	133.3	+4	+ 7.7	61.85	98.9	+ .72	+1.2	.1394	101.8	+.0106	+ 7.6
1895	38	97.4	+18	+47.4	62.53	100.0	+ .04	+ .1	.1368	99.9	+.0132	+ 9.6
1896	34	87.2	+22	+64.7	62.82	100.5	— .25	— .4	.1360	99.3	+.0140	+10.3
1897	50	128.2	+6	+12.0	61.92	99.1	+ .65	+1.0	.1375	100.4	+.0125	+ 9.1
1898	42	107.7	+14	+33.3	62.29	99.6	+ .28	+ .4	.1387	101.2	+.0113	+ 8.1
1899	42	107.7	+14	+33.3	62.29	99.6	+ .28	+ .4	.1369	99.9	+.0131	+ 9.6
1900	35	89.7	+21	+60.0	62.74	100.4	— .17	— .3	.1371	100.1	+.0129	+ 9.4
1901	56	143.6	.....	.....	62.57	100.1	.....	.....	.1500	109.5	.....	.....
1902	48	123.1	+ 8	+16.7	63.00	100.8	— .43	— .7	.1500	109.5	.....	.....
1903	56	143.6	.....	.....	62.57	100.1	.....	.....	.1500	109.5	.....	.....

MASH HANDS, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	.....	.....	56.08	100.0	-4.08	-7.3	\$0.2038	100.0	+\$0.0240	+11.8
1890	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.1985	97.4	+.0293	+14.8
1891	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.1985	97.4	+.0293	+14.8
1892	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.1985	97.4	+.0293	+14.8
1893	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2046	100.4	+.0232	+11.3
1894	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2046	100.4	+.0232	+11.3
1895	5	83.3	+1	+20.0	56.40	100.6	-4.40	-7.8	.2067	101.4	+.0211	+10.2
1896	5	83.3	+1	+20.0	56.40	100.6	-4.40	-7.8	.2067	101.4	+.0211	+10.2
1897	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2046	100.4	+.0232	+11.3
1898	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2046	100.4	+.0232	+11.3
1899	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2108	103.4	+.0170	+ 8.1
1900	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2108	103.4	+.0170	+ 8.1
1901	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2108	103.4	+.0170	+ 8.1
1902	6	100.0	.....	.....	56.00	99.9	-4.00	-7.1	.2108	103.4	+.0170	+ 8.1
1903	6	100.0	.....	.....	52.00	92.7	.....	.....	.2278	111.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 713.]

LIQUORS, DISTILLED—Continued.

MILLERS, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	6	100.0	+1	+16.7	58.94	100.0	-0.65	-1.1	\$0.2408	100.0	+\$0.0001	+0.04
1890	6	100.0	+1	+16.7	59.00	100.1	—	-1.2	.2355	97.8	+	.0054
1891	6	100.0	+1	+16.7	59.00	100.1	—	-1.2	.2355	97.8	+	.0054
1892	6	100.0	+1	+16.7	59.00	100.1	—	-1.2	.2355	97.8	+	.0054
1893	6	100.0	+1	+16.7	59.00	100.1	—	-1.2	.2355	97.8	+	.0054
1894	6	100.0	+1	+16.7	59.00	100.1	—	-1.2	.2355	97.8	+	.0054
1895	6	100.0	+1	+16.7	59.00	100.1	—	-1.2	.2369	98.4	+	.0040
1896	6	100.0	+1	+16.7	59.00	100.1	—	-1.2	.2327	96.6	+	.0082
1897	5	83.3	+2	+40.0	58.80	99.8	—	-1.1	.2559	106.3	—	.0150
1898	5	83.3	+2	+40.0	58.80	99.8	—	-1.1	.2559	106.3	—	.0150
1899	5	83.3	+2	+40.0	58.80	99.8	—	-1.1	.2493	103.5	—	.0084
1900	5	83.3	+2	+40.0	58.80	99.8	—	-1.1	.2526	104.9	—	.0117
1901	8	133.3	-1	-12.5	59.25	100.5	—	-1.6	.2266	94.1	+	.0143
1902	7	116.7	—	—	59.14	100.3	—	-1.4	.2352	97.7	+	.0057
1903	7	116.7	—	—	58.29	98.9	—	—	.2409	100.0	—	—

SPIRIT RUNNERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	4	100.0	—	—	78.00	100.0	-6.00	-7.7	\$0.2649	100.0	+\$0.0476	+18.0
1890	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2580	97.4	+	.0545
1891	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2580	97.4	+	.0546
1892	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2580	97.4	+	.0545
1893	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2580	97.4	+	.0545
1894	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2580	97.4	+	.0545
1895	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2580	97.4	+	.0545
1896	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2753	103.9	+	.0372
1897	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2753	103.9	+	.0372
1898	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2753	103.9	+	.0372
1899	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2753	103.9	+	.0372
1900	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2753	103.9	+	.0372
1901	4	100.0	—	—	78.00	100.0	-6.00	-7.7	.2927	110.5	+	.0198
1902	4	100.0	—	—	72.00	92.3	—	—	.3125	118.0	—	—
1903	4	100.0	—	—	72.00	92.3	—	—	.3125	118.0	—	—

STILL MEN, Male.

[Data from 1 establishment.]

Av. 1890-99.	1	100.0	—	—	59.80	100.0	-5.80	-9.7	\$0.1856	100.0	+\$0.0366	+19.7
1890	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1891	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1892	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1893	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1894	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1895	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1896	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1897	1	100.0	—	—	60.00	100.3	-6.00	-10.0	.1833	98.8	+	.0389
1898	1	100.0	—	—	59.00	98.7	-5.00	-8.5	.1949	105.0	+	.0273
1899	1	100.0	—	—	59.00	98.7	-5.00	-8.5	.1949	105.0	+	.0273
1900	1	100.0	—	—	59.00	98.7	-5.00	-8.5	.1949	105.0	+	.0273
1901	1	100.0	—	—	54.00	90.3	—	—	.2130	114.8	+	.0092
1902	1	100.0	—	—	54.00	90.3	—	—	.2130	114.8	+	.0092
1903	1	100.0	—	—	54.00	90.3	—	—	.2222	119.7	—	—

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

LIQUORS, DISTILLED—Continued.

TRIMMERS, Male.

[Data from 1 establishment.]

Year.	Emp. oyees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	6	100.0	+2	+33.3	60.00	100.0	.....	.....	\$0.1800	100.0	+\$0.0450	+25.0
1890	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1891	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1892	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1893	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1894	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1895	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1896	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1897	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.1750	97.2	+ .0500	+28.6
1898	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.2000	111.1	+ .0250	+12.5
1899	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.2000	111.1	+ .0250	+12.5
1900	6	100.0	+2	+33.3	60.00	100.0	.....	.....	.2000	111.1	+ .0250	+12.5
1901	8	133.3	.....	.....	60.00	100.0	.....	.....	.2250	125.0	.....	.....
1902	8	133.3	.....	.....	60.00	100.0	.....	.....	.2250	125.0	.....	.....
1903	8	133.3	.....	.....	60.00	100.0	.....	.....	.2250	125.0	.....	.....

WAREHOUSEMEN, Male.

[Data from 3 establishments.]

Av. 1890-99.	17	100.0	+3	+17.6	59.96	100.0	-1.16	-1.9	\$0.1841	100.0	+\$0.0126	+6.8
1890	17	100.0	+3	+17.6	60.00	100.1	-1.20	-2.0	.1824	99.1	+ .0143	+7.8
1891	17	100.0	+3	+17.6	60.00	100.1	-1.20	-2.0	.1824	99.1	+ .0143	+7.8
1892	16	94.1	+4	+25.0	60.00	100.1	-1.20	-2.0	.1833	99.6	+ .0134	+7.3
1893	16	94.1	+4	+25.0	60.00	100.1	-1.20	-2.0	.1833	99.6	+ .0134	+7.3
1894	16	94.1	+4	+25.0	60.00	100.1	-1.20	-2.0	.1833	99.6	+ .0134	+7.3
1895	18	105.9	+2	+11.1	60.00	100.1	-1.20	-2.0	.1819	98.8	+ .0148	+8.1
1896	18	105.9	+2	+11.1	60.00	100.1	-1.20	-2.0	.1819	98.8	+ .0148	+8.1
1897	19	111.8	+1	+5.3	60.00	100.1	-1.20	-2.0	.1842	100.1	+ .0125	+6.8
1898	17	100.0	+3	+17.6	59.76	99.7	-.96	-1.6	.1891	102.7	+ .0076	+4.0
1899	20	117.6	.....	.....	59.80	99.7	-1.00	-1.7	.1891	102.7	+ .0076	+4.0
1900	14	82.4	+6	+42.9	59.71	99.6	-.91	-1.5	.1987	107.9	+ .0020	-1.0
1901	22	129.4	-2	-9.1	58.91	98.2	-.11	-.2	.1879	102.1	+ .0088	+4.7
1902	21	123.5	-1	-4.8	58.86	98.2	-.06	-.1	.2048	111.2	+ .0081	-4.0
1903	20	117.6	.....	.....	58.80	98.1	.....	.....	.1967	106.8	.....	.....

YEAST MAKERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	2	100.0	.....	.....	66.00	100.0	.....	.....	\$0.6225	100.0	-\$0.0357	-5.7
1890	2	100.0	.....	.....	66.00	100.0	.....	.....	.6182	99.3	+ .0314	-5.1
1891	2	100.0	.....	.....	66.00	100.0	.....	.....	.6182	99.3	+ .0314	-5.1
1892	2	100.0	.....	.....	66.00	100.0	.....	.....	.6182	99.3	+ .0314	-5.1
1893	2	100.0	.....	.....	66.00	100.0	.....	.....	.6182	99.3	+ .0314	-5.1
1894	2	100.0	.....	.....	66.00	100.0	.....	.....	.6182	99.3	+ .0314	-5.1
1895	2	100.0	.....	.....	66.00	100.0	.....	.....	.6182	99.3	+ .0314	-5.1
1896	2	100.0	.....	.....	66.00	100.0	.....	.....	.6529	104.9	+ .0661	-10.1
1897	2	100.0	.....	.....	66.00	100.0	.....	.....	.6529	104.9	+ .0661	-10.1
1898	2	100.0	.....	.....	66.00	100.0	.....	.....	.6529	104.9	+ .0661	-10.1
1899	2	100.0	.....	.....	66.00	100.0	.....	.....	.5570	89.5	+ .0298	+5.4
1900	2	100.0	.....	.....	66.00	100.0	.....	.....	.4612	74.1	+ .1256	+27.2
1901	2	100.0	.....	.....	66.00	100.0	.....	.....	.5868	94.3	.....	.....
1902	2	100.0	.....	.....	66.00	100.0	.....	.....	.5868	94.3	.....	.....
1903	2	100.0	.....	.....	66.00	100.0	.....	.....	.5868	94.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

LIQUORS, DISTILLED—Concluded.

YEAST MEN, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	2	100.0	.....	.....	60.00	100.0	.....	.....	\$0.2859	100.0	—\$0.0109	— 8.8
1890	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1891	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1892	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1893	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1894	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1895	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1896	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1897	2	100.0	.....	.....	60.00	100.0	.....	.....	.2750	96.2	.....	.....
1898	2	100.0	.....	.....	60.00	100.0	.....	.....	.2917	102.0	— .0167	— 5.7
1899	2	100.0	.....	.....	60.00	100.0	.....	.....	.2500	87.4	+ .0250	+10.0
1900	3	150.0	—1	—33.3	60.00	100.0	.....	.....	.2500	87.4	+ .0250	+10.0
1901	3	150.0	—1	—33.3	60.00	100.0	.....	.....	.2500	87.4	+ .0250	+10.0
1902	2	100.0	.....	.....	60.00	100.0	.....	.....	.2750	96.2	.....	.....
1903	2	100.0	.....	.....	60.00	100.0	.....	.....	.2750	96.2	.....	.....

LIQUORS, MALT.

BOTTLEERS, Male.

[Data from 23 establishments.]

Av. 1890-99.	596	100.0	+856	+143.6	59.64	100.0	—5.03	—8.4	\$0.1545	100.0	+ \$0.0422	+27.3
1890	566	95.0	+886	+156.5	59.70	100.1	—5.09	—8.5	.1519	98.3	+ .0448	+29.5
1891	539	90.4	+913	+169.4	59.69	100.1	—5.08	—8.5	.1587	102.7	+ .0380	+23.9
1892	572	96.0	+890	+153.8	59.71	100.1	—5.10	—8.5	.1537	98.5	+ .0430	+23.0
1893	595	99.8	+857	+144.0	59.72	100.1	—5.11	—8.6	.1517	98.2	+ .0450	+28.7
1894	600	100.7	+852	+142.0	59.72	100.1	—5.11	—8.6	.1554	100.6	+ .0413	+26.6
1895	520	87.2	+932	+179.2	59.68	100.1	—5.07	—8.5	.1570	101.6	+ .0397	+25.3
1896	590	100.5	+853	+142.4	59.72	100.1	—5.11	—8.6	.1535	99.4	+ .0432	+23.1
1897	615	103.2	+837	+136.1	59.66	100.0	—5.05	—8.5	.1542	99.8	+ .0425	+27.0
1898	628	105.4	+824	+131.2	59.69	99.1	—4.48	—7.6	.1543	99.9	+ .0424	+27.5
1899	725	121.6	+727	+100.3	59.71	100.1	—5.10	—8.5	.1544	99.9	+ .0423	+27.4
1900	1,914	321.1	—462	—24.1	55.35	92.8	— .74	—1.3	.1821	117.9	+ .0146	+ 8.0
1901	1,119	187.8	+333	+29.8	55.58	93.2	— .97	—1.7	.1789	115.8	+ .0178	+ 9.9
1902	1,243	208.6	+209	+16.8	54.37	91.2	+ .24	+ .4	.1922	124.4	+ .0046	+ 2.3
1903	1,452	243.6	.....	.....	54.61	91.6	.....	.....	.1967	127.3	.....	.....

CELLAR MEN, Male.

[Data from 47 establishments.]

Av. 1890-99.	672	100.0	+62	+ 9.2	58.75	100.0	—5.77	— 9.8	\$0.2661	100.0	+ \$0.0458	+17.0
1890	653	97.2	+81	+12.4	59.11	100.6	—6.13	—10.4	.2568	96.5	+ .0546	+21.3
1891	649	96.6	+85	+13.1	58.95	100.3	—5.97	—10.1	.2605	97.9	+ .0509	+19.5
1892	679	101.0	+55	+ 8.1	58.97	100.4	—5.99	—10.2	.2618	98.2	+ .0501	+19.2
1893	679	101.0	+55	+ 8.1	58.88	100.2	—5.90	—10.0	.2652	99.7	+ .0462	+17.4
1894	660	98.2	+74	+11.2	58.88	100.2	—5.90	—10.0	.2669	100.3	+ .0445	+16.7
1895	651	98.4	+73	+11.0	58.88	100.2	—5.90	—10.0	.2673	100.5	+ .0441	+16.5
1896	656	99.1	+68	+10.2	58.81	100.1	—5.83	— 9.9	.2696	101.3	+ .0418	+15.5
1897	700	104.2	+34	+ 4.9	58.62	99.8	—5.64	— 9.6	.2695	101.3	+ .0419	+15.5
1898	686	102.1	+48	+ 7.0	58.28	99.2	—5.30	— 9.1	.2711	101.9	+ .0408	+14.9
1899	682	101.5	+52	+ 7.6	58.10	98.9	—5.12	— 8.8	.2725	102.4	+ .0389	+14.3
1900	707	105.2	+27	+ 3.8	57.24	97.4	—4.26	— 7.4	.2785	104.7	+ .0329	+11.8
1901	700	104.2	+34	+ 4.9	56.06	95.4	—5.08	— 6.5	.2853	107.6	+ .0251	+ 8.8
1902	715	106.4	+19	+ 2.7	54.27	92.4	—1.29	— 2.4	.3024	113.6	+ .0090	+ 3.0
1903	734	109.2	.....	.....	52.98	90.2	.....	.....	.3114	117.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

LIQUORS, MALT—Continued.

COOPERS, Male.

[Data from 32 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	303	100.0	+ 20	+ 6.6	58.65	100.0	-8.38	-14.8	\$0.2411	100.0	+\$0.0647	+26.8
1890	217	69.6	+112	+63.1	59.29	101.1	-9.02	-15.2	.2387	99.0	+ .0671	+28.1
1891	214	70.6	+109	+50.9	58.99	100.6	-8.72	-14.8	.2416	100.2	+ .0642	+26.6
1892	230	75.9	+ 93	+40.4	59.22	101.0	-8.95	-15.1	.2378	98.6	+ .0680	+28.6
1893	334	110.2	- 17	- 3.8	59.53	101.5	-9.26	-15.6	.2366	98.1	+ .0692	+29.2
1894	348	114.9	- 25	- 7.2	59.52	101.5	-9.25	-15.5	.2397	99.4	+ .0661	+27.6
1895	354	116.8	- 31	- 8.8	59.44	101.3	-9.17	-15.4	.2416	100.2	+ .0642	+26.6
1896	328	108.3	- 5	- 1.5	57.01	97.2	-6.74	-11.8	.2414	100.1	+ .0644	+26.7
1897	361	119.1	- 38	-10.5	59.32	101.1	-9.05	-15.3	.2405	99.8	+ .0653	+27.2
1898	313	103.3	+ 10	+ 3.2	56.99	97.2	-6.72	-11.8	.2477	102.7	+ .0581	+23.5
1899	336	110.9	- 13	- 3.9	57.21	97.5	-6.94	-12.1	.2450	101.6	+ .0608	+24.8
1900	287	94.7	+ 36	+12.5	57.60	98.2	-7.33	-12.7	.2589	107.4	+ .0469	+18.1
1901	309	102.0	+ 14	+ 4.5	53.87	91.8	-3.60	- 6.7	.2774	115.1	+ .0284	+10.2
1902	312	103.0	+ 11	+ 3.5	50.37	85.9	- 8.10	- 2	.3031	125.7	+ .0027	+ .9
1903	323	106.6	.....	.....	50.27	85.7	.....	.....	.3058	126.8	.....	.....

DRIVERS, Male.

[Data from 46 establishments.]

Av. 1890-99.	800	100.0	+139	+17.4	61.10	100.0	-1.88	-3.1	\$0.2579	100.0	+\$0.0194	+7.5
1890	715	89.4	+224	+31.3	61.29	100.3	-2.07	-3.4	.2554	99.0	+ .0219	+8.6
1891	749	93.6	+190	+25.4	61.17	100.1	-1.95	-3.2	.2577	99.9	+ .0196	+7.6
1892	759	94.9	+180	+23.7	61.16	100.1	-1.94	-3.2	.2562	99.3	+ .0211	+8.2
1893	793	99.1	+146	+18.4	61.12	100.0	-1.90	-3.1	.2579	100.0	+ .0194	+7.5
1894	771	96.4	+168	+21.8	61.11	100.0	-1.89	-3.1	.2588	100.3	+ .0185	+7.1
1895	815	101.9	+124	+15.2	61.16	100.1	-1.94	-3.2	.2583	100.2	+ .0190	+7.4
1896	840	105.0	+ 99	+11.8	61.17	100.1	-1.95	-3.2	.2584	100.2	+ .0189	+7.3
1897	857	107.1	+ 82	+ 9.6	60.95	99.8	-1.73	-2.8	.2588	100.3	+ .0185	+7.1
1898	840	105.0	+ 99	+11.8	60.93	99.7	-1.71	-2.8	.2583	100.2	+ .0190	+7.4
1899	864	108.0	+ 75	+ 8.7	60.90	99.7	-1.68	-2.8	.2592	100.5	+ .0181	+7.0
1900	868	108.5	+ 71	+ 8.2	60.63	99.2	-1.41	-2.3	.2638	102.3	+ .0135	+5.1
1901	899	112.4	+ 40	+ 4.4	59.95	98.1	- .73	-1.2	.2689	104.3	+ .0084	+3.1
1902	909	113.6	+ 30	+ 3.3	59.39	97.2	- .17	- .3	.2759	107.0	+ .0014	+ .5
1903	939	117.4	.....	.....	59.22	96.9	.....	.....	.2773	107.5	.....	.....

FERMENTERS, Male.

[Data from 32 establishments.]

Av. 1890-99.	157	100.0	+27	+17.2	59.73	100.0	-6.71	-11.2	\$0.2620	100.0	+\$0.0515	+19.7
1890	136	86.6	+48	+35.3	61.03	102.2	-8.01	-13.1	.2566	97.9	+ .0569	+22.2
1891	149	94.9	+35	+23.5	60.00	100.5	-6.98	-11.6	.2522	96.3	+ .0613	+24.3
1892	145	92.4	+39	+26.9	60.00	100.5	-6.98	-11.6	.2572	98.2	+ .0563	+21.9
1893	165	105.1	+19	+11.5	59.85	100.2	-6.83	-11.4	.2597	99.1	+ .0538	+20.7
1894	169	107.6	+15	+ 8.9	59.89	100.3	-6.87	-11.5	.2604	99.4	+ .0531	+20.4
1895	168	107.0	+16	+ 9.5	59.68	99.9	-6.66	-11.2	.2629	100.3	+ .0506	+19.2
1896	158	100.6	+26	+16.5	59.70	99.9	-6.68	-11.2	.2633	100.5	+ .0502	+19.1
1897	160	101.9	+24	+15.0	59.36	99.4	-6.34	-10.7	.2656	101.4	+ .0479	+18.0
1898	159	101.3	+25	+15.7	58.87	98.6	-5.85	- 9.9	.2708	103.4	+ .0427	+15.8
1899	163	103.8	+21	+12.9	58.88	98.6	-5.86	-10.0	.2709	103.4	+ .0426	+15.7
1900	170	108.3	+14	+ 8.2	57.48	96.2	-4.46	- 7.8	.2793	106.8	+ .0337	+12.0
1901	166	105.7	+18	+10.8	55.90	93.6	-2.88	- 5.2	.2890	110.3	+ .0245	+ 8.5
1902	173	110.2	+11	+ 6.4	53.88	90.2	- .86	- 1.6	.3045	116.2	+ .0090	+ 3.0
1903	184	117.2	.....	.....	53.02	88.8	.....	.....	.3135	119.7	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 713.]

LIQUORS, MALT—Concluded.

KETTLE MEN, Male.

[Data from 43 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	174	100.0	+26	+14.9	59.52	100.0	-6.61	-11.1	\$0.2681	100.0	+\$0.0516	+19.2
1890	168	96.6	+32	+19.0	60.24	101.2	-7.33	-12.2	.2574	96.0	+ .0623	+24.2
1891	168	96.6	+32	+19.0	59.83	100.5	-6.92	-11.6	.2617	97.6	+ .0580	+22.2
1892	175	100.6	+25	+14.3	59.81	100.5	-6.90	-11.5	.2621	97.8	+ .0577	+22.0
1893	175	100.6	+25	+14.3	59.67	100.3	-6.76	-11.3	.2626	97.9	+ .0571	+21.7
1894	180	103.4	+20	+11.1	59.74	100.4	-6.83	-11.4	.2651	98.9	+ .0546	+20.6
1895	177	101.7	+23	+13.0	59.57	100.1	-6.66	-11.2	.2698	100.4	+ .0504	+18.7
1896	173	99.3	+27	+15.6	59.53	100.0	-6.62	-11.1	.2707	101.0	+ .0490	+18.1
1897	173	99.4	+27	+15.6	59.12	99.3	-6.21	-10.5	.2750	102.6	+ .0447	+16.3
1898	179	102.9	+21	+11.7	58.35	98.9	-5.94	-10.1	.2783	103.8	+ .0414	+14.9
1899	175	100.6	+25	+14.3	58.86	98.9	-5.95	-10.1	.2784	103.8	+ .0413	+14.8
1900	184	105.7	+16	+ 8.7	58.13	97.7	-5.22	- 9.0	.2818	105.1	+ .0379	+13.4
1901	182	104.6	+18	+ 9.8	56.95	95.7	-4.04	- 7.1	.2911	108.6	+ .0286	+ 9.3
1902	189	108.6	+11	+ 5.9	54.02	90.8	-1.11	- 2.1	.5095	115.4	+ .0102	+ 3.8
1903	200	114.9	.....	.....	52.91	88.9	.....	.....	.3197	119.2	.....	.....

MALT HOUSE MEN, Male.

[Data from 21 establishments.]

Av. 1890-99.	303	100.0	-13	- 4.3	60.09	100.0	-6.88	-11.4	\$0.2512	100.0	+\$0.0521	+20.7
1890	327	107.9	-87	-11.3	60.07	100.0	-6.86	-11.4	.2462	98.0	+ .0572	+23.2
1891	300	99.0	-10	- 3.3	60.02	99.9	-6.81	-11.3	.2500	99.5	+ .0534	+21.4
1892	289	95.4	+ 1	+ 0.3	60.70	101.0	-7.49	-12.3	.2427	96.6	+ .0607	+25.0
1893	295	97.4	- 5	- 1.7	60.54	100.7	-7.33	-12.1	.2481	98.7	+ .0553	+22.3
1894	325	107.3	-35	-10.8	60.59	100.8	-7.38	-12.2	.2468	98.2	+ .0566	+22.9
1895	302	99.7	-12	- 4.0	60.62	100.9	-7.41	-12.2	.2481	97.7	+ .0553	+22.3
1896	310	102.3	-20	- 6.5	60.56	100.8	-7.35	-12.1	.2515	100.1	+ .0519	+20.6
1897	296	97.7	- 6	- 2.0	60.00	99.9	-6.79	-11.3	.2557	101.8	+ .0477	+18.7
1898	285	94.1	+ 5	+ 1.8	59.01	98.2	-5.80	- 9.8	.2605	103.7	+ .0429	+16.5
1899	300	99.0	-10	- 3.3	58.82	97.9	-5.61	- 9.5	.2631	104.7	+ .0403	+15.3
1900	314	103.6	-24	- 7.6	55.82	92.9	-2.61	- 4.7	.2799	111.4	+ .0235	+ 8.4
1901	318	105.0	-28	- 8.8	55.18	91.8	-1.97	- 3.6	.2873	114.3	+ .0161	+ 5.6
1902	279	92.1	+11	+ 3.9	54.21	90.2	-1.00	- 1.8	.2953	117.5	+ .0081	+ 2.7
1903	290	95.7	.....	.....	53.21	88.6	.....	.....	.3084	120.7	.....	.....

WASHERS, Male.

[Data from 46 establishments.]

Av. 1890-99.	635	100.0	+ 27	+ 4.3	59.00	100.0	-6.75	-11.4	\$0.2308	100.0	+\$0.0561	+24.4
1890	635	100.0	+ 27	+ 4.3	59.27	100.5	-7.02	-11.8	.2222	96.5	+ .0641	+28.8
1891	645	101.6	+ 17	+ 2.6	59.20	100.3	-6.85	-11.7	.2224	96.6	+ .0640	+28.8
1892	656	103.8	+ 6	+ 0.9	59.31	100.5	-7.06	-11.9	.2259	98.1	+ .0605	+26.8
1893	715	112.6	- 53	- 7.4	59.39	100.7	-7.14	-12.0	.2268	98.5	+ .0596	+26.3
1894	684	107.7	- 22	- 3.2	59.33	100.6	-7.08	-11.9	.2272	98.7	+ .0592	+26.1
1895	655	103.1	+ 7	+ 1.1	59.20	100.3	-6.95	-11.7	.2299	99.8	+ .0565	+24.6
1896	598	94.2	+ 64	+10.7	59.09	100.2	-6.84	-11.6	.2329	101.1	+ .0535	+23.0
1897	584	92.0	+ 78	+13.4	58.90	99.8	-6.65	-11.3	.2385	101.4	+ .0529	+22.7
1898	601	94.6	+ 61	+10.1	58.26	98.7	-6.01	-10.3	.2398	104.1	+ .0466	+19.4
1899	575	90.6	+ 87	+15.1	58.05	98.4	-5.80	-10.0	.2418	105.0	+ .0446	+18.4
1900	558	87.9	+104	+18.6	56.86	96.6	-4.73	- 8.3	.2488	108.0	+ .0376	+15.1
1901	640	101.7	+ 16	+ 2.5	55.80	93.7	-3.05	- 5.5	.2606	113.2	+ .0258	+ 9.9
1902	651	102.5	+ 11	+ 1.7	53.25	90.8	-1.00	- 1.9	.2776	120.5	+ .0088	+ 3.2
1903	662	104.3	.....	.....	52.25	88.6	.....	.....	.2864	124.4	.....	.....

TABLE II.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

LITHOGRAPHING.

ENGRAVERS, Male.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	26	100.0	+ 6	+23.1	48.00	100.0	.....	.....	\$0.4084	100.0	+\$0.0278	+ 6.8
1890	27	103.8	+ 5	+18.5	48.00	100.0	.....	.....	.3958	96.9	+ .0404	+10.2
1891	27	103.8	+ 5	+18.5	48.00	100.0	.....	.....	.4144	101.5	+ .0218	+ 5.3
1892	31	119.2	+ 1	+ 3.2	48.00	100.0	.....	.....	.3905	95.6	+ .0457	+11.7
1893	28	107.7	+ 4	+14.8	48.00	100.0	.....	.....	.3996	97.8	+ .0366	+ 9.2
1894	27	103.8	+ 5	+18.5	48.00	100.0	.....	.....	.3912	95.8	+ .0450	+11.5
1895	26	100.0	+ 6	+23.1	48.00	100.0	.....	.....	.3942	96.5	+ .0420	+10.7
1896	22	84.6	+10	+45.5	48.00	100.0	.....	.....	.3992	97.7	+ .0370	+ 9.3
1897	25	96.2	+ 7	+28.0	48.00	100.0	.....	.....	.4182	102.4	+ .0180	+ 4.3
1898	23	88.5	+ 9	+39.1	48.00	100.0	.....	.....	.4357	106.7	+ .0005	+ .1
1899	26	100.0	+ 6	+23.1	48.00	100.0	.....	.....	.4447	108.9	— .0085	— 1.9
1900	27	103.8	+ 5	+18.5	48.00	100.0	.....	.....	.4421	108.3	— .0059	— 1.3
1901	29	111.5	+ 3	+10.3	48.00	100.0	.....	.....	.4389	107.5	— .0027	— .6
1902	32	123.1	.....	.....	48.00	100.0	.....	.....	.4476	109.6	— .0114	— 2.5
1903	32	123.1	.....	.....	48.00	100.0	.....	.....	.4362	106.8	.....	.....

PRESSMEN, Male.

[Data from 5 establishments.]

Av. 1890-99.	22	100.0	+3	+13.6	54.57	100.0	—0.45	—0.8	\$0.3548	100.0	+\$0.0120	+3.7
1890	22	100.0	+3	+13.6	54.55	100.0	— .43	— .8	.3517	99.1	+ .0161	+4.6
1891	20	90.9	+5	+25.0	54.65	100.1	— .53	—1.0	.3599	101.4	+ .0079	+2.2
1892	22	100.0	+3	+13.6	54.59	100.0	— .47	— .9	.3474	97.9	+ .0204	+5.9
1893	21	95.5	+4	+19.0	54.62	100.1	— .50	— .9	.3577	100.8	+ .0101	+2.8
1894	23	104.5	+2	+ 8.7	54.52	99.9	— .40	— .7	.3567	100.5	+ .0111	+3.1
1895	21	95.5	+4	+19.0	54.62	100.1	— .50	— .9	.3428	96.6	+ .0250	+7.3
1896	21	95.5	+4	+19.0	54.62	100.1	— .50	— .9	.3463	97.6	+ .0215	+6.2
1897	22	100.0	+3	+13.6	54.55	100.0	— .43	— .8	.3583	101.0	+ .0095	+2.7
1898	23	104.5	+2	+ 8.7	54.52	99.9	— .40	— .7	.3616	101.9	+ .0062	+1.7
1899	25	113.6	.....	.....	54.48	99.8	— .36	— .7	.3660	103.2	+ .0019	+ .5
1900	26	118.2	—1	— 3.8	54.69	100.2	— .57	—1.0	.3665	103.3	+ .0013	+ .4
1901	27	122.7	—2	— 7.4	54.63	100.1	— .51	— .9	.3654	103.0	+ .0024	+ .7
1902	25	113.6	.....	.....	54.12	99.2	.....	.....	.3589	101.2	+ .0089	+2.6
1903	25	113.6	.....	.....	54.12	99.2	.....	.....	.3678	103.7	.....	.....

TRANSFERRERS, Male.

[Data from 5 establishments.]

Av. 1890-99.	34	100.0	+13	+38.2	56.38	100.0	—1.49	—2.6	\$0.2983	100.0	+\$0.0342	+11.5
1890	31	91.2	+16	+51.6	56.10	99.5	—1.21	—2.2	.2895	97.0	+ .0430	+14.9
1891	32	94.1	+15	+46.9	56.19	99.7	—1.30	—2.3	.2946	98.8	+ .0379	+12.9
1892	31	91.2	+16	+51.6	55.94	99.2	—1.06	—1.9	.3024	101.4	+ .0301	+10.0
1893	33	97.1	+14	+42.4	56.12	99.5	—1.23	—2.2	.2984	100.0	+ .0341	+11.4
1894	28	82.4	+19	+67.9	56.36	100.0	—1.47	—2.6	.2936	98.4	+ .0389	+13.3
1895	32	94.1	+15	+46.9	56.50	100.2	—1.61	—2.8	.3087	103.5	+ .0238	+ 7.7
1896	32	94.1	+15	+46.9	56.84	100.8	—1.95	—3.4	.2974	99.7	+ .0351	+ 8.8
1897	38	111.8	+ 9	+23.7	56.50	100.2	—1.61	—2.8	.2967	99.5	+ .0358	+12.1
1898	38	111.8	+ 9	+23.7	56.68	100.5	—1.79	—3.2	.2991	100.3	+ .0334	+11.2
1899	42	123.6	+ 5	+11.9	56.52	100.2	—1.63	—2.9	.3029	101.5	+ .0296	+ 9.8
1900	43	126.5	+ 4	+ 9.3	56.44	100.1	—1.56	—2.7	.3010	100.9	+ .0315	+10.5
1901	46	135.3	+ 1	+ 2.2	56.60	100.2	—1.61	—2.8	.3107	104.2	+ .0218	+ 7.0
1902	44	129.4	+ 3	+ 6.8	55.91	99.2	—1.02	—1.8	.3170	106.3	+ .0155	+ 4.9
1903	47	138.2	.....	.....	54.89	97.4	.....	.....	.3325	111.5	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

LUMBER.

BAND SETTERS, Male.

[Data from 22 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	57	100.0	+2	+3.5	62.06	100.0	-0.35	-0.5	\$0.2327	100.0	+\$0.0360	+15.5
1890	57	100.0	+2	+3.5	62.21	100.2	-.48	-.8	.2386	102.5	+.0801	+12.6
1891	57	100.0	+2	+3.5	62.11	100.1	-.88	-.6	.2392	102.8	+.0295	+12.3
1892	58	101.8	+1	+1.7	62.17	100.2	-.44	-.7	.2413	103.7	+.0274	+11.4
1893	56	98.2	+3	+5.4	62.14	100.1	-.41	-.7	.2560	101.4	+.0827	+13.9
1894	55	96.5	+4	+7.3	62.07	100.0	-.34	-.5	.2238	96.2	+.0449	+20.1
1895	58	101.8	+1	+1.7	62.07	100.0	-.34	-.5	.2203	94.7	+.0484	+22.0
1896	55	96.5	+4	+7.3	61.85	99.7	-.12	-.2	.2249	96.6	+.0438	+19.5
1897	56	98.2	+3	+5.4	61.82	99.6	-.09	-.1	.2291	98.5	+.0896	+17.3
1898	59	103.5	.....	.....	62.03	100.0	-.30	-.5	.2321	99.7	+.0366	+15.8
1899	60	105.3	-1	-1.7	62.10	100.1	-.37	-.6	.2417	103.9	+.0270	+11.2
1900	59	103.5	.....	.....	62.03	100.0	-.30	-.5	.2413	104.5	+.0256	+10.5
1901	57	100.0	+2	+3.5	61.05	98.4	+.68	+1.1	.2432	104.5	+.0255	+10.5
1902	65	114.0	+6	+9.2	61.48	99.1	+.25	+.4	.2650	113.9	+.0087	+1.4
1903	59	103.5	.....	.....	61.78	99.6	.....	.....	.2587	115.5	.....	.....

CANT SETTERS, GANG, Male.

[Data from 10 establishments.]

Av. 1890-99.	31	100.0	-4	-12.9	63.56	100.0	-2.67	-4.2	\$0.1825	100.0	+\$0.0239	+13.1
1890	31	100.0	-4	-12.9	63.68	100.2	-2.79	-4.4	.1849	101.3	+.0215	+11.6
1891	31	100.0	-4	-12.9	63.68	100.2	-2.79	-4.4	.1850	101.4	+.0214	+11.6
1892	31	100.0	-4	-12.9	63.68	100.2	-2.79	-4.4	.1854	101.6	+.0210	+11.3
1893	31	100.0	-4	-12.9	63.68	100.2	-2.79	-4.4	.1852	101.5	+.0212	+11.4
1894	31	100.0	-4	-12.9	63.68	100.2	-2.79	-4.4	.1851	101.4	+.0213	+11.5
1895	31	100.0	-4	-12.9	63.68	100.2	-2.79	-4.4	.1817	99.6	+.0247	+13.6
1896	32	103.2	-5	-15.6	63.56	100.0	-2.67	-4.2	.1741	95.4	+.0323	+18.6
1897	32	103.2	-5	-15.6	63.56	100.0	-2.67	-4.2	.1741	95.4	+.0323	+18.6
1898	28	90.3	-1	-3.6	63.21	99.4	-2.32	-3.7	.1810	99.2	+.0254	+14.0
1899	28	90.3	-1	-3.6	63.21	99.4	-2.32	-3.7	.1887	103.4	+.0177	+9.4
1900	28	90.3	-1	-3.6	63.21	99.4	-2.32	-3.7	.1903	104.3	+.0161	+8.5
1901	28	90.3	-1	-3.6	63.21	99.4	-2.32	-3.7	.1911	104.7	+.0158	+8.0
1902	28	90.3	-1	-3.6	62.14	97.8	-1.25	-2.0	.1947	106.7	+.0117	+6.0
1903	27	87.1	.....	.....	60.89	95.8	.....	.....	.2064	113.1	.....	.....

CARRIAGE MEN, Male.

[Data from 7 establishments.]

Av. 1890-99.	24	100.0	.....	.....	64.87	100.0	-1.74	-2.7	\$0.1389	100.0	+\$0.0317	+22.8
1890	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1368	98.5	+.0338	+24.7
1891	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1381	99.4	+.0325	+23.5
1892	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1381	99.4	+.0325	+23.5
1893	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1381	99.4	+.0325	+23.5
1894	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1382	99.5	+.0324	+23.4
1895	22	91.7	+2	+9.1	64.77	98.8	-1.64	-2.6	.1352	97.3	+.0354	+26.2
1896	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1372	98.1	+.0334	+24.3
1897	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1377	99.1	+.0329	+23.9
1898	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1395	100.4	+.0311	+22.8
1899	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1498	107.8	+.0208	+13.9
1900	24	100.0	.....	.....	64.88	100.0	-1.75	-2.7	.1488	107.1	+.0213	+14.7
1901	24	100.0	.....	.....	63.88	98.5	-.75	-1.2	.1560	112.8	+.0146	+9.4
1902	24	100.0	.....	.....	63.13	97.3	.....	.....	.1637	117.9	+.0069	+4.2
1903	24	100.0	.....	.....	63.13	97.3	.....	.....	.1706	122.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

LUMBER—Continued.

CHOPPERS AND SAWYERS IN WOODS, Male.

[Data from 16 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	1,181	100.0	+416	+35.2	61.61	100.0	-0.14	-0.2	\$0.1751	100.0	+\$0.0286	+16.3
890	1,160	98.2	+437	+37.7	61.78	100.4	- .41	- .7	.1727	98.6	+ .0310	+18.0
891	1,188	100.6	+409	+34.4	61.74	100.4	- .37	- .6	.1713	97.8	+ .0324	+18.9
892	1,190	100.8	+407	+34.2	61.64	100.0	- .17	- .3	.1739	99.3	+ .0298	+17.1
893	1,122	95.0	+475	+42.3	61.44	99.9	- .07	- .1	.1680	95.9	+ .0357	+21.3
894	1,132	95.9	+465	+41.1	61.43	99.9	- .06	- .1	.1659	94.7	+ .0378	+22.8
895	1,146	97.0	+451	+39.4	61.37	99.8	.....	.....	.1724	98.5	+ .0313	+18.2
896	1,152	97.5	+445	+38.6	61.48	100.0	- .11	- .2	.1722	98.3	+ .0315	+18.3
897	1,218	103.1	+379	+31.1	61.37	99.8	.....	.....	.1768	101.0	+ .0269	+15.2
898	1,220	103.3	+377	+30.9	61.29	99.6	+ .08	+ .1	.1865	106.5	+ .0172	+ 9.2
899	1,277	108.1	+320	+25.1	61.64	100.2	- .27	- .4	.1916	109.4	+ .0121	+ 6.3
900	1,356	114.8	+241	+17.8	61.54	100.0	- .17	- .3	.1918	109.5	+ .0119	+ 6.2
901	1,359	115.1	+238	+17.5	61.42	99.9	- .06	- .1	.1982	113.2	+ .0055	+ 2.8
902	1,434	121.4	+163	+11.4	61.63	100.0	- .16	- .3	.2026	115.7	+ .0011	+ .5
903	1,597	135.2	.....	.....	61.37	99.8	.....	.....	.2037	116.3	.....	.....

CIRCULAR SETTERS, Male.

[Data from 15 establishments.]

Av. 1890-99.	28	100.0	+13	+46.4	62.23	100.0	-1.23	-2.0	\$0.1815	100.0	+\$0.0121	+ 6.7
890	25	89.3	+16	+64.0	62.84	101.0	-1.84	-2.9	.1918	105.7	+ .0018	+ .9
891	26	92.9	+15	+57.7	62.50	100.4	-1.50	-2.4	.1865	102.8	+ .0071	+ 3.8
892	26	92.9	+15	+57.7	62.50	100.4	-1.50	-2.4	.1874	103.3	+ .0062	+ 3.8
893	26	92.9	+15	+57.7	61.85	98.6	- .35	- .6	.1860	102.5	+ .0076	+ 4.1
894	26	92.9	+15	+57.7	61.35	98.6	- .35	- .6	.1792	98.7	+ .0144	+ 8.0
895	26	92.9	+15	+57.7	62.50	100.4	-1.50	-2.4	.1775	97.8	+ .0161	+ 9.1
896	27	96.4	+14	+51.9	62.63	100.6	-1.63	-2.6	.1774	97.7	+ .0162	+ 9.1
897	30	107.1	+11	+36.7	62.37	100.2	-1.37	-2.2	.1739	95.8	+ .0197	+11.3
898	32	114.3	+ 9	+28.1	62.22	100.0	-1.22	-2.0	.1733	98.2	+ .0153	+ 8.6
899	35	125.0	+ 6	+17.1	62.03	99.7	-1.03	-1.7	.1769	97.5	+ .0167	+ 9.4
900	35	125.0	+ 6	+17.1	61.51	98.8	- .51	- .8	.1832	100.9	+ .0104	+ 5.7
901	37	132.1	+ 4	+10.8	61.43	98.7	- .43	- .7	.1842	101.6	+ .0094	+ 5.1
902	41	146.4	.....	.....	61.00	98.0	.....	.....	.1840	101.4	+ .0096	+ 5.2
903	41	146.4	.....	.....	61.00	98.0	.....	.....	.1936	106.7	.....	.....

EDGER MEN, Male.

[Data from 23 establishments.]

Av. 1890-99.	52	100.0	+17	+32.7	61.90	100.0	-0.80	-1.3	\$0.2314	100.0	+\$0.0237	+10.2
890	49	94.2	+20	+40.8	62.89	100.8	-1.29	-2.1	.2424	104.8	+ .0127	+ 5.2
891	50	96.2	+19	+38.0	62.10	100.3	-1.00	-1.6	.2427	104.9	+ .0124	+ 5.1
892	50	96.2	+19	+38.0	62.10	100.3	-1.00	-1.6	.2454	106.1	+ .0097	+ 4.0
893	52	100.0	+17	+32.7	61.44	99.3	- .34	- .6	.2416	104.4	+ .0135	+ 5.6
894	48	92.3	+21	+43.8	61.44	99.3	- .34	- .6	.2261	97.7	+ .0290	+12.3
895	49	94.2	+20	+40.8	62.14	100.4	-1.04	-1.7	.2190	94.6	+ .0361	+16.6
896	51	98.1	+18	+35.3	62.06	100.3	- .96	-1.5	.2258	97.6	+ .0293	+13.0
897	55	105.8	+14	+25.5	61.91	100.0	- .81	-1.3	.2210	95.5	+ .0341	+15.4
898	56	107.7	+13	+23.2	61.77	99.8	- .67	-1.1	.2227	96.2	+ .0324	+14.5
899	58	111.5	+11	+19.0	61.60	99.5	- .50	- .8	.2276	98.3	+ .0276	+12.1
900	62	119.2	+ 7	+11.3	61.40	99.2	- .80	- .5	.2331	102.9	+ .0170	+ 7.1
901	65	125.0	+ 4	+ 6.2	61.20	98.9	- .10	- .2	.2449	105.8	+ .0102	+ 4.2
902	67	128.8	+ 2	+ 3.0	60.90	98.4	+ .20	+ .3	.2451	105.9	+ .0100	+ 4.1
903	69	132.7	.....	.....	61.10	98.7	.....	.....	.2551	110.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1900=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

LUMBER—Continued.

FILERS, Male.

[Data from 36 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount	Per cent.
Av. 1890-99.	73	100.0	+18	+24.7	62.13	100.0	-1.02	-1.6	\$0.3910	100.0	+\$0.0501	+12.
1890	70	95.9	+21	+30.0	62.43	100.5	-1.32	-2.1	.3932	100.6	+ .0479	+12.
1891	71	97.3	+20	+28.2	62.23	100.2	-1.12	-1.8	.3958	101.2	+ .0453	+11.
1892	72	98.6	+19	+26.4	62.19	100.1	-1.08	-1.7	.3913	100.1	+ .0498	+12.
1893	71	97.3	+20	+28.2	61.80	99.5	-.69	-1.1	.3988	102.0	+ .0423	+10.
1894	72	98.6	+19	+26.4	61.78	99.4	-.67	-1.1	.3818	97.6	+ .0593	+15.
1895	70	95.9	+21	+30.0	62.26	100.2	-1.15	-1.8	.3768	96.4	+ .0643	+17.
1896	69	94.5	+22	+31.9	62.29	100.3	-1.18	-1.9	.3866	98.9	+ .0545	+14.
1897	75	102.7	+16	+21.8	62.19	100.1	-1.08	-1.7	.3862	98.8	+ .0549	+14.
1898	78	106.8	+13	+16.7	62.10	100.0	-.99	-1.6	.3925	100.4	+ .0486	+12.
1899	77	105.5	+14	+18.2	62.05	99.9	-.94	-1.5	.4069	104.1	+ .0342	+ 8.
1900	77	105.5	+14	+18.2	61.97	99.7	-.86	-1.4	.4184	107.0	+ .0227	+ 5.
1901	83	113.7	+ 8	+ 9.6	61.80	99.5	-.69	-1.1	.4232	108.2	+ .0179	+ 4.
1902	91	124.7	.....	.....	61.37	98.8	-.26	-.4	.4229	108.2	+ .0182	+ 4.
1903	91	124.7	.....	.....	61.11	98.4	.....	.....	.4411	112.8	.....	.....

LABORERS, Male.

[Data from 17 establishments.]

Av. 1890-99.	1,204	100.0	+490	+40.7	63.55	100.0	-2.03	-3.2	\$0.1277	100.0	+\$0.0167	+13.
1890	1,123	93.3	+571	+50.8	63.74	100.3	-2.22	-3.5	.1338	104.8	+ .0106	+ 7.
1891	1,186	98.5	+508	+42.8	63.64	100.1	-2.12	-3.3	.1335	104.4	+ .0111	+ 8.
1892	1,143	94.9	+551	+48.2	63.76	100.3	-2.24	-3.5	.1319	103.3	+ .0125	+ 9.
1893	1,150	95.5	+544	+47.3	63.63	100.1	-2.11	-3.3	.1313	102.8	+ .0131	+10.
1894	1,220	101.3	+474	+38.9	63.68	100.2	-2.16	-3.4	.1253	98.1	+ .0191	+15.
1895	1,216	101.0	+478	+39.3	63.57	100.0	-2.05	-3.2	.1221	96.6	+ .0223	+18.
1896	1,171	97.3	+523	+44.7	63.62	100.1	-2.10	-3.3	.1235	96.7	+ .0209	+16.
1897	1,212	100.7	+432	+39.8	63.52	100.0	-2.00	-3.2	.1211	94.8	+ .0233	+19.
1898	1,305	108.4	+359	+29.8	63.16	99.4	-1.64	-2.6	.1250	97.9	+ .0194	+15.
1899	1,314	109.1	+350	+28.9	63.22	99.5	-1.70	-2.7	.1292	101.2	+ .0152	+11.
1900	1,446	120.1	+248	+17.2	62.95	99.1	-1.43	-2.3	.1306	102.3	+ .0138	+10.
1901	1,560	129.6	+134	+ 8.6	62.81	98.8	-1.29	-2.1	.1351	105.8	+ .0093	+ 6.
1902	1,646	136.7	+ 48	+ 2.9	61.99	97.5	-.47	-.8	.1413	110.6	+ .0031	+ 2.
1903	1,694	140.7	.....	.....	61.52	96.8	.....	.....	.1444	113.1	.....	.....

SAWYERS, BAND, Male.

[Data from 24 establishments.]

Av. 1890-99.	52	100.0	+15	+28.8	61.72	100.0	-0.82	-1.3	\$0.3975	100.0	+\$0.0876	+22.
1890	51	98.1	+16	+31.4	61.88	100.3	-.98	-1.6	.4013	101.0	+ .0838	+20.
1891	50	96.2	+17	+34.0	61.68	99.9	-.78	-1.3	.4050	101.9	+ .0801	+19.
1892	50	96.2	+17	+34.0	61.80	100.1	-.90	-1.5	.4033	101.5	+ .0818	+20.
1893	49	94.2	+18	+36.7	61.84	100.2	-.94	-1.5	.4074	102.5	+ .0777	+19.
1894	51	98.1	+16	+31.4	61.76	100.1	-.86	-1.4	.3887	97.8	+ .0964	+24.
1895	53	101.9	+14	+26.4	61.70	100.0	-.80	-1.3	.3887	99.8	+ .0964	+24.
1896	51	98.1	+16	+31.4	61.65	99.9	-.75	-1.2	.2919	98.6	+ .0962	+23.
1897	51	98.1	+16	+31.4	61.65	99.9	-.75	-1.2	.3957	99.5	+ .0894	+22.
1898	57	109.6	+10	+17.5	61.58	99.8	-.68	-1.1	.3919	98.6	+ .0932	+23.
1899	58	111.5	+ 9	+15.5	61.66	99.9	-.76	-1.2	.4013	101.0	+ .0838	+20.
1900	63	121.2	+ 4	+ 6.3	61.43	99.5	-.53	-.9	.4174	105.0	+ .0677	+16.
1901	63	121.2	+ 4	+ 6.3	61.43	99.5	-.53	-.9	.4280	107.7	+ .0571	+13.
1902	67	128.8	.....	.....	60.99	98.8	-.09	-.1	.4565	114.8	+ .0286	+ 6.
1903	67	128.8	.....	.....	60.90	98.7	.....	.....	.4851	122.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

LUMBER—Concluded.

SAWYERS, CIRCULAR, Male.

[Data from 17 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
A v. 1890-99.	25	100.0	+10	+40.0	63.13	100.0	-1.96	-3.1	\$0.3381	100.0	+\$0.0244	+ 7.2
1890	23	92.0	+12	+52.2	63.74	101.0	-2.57	-4.0	.3545	104.9	+ .0080	+ 2.3
1891	23	92.0	+12	+52.2	63.48	100.6	-2.31	-3.6	.3562	105.4	+ .0063	+ 1.8
1892	22	88.0	+13	+59.1	63.64	100.8	-2.47	-3.9	.3474	102.8	+ .0151	+ 4.3
1893	22	88.0	+13	+59.1	62.27	98.6	-1.10	-1.8	.3479	102.9	+ .0146	+ 4.2
1894	22	88.0	+13	+59.1	62.27	98.6	-1.10	-1.8	.3420	101.2	+ .0205	+ 6.0
1895	23	92.0	+12	+52.2	63.48	100.6	-2.31	-3.6	.3382	100.0	+ .0243	+ 7.2
1896	25	100.0	+10	+40.0	63.44	100.5	-2.27	-3.6	.3364	99.5	+ .0261	+ 7.8
1897	27	108.0	+8	+29.6	63.19	100.1	-2.02	-3.2	.3213	95.0	+ .0412	+12.8
1898	29	116.0	+6	+20.7	62.97	99.7	-1.80	-2.9	.3207	94.9	+ .0418	+13.0
1899	31	124.0	+4	+12.9	62.77	99.4	-1.60	-2.5	.3168	93.7	+ .0457	+14.4
1900	33	132.0	+2	+6.1	62.24	98.6	-1.07	-1.7	.3255	96.3	+ .0370	+11.4
1901	33	132.0	+2	+6.1	61.97	98.2	— .80	-1.3	.3366	99.6	+ .0259	+ 7.7
1902	35	140.0	.....	.....	61.17	96.9	.....	.....	.3501	103.5	+ .0124	+ 3.5
1903	35	140.0	.....	.....	61.17	96.9	.....	.....	.3625	107.2	.....	.....

SAWYERS, GANG, Male.

[Data from 17 establishments.]

A v. 1890-99.	27	100.0	+1	+3.7	62.08	100.0	-0.58	-0.9	\$0.2202	100.0	+\$0.0487	+22.1
1890	26	96.3	+2	+7.7	62.08	100.0	— .58	— .9	.2151	97.7	+ .0538	+25.0
1891	26	96.3	+2	+7.7	62.08	100.0	— .58	— .9	.2150	97.6	+ .0539	+25.1
1892	26	96.3	+2	+7.7	62.08	100.0	— .58	— .9	.2170	98.5	+ .0519	+23.9
1893	27	100.0	+1	+3.7	62.22	100.2	— .72	-1.2	.2164	98.3	+ .0525	+24.3
1894	27	100.0	+1	+3.7	62.22	100.2	— .72	-1.2	.2059	98.5	+ .0630	+30.6
1895	29	107.4	—1	—3.4	62.07	100.0	— .57	— .9	.2096	99.2	+ .0592	+28.3
1896	29	107.4	—1	—3.4	62.07	100.0	— .57	— .9	.2103	99.5	+ .0586	+27.9
1897	27	100.0	+1	+3.7	62.00	99.9	— .50	— .8	.2356	107.9	+ .0332	+14.1
1898	27	100.0	+1	+3.7	62.00	99.9	— .50	— .8	.2350	106.7	+ .0339	+14.4
1899	27	100.0	+1	+3.7	62.00	99.9	— .50	— .8	.2422	110.0	+ .0267	+11.0
1900	27	100.0	+1	+3.7	61.78	99.5	— .28	— .5	.2501	113.6	+ .0188	+ 7.5
1901	27	100.0	+1	+3.7	61.78	99.5	— .28	— .5	.2542	115.4	+ .0147	+ 6.8
1902	27	100.0	+1	+3.7	61.33	98.8	+ .17	+ .3	.2628	119.3	+ .0063	+ 2.4
1903	28	108.7	.....	.....	61.50	99.1	.....	.....	.2689	122.1	.....	.....

TRIMMERS, Male.

[Data from 7 establishments.]

A v. 1890-99.	64	100.0	+36	+56.3	60.55	100.0	+0.41	+0.7	\$0.1966	100.0	—\$0.0038	— 1.9
1890	47	73.4	+53	+112.8	60.77	100.4	+ .19	+ .3	.2235	113.7	— .0307	—13.7
1891	50	78.1	+50	+100.0	60.72	100.3	+ .24	+ .4	.2141	108.9	— .0213	— 9.9
1892	56	87.5	+44	+78.6	60.64	100.1	+ .32	+ .5	.2086	106.1	— .0158	— 7.6
1893	55	85.9	+45	+81.8	60.65	100.2	+ .31	+ .5	.2108	107.2	— .0180	— 8.5
1894	51	79.7	+49	+96.1	60.59	100.1	+ .37	+ .6	.1911	97.2	+ .0017	+ .9
1895	51	79.7	+49	+96.1	60.59	100.1	+ .37	+ .6	.1914	97.4	+ .0014	+ .7
1896	64	100.0	+36	+56.3	60.47	99.9	+ .49	+ .8	.1780	90.5	+ .0145	+ 8.3
1897	85	132.8	+15	+17.6	60.35	99.7	+ .61	+1.0	.1747	88.9	+ .0181	+10.4
1898	84	131.3	+16	+19.0	60.36	99.7	+ .60	+1.0	.1857	94.5	+ .0071	+ 3.8
1899	93	145.3	+7	+7.5	60.39	99.7	+ .57	+ .9	.1877	95.5	+ .0051	+ 2.7
1900	99	154.7	+1	+1.0	60.36	99.7	+ .60	+1.0	.1944	98.9	+ .0016	+ .3
1901	106	165.6	—6	—5.7	60.34	99.7	+ .62	+1.0	.1951	99.2	— .0023	— 1.2
1902	97	151.6	+3	+3.1	60.37	99.7	+ .59	+1.0	.1891	96.2	+ .0037	+ 2.0
1903	100	156.8	.....	.....	60.96	100.7	.....	.....	.1928	98.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MARBLE AND STONE WORK.

BED RUBBERS, Male.

[Data from 29 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	146	100.0	+20	+13.8	56.59	100.0	-5.33	-9.4	\$0.2398	100.0	+\$0.0614	+25
1890	152	104.8	+13	+8.6	57.51	101.6	-6.25	-10.9	.2822	96.8	+.0690	+29
1891	147	101.4	+18	+12.2	56.98	100.6	-5.67	-10.0	.2377	99.1	+.0635	+26
1892	152	104.8	+13	+8.6	56.91	100.6	-5.65	-9.9	.2346	97.8	+.0666	+28
1893	156	107.6	+9	+5.8	56.99	100.7	-5.73	-10.1	.2372	98.9	+.0640	+27
1894	134	92.4	+31	+23.1	56.70	100.2	-5.44	-9.6	.2386	99.5	+.0626	+26
1895	145	100.0	+20	+13.8	56.91	100.6	-5.65	-9.9	.2342	97.7	+.0670	+28
1896	131	90.3	+34	+26.0	56.27	99.4	-5.01	-9.9	.2447	102.0	+.0565	+23
1897	143	98.6	+22	+15.4	56.49	99.8	-5.23	-9.3	.2403	100.2	+.0609	+25
1898	144	99.3	+21	+14.6	56.51	99.9	-5.25	-9.8	.2383	99.4	+.0629	+26
1899	141	97.2	+24	+17.0	54.72	96.7	-3.46	-6.3	.2602	108.5	+.0410	+15
1900	142	97.9	+23	+16.2	54.82	96.9	-3.56	-6.8	.2609	108.8	+.0403	+15
1901	161	111.0	+4	+2.5	53.80	95.1	-2.54	-4.7	.2819	117.6	+.0183	+6
1902	171	117.9	-6	-8.5	53.22	94.0	-1.96	-8.7	.2987	124.6	+.0025	+
1903	165	113.8	.....	.....	51.26	90.6	.....	.....	.3012	125.6	.....	.....

CARVERS, Male.

[Data from 28 establishments.]

Av. 1890-99.	120	100.0	+5	+4.2	51.47	100.0	-3.62	-7.0	\$0.4492	100.0	+\$0.1115	+24
1890	115	95.8	+10	+8.7	51.54	100.1	-3.69	-7.2	.4454	99.2	+.1153	+26
1891	107	89.2	+18	+16.8	52.09	101.2	-4.24	-8.1	.4285	95.4	+.1322	+8
1892	112	93.3	+13	+11.6	50.72	98.5	-2.87	-5.7	.4481	99.8	+.1126	+2
1893	114	95.0	+11	+9.6	51.07	99.2	-3.22	-6.8	.4455	99.2	+.1152	+2
1894	137	114.2	-12	-8.8	52.91	102.8	-5.06	-9.6	.4324	96.3	+.1283	+2
1895	121	100.8	+4	+3.8	52.85	102.7	-5.00	-9.5	.4179	98.0	+.1428	+3
1896	119	99.2	+6	+5.0	52.10	101.2	-4.25	-8.2	.4663	103.8	+.0944	+2
1897	103	85.8	+22	+21.4	51.21	99.5	-3.36	-6.6	.4658	103.7	+.0949	+2
1898	114	95.0	+11	+9.6	51.47	100.0	-3.62	-7.0	.4602	102.4	+.1005	+2
1899	153	127.5	-28	-13.3	48.73	94.7	-1.88	-1.8	.4820	107.3	+.0787	+1
1900	167	139.2	-42	-25.1	48.42	94.1	-1.67	-1.2	.4851	108.0	+.0756	+1
1901	166	138.3	-41	-24.7	48.28	93.8	-1.43	-1.9	.5213	116.1	+.0394	+
1902	146	121.7	-21	-14.4	47.71	92.7	+1.14	+1.8	.5616	125.0	-.0009	-
1903	125	104.2	.....	.....	47.85	93.0	.....	.....	.5607	124.8	.....	.....

LABORERS, Male.

[Data from 18 establishments.]

Av. 1890-99.	202	100.0	-10	-5.0	57.00	100.0	-0.53	-0.9	\$0.1559	100.0	+\$0.0193	+1
1890	214	105.9	-22	-10.3	58.73	103.0	-2.26	-3.9	.1558	99.9	+.0194	+1
1891	208	103.0	-16	-7.7	58.17	102.1	-1.70	-2.9	.1506	96.6	+.0246	+1
1892	221	109.4	-29	-13.1	57.93	101.6	-1.46	-2.5	.1566	100.4	+.0186	+1
1893	211	104.5	-19	-9.0	57.69	101.2	-1.22	-2.1	.1604	102.9	+.0148	+
1894	190	94.1	+2	+1.1	56.81	99.7	-3.4	-6	.1541	100.1	+.0191	+1
1895	190	94.1	+2	+1.1	56.94	99.9	-4.7	-8	.1569	99.4	+.0203	+1
1896	196	97.0	-4	-2.0	56.92	99.9	-4.5	-8	.1555	99.7	+.0197	+1
1897	201	99.5	-9	-4.5	56.35	98.9	+12	+2	.1592	102.1	+.0160	+1
1898	199	98.5	-7	-3.5	56.50	99.1	-0.03	-1	.1591	102.1	+.0161	+1
1899	190	94.1	+2	+1.1	53.95	94.6	+2.52	+4.7	.1505	96.5	+.0247	+1
1900	173	85.6	+19	+11.0	57.25	100.4	-1.78	-1.4	.1550	99.4	+.0202	+1
1901	216	106.9	-24	-11.1	56.75	99.6	-1.28	-5	.1638	105.1	+.0114	+
1902	218	107.9	-26	-11.9	56.36	98.9	+11	+2	.1693	108.6	+.0059	+
1903	192	95.0	.....	.....	56.47	99.1	.....	.....	.1752	112.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MARBLE AND STONE WORK—Continued.**LETTERERS, Male.**

[Data from 42 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num. ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
v. 1890-99.	76	100.0	+ 8	+10.5	56.23	100.0	-4.74	-8.4	\$0.2992	100.0	+\$0.0539	+18.0
890	74	97.4	+10	+13.5	56.95	101.3	-5.46	-9.6	.2921	97.6	+.0610	+20.9
891	75	98.7	+ 9	+12.0	56.43	100.4	-4.94	-8.8	.2932	98.0	+.0599	+20.4
892	73	96.1	+11	+15.1	55.82	99.3	-4.93	-7.8	.2963	99.0	+.0568	+19.2
893	76	100.0	+ 8	+10.5	55.89	99.4	-4.40	-7.9	.2927	97.8	+.0604	+20.6
894	72	94.7	+12	+16.7	56.46	100.4	-4.97	-8.8	.2964	99.1	+.0567	+19.1
895	77	101.3	+ 7	+ 9.1	56.38	100.3	-4.89	-8.7	.2978	99.5	+.0558	+18.6
896	72	94.7	+12	+16.7	56.25	100.0	-4.76	-8.5	.3053	102.0	+.0478	+15.7
897	77	101.3	+ 7	+ 9.1	56.32	100.2	-4.83	-8.6	.3048	101.9	+.0483	+15.8
898	79	103.9	+ 5	+ 6.3	55.96	99.5	-4.47	-8.0	.3060	102.3	+.0471	+15.4
899	80	105.3	+ 4	+ 5.0	55.85	99.3	-4.36	-7.8	.3074	102.7	+.0457	+14.9
900	81	106.6	+ 3	+ 3.7	54.28	96.5	-2.79	-5.1	.3175	106.1	+.0356	+11.2
901	85	111.8	- 1	- 1.2	53.99	96.0	-2.60	-4.6	.3254	108.3	+.0277	+ 8.5
902	86	113.2	- 2	- 2.3	53.64	95.4	-2.15	-4.0	.3376	112.8	+.0155	+ 4.6
903	84	110.5	.....	.....	51.49	91.6	.....	.....	.3531	118.0	.....	.....

MARBLE CUTTERS, Male.

[Data from 58 establishments.]

v. 1890-99.	411	100.0	+138	+33.6	52.89	100.0	-3.71	-7.0	\$0.3518	100.0	+\$0.1040	+29.6
890	437	106.3	+112	+25.6	54.33	102.7	-5.15	-9.5	.3369	95.8	+.1189	+35.3
891	449	109.2	+100	+22.3	52.93	100.1	-3.75	-7.1	.3534	101.9	+.0974	+27.2
892	406	98.8	+143	+35.2	52.70	99.6	-3.52	-6.7	.3527	100.3	+.1031	+29.2
893	397	96.6	+152	+38.3	52.74	99.7	-3.56	-6.8	.3507	99.7	+.1051	+30.0
894	363	88.3	+186	+51.2	53.39	100.9	-4.21	-7.9	.3372	95.8	+.1186	+35.2
895	368	89.5	+181	+49.2	53.23	100.6	-4.05	-7.6	.3370	95.8	+.1188	+35.3
896	333	93.2	+166	+43.3	53.09	100.4	-3.91	-7.4	.3548	100.9	+.1010	+23.5
897	392	95.4	+157	+40.1	52.33	99.9	-3.65	-6.9	.3530	101.8	+.0978	+27.3
898	403	98.1	+146	+36.2	52.84	99.9	-3.66	-6.9	.3564	101.3	+.0994	+27.9
899	513	124.8	+ 36	+ 7.0	50.82	96.1	-1.64	-3.2	.3754	106.7	+.0804	+21.4
900	534	129.9	+ 15	+ 2.8	50.48	95.4	-1.30	-2.6	.3826	108.8	+.0732	+19.1
901	535	130.2	+ 14	+ 2.6	50.36	95.2	-1.18	-2.3	.4065	115.5	+.0493	+12.1
902	527	128.2	+ 22	+ 4.2	50.22	95.0	-1.04	-2.1	.4338	123.3	+.0220	+ 5.1
903	549	133.6	.....	.....	49.18	93.0	.....	.....	.4558	129.6	.....	.....

MARBLE POLISHERS, Male.

[Data from 29 establishments.]

v. 1890-99.	263	100.0	+54	+20.5	55.41	100.0	-3.44	-6.2	\$0.2193	100.0	+\$0.0619	+23.2
90	261	99.2	+56	+21.5	56.68	102.3	-4.71	-8.3	.2139	97.5	+.0673	+31.5
91	278	105.7	+39	+14.0	56.22	101.5	-4.25	-7.6	.2120	96.7	+.0692	+32.6
92	285	108.4	+32	+11.2	55.66	100.5	-3.69	-6.6	.2138	99.8	+.0654	+28.5
93	262	99.6	+55	+21.0	55.71	100.5	-3.74	-6.7	.2193	100.0	+.0619	+23.2
94	273	103.8	+44	+16.1	55.78	100.7	-3.81	-6.8	.2056	93.8	+.0756	+36.8
95	267	101.5	+50	+18.7	55.83	100.8	-3.91	-7.0	.2042	93.1	+.0770	+37.7
96	225	85.6	+92	+40.9	55.02	99.3	-3.05	-5.5	.2222	101.3	+.0590	+26.6
97	235	89.4	+82	+34.9	54.92	99.1	-2.95	-5.4	.2237	102.0	+.0575	+25.7
98	245	93.2	+72	+29.4	55.12	99.5	-3.15	-5.7	.2259	108.0	+.0553	+24.5
99	294	111.8	+23	+ 7.8	53.10	95.8	-1.13	-2.1	.2472	112.7	+.0340	+13.8
00	308	117.1	+ 9	+ 2.9	53.31	96.2	-1.34	-2.5	.2461	112.2	+.0351	+14.3
01	314	119.4	+ 3	+ 1.0	53.07	95.8	-1.10	-2.1	.2596	118.4	+.0216	+ 8.3
02	316	120.2	+ 1	+ .3	53.46	96.5	-1.49	-2.8	.2695	122.9	+.0117	+ 4.3
03	317	120.5	.....	.....	51.97	93.8	.....	.....	.2812	128.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MARBLE AND STONE WORK—Continued.

SAWYERS, Male.

[Data from 35 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	91	100.0	+ 8	+ 8.8	56.67	100.0	-2.52	-4.4	\$0.2283	100.0	+\$0.0556	+15.
1890	89	97.8	+10	+11.2	57.65	101.7	-3.50	-6.1	.2182	95.6	+.0456	+20.
1891	89	97.8	+10	+11.2	57.58	101.6	-3.43	-6.0	.2193	96.1	+.0445	+20.
1892	90	98.9	+ 9	+10.0	57.61	101.7	-3.46	-6.0	.2178	95.4	+.0460	+21.
1893	89	97.8	+10	+11.2	57.11	100.8	-2.96	-5.2	.2218	97.2	+.0420	+18.
1894	90	98.9	+ 9	+10.0	57.08	100.7	-2.93	-5.1	.2241	98.2	+.0397	+17.
1895	91	100.0	+ 8	+ 8.8	57.31	101.1	-3.16	-5.5	.2203	96.5	+.0435	+19.
1896	92	101.1	+ 7	+ 7.6	55.95	98.7	-1.80	-3.2	.2378	104.2	+.0260	+10.
1897	94	103.3	+ 5	+ 5.3	55.67	98.2	-1.52	-2.7	.2396	104.9	+.0242	+10.
1898	94	103.3	+ 5	+ 5.3	55.52	98.0	-1.37	-2.5	.2403	105.3	+.0235	+ 9.
1899	94	103.3	+ 5	+ 5.3	55.22	97.4	-1.07	-1.9	.2440	106.9	+.0198	+ 8.
1900	96	105.5	+ 3	+ 3.1	54.86	96.8	- .71	-1.3	.2474	108.4	+.0164	+ 6.
1901	100	109.9	- 1	- 1.0	54.01	95.3	+ 1.14	+ 3	.2590	113.4	+.0048	+ 1.
1902	96	105.5	+ 3	+ 3.1	54.28	95.8	- .13	- .2	.2544	111.4	+.0094	+ 3.
1903	99	108.8	.....	.....	54.15	95.6	.....	.....	.2638	115.5	.....	.....

STONE CUTTERS, GRANITE, Male.

[Data from 72 establishments.]

Av. 1890-99.	775	100.0	+125	+16.1	52.71	100.0	-4.04	-7.7	\$0.3628	100.0	+\$0.0597	+16
1890	933	121.0	- 38	- 4.1	52.73	100.0	-4.06	-7.7	.3730	102.8	+.0495	+18
1891	880	113.5	+ 20	+ 2.3	52.54	99.7	-3.87	-7.4	.3803	104.8	+.0422	+11
1892	882	113.8	+ 18	+ 2.0	52.70	100.0	-4.03	-7.6	.3750	103.2	+.0475	+12
1893	778	100.4	+122	+15.7	53.12	100.8	-4.45	-8.4	.3618	99.7	+.0607	+16
1894	705	91.0	+195	+27.7	52.84	100.2	-4.17	-7.9	.3593	99.0	+.0632	+17
1895	685	88.4	+215	+31.4	52.67	99.9	-4.00	-7.6	.3611	99.5	+.0614	+17
1896	709	91.5	+191	+26.9	52.77	100.1	-4.10	-7.8	.3590	99.0	+.0635	+17
1897	678	87.5	+222	+32.7	52.99	100.5	-4.32	-8.2	.3524	97.1	+.0701	+19
1898	698	90.1	+202	+28.9	53.04	100.6	-4.37	-8.2	.3467	95.6	+.0758	+21
1899	798	103.0	+102	+12.8	51.70	98.1	-3.03	-5.9	.3594	99.1	+.0631	+17
1900	901	116.3	- 1	- .1	50.20	95.2	-1.53	-3.0	.3923	108.1	+.0802	+ 7
1901	852	109.9	+ 48	+ 5.6	49.96	94.8	-1.29	-2.6	.3868	106.6	+.0857	+ 9
1902	856	110.5	+ 44	+ 5.1	49.67	94.2	-1.00	-2.0	.3938	108.5	+.0287	+ 9
1903	900	116.1	.....	.....	48.67	92.3	.....	.....	.4225	116.5	.....	.....

STONE CUTTERS, SOFT STONE, Male.

[Data from 49 establishments.]

Av. 1890-99.	572	100.0	- 44	- 7.7	49.41	100.0	-2.11	-4.3	\$0.4242	100.0	+\$0.0687	+ 16
1890	631	110.3	-103	-16.3	50.93	103.1	-3.63	-7.1	.4263	100.5	+.0666	+ 15
1891	626	109.4	- 98	-15.7	49.66	100.5	-2.36	-4.8	.4419	104.2	+.0510	+ 11
1892	601	105.1	- 73	-12.1	49.55	100.3	-2.25	-4.5	.4409	103.9	+.0520	+ 11
1893	591	103.3	- 63	-10.7	49.98	101.2	-2.68	-5.1	.4264	100.5	+.0665	+ 15
1894	523	91.4	+ 5	+ 1.0	49.79	100.8	-2.49	-5.0	.4124	97.2	+.0806	+ 19
1895	522	91.3	+ 6	+ 1.1	49.49	100.2	-2.19	-4.4	.4081	96.2	+.0848	+ 20
1896	565	98.8	- 37	- 6.5	49.27	99.7	-1.97	-4.0	.4116	97.0	+.0813	+ 18
1897	499	87.2	+ 29	+ 5.8	48.64	98.4	-1.34	-2.8	.4187	98.7	+.0742	+ 17
1898	663	115.9	-135	-20.4	48.29	97.7	- .99	-2.1	.4321	101.9	+.0608	+ 14
1899	500	87.4	+ 28	+ 5.6	48.47	98.1	-1.17	-2.4	.4237	99.9	+.0692	+ 16
1900	491	85.8	+ 37	+ 7.5	48.66	98.5	-1.36	-2.8	.4260	100.4	+.0669	+ 15
1901	505	88.3	+ 23	+ 4.6	48.05	97.2	- .75	-1.6	.4347	102.5	+.0582	+ 13
1902	551	96.3	- 23	- 4.2	47.86	96.9	- .56	-1.2	.4607	108.6	+.0322	+ 7
1903	528	92.3	.....	.....	47.30	95.7	.....	.....	.4929	116.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

MARBLE AND STONE WORK—Concluded.

STONE CUTTERS, N. S., Male.

[Data from 30 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
v. 1890-99.	429	100.0	+ 75	+17.5	49.69	100.0	−3.03	−6.1	\$0.4359	100.0	+\$0.0535	+12.3
990.....	467	108.9	+ 37	+ 7.9	51.40	103.4	−4.74	−9.2	.4344	99.7	+ .0550	+12.7
991.....	430	100.2	+ 74	+17.2	50.59	101.8	−3.93	−7.8	.4421	101.4	+ .0478	+10.7
992.....	492	114.7	+ 12	+ 2.4	50.64	101.9	−3.98	−7.9	.4436	101.8	+ .0458	+10.3
993.....	470	109.6	+ 34	+ 7.2	50.05	100.7	−3.39	−6.8	.4467	102.5	+ .0427	+ 9.6
994.....	404	94.2	+100	+24.8	49.04	98.7	−2.38	−4.9	.4467	102.5	+ .0427	+ 9.6
995.....	396	92.3	+108	+27.3	49.97	100.6	−3.31	−6.6	.4276	98.1	+ .0618	+14.5
996.....	405	94.4	+ 99	+24.4	49.34	99.3	−2.68	−5.4	.4341	99.6	+ .0553	+12.7
997.....	390	90.9	+114	+29.2	48.64	97.9	−1.98	−4.1	.4356	99.9	+ .0538	+12.4
998.....	359	83.7	+145	+40.4	49.14	98.9	−2.48	−5.0	.4215	96.7	+ .0679	+16.1
999.....	481	112.1	+ 23	+ 4.8	48.08	96.8	−1.42	−3.0	.4265	97.8	+ .0629	+14.7
000.....	428	99.8	+ 76	+17.8	47.59	95.8	− .93	−2.0	.4303	98.7	+ .0591	+13.7
001.....	552	128.7	− 48	− 8.7	46.89	94.4	− .23	− .5	.4539	104.1	+ .0355	+ 7.8
002.....	565	131.7	− 61	−10.8	46.78	94.1	− .12	− .3	.4695	107.7	+ .0199	+ 4.2
003.....	504	117.5	.....	.....	46.66	93.9	.....	.....	.4894	112.3	.....	.....

STONE POLISHERS, Male.

[Data from 22 establishments.]

v. 1890-99.	50	100.0	+ 7	+14.0	56.50	100.0	−3.78	−6.7	\$0.2091	100.0	+\$0.0136	+ 6.5
990.....	49	98.0	+ 8	+16.3	57.37	101.5	−4.65	−8.1	.2098	100.3	+ .0129	+ 6.1
991.....	51	102.0	+ 6	+11.8	56.65	100.3	−3.99	−6.9	.2109	100.9	+ .0118	+ 5.6
992.....	49	98.0	+ 8	+16.3	56.39	99.8	−3.67	−6.5	.2161	103.3	+ .0066	+ 3.1
993.....	55	110.0	+ 2	+ 3.6	57.00	100.9	−4.28	−7.5	.2043	97.7	+ .0184	+ 9.0
994.....	46	92.0	+11	+23.9	57.07	101.0	−4.85	−7.6	.1962	93.8	+ .0265	+13.5
995.....	49	98.0	+ 8	+16.3	56.76	100.5	−4.04	−7.1	.1997	95.5	+ .0230	+11.5
996.....	52	104.0	+ 5	+ 9.6	55.44	98.1	−2.72	−4.9	.2105	100.7	+ .0122	+ 5.8
997.....	52	104.0	+ 5	+ 9.6	55.79	98.7	−3.07	−5.5	.2211	105.7	+ .0016	+ .7
998.....	51	102.0	+ 6	+11.8	56.18	99.4	−3.46	−6.2	.2141	102.4	+ .0086	+ 4.0
999.....	49	98.0	+ 8	+16.3	56.35	99.7	−3.63	−6.4	.2080	99.5	+ .0147	+ 7.1
000.....	50	100.0	+ 7	+14.0	55.00	97.8	−2.28	−4.1	.2002	95.7	+ .0225	+11.2
001.....	55	110.0	+ 2	+ 3.6	54.80	97.0	−2.08	−3.8	.2028	97.0	+ .0199	+ 9.8
002.....	59	118.0	− 2	− 3.4	53.32	94.4	− .60	−1.1	.2117	101.2	+ .0110	+ 5.2
003.....	57	114.0	.....	.....	52.72	93.3	.....	.....	.2227	106.5	.....	.....

TURNERS, Male.

[Data from 10 establishments.]

v. 1890-99.	19	100.0	+4	+21.1	56.97	100.0	−2.58	−4.5	\$0.2331	100.0	+\$0.0423	+18.1
990.....	19	100.0	+4	+21.1	57.58	101.1	−3.19	−5.5	.2249	96.5	+ .0505	+22.5
991.....	19	100.0	+4	+21.1	57.26	100.5	−2.87	−5.0	.2291	98.3	+ .0463	+20.2
992.....	19	100.0	+4	+21.1	57.26	100.5	−2.87	−5.0	.2291	98.3	+ .0463	+20.2
993.....	19	100.0	+4	+21.1	57.26	100.5	−2.87	−5.0	.2345	100.6	+ .0409	+17.4
994.....	19	100.0	+4	+21.1	57.26	100.5	−2.87	−5.0	.2345	100.6	+ .0409	+17.4
995.....	19	100.0	+4	+21.1	57.26	100.5	−2.87	−5.0	.2319	99.5	+ .0435	+18.8
996.....	17	89.5	+6	+35.3	56.35	98.9	−1.96	−3.5	.2381	102.1	+ .0373	+15.7
997.....	20	105.3	+3	+15.0	56.50	99.2	−2.11	−3.7	.2355	101.0	+ .0399	+16.9
998.....	19	100.0	+4	+21.1	56.63	99.4	−2.24	−4.0	.2376	101.9	+ .0378	+15.9
999.....	21	110.5	+2	+ 9.5	56.38	99.0	−1.99	−3.5	.2353	100.9	+ .0401	+17.0
000.....	19	100.0	+4	+21.1	56.63	99.4	−2.24	−4.0	.2426	104.1	+ .0328	+13.5
001.....	24	126.3	−1	− 4.2	56.08	98.4	−1.69	−3.0	.2398	102.9	+ .0356	+14.8
002.....	23	121.1	.....	.....	56.17	98.6	−1.78	−3.2	.2514	107.9	+ .0240	+ 9.5
003.....	23	121.1	.....	.....	54.39	95.5	.....	.....	.2754	118.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MUSICAL INSTRUMENTS, ORGANS.

ACTION MAKERS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	89	100.0	+27	+69.2	59.58	100.0	-2.65	-4.5	\$0.2837	100.0	-\$0.0089	-3.8
1890	45	115.4	+21	+46.7	59.56	100.1	-2.68	-4.5	.2284	97.7	-.0086	-1.6
1891	38	97.4	+28	+73.7	59.55	100.0	-2.67	-4.5	.2375	101.6	-.0127	-5.3
1892	41	105.1	+25	+61.0	59.54	100.0	-2.66	-4.5	.2385	102.1	-.0137	-5.7
1893	42	110.3	+23	+53.5	59.58	100.1	-2.70	-4.5	.2385	102.1	-.0137	-5.7
1894	35	89.7	+31	+88.6	59.46	99.9	-2.58	-4.3	.2264	96.9	-.0016	-.3
1895	36	92.3	+30	+83.3	59.50	99.9	-2.62	-4.4	.2327	99.6	-.0079	-3.4
1896	39	100.0	+27	+69.2	59.51	100.0	-2.63	-4.4	.2363	101.1	-.0115	-4.5
1897	38	97.4	+28	+73.7	59.50	99.9	-2.62	-4.4	.2281	97.6	-.0033	-1.3
1898	36	92.3	+30	+83.3	59.50	99.9	-2.62	-4.4	.2365	101.2	-.0117	-4.5
1899	49	110.3	+23	+53.5	59.56	100.1	-2.68	-4.5	.2336	100.0	-.0088	-3.8
1900	42	107.7	+24	+57.1	57.69	96.9	-.81	-1.4	.2622	112.2	-.0374	-14.3
1901	43	110.3	+23	+53.5	57.67	96.9	-.79	-1.4	.2504	107.1	-.0256	-10.1
1902	43	110.3	+23	+53.5	57.84	97.2	-.96	-1.7	.2268	97.0	-.0020	-.5
1903	66	169.2	.....	.....	56.88	95.5	.....	.....	.2248	96.2	.....	.....

CASE MAKERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	31	100.0	+5	+16.1	59.89	100.0	-5.36	-8.9	\$0.2022	100.0	+\$0.0075	+3.8
1890	39	122.6	-2	-5.8	59.92	100.1	-5.39	-9.0	.1993	98.6	+.0104	+5.3
1891	37	119.4	-1	-2.7	59.92	100.1	-5.39	-9.0	.2032	100.5	+.0065	+3.3
1892	51	164.5	-15	-29.4	59.94	100.1	-5.41	-9.0	.2235	110.5	-.0138	-6.6
1893	31	100.0	+5	+16.1	59.90	100.0	-5.37	-9.0	.2249	111.2	-.0152	-6.3
1894	22	71.0	+14	+63.6	59.86	99.9	-5.33	-8.9	.2059	101.8	+.0038	+1.7
1895	28	90.3	+8	+23.6	59.89	100.0	-5.36	-8.9	.1956	96.7	+.0141	+7.1
1896	26	83.9	+10	+38.5	59.83	100.0	-5.35	-8.9	.2034	100.6	+.0063	+3.3
1897	22	71.0	+14	+63.6	59.86	99.9	-5.33	-8.9	.1909	94.4	+.0188	+9.9
1898	25	80.6	+11	+44.0	59.88	100.0	-5.35	-8.3	.1857	91.8	+.0240	+12.3
1899	28	90.3	+8	+23.6	59.89	100.0	-5.36	-8.9	.1897	93.8	+.0200	+10.0
1900	28	90.3	+8	+23.6	56.79	94.8	-2.26	-4.0	.1985	98.2	+.0112	+5.3
1901	24	77.4	+12	+50.0	56.83	94.9	-2.30	-4.0	.2142	105.9	+.0045	+2.3
1902	26	83.9	+10	+38.5	57.19	95.5	-2.66	-4.7	.2137	105.7	-.0040	-1.9
1903	36	113.1	.....	.....	54.53	91.1	.....	.....	.2097	103.7	.....	.....

FINISHERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	19	100.0	+13	+68.4	59.67	100.0	-7.36	-12.3	\$0.2125	100.0	+\$0.0198	+9.3
1890	21	110.5	+11	+52.4	60.00	100.6	-7.69	-12.8	.1904	89.6	+.0419	+22.3
1891	20	105.3	+12	+60.0	60.00	100.6	-7.69	-12.8	.2180	102.6	+.0143	+6.3
1892	20	105.3	+12	+60.0	60.00	100.6	-7.69	-12.8	.2177	102.4	+.0146	+6.3
1893	17	89.5	+15	+88.2	60.00	100.6	-7.69	-12.8	.2431	114.4	+.0108	+4.3
1894	18	94.7	+14	+77.8	60.00	100.6	-7.69	-12.8	.2006	94.4	+.0317	+15.3
1895	23	121.1	+9	+39.1	60.00	100.6	-7.69	-12.8	.2213	104.4	+.0105	+4.3
1896	17	89.5	+15	+88.2	60.00	100.6	-7.69	-12.8	.2097	98.7	+.0226	+10.3
1897	18	94.7	+14	+77.8	59.00	98.9	-6.69	-11.3	.2098	98.7	+.0225	+10.3
1898	14	73.7	+18	+123.6	58.71	98.4	-6.40	-10.9	.2182	102.7	+.0141	+6.3
1899	24	126.3	+8	+33.3	59.00	98.9	-6.69	-11.3	.1953	91.9	+.0370	+18.3
1900	24	126.3	+8	+33.3	56.08	94.0	-3.77	-6.7	.2210	104.0	+.0113	+5.3
1901	28	147.4	+4	+14.3	56.14	94.1	-3.83	-6.8	.2127	100.1	+.0196	+9.3
1902	29	152.6	+3	+10.3	56.07	94.0	-3.76	-6.7	.2276	107.1	+.0047	+2.3
1903	32	168.4	.....	.....	52.31	87.7	.....	.....	.2323	109.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MUSICAL INSTRUMENTS, ORGANS—Continued**MACHINE WOODWORKERS, Male.**

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	10	100.0	+6	+ 60.0	58.20	100.0	-4.20	- 7.2	\$0.2740	100.0	+\$0.0225	+ 8.4
1890	8	80.0	+8	+100.0	60.00	103.1	-6.00	-10.0	.2715	99.1	+.0254	+ 9.4
1891	8	80.0	+8	+100.0	60.00	103.1	-6.00	-10.0	.2715	99.1	+.0254	+ 9.4
1892	10	100.0	+6	+ 60.0	60.00	103.1	-6.00	-10.0	.2725	99.5	+.0244	+ 9.0
1893	11	110.0	+5	+ 45.5	60.00	103.1	-6.00	-10.0	.2780	101.5	+.0189	+ 6.8
1894	9	90.0	+7	+ 77.8	60.00	103.1	-6.00	-10.0	.2805	102.4	+.0164	+ 5.8
1895	12	120.0	+4	+ 33.3	60.00	103.1	-6.00	-10.0	.2726	99.9	+.0235	+ 8.5
1896	10	100.0	+6	+ 60.0	60.00	103.1	-6.00	-10.0	.2750	100.4	+.0219	+ 8.0
1897	9	90.0	+7	+ 77.8	54.00	92.8	.....	.....	.2685	98.0	+.0284	+10.6
1898	9	90.0	+7	+ 77.8	54.00	92.8	.....	.....	.2685	98.0	+.0284	+10.6
1899	9	90.0	+7	+ 77.8	54.00	92.8	.....	.....	.2805	102.4	+.0164	+ 5.8
1900	10	100.0	+6	+ 60.0	54.00	92.8	.....	.....	.2775	108.6	-.0006	-. 2
1901	12	120.0	+4	+ 33.3	54.00	92.8	.....	.....	.2924	106.7	+.0045	+ 1.5
1902	16	160.0	.....	.....	54.00	92.8	.....	.....	.2969	108.4	.....	.....
1903	16	160.0	.....	.....	54.00	92.8	.....	.....	.2969	108.4	.....	.....

PIPE MAKERS, METAL, Male.

[Data from 1 establishment.]

Av. 1890-99.	10	100.0	+4	+40.0	58.20	100.0	-4.20	- 7.2	\$0.2967	100.0	-\$0.0056	-1.9
1890	11	110.0	+3	+27.3	60.00	103.1	-6.00	-10.0	.2868	96.7	+.0043	+1.5
1891	10	100.0	+4	+40.0	60.00	103.1	-6.00	-10.0	.2955	99.6	-.0044	-1.5
1892	13	130.0	+1	+ 7.7	60.00	103.1	-6.00	-10.0	.2904	97.9	+.0007	+ .2
1893	12	120.0	+2	+16.7	60.00	103.1	-6.00	-10.0	.2979	100.4	-.0068	-2.3
1894	10	100.0	+4	+40.0	60.00	103.1	-6.00	-10.0	.3075	103.6	-.0164	-5.3
1895	10	100.0	+4	+40.0	60.00	103.1	-6.00	-10.0	.2975	100.3	-.0064	-2.2
1896	9	90.0	+5	+55.6	60.00	103.1	-6.00	-10.0	.2972	100.2	-.0061	-2.1
1897	9	90.0	+5	+55.6	54.00	92.8	.....	.....	.2972	100.2	-.0061	-2.1
1898	8	80.0	+6	+75.0	54.00	92.8	.....	.....	.3000	101.1	-.0089	-3.0
1899	9	90.0	+5	+55.6	54.00	92.8	.....	.....	.2972	100.2	-.0061	-2.1
1900	9	90.0	+5	+55.6	54.00	92.8	.....	.....	.3000	101.1	-.0089	-3.0
1901	10	100.0	+4	+40.0	54.00	92.8	.....	.....	.2900	97.7	+.0011	+ .4
1902	16	160.0	-2	-12.5	54.00	92.8	.....	.....	.2859	96.4	+.0052	+1.8
1903	14	140.0	.....	.....	54.00	92.8	.....	.....	.2911	98.1	.....	.....

PIPE-ORGAN BUILDERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	28	100.0	+28	+100.0	58.20	100.0	-4.20	- 7.2	\$0.3044	100.0	-\$0.0201	-6.6
1890	26	92.9	+30	+115.4	60.00	103.1	-6.00	-10.0	.3040	99.9	-.0197	-6.5
1891	23	82.1	+33	+143.5	60.00	103.1	-6.00	-10.0	.3037	99.8	-.0194	-6.4
1892	30	107.1	+26	+ 86.7	60.00	103.1	-6.00	-10.0	.3093	101.6	-.0250	-8.1
1893	28	100.0	+28	+100.0	60.00	103.1	-6.00	-10.0	.3088	99.8	-.0195	-6.4
1894	24	85.7	+32	+133.3	60.00	103.1	-6.00	-10.0	.2988	98.2	-.0145	-4.9
1895	32	114.3	+24	+ 75.0	60.00	103.1	-6.00	-10.0	.3028	99.5	-.0185	-6.1
1896	26	92.9	+30	+115.4	60.00	103.1	-6.00	-10.0	.3066	100.7	-.0223	-7.3
1897	26	92.9	+30	+115.4	54.00	92.8	.....	.....	.3066	100.7	-.0223	-7.3
1898	26	92.9	+30	+115.4	54.00	92.8	.....	.....	.3066	100.7	-.0223	-7.3
1899	36	128.6	+20	+ 55.6	54.00	92.8	.....	.....	.3013	99.0	-.0170	-5.6
1900	40	142.9	+16	+ 40.0	54.00	92.8	.....	.....	.2989	98.2	-.0146	-4.9
1901	43	171.4	+8	+ 16.7	54.00	92.8	.....	.....	.2928	96.2	-.0085	-2.9
1902	61	217.9	-5	- 8.2	54.00	92.8	.....	.....	.2872	94.3	-.0029	-1.0
1903	56	200.0	.....	.....	54.00	92.8	.....	.....	.2843	93.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MUSICAL INSTRUMENTS, ORGANS—Concluded.

TUNERS, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount	Per cent.
Av. 1890-99.	14	100.0	-4	-28.6	60.00	100.0	-7.50	-12.5	0.3177	100.0	\$-0.0112	- 3.5
1890	17	121.4	-7	-41.2	60.00	100.0	-7.50	-12.5	.3184	100.2	- .0119	- 3.7
1891	18	128.6	-8	-44.4	60.00	100.0	-7.50	-12.5	.3314	104.3	- .0249	- 7.5
1892	17	121.4	-7	-41.2	60.00	100.0	-7.50	-12.5	.3299	103.8	- .0234	- 7.1
1893	17	121.4	-7	-41.2	60.00	100.0	-7.50	-12.5	.3673	115.6	- .0608	-16.6
1894	9	64.3	+1	+11.1	60.00	100.0	-7.50	-12.5	.3603	113.4	- .0533	-14.9
1895	15	107.1	-5	-33.3	60.00	100.0	-7.50	-12.5	.3077	96.9	- .0012	- .4
1896	13	92.9	-3	-23.1	60.00	100.0	-7.50	-12.5	.3069	96.6	- .0004	- .1
1897	11	78.6	-1	- 9.1	60.00	100.0	-7.50	-12.5	.2799	88.1	+ .0266	+ 9.5
1898	11	78.6	-1	- 9.1	60.00	100.0	-7.50	-12.5	.2749	86.5	+ .0316	+11.5
1899	13	92.9	-3	-23.1	60.00	100.0	-7.50	-12.5	.3004	94.6	+ .0061	+ 2.0
1900	13	92.9	-3	-23.1	56.54	94.2	-4.04	- 7.1	.3941	124.0	- .0376	-22.2
1901	10	71.4	.....	.....	56.50	94.2	-4.00	- 7.1	.3379	106.4	- .0314	- 9.3
1902	12	85.7	-2	-16.7	56.50	94.2	-4.00	- 7.1	.3077	96.9	- .0012	- .4
1903	10	71.4	.....	.....	52.50	87.5	.....	.....	.3065	96.5	.....	.....

VOICERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	3	100.0	+1	+33.3	58.20	100.0	-4.20	- 7.2	\$0.4180	100.0	-\$0.0034	- 0.8
1890	3	100.0	+1	+33.3	60.00	103.1	-6.00	-10.0	.4128	98.8	+ .0018	+ .4
1891	3	100.0	+1	+33.3	60.00	103.1	-6.00	-10.0	.4128	98.8	+ .0018	+ .4
1892	3	100.0	+1	+33.3	60.00	103.1	-6.00	-10.0	.4194	100.3	- .0048	- 1.1
1893	3	100.0	+1	+33.3	60.00	103.1	-6.00	-10.0	.4194	100.3	- .0048	- 1.1
1894	3	100.0	+1	+33.3	60.00	103.1	-6.00	-10.0	.4194	100.3	- .0048	- 1.1
1895	3	100.0	+1	+33.3	60.00	103.1	-6.00	-10.0	.4194	100.3	- .0048	- 1.1
1896	3	100.0	+1	+33.3	60.00	103.1	-6.00	-10.0	.4183	100.1	- .0037	- .9
1897	3	100.0	+1	+33.3	54.00	92.8	.....	.....	.4194	100.3	- .0048	- 1.1
1898	3	100.0	+1	+33.3	54.00	92.8	.....	.....	.4194	100.3	- .0048	- 1.1
1899	3	100.0	+1	+33.3	54.00	92.8	.....	.....	.4194	100.3	- .0048	- 1.1
1900	3	100.0	+1	+33.3	54.00	92.8	.....	.....	.4194	100.3	- .0048	- 1.1
1901	3	100.0	+1	+33.3	54.00	92.8	.....	.....	.4194	100.3	- .0048	- 1.1
1902	4	133.3	.....	.....	54.00	92.8	.....	.....	.4146	99.2	.....	.....
1903	4	133.3	.....	.....	54.00	92.8	.....	.....	.4146	99.2	.....	.....

MUSICAL INSTRUMENTS, PIANOS.

ACTION MAKERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	56	100.0	+49	+ 87.5	59.68	100.0	-7.07	-11.8	\$0.2544	100.0	+\$0.0285	+11.2
1890	80	58.6	+75	+250.0	59.47	99.6	-6.86	-11.5	.2921	114.8	- .0092	- 3.1
1891	86	64.3	+69	+191.7	59.50	99.7	-6.89	-11.6	.2854	112.2	- .0025	- .8
1892	36	64.3	+69	+191.7	59.50	99.7	-6.89	-11.6	.3003	118.0	- .0174	- 5.8
1893	40	71.4	+65	+162.5	59.68	100.0	-7.07	-11.8	.2586	101.7	+ .0243	+ 9.4
1894	59	105.4	+46	+ 78.0	59.73	100.1	-7.12	-11.9	.2214	87.0	+ .0615	+27.8
1895	71	126.8	+34	+47.9	59.76	100.1	-7.15	-12.0	.2447	96.2	+ .0382	+15.0
1896	70	125.0	+35	+60.0	59.81	100.2	-7.20	-12.0	.2222	87.3	+ .0607	+27.0
1897	69	117.9	+39	+69.1	59.77	100.2	-7.16	-12.0	.2808	90.7	+ .0521	+22.0
1898	81	144.6	+24	+29.6	59.78	100.2	-7.17	-12.0	.2404	94.5	+ .0425	+17.0
1899	67	119.6	+33	+66.7	59.76	100.1	-7.15	-12.0	.2483	97.6	+ .0346	+13.0
1900	91	162.5	+14	+15.4	57.41	96.2	-4.80	- 8.4	.2431	95.6	+ .0398	+16.0
1901	88	157.1	+17	+19.3	57.52	96.4	-4.91	- 8.5	.2583	101.5	+ .0246	+ 9.0
1902	99	176.8	+ 6	+ 6.1	56.47	94.6	-3.86	- 6.8	.2670	105.0	+ .0159	+ 6.0
1903	105	187.5	.....	.....	52.61	88.2	.....	.....	.2829	111.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MUSICAL INSTRUMENTS, PLANOS—Continued.

ACTION REGULATORS, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	32	100.0	+26	+ 81.3	59.40	100.0	-6.92	-11.6	\$0.2704	100.0	+\$0.0218	+ 8.1
890	15	46.9	+43	+286.7	59.20	99.7	-6.72	-11.4	.2915	107.8	+ .0007	+ .2
891	20	62.5	+38	+190.0	59.40	100.0	-6.92	-11.6	.2732	101.0	+ .0190	+ 7.0
892	24	75.0	+84	+441.7	59.25	99.7	-6.77	-11.4	.2527	93.5	+ .0395	+15.6
893	26	81.3	+32	+123.1	59.31	99.8	-6.53	-11.5	.2787	103.1	+ .0135	+ 4.8
894	25	78.1	+33	+132.0	59.28	99.8	-6.50	-11.5	.2556	94.5	+ .0366	+14.3
895	34	106.3	+24	+ 70.6	59.47	100.1	-6.99	-11.8	.2531	95.5	+ .0341	+13.2
896	33	103.1	+25	+ 75.8	59.45	100.1	-6.97	-11.7	.2894	107.0	+ .0028	+ 1.0
897	33	103.1	+25	+ 75.8	59.45	100.1	-6.97	-11.7	.2779	102.8	+ .0143	+ 5.1
898	34	106.3	+24	+ 70.6	59.47	100.1	-6.99	-11.8	.2789	103.1	+ .0133	+ 4.8
899	71	221.9	-13	- 18.3	59.75	100.6	-7.27	-12.2	.2479	91.7	+ .0443	+17.9
900	44	137.5	+14	+ 31.8	57.20	96.3	-4.72	-8.3	.2330	104.7	+ .0092	+ 3.3
901	46	143.8	+12	+ 26.1	57.17	96.2	-4.69	-8.2	.2778	102.7	+ .0144	+ 5.2
902	50	156.3	+ 8	+ 16.0	57.12	96.2	-4.64	-8.1	.2328	104.6	+ .0094	+ 3.3
903	58	181.3	.....	.....	52.48	88.4	.....	.....	.2922	108.1	.....	.....

BELL MEN, Male.

[Data from 5 establishments.]

Av. 1890-99.	66	100.0	+42	+ 63.6	59.59	100.0	-6.18	-10.4	\$0.2745	100.0	+\$0.0598	+21.8
890	56	84.8	+52	+ 92.9	59.11	98.2	-5.70	-9.6	.2820	102.7	+ .0523	+18.5
891	64	97.0	+44	+ 68.8	59.11	98.2	-5.70	-9.6	.2839	103.4	+ .0504	+17.8
892	64	97.0	+44	+ 68.8	59.11	98.2	-5.70	-9.6	.3096	112.3	+ .0247	+ 8.0
893	59	89.4	+49	+ 83.1	59.19	99.3	-5.78	-9.8	.2561	93.3	+ .0732	+30.5
894	53	80.3	+55	+103.8	60.28	101.2	-6.87	-11.4	.2634	96.0	+ .0709	+24.1
895	70	106.1	+35	+ 54.3	60.09	100.8	-6.58	-11.1	.2694	98.1	+ .0649	+21.9
896	61	92.4	+47	+ 77.0	60.31	101.2	-6.90	-11.4	.2539	92.5	+ .0804	+31.7
897	70	106.1	+35	+ 54.3	60.16	101.0	-6.75	-11.2	.2722	99.2	+ .0621	+22.8
898	78	118.2	+30	+ 38.5	59.27	99.5	-5.96	-9.9	.2627	95.7	+ .0716	+27.3
899	86	130.3	+22	+ 25.6	59.30	99.5	-5.99	-9.9	.2919	106.3	+ .0424	+14.5
900	89	134.8	+19	+ 21.3	58.02	97.4	-4.61	-7.9	.2761	100.6	+ .0582	+21.1
901	97	147.0	+11	+ 11.3	57.97	97.3	-4.56	-7.9	.2894	105.4	+ .0449	+15.5
902	100	151.5	+ 8	+ 8.0	55.95	93.9	-2.54	-4.5	.3050	111.1	+ .0293	+ 9.6
903	108	163.6	.....	.....	53.41	89.6	.....	.....	.3343	121.8	.....	.....

CASE MAKERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	141	100.0	+149	+105.7	59.79	100.0	-7.18	-12.0	\$0.2275	100.0	+\$0.0269	+11.8
890	88	62.4	+202	+229.5	59.63	99.7	-7.02	-11.8	.2692	118.3	+ .0148	+ 5.5
891	93	66.0	+197	+211.8	59.73	99.9	-7.12	-11.9	.2481	109.4	+ .0063	+ 2.5
892	128	90.8	+162	+126.6	59.73	99.9	-7.12	-11.9	.2300	101.1	+ .0244	+10.6
893	109	77.3	+181	+166.1	59.83	100.1	-7.22	-12.1	.2364	103.9	+ .0180	+ 7.6
894	141	100.0	+149	+105.7	59.82	100.1	-7.21	-12.1	.2173	95.5	+ .0371	+17.1
895	160	113.5	+130	+ 81.3	59.83	100.1	-7.22	-12.1	.2191	96.3	+ .0353	+16.1
896	149	105.7	+141	+ 94.6	59.87	100.1	-7.26	-12.1	.2086	91.7	+ .0458	+22.0
897	143	101.4	+147	+102.8	59.83	100.1	-7.22	-12.1	.2099	92.3	+ .0445	+21.2
898	174	123.4	+116	+ 66.7	59.83	100.1	-7.22	-12.1	.2196	96.5	+ .0348	+15.8
899	224	158.9	+ 66	+ 29.5	59.84	100.1	-7.23	-12.1	.2165	95.2	+ .0379	+17.5
900	243	172.3	+ 47	+ 19.3	57.34	95.9	-4.73	-8.2	.2247	98.8	+ .0297	+13.2
901	268	190.1	+ 22	+ 8.2	57.25	95.8	-4.68	-8.1	.2310	101.5	+ .0234	+10.1
902	266	188.7	+ 24	+ 9.0	56.49	94.5	-3.84	-6.9	.2342	102.9	+ .0202	+ 8.6
903	290	205.7	.....	.....	52.61	88.0	.....	.....	.2544	111.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MUSICAL INSTRUMENTS, PLANOS—Continued.

FINISHERS, Male.

[Data from 5 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	97	100.0	+118	+121.6	59.53	100.0	-7.05	-11.8	\$0.2648	100.0	+\$0.0199	+7.5
1890	51	52.6	+164	+321.6	58.27	99.6	-6.79	-11.5	.2777	104.9	+.0070	+2.5
1891	57	58.8	+156	+277.2	59.21	99.5	-6.73	-11.4	.3021	114.1	-.0174	-5.8
1892	74	76.8	+141	+190.5	59.59	99.8	-6.91	-11.6	.2782	105.1	+.0065	+2.3
1893	90	92.8	+125	+138.9	59.51	100.0	-7.08	-11.8	.2751	103.9	+.0098	+3.5
1894	85	87.6	+130	+152.9	59.51	100.0	-7.08	-11.8	.2425	91.6	+.0422	+17.4
1895	106	109.9	+109	+102.8	59.66	100.2	-7.18	-12.0	.2581	97.5	+.0266	+10.3
1896	102	105.2	+113	+110.8	59.65	100.2	-7.17	-12.0	.2682	99.4	+.0215	+8.2
1897	108	111.3	+107	+99.1	59.65	100.2	-7.17	-12.0	.2585	97.6	+.0262	+10.1
1898	141	145.4	+74	+62.5	59.72	100.3	-7.24	-12.1	.2396	90.5	+.0451	+18.8
1899	154	158.8	+61	+59.6	59.69	100.3	-7.21	-12.1	.2532	95.6	+.0315	+12.4
1900	159	163.9	+56	+55.2	57.13	96.0	-4.65	-8.1	.2616	98.8	+.0231	+8.3
1901	169	163.9	+56	+55.2	57.04	95.8	-4.66	-8.0	.2671	100.9	+.0176	+6.6
1902	191	196.9	+24	+12.0	56.40	94.7	-8.92	-7.0	.2727	103.0	+.0120	+4.4
1903	215	221.6			62.48	88.2			.2847	107.5		

FLY FINISHERS, Male.

[Data from 5 establishments.]

Av. 1890-99.	37	100.0	+24	+91.9	59.13	100.0	-5.64	-9.5	\$0.2897	100.0	+\$0.0285	+9.8
1890	80	81.1	+41	+136.7	58.90	99.6	-5.41	-9.2	.2936	101.8	+.0246	+8.4
1891	89	105.4	+32	+82.1	58.97	99.7	-5.48	-9.3	.3096	106.9	+.0088	+2.3
1892	41	110.8	+30	+73.2	59.02	99.8	-5.53	-9.4	.3123	107.8	+.0059	+1.9
1893	80	81.1	+41	+136.7	59.07	99.9	-5.58	-9.4	.2931	101.2	+.0251	+8.6
1894	33	89.2	+38	+115.2	59.09	99.9	-5.60	-9.5	.2897	100.0	+.0285	+9.8
1895	29	78.4	+42	+144.8	59.14	100.0	-5.65	-9.6	.2739	94.5	+.0448	+16.2
1896	35	94.6	+36	+102.9	59.23	100.2	-5.74	-9.7	.2696	93.1	+.0486	+18.0
1897	45	121.6	+26	+57.8	59.40	100.5	-5.91	-9.9	.2967	102.4	+.0215	+7.2
1898	42	113.5	+29	+69.0	59.18	100.1	-5.69	-9.6	.2754	95.1	+.0428	+15.5
1899	46	124.8	+25	+54.3	59.26	100.2	-5.77	-9.7	.2833	97.8	+.0349	+12.3
1900	52	140.5	+19	+36.5	58.19	98.4	-4.70	-9.1	.2887	98.7	+.0235	+10.2
1901	59	159.5	+12	+20.3	58.08	98.2	-4.59	-7.9	.2858	98.7	+.0324	+11.3
1902	67	181.1	+4	+6.0	56.03	94.8	-2.54	-4.5	.3357	116.9	-.0175	-5.2
1903	71	191.9			53.49	90.5			.3182	109.8		

KEY MAKERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	19	100.0	+6	+81.6	59.86	100.0	-5.86	-9.0	\$0.2835	100.0	+\$0.0832	+29.3
1890	25	131.6			59.28	99.9	-5.28	-8.9	.2916	102.9	+.0751	+25.8
1891	25	131.6			59.24	99.8	-5.24	-8.8	.2998	103.6	+.0729	+24.8
1892	16	84.2	+9	+66.8	59.44	100.1	-5.44	-9.2	.2893	102.0	+.0774	+26.8
1893	14	73.7	+11	+78.6	59.43	100.1	-5.43	-9.1	.2935	103.5	+.0732	+24.9
1894	17	89.5	+8	+47.1	59.35	100.0	-5.35	-9.0	.2706	95.4	+.0961	+35.5
1895	21	110.5	+4	+19.0	59.29	99.9	-5.29	-8.9	.2965	104.6	+.0702	+23.7
1896	17	89.5	+8	+47.1	59.41	100.1	-5.41	-9.1	.2464	86.9	+.1203	+48.8
1897	14	73.7	+11	+78.6	59.43	100.1	-5.43	-9.1	.2620	92.4	+.1047	+40.9
1898	20	105.3	+5	+25.0	59.35	100.0	-5.35	-9.0	.2950	104.1	+.0717	+24.3
1899	19	100.0	+6	+81.6	59.37	100.0	-5.37	-9.0	.2963	104.5	+.0704	+23.8
1900	21	110.5	+4	+19.0	59.33	100.0	-5.33	-9.1	.3009	106.1	+.0658	+21.9
1901	18	94.7	+7	+38.9	59.44	100.1	-5.44	-9.2	.3087	108.9	+.0580	+18.8
1902	22	115.8	+8	+13.6	56.18	94.6	-2.18	-3.9	.3475	122.6	+.0192	+5.5
1903	25	131.6			54.00	91.0			.3667	129.8		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

MUSICAL INSTRUMENTS, PIANOS—Continued.

POLISHERS, Male.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	36	100.0	+23	+ 63.9	59.31	100.0	-6.33	-10.7	\$0.2699	100.0	+\$0.0242	+ 9.0
1890	27	75.0	+32	+118.5	59.11	99.7	-6.13	-10.4	.2628	97.4	+.0813	+11.9
1891	33	91.7	+26	+73.8	59.27	99.9	-6.29	-10.6	.2598	96.8	+.0843	+13.2
1892	34	94.4	+25	+73.5	59.29	100.0	-6.31	-10.6	.2711	100.4	+.0230	+ 8.5
1893	35	97.2	+24	+68.6	59.31	100.0	-6.33	-10.7	.2840	105.2	+.0101	+ 3.6
1894	36	100.0	+23	+63.9	59.33	100.0	-6.35	-10.7	.2646	98.0	+.0295	+11.1
1895	41	113.9	+18	+49.9	59.41	100.2	-6.43	-10.8	.2857	105.9	+.0084	+ 2.9
1896	39	108.3	+20	+51.3	59.38	100.1	-6.40	-10.8	.2766	102.5	+.0175	+ 6.3
1897	39	108.3	+20	+51.3	59.38	100.1	-6.40	-10.8	.2580	95.6	+.0361	+14.0
1898	35	97.2	+24	+68.6	59.31	100.0	-6.33	-10.7	.2676	99.1	+.0265	+ 9.9
1899	44	122.2	+15	+34.1	59.32	100.0	-6.34	-10.7	.2691	99.7	+.0250	+ 9.3
1900	39	108.3	+20	+51.3	57.90	97.6	-4.92	- 8.5	.2894	107.2	+.0047	+ 1.6
1901	53	147.2	+ 6	+11.8	57.53	97.0	-4.55	- 7.9	.2879	106.7	+.0062	+ 2.2
1902	57	158.3	+ 2	+ 3.5	57.46	96.9	-4.48	- 7.8	.2738	101.4	+.0208	+ 7.4
1903	59	163.9	.....	.....	52.98	89.3	.....	.....	.2941	109.0	.....	.....

RUBBERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	28	100.0	+4	+14.3	59.18	100.0	-5.18	-8.8	\$0.2322	100.0	+\$0.0230	+ 9.9
1890	28	100.0	+3	+10.3	59.17	100.0	-5.17	-8.7	.2323	100.0	+.0229	+ 9.9
1891	28	100.0	+4	+14.3	59.14	99.9	-5.14	-8.7	.2325	100.1	+.0227	+ 9.8
1892	27	96.4	+5	+18.5	59.11	99.9	-5.11	-8.6	.2328	100.3	+.0224	+ 9.6
1893	27	96.4	+5	+18.5	59.11	99.9	-5.11	-8.6	.2328	100.3	+.0224	+ 9.6
1894	26	92.9	+6	+23.1	59.08	99.8	-5.08	-8.6	.2331	100.4	+.0221	+ 9.5
1895	27	96.4	+5	+18.5	59.11	99.9	-5.11	-8.6	.2328	100.3	+.0224	+ 9.6
1896	26	92.9	+6	+23.1	59.77	101.0	-5.77	-9.7	.2277	98.1	+.0275	+12.1
1897	26	92.9	+6	+23.1	59.31	100.2	-5.31	-9.0	.2304	99.2	+.0248	+10.8
1898	28	100.0	+4	+14.3	58.93	99.6	-4.93	-8.4	.2338	100.7	+.0214	+ 9.2
1899	31	110.7	+1	+ 3.2	59.03	99.7	-5.03	-8.5	.2341	100.8	+.0211	+ 9.0
1900	33	117.9	-1	- 3.0	59.09	99.8	-5.09	-8.6	.2336	100.6	+.0216	+ 9.2
1901	33	117.9	-1	- 3.0	59.09	99.8	-5.09	-8.6	.2336	100.6	+.0216	+ 9.2
1902	33	117.9	-1	- 3.0	59.09	99.8	-5.09	-8.6	.2336	100.6	+.0216	+ 9.2
1903	32	114.3	.....	.....	54.00	91.2	.....	.....	.2552	109.9	.....	.....

STRINGERS, Male.

[Data for employees from 2 establishments for entire period. Data for hours and wages from 2 establishments, 1890, 1891; 3 establishments, 1892-1903.]

Av. 1890-99.	3	100.0	+1	+33.3	58.80	100.0	-6.07	-10.3	\$0.2501	100.0	+\$0.0059	+ 2.4
1890	3	100.0	+1	+33.3	58.00	98.6	-5.27	- 9.1	.2388	119.5	+.0428	+14.3
1891	4	133.3	.....	.....	58.50	91.5	-5.77	- 9.9	.2391	119.6	+.0431	+14.4
1892	4	133.3	.....	.....	59.00	100.3	-6.27	-10.6	.2460	98.4	+.0100	+ 4.1
1893	3	100.0	+1	+33.3	58.80	100.0	-6.07	-10.3	.2505	100.2	+.0055	+ 2.2
1894	3	100.0	+1	+33.3	58.80	100.0	-6.07	-10.3	.2379	95.1	+.0181	+ 7.6
1895	3	100.0	+1	+33.3	59.14	100.6	-6.41	-10.8	.2392	93.2	+.0478	+23.0
1896	3	100.0	+1	+33.3	58.80	100.0	-6.07	-10.3	.2501	100.0	+.0059	+ 2.4
1897	3	100.0	+1	+33.3	59.00	100.3	-6.27	-10.6	.2246	93.8	+.0314	+14.0
1898	3	100.0	+1	+33.3	59.00	100.3	-6.27	-10.6	.2260	90.4	+.0300	+13.3
1899	4	133.3	.....	.....	59.00	100.3	-6.27	-10.6	.2595	103.8	+.0035	- 1.3
1900	4	133.3	.....	.....	57.30	97.4	-4.57	- 8.0	.2148	85.9	+.0412	+19.2
1901	4	133.3	.....	.....	57.44	97.7	-4.71	- 8.2	.2344	93.7	+.0216	+ 9.2
1902	4	133.3	.....	.....	57.30	97.4	-4.57	- 8.0	.2377	95.0	+.0183	+ 7.7
1903	4	133.3	.....	.....	52.73	89.7	.....	.....	.2560	102.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MUSICAL INSTRUMENTS, PIANOS—Concluded.**STONE REGULATORS, Male.**

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per-cent.			Num-ber.	Per-cent.			Amount.	Per-cent.
Av. 1890-99.	5	100.0	+3	+ 60.0	57.40	100.0	- 3.40	- 5.9	\$0.3340	100.0	+\$0.0271	+ 8.1
1890.	5	100.0	+3	+ 60.0	57.60	100.3	- 3.60	- 6.3	.3359	100.6	+.0252	+ 7.5
1891.	5	100.0	+3	+ 60.0	57.60	100.3	- 3.60	- 6.3	.3359	100.6	+.0252	+ 7.5
1892.	5	100.0	+3	+ 60.0	57.60	100.3	- 3.60	- 6.3	.3359	100.6	+.0252	+ 7.5
1893.	4	80.0	+4	+100.0	57.00	99.3	- 3.00	- 5.3	.3324	99.5	+.0287	+ 8.6
1894.	4	80.0	+4	+100.0	57.00	99.3	- 3.00	- 5.3	.3324	99.5	+.0287	+ 8.6
1895.	5	100.0	+3	+ 60.0	57.60	100.3	- 3.60	- 6.3	.3359	100.6	+.0252	+ 7.5
1896.	5	100.0	+3	+ 60.0	57.60	100.3	- 3.60	- 6.3	.3359	100.6	+.0252	+ 7.5
1897.	5	100.0	+3	+ 60.0	57.60	100.3	- 3.60	- 6.3	.3359	100.6	+.0252	+ 7.5
1898.	6	120.0	+2	+ 33.3	57.00	99.3	- 3.00	- 5.3	.3244	97.1	+.0867	+11.3
1899.	7	140.0	+1	+ 14.3	57.43	100.1	- 3.43	- 6.0	.3349	100.3	+.0262	+ 7.8
1900.	7	140.0	+1	+ 14.3	57.43	100.1	- 3.43	- 6.0	.3349	100.3	+.0262	+ 7.8
1901.	8	160.0	.....	.....	57.75	100.6	- 3.75	- 6.5	.3368	100.8	+.0243	+ 7.2
1902.	8	160.0	.....	.....	57.75	100.6	- 3.75	- 6.5	.3368	100.8	+.0243	+ 7.2
1903.	8	160.0	.....	.....	54.00	94.1	.....	.....	.3611	108.1	.....	.....

TUNERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	16	100.0	+17	+106.3	58.74	100.0	-6.13	-10.4	\$0.2103	100.0	+\$0.0706	+33.6
1890.	8	50.0	+25	+312.5	57.75	98.3	-5.14	- 8.9	.2473	117.6	+.0336	+13.6
1891.	10	62.5	+23	+230.0	58.20	99.1	-5.59	- 9.6	.2287	108.7	+.0522	+22.8
1892.	13	81.3	+20	+153.8	58.62	99.8	-6.01	-10.3	.1964	98.4	+.0845	+43.0
1893.	17	106.3	+16	+ 94.1	58.94	100.3	-6.33	-10.7	.2000	98.2	+.0809	+40.5
1894.	19	118.8	+14	+ 73.7	59.05	100.5	-6.44	-10.9	.1941	92.3	+.0868	+44.7
1895.	19	118.8	+14	+ 73.7	59.05	100.5	-6.44	-10.9	.2065	98.2	+.0744	+36.0
1896.	18	112.5	+15	+ 83.3	59.00	100.4	-6.39	-10.8	.2112	100.4	+.0697	+33.0
1897.	17	106.3	+16	+ 94.1	58.94	100.3	-6.33	-10.7	.2107	100.2	+.0702	+33.3
1898.	15	93.8	+18	+120.0	58.80	100.1	-6.19	-10.5	.2147	102.1	+.0662	+30.8
1899.	19	118.8	+14	+ 73.7	59.05	100.5	-6.44	-10.9	.1938	92.2	+.0871	+44.9
1900.	32	200.0	+ 1	+ 3.1	57.03	97.1	-4.42	- 7.8	.2327	110.7	+.0482	+20.7
1901.	28	175.0	+ 5	+17.9	57.11	97.2	-4.50	- 7.9	.2565	122.0	+.0244	+ 9.5
1902.	35	218.8	- 2	- 5.7	57.00	97.0	-4.39	- 7.7	.2639	125.5	+.0170	+ 6.4
1903.	33	206.3	.....	.....	52.61	89.6	.....	.....	.2809	133.6	.....	.....

OIL, COTTON SEED.**CAKE STRIPPERS, Male.**

[Data from 1 establishment.]

Av. 1890-99.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	\$0.1125	100.0	+\$0.0250	+22.2
1890.	14	116.7	+1	+ 7.1	84.00	100.0	.....	.....	.1250	111.1	+.0125	+10.0
1891.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1250	111.1	+.0125	+10.0
1892.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1250	111.1	+.0125	+10.0
1893.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1250	111.1	+.0125	+10.0
1894.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1895.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1896.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1897.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1898.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1899.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1900.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1901.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1042	92.6	+.0333	+32.0
1902.	12	100.0	+3	+25.0	84.00	100.0	.....	.....	.1250	111.1	+.0125	+10.0
1903.	15	125.0	.....	.....	84.00	100.0	.....	.....	.1375	122.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 713.]

OIL, COTTON SEED—Continued.

GRINDERS, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	3	100.0	.....	.....	72.00	100.0	.....	.....	\$0.0792	100.0	+\$0.0041	+5.2
1890	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1891	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1892	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1893	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1894	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1895	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1896	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1897	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1898	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1899	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1900	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1901	3	100.0	.....	.....	72.00	100.0	.....	.....	.0792	100.0	+ .0041	+5.2
1902	3	100.0	.....	.....	72.00	100.0	.....	.....	.0838	105.2	.....	.....
1903	3	100.0	.....	.....	72.00	100.0	.....	.....	.0838	105.2	.....	.....

HULLERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	5	100.0	+2	+40.0	72.00	100.0	.....	.....	\$0.0600	100.0	+\$0.0025	+4.2
1890	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1891	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1892	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1893	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1894	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1895	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1896	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1897	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1898	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1899	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1900	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1901	5	100.0	+2	+40.0	72.00	100.0	.....	.....	.0600	100.0	+ .0025	+4.2
1902	6	120.0	+1	+16.7	72.00	100.0	.....	.....	.0653	108.8	— .0028	—4.3
1903	7	140.0	.....	.....	72.00	100.0	.....	.....	.0625	104.2	.....	.....

LINTERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	16	100.0	—1	—6.3	80.90	100.0	—2.50	—3.1	\$0.1090	100.0	—\$0.0012	—1.1
1890	14	87.5	+1	+7.1	80.00	98.9	—1.60	—2.0	.1202	110.8	— .0124	—10.3
1891	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1182	108.4	— .0104	—8.8
1892	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1182	108.4	— .0104	—8.8
1893	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1182	108.4	— .0104	—8.8
1894	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1895	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1896	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1897	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1898	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1899	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1900	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1901	16	100.0	—1	—6.3	81.00	100.1	—2.60	—3.2	.1026	94.1	+ .0052	+5.1
1902	21	131.3	—6	—23.6	78.86	97.5	— .46	— .6	.1075	98.6	+ .0003	+ .3
1903	15	93.8	.....	.....	78.40	96.9	.....	.....	.1078	98.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

OIL, COTTON SEED—Concluded.

PRESSERS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount	Per cent.
Av. 1890-99.	33	100.0	+ 5	+15.2	80.39	100.0	-2.07	-2.6	\$0.1841	100.0	-\$0.0058	- 4.3
1890	28	84.8	+10	+35.7	79.71	99.2	-1.39	-1.7	.1884	103.2	— .0101	- 7.3
1891	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1434	106.9	— .0151	-10.5
1892	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1434	106.9	— .0151	-10.5
1893	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1434	106.9	— .0151	-10.5
1894	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1895	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1896	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1897	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1898	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1899	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1900	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1901	34	103.0	+ 4	+11.8	80.47	100.1	-2.15	-2.7	.1287	96.0	— .0004	- 3
1902	38	115.2	.....	.....	79.58	99.0	-1.26	-1.6	.1898	103.9	— .0110	- 7.9
1903	38	115.2	.....	.....	78.32	97.4	.....	.....	.1283	95.7	.....	.....

OIL, LINSEED.

LABORERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	10	100.0	- 8	-80.0	60.00	100.0	.....	.....	\$0.1500	100.0	+\$0.0100	+6.7
1890	30	300.0	-28	-93.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1891	10	100.0	- 8	-80.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1892	14	140.0	-12	-85.7	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1893	11	110.0	- 9	-81.8	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1894	10	100.0	- 8	-80.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1895	5	50.0	- 3	-60.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1896	8	80.0	- 6	-75.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1897	5	50.0	- 3	-60.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1898	4	40.0	- 2	-50.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1899	6	60.0	- 4	-66.7	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1900	4	40.0	- 2	-50.0	60.00	100.0	.....	.....	.1500	100.0	+ .0100	+6.7
1901	6	60.0	- 4	-66.7	60.00	100.0	.....	.....	.1600	106.7	.....	.....
1902	5	50.0	- 3	-60.0	60.00	100.0	.....	.....	.1600	106.7	.....	.....
1903	2	20.0	.....	.....	60.00	100.0	.....	.....	.1600	106.7	.....	.....

MOLDERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	0.1700	100.0	+\$0.0257	+15.1
1890	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1891	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1892	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1893	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1894	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1895	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1896	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1897	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1898	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1899	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1900	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1700	100.0	+ .0257	+15.1
1901	4	100.0	.....	.....	69.00	115.0	.....	.....	.1957	115.1	.....	.....
1902	4	100.0	.....	.....	69.00	115.0	.....	.....	.1957	115.1	.....	.....
1903	4	100.0	.....	.....	69.00	115.0	.....	.....	.1957	115.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

OIL, LINSEED—Continued.

PRESSMEN, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	34	100.0	-10	-29.4	71.19	100.0	+0.31	+0.4	\$0.1639	100.0	+\$0.0104	+6.3
1890	36	105.9	-12	-33.3	72.89	102.4	-1.39	-1.9	.1622	99.0	+.0121	+7.5
1891	37	108.8	-13	-35.1	72.95	102.5	-1.45	-2.0	.1622	99.0	+.0121	+7.5
1892	41	120.6	-17	-41.5	73.10	102.7	-1.60	-2.2	.1649	100.6	+.0094	+5.7
1893	31	91.2	-7	-22.6	70.45	99.0	+1.05	+1.5	.1658	101.2	+.0085	+5.1
1894	22	64.7	+2	+9.1	69.82	98.1	+1.68	+2.4	.1673	102.1	+.0070	+4.2
1895	24	70.6	.....	.....	70.00	98.3	+1.50	+2.1	.1675	102.2	+.0068	+4.1
1896	36	105.9	-12	-33.3	70.67	99.3	+.83	+1.2	.1622	99.0	+.0121	+7.5
1897	38	111.8	-14	-36.8	70.74	99.4	+.76	+1.1	.1621	98.9	+.0122	+7.5
1898	32	94.1	-8	-25.0	70.50	99.0	+1.00	+1.4	.1625	99.1	+.0118	+7.3
1899	33	111.8	-14	-36.8	70.74	99.4	+.76	+1.1	.1621	98.9	+.0122	+7.5
1900	40	117.6	-16	-40.0	70.80	99.5	+.70	+1.0	.1620	98.8	+.0123	+7.6
1901	27	79.4	-3	-11.1	71.53	100.5	-.06	-.1	.1738	106.0	+.0005	+.3
1902	23	67.6	+1	+4.3	71.43	100.4	+.02	+.03	.1745	106.5	+.0002	-.1
1903	24	70.6	.....	.....	71.50	100.4	.....	.....	.1743	106.3	.....	.....

REFINERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	2	100.0	+1	+50.0	60.00	100.0	.....	.....	\$0.2256	100.0	+\$0.0022	+1.0
1890	1	50.0	+2	+200.0	60.00	100.0	.....	.....	.2500	110.8	+.0222	+8.9
1891	1	50.0	+2	+200.0	60.00	100.0	.....	.....	.2500	110.8	+.0222	+8.9
1892	1	50.0	+2	+200.0	60.00	100.0	.....	.....	.2500	110.8	+.0222	+8.9
1893	1	50.0	+2	+200.0	60.00	100.0	.....	.....	.2500	110.8	+.0222	+8.9
1894	2	100.0	+1	+50.0	60.00	100.0	.....	.....	.2250	99.7	+.0028	+1.2
1895	3	150.0	.....	.....	60.00	100.0	.....	.....	.2000	88.7	+.0278	+13.9
1896	3	150.0	.....	.....	60.00	100.0	.....	.....	.2000	88.7	+.0278	+13.9
1897	3	150.0	.....	.....	60.00	100.0	.....	.....	.2033	90.1	+.0245	+12.1
1898	3	150.0	.....	.....	60.00	100.0	.....	.....	.2156	95.6	+.0122	+5.7
1899	3	150.0	.....	.....	60.00	100.0	.....	.....	.2122	94.1	+.0156	+7.4
1900	3	150.0	.....	.....	60.00	100.0	.....	.....	.2222	98.5	+.0056	+2.5
1901	3	150.0	.....	.....	60.00	100.0	.....	.....	.2222	98.5	+.0056	+2.5
1902	3	150.0	.....	.....	60.00	100.0	.....	.....	.2278	101.0	.....	.....
1903	3	150.0	.....	.....	60.00	100.0	.....	.....	.2278	101.0	.....	.....

ROLLER MEN, Male.

[Data from 1 establishment.]

Av. 1890-99.	2	100.0	.....	.....	72.75	100.0	-0.75	-1.0	\$0.2000	100.0	-\$0.0200	-10.0
1890	2	100.0	.....	.....	74.50	102.4	-2.50	-3.4	.1600	80.0	+.0200	+12.5
1891	2	100.0	.....	.....	74.50	102.4	-2.50	-3.4	.1600	80.0	+.0200	+12.5
1892	2	100.0	.....	.....	74.50	102.4	-2.50	-3.4	.2200	110.0	+.0400	+18.2
1893	2	100.0	.....	.....	72.00	99.0	.....	.....	.2200	110.0	+.0400	+18.2
1894	2	100.0	.....	.....	72.00	99.0	.....	.....	.2200	110.0	+.0400	+18.2
1895	2	100.0	.....	.....	72.00	99.0	.....	.....	.2200	110.0	+.0400	+18.2
1896	2	100.0	.....	.....	72.00	99.0	.....	.....	.2200	110.0	+.0400	+18.2
1897	2	100.0	.....	.....	72.00	99.0	.....	.....	.2000	100.0	+.0200	+10.0
1898	2	100.0	.....	.....	72.00	99.0	.....	.....	.2000	100.0	+.0200	+10.0
1899	2	100.0	.....	.....	72.00	99.0	.....	.....	.1800	90.0	.....	.....
1900	2	100.0	.....	.....	72.00	99.0	.....	.....	.1800	90.0	.....	.....
1901	2	100.0	.....	.....	72.00	99.0	.....	.....	.1800	90.0	.....	.....
1902	2	100.0	.....	.....	72.00	99.0	.....	.....	.1800	90.0	.....	.....
1903	2	100.0	.....	.....	72.00	99.0	.....	.....	.1800	90.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

OIL, LINSEED—Concluded.

STRIPPERS, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	\$0.1600	100.0	+\$0.0357	+22.3
1890	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1891	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1892	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1893	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1894	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1895	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1896	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1897	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1898	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1899	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1900	4	100.0	.....	.....	60.00	100.0	+9.00	+15.0	.1600	100.0	+.0857	+22.3
1901	4	100.0	.....	.....	69.00	115.0	.....	.....	.1957	122.3	.....	.....
1902	4	100.0	.....	.....	69.00	115.0	.....	.....	.1957	122.3	.....	.....
1903	4	100.0	.....	.....	69.00	115.0	.....	.....	.1957	122.3	.....	.....

PAINTS.

CANNERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	29	100.0	+29	+100.0	58.09	100.0	+0.20	+ 0.3	\$0.1457	100.0	+\$0.0229	+15.7
1890	28	96.6	+30	+107.1	60.00	103.3	-1.71	- 2.9	.1468	100.4	+.0223	+15.2
1891	29	100.0	+29	+100.0	60.00	103.3	-1.71	- 2.9	.1456	99.9	+.0231	+15.9
1892	30	103.4	+28	+ 93.3	60.00	103.3	-1.71	- 2.9	.1460	100.2	+.0226	+15.5
1893	28	96.6	+30	+107.1	60.00	103.3	-1.71	- 2.9	.1450	99.5	+.0236	+16.3
1894	21	72.4	+37	+176.2	50.71	87.3	+7.58	+14.9	.1632	112.0	+.0654	+ 3.3
1895	28	96.6	+30	+107.1	57.00	98.1	+1.29	+ 2.3	.1408	96.3	+.0233	+20.2
1896	25	86.2	+33	+132.0	60.00	103.3	-1.71	- 2.9	.1340	92.0	+.0346	+25.8
1897	32	110.3	+26	+ 81.3	57.75	99.4	+ .54	+ .9	.1436	98.6	+.0250	+17.4
1898	34	117.2	+24	+ 70.6	57.61	99.2	+ .68	+ 1.2	.1447	99.3	+.0239	+16.5
1899	39	134.5	+19	+ 48.7	57.81	99.5	+ .43	+ .8	.1484	101.9	+.0202	+13.6
1900	52	179.3	+ 6	+ 11.5	58.27	100.3	+ .02	+ .03	.1496	102.7	+.0190	+12.7
1901	55	189.7	+ 3	+ 5.5	58.29	100.3	.....	.....	.1523	104.5	+.0163	+10.7
1902	63	217.2	- 5	- 7.9	58.00	99.8	+ .29	+ .5	.1619	111.1	+.0067	+ 4.1
1903	53	200.0	.....	.....	58.29	100.3	.....	.....	.1636	115.7	.....	.....

CANNERS, Female.

[Data from 1 establishment.]

Av. 1890-99.	49	100.0	-11	-22.4	59.00	100.0	.....	.....	\$0.0701	100.0	+\$0.0071	+10.1
1890	43	87.8	- 5	-11.6	59.00	100.0	.....	.....	.0686	97.9	+.0086	+12.5
1891	43	87.8	- 5	-11.6	59.00	100.0	.....	.....	.0690	98.4	+.0082	+11.5
1892	44	89.8	- 6	-13.6	59.00	100.0	.....	.....	.0689	98.3	+.0083	+12.0
1893	50	102.0	-12	-24.0	59.00	100.0	.....	.....	.0717	102.3	+.0056	+ 7.7
1894	40	81.6	- 2	- 5.0	59.00	100.0	.....	.....	.0735	104.9	+.0037	+ 5.0
1895	56	114.3	-18	-32.1	59.00	100.0	.....	.....	.0693	98.9	+.0079	+11.5
1896	48	98.0	-10	-20.8	59.00	100.0	.....	.....	.0719	102.6	+.0053	+ 7.4
1897	49	100.0	-11	-22.4	59.00	100.0	.....	.....	.0700	99.9	+.0072	+10.5
1898	58	118.4	-20	-34.5	59.00	100.0	.....	.....	.0690	98.4	+.0082	+11.5
1899	59	120.4	-21	-35.6	59.00	100.0	.....	.....	.0695	99.1	+.0077	+11.7
1900	67	136.7	-29	-43.3	59.00	100.0	.....	.....	.0716	102.1	+.0056	+ 7.5
1901	46	93.9	- 8	-17.4	59.00	100.0	.....	.....	.0718	102.4	+.0054	+ 7.8
1902	46	93.9	- 8	-17.4	59.00	100.0	.....	.....	.0774	110.4	-.0002	- .3
1903	38	77.6	.....	.....	59.00	100.0	.....	.....	.0772	110.1	.....	.....

TABLE K.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

PAINTS—Concluded.

GRINDERS, Male.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
y. 1890-99.	101	100.0	+39	+38.6	58.14	100.0	−0.24	−0.4	\$0.1841	100.0	+\$0.0226	+12.3
90.	96	95.0	+44	+45.8	59.21	101.8	−1.81	−2.2	.1794	97.4	+.0273	+15.2
91.	107	105.9	+33	+30.8	59.19	101.8	−1.29	−2.2	.1821	98.9	+.0246	+13.5
92.	106	105.0	+34	+32.1	59.21	101.8	−1.81	−2.2	.1810	98.3	+.0257	+14.2
93.	101	100.0	+39	+38.6	59.17	101.8	−1.27	−2.1	.1841	100.0	+.0226	+12.3
94.	92	91.1	+48	+52.2	54.91	94.4	+2.99	+5.4	.1984	105.1	+.0133	+6.9
95.	98	97.0	+42	+42.9	57.50	98.9	+ .40	+ .7	.1821	98.9	+.0246	+13.5
96.	105	104.0	+35	+33.3	59.13	101.7	−1.23	−2.1	.1836	99.7	+.0231	+12.6
97.	96	95.0	+44	+45.8	57.64	99.1	+ .26	+ .5	.1811	98.4	+.0256	+14.1
98.	97	96.0	+43	+44.3	57.62	99.1	+ .23	+ .5	.1874	101.8	+.0198	+10.3
99.	114	112.9	+26	+22.8	57.81	99.4	+ .09	+ .2	.1863	101.2	+.0204	+11.0
00.	120	118.8	+20	+16.7	57.81	99.4	+ .09	+ .2	.1869	101.5	+.0198	+10.6
01.	109	107.9	+31	+28.4	57.76	99.3	+ .14	+ .2	.1949	105.9	+.0118	+6.1
02.	129	127.7	+11	+8.5	57.82	99.4	+ .08	+ .1	.1941	105.4	+.0126	+6.5
03.	140	138.6	.....	.....	57.90	99.6	.....	.....	.2067	112.3	.....	.....

MIXERS, Male.

[Data from 3 establishments.]

y. 1890-99.	47	100.0	+21	+44.7	58.31	100.0	−0.47	−0.8	\$0.1681	100.0	+\$0.0122	+7.3
90.	42	99.4	+26	+61.9	59.67	102.3	−1.83	−3.1	.1687	97.4	+.0166	+10.1
91.	45	95.7	+23	+51.1	59.67	102.8	−1.83	−3.1	.1642	97.7	+.0161	+9.8
92.	47	100.0	+21	+44.7	59.66	102.3	−1.82	−3.1	.1660	98.8	+.0143	+8.6
93.	50	106.4	+18	+36.0	59.62	102.2	−1.78	−3.0	.1686	100.3	+.0117	+6.9
94.	44	93.6	+24	+54.5	54.18	92.9	+3.66	+6.8	.1824	108.5	+.0021	−1.2
95.	45	95.7	+23	+51.1	57.33	98.8	+ .51	+ .9	.1701	101.2	+.0102	+6.0
96.	42	99.4	+26	+61.9	59.69	102.4	−1.85	−3.1	.1611	95.8	+.0192	+11.9
97.	47	100.0	+21	+44.7	57.70	99.0	+ .14	+ .2	.1682	100.1	+.0121	+7.2
98.	56	119.1	+12	+21.4	57.77	99.1	+ .07	+ .1	.1687	100.4	+.0116	+6.9
99.	56	119.1	+12	+21.4	57.79	99.1	+ .05	+ .1	.1680	99.9	+.0123	+7.3
00.	58	123.4	+10	+17.2	57.84	99.2	.....	.....	.1661	98.8	+.0142	+8.5
01.	58	123.4	+10	+17.2	57.74	99.0	+ .10	+ .2	.1899	112.9	+.0096	+5.1
02.	64	136.2	+4	+6.3	57.72	99.0	+ .12	+ .2	.1728	102.8	+.0076	+4.3
03.	68	144.7	.....	.....	57.84	99.2	.....	.....	.1808	107.3	.....	.....

PAPER AND WOOD PULP.

BACK TENDERS, Male.

[Data from 11 establishments.]

y. 1890-99.	96	100.0	+21	+21.9	68.53	100.0	-4.82	-7.0	\$0.1365	100.0	+\$0.0276	+20.2
90.	82	85.4	+35	+42.7	68.78	100.4	-5.07	-7.4	.1325	97.1	+.0316	+23.8
91.	91	94.8	+26	+28.6	68.70	100.2	-4.99	-7.3	.1330	97.4	+.0311	+23.4
92.	88	91.7	+29	+33.0	68.73	100.3	-5.02	-7.3	.1339	98.1	+.0302	+22.6
93.	96	100.0	+21	+21.9	68.75	100.3	-5.04	-7.3	.1331	97.5	+.0310	+23.3
94.	90	93.8	+27	+30.0	68.53	100.0	-4.82	-7.0	.1350	98.9	+.0291	+21.6
95.	97	101.0	+20	+20.6	68.78	100.4	-5.07	-7.4	.1363	99.9	+.0278	+20.4
96.	98	102.1	+19	+19.4	68.82	100.4	-5.11	-7.4	.1345	98.5	+.0296	+22.0
97.	102	106.3	+15	+14.7	69.06	100.8	-5.35	-7.7	.1389	101.8	+.0252	+18.1
98.	113	117.7	+4	+3.5	69.35	101.2	-5.64	-8.1	.1391	101.9	+.0250	+18.0
99.	104	108.3	+13	+12.5	65.77	96.0	-2.06	-3.1	.1489	109.1	+.0152	+10.2
00.	115	119.8	+2	+1.7	65.11	95.0	-1.40	-2.2	.1501	110.0	+.0140	+9.3
01.	113	117.7	+4	+3.5	64.78	94.5	-1.07	-1.7	.1504	110.2	+.0137	+9.1
02.	116	120.8	+1	+ .9	63.43	92.6	+ .28	+ .4	.1525	111.7	+.0116	+7.6
03.	117	121.9	.....	.....	63.71	93.0	.....	.....	.1641	120.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PAPER AND WOOD PULP—Continued.

BEATERS, Male.

[Data from 14 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	189	100.0	+38	+20.1	69.78	100.0	-7.53	-10.8	\$0.1527	100.0	+\$0.0355	+23
1890	185	97.9	+42	+22.7	70.12	100.5	-7.87	-11.2	.1456	95.4	+.0426	+28
1891	194	102.6	+33	+17.0	69.97	100.3	-7.72	-11.0	.1510	98.9	+.0372	+22
1892	192	101.6	+35	+18.2	70.06	100.4	-7.61	-11.1	.1506	98.6	+.0376	+22
1893	188	99.5	+39	+20.7	70.40	100.9	-8.15	-11.6	.1504	98.5	+.0378	+22
1894	185	97.9	+42	+22.7	70.18	100.6	-7.83	-11.3	.1529	100.1	+.0353	+23
1895	180	95.2	+47	+26.1	70.20	100.6	-7.95	-11.3	.1526	99.9	+.0356	+23
1896	190	100.5	+37	+19.6	69.41	99.5	-7.16	-10.3	.1537	100.7	+.0345	+22
1897	190	100.5	+37	+19.6	70.17	100.6	-7.92	-11.3	.1533	100.4	+.0349	+22
1898	186	98.4	+41	+22.0	69.15	100.5	-7.88	-11.2	.1524	99.8	+.0358	+22
1899	198	104.8	+29	+14.6	67.15	96.2	-4.90	-7.3	.1642	107.5	+.0240	+11
1900	204	107.9	+23	+11.8	68.88	98.8	-4.63	-6.9	.1660	108.7	+.0222	+9
1901	205	108.5	+22	+10.7	64.88	92.8	-2.08	-3.2	.1743	114.1	+.0189	+9
1902	212	112.2	+15	+7.1	63.82	90.7	-1.07	-1.7	.1784	116.8	+.0098	+9
1903	227	120.1	.....	.....	62.25	89.2	.....	.....	.1882	128.2	.....	.....

BLACK ASH BURNERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	17	100.0	-1	-5.9	60.45	100.0	-9.45	-15.6	\$0.1732	100.0	+\$0.0619	+33
1890	19	111.8	-3	-15.8	61.26	101.3	-10.26	-16.7	.1569	90.6	+.0782	+44
1891	18	76.5	+3	+23.1	61.85	102.3	-10.85	-17.5	.1726	99.7	+.0625	+39
1892	17	100.0	-1	-5.9	61.41	101.6	-10.41	-17.0	.1650	95.3	+.0701	+44
1893	15	88.2	+1	+6.7	61.60	101.9	-10.60	-17.2	.1684	95.5	+.0697	+44
1894	19	111.8	-3	-15.8	61.26	101.3	-10.26	-16.7	.1682	97.1	+.0669	+33
1895	19	111.8	-3	-15.8	61.26	101.3	-10.26	-16.7	.1682	94.2	+.0719	+44
1896	18	105.9	-2	-11.1	61.33	101.5	-10.33	-16.8	.1766	102.0	+.0585	+38
1897	25	147.1	-9	-36.0	60.96	100.8	-9.96	-16.3	.1775	102.5	+.0576	+38
1898	15	88.2	+1	+6.7	61.60	101.9	-10.60	-17.2	.1734	100.1	+.0617	+33
1899	12	70.6	+4	+33.3	52.00	86.0	-1.00	-1.9	.2129	122.9	+.0222	+1
1900	22	129.4	-6	-27.3	50.18	83.0	+.82	+1.6	.1957	113.0	+.0394	+2
1901	11	64.7	+5	+45.6	52.36	86.6	-1.36	-2.6	.2095	121.0	+.0256	+1
1902	11	64.7	+5	+45.6	52.36	86.6	-1.36	-2.6	.2095	121.0	+.0256	+1
1903	16	94.1	.....	.....	51.00	84.4	.....	.....	.2351	135.7	.....	.....

BLEACHERS, Male.

[Data from 7 establishments.]

Av. 1890-99.	68	100.0	-7	-10.3	63.85	100.0	-3.33	-5.2	\$0.1625	100.0	+\$0.0158	+11
1890	81	119.1	-20	-24.7	63.26	99.1	-2.74	-4.3	.1464	96.0	+.0219	+1
1891	83	122.1	-22	-26.5	63.40	99.3	-2.88	-4.5	.1478	96.9	+.0205	+1
1892	88	129.4	-27	-30.7	63.41	99.3	-2.89	-4.6	.1506	98.8	+.0177	+1
1893	76	111.8	-15	-19.7	63.87	100.0	-3.85	-5.2	.1504	98.6	+.0179	+1
1894	71	104.4	-10	-14.1	63.46	99.4	-2.94	-4.6	.1496	98.1	+.0187	+1
1895	59	86.8	+2	+3.4	64.17	100.5	-3.65	-5.7	.1542	101.1	+.0141	+1
1896	63	92.6	-2	-3.2	64.67	101.1	-4.05	-6.3	.1627	100.1	+.0156	+1
1897	51	75.0	+10	+19.6	66.12	103.6	-5.60	-8.5	.1583	100.5	+.0150	+1
1898	49	72.1	+12	+24.6	66.37	103.9	-5.35	-8.8	.1623	99.9	+.0160	+1
1899	54	79.4	+7	+13.0	59.82	93.7	+.70	+1.2	.1676	109.9	+.0007	+
1900	59	86.8	+2	+3.4	64.88	101.6	-4.86	-6.7	.1625	106.6	+.0058	+
1901	59	86.8	+2	+3.4	64.88	101.6	-4.86	-6.7	.1622	106.4	+.0061	+
1902	62	91.2	-1	-1.6	60.82	94.5	+.20	+3	.1656	108.6	+.0027	+
1903	61	89.7	.....	.....	60.52	94.8	.....	.....	.1683	110.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PAPER AND WOOD PULP—Continued.

CALENDREERS, Male.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1892, 1894-1903; 4 establishments, 1893.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	55	100.0	+50	+ 90.9	62.24	100.0	- 9.29	-14.9	\$0.1595	100.0	+\$0.0441	+27.6
1890	44	80.0	+61	+133.6	63.75	102.4	-10.80	-16.9	.1502	94.2	+ .0534	+35.6
1891	51	92.7	+54	+105.9	63.27	101.7	-10.32	-16.3	.1486	93.2	+ .0550	+37.0
1892	55	100.0	+50	+ 90.9	63.05	101.3	-10.10	-16.0	.1479	92.7	+ .0557	+37.7
1893	61	110.9	+44	+ 72.1	62.16	99.9	- 9.21	-14.8	.1577	98.9	+ .0459	+29.1
1894	55	100.0	+50	+ 90.9	63.05	101.3	-10.1	-16.0	.1551	97.2	+ .0485	+31.3
1895	55	100.0	+50	+ 90.9	63.05	101.3	-10.1	-16.0	.1636	102.6	+ .0400	+24.4
1896	51	92.7	+54	+105.9	63.27	101.7	-10.32	-16.3	.1647	103.8	+ .0389	+23.6
1897	49	89.1	+56	+114.3	62.62	102.2	-10.67	-16.8	.1626	101.9	+ .0410	+25.2
1898	66	126.0	+39	+ 59.1	62.74	100.8	- 9.79	-15.6	.1575	98.7	+ .0461	+29.3
1899	68	114.5	+42	+63.7	54.45	87.5	- 1.51	- 2.8	.1866	117.0	+ .0170	+ 9.1
1900	77	140.0	+28	+ 36.4	54.22	87.1	- .27	- 0.5	.1877	117.7	+ .0159	+ 8.5
1901	93	169.1	+12	+12.9	53.20	85.5	- .25	- 0.5	.1954	122.5	+ .0082	+ 4.2
1902	95	172.7	+10	+10.5	52.61	84.5	+ .84	+ .6	.1961	122.9	+ .0075	+ 3.8
1903	105	190.9	.....	.....	52.95	85.1	.....	.....	.2036	127.6	.....	.....

CALENDREERS, Female.

[Data from 1 establishment.]

Av. 1890-99.	19	100.0	.....	.....	58.00	100.0	-3.00	-5.2	\$0.1280	100.0	-\$0.0029	- 2.3
1890	20	105.3	-1	- 5.0	58.00	100.0	-3.00	-5.2	.1229	96.0	+ .0022	+ 1.8
1891	20	105.3	-1	- 5.0	58.00	100.0	-3.00	-5.2	.1373	107.3	+ .0122	+ 8.9
1892	24	126.3	-5	-20.8	58.00	100.0	-3.00	-5.2	.1309	102.3	+ .0055	- 4.4
1893	24	126.3	-5	-20.8	58.00	100.0	-3.00	-5.2	.1404	109.7	+ .0153	+10.9
1894	16	84.2	+8	+13.8	58.00	100.0	-3.00	-5.2	.1198	93.6	+ .0053	+ 4.4
1895	20	105.3	-1	- 5.0	58.00	100.0	-3.00	-5.2	.1165	91.0	+ .0086	+ 7.7
1896	19	100.0	.....	.....	58.00	100.0	-3.00	-5.2	.1387	108.4	+ .0136	+ 9.8
1897	18	94.7	+1	+ 5.6	58.00	100.0	-3.00	-5.2	.1228	95.9	+ .0023	+ 1.9
1898	18	94.7	+1	+ 5.6	58.00	100.0	-3.00	-5.2	.1208	94.4	+ .0043	+ 3.3
1899	13	68.4	+6	+46.2	58.00	100.0	-3.00	-5.2	.1294	101.1	+ .0043	+ 3.3
1900	15	78.9	+4	+26.7	58.00	100.0	-3.00	-5.2	.1355	105.9	+ .0104	+ 7.7
1901	15	78.9	+4	+26.7	58.00	100.0	-3.00	-5.2	.1293	101.0	+ .0042	+ 3.2
1902	16	84.2	+8	+13.8	55.00	94.8	.....	.....	.1271	99.8	+ .0020	+ 1.6
1903	19	100.0	.....	.....	55.00	94.8	.....	.....	.1251	97.7	.....	.....

COLOR MIXERS, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 2 establishments, 1890-1892, 1894-1903; 1 establishment, 1893.]

Av. 1890-99.	6	100.0	+3	+ 50.0	61.75	100.0	- 9.39	-15.2	\$0.1969	100.0	+\$0.0465	+23.6
1890	5	83.3	+4	+ 80.0	63.43	102.7	-11.07	-17.5	.1776	90.2	+ .0658	+37.0
1891	5	83.3	+4	+ 80.0	63.43	102.7	-11.07	-17.5	.1780	90.4	+ .0654	+36.7
1892	5	83.3	+4	+ 80.0	63.43	102.7	-11.07	-17.5	.1822	92.5	+ .0612	+33.6
1893	4	66.7	+5	+125.0	60.00	97.2	- 7.74	-12.7	.1906	96.8	+ .0528	+27.7
1894	5	83.3	+4	+ 80.0	63.43	102.7	-11.07	-17.5	.1958	99.4	+ .0476	+24.3
1895	6	100.0	+3	+ 50.0	63.00	102.0	-10.64	-16.9	.1964	99.7	+ .0470	+23.9
1896	7	116.7	+2	+ 28.6	62.67	101.5	-10.31	-16.5	.2068	105.0	+ .0306	+17.7
1897	7	116.7	+2	+ 28.6	62.67	101.5	-10.31	-16.5	.2068	105.0	+ .0306	+17.7
1898	7	116.7	+2	+ 28.6	62.67	101.5	-10.31	-16.5	.2068	105.0	+ .0306	+17.7
1899	8	133.3	+1	+12.5	52.80	85.5	- .44	- .8	.2280	115.8	+ .0154	+ 6.8
1900	9	150.0	.....	.....	52.36	84.8	.....	.....	.2223	113.2	+ .0206	+ 9.2
1901	9	150.0	.....	.....	52.36	84.8	.....	.....	.2231	114.8	+ .0173	+ 7.7
1902	8	133.3	+1	+12.5	52.80	85.5	- .44	- .8	.2238	113.7	+ .0196	+ 8.8
1903	9	150.0	.....	.....	52.36	84.8	.....	.....	.2434	123.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PAPER AND WOOD PULP—Continued.

CUTTERS, Male.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 6 establishments, 1890-1892, 1894-1903; 5 establishments, 1893.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	59	100.0	+32	+ 54.2	58.92	100.0	- 9.17	-15.6	\$0.1801	100.0	+\$0.0413	+22.9
1890	44	74.6	+47	+106.8	59.87	101.6	-10.12	-16.9	.1797	99.8	+.0417	+23.2
1891	46	78.0	+45	+97.8	59.88	101.6	-10.13	-16.9	.1816	100.8	+.0598	+21.9
1892	50	84.7	+41	+82.0	59.88	101.6	-10.13	-16.9	.1808	100.4	+.0406	+22.5
1893	57	96.6	+34	+59.6	59.82	101.5	-10.07	-16.8	.1732	96.2	+.0482	+27.8
1894	67	113.6	+24	+35.8	59.83	101.5	-10.08	-16.8	.1766	98.1	+.0448	+25.4
1895	67	113.6	+24	+35.8	59.91	101.7	-10.16	-17.0	.1743	96.8	+.0471	+27.0
1896	65	110.2	+26	+40.0	59.91	101.7	-10.16	-17.0	.1740	96.6	+.0474	+27.2
1897	64	108.5	+27	+42.2	59.91	101.7	-10.16	-17.0	.1754	97.4	+.0460	+26.2
1898	66	111.9	+25	+37.9	59.91	101.7	-10.16	-17.0	.1758	97.6	+.0456	+25.9
1899	67	113.6	+24	+35.8	50.32	85.4	-.57	-1.1	.2096	116.4	+.0118	+5.6
1900	69	116.9	+22	+31.9	50.11	85.0	-.36	-.7	.2101	116.7	+.0113	+5.4
1901	77	130.5	+14	+18.2	50.09	84.9	-.28	-.6	.2071	115.0	+.0143	+6.9
1902	78	132.2	+13	+16.7	50.04	84.9	-.29	-.6	.2129	118.2	+.0065	+4.0
1903	91	154.2	.....	.....	49.75	84.4	.....	.....	.2214	122.9	.....	.....

CUTTERS, Female.

[Data from 6 establishments.]

Av. 1890-99.	92	100.0	+10	+10.9	63.20	100.0	-3.83	-6.1	\$0.0896	100.0	+\$0.0081	+9.0
1890	99	107.6	+8	+3.0	64.91	102.7	-5.54	-8.5	.0889	99.2	+.0088	+9.9
1891	117	127.2	-15	-12.8	64.26	101.7	-4.89	-7.6	.0887	99.0	+.0090	+10.1
1892	89	96.7	+13	+14.6	64.31	101.8	-4.94	-7.7	.0889	99.2	+.0088	+9.9
1893	95	103.8	+7	+7.4	62.69	99.2	-3.32	-5.3	.0913	101.9	+.0064	+7.0
1894	81	88.0	+21	+25.9	63.36	100.3	-3.99	-6.3	.0888	98.8	+.0092	+10.4
1895	89	96.7	+13	+14.6	62.97	99.6	-3.60	-5.7	.0889	99.2	+.0088	+9.9
1896	91	98.9	+11	+12.1	62.90	99.5	-3.58	-5.6	.0888	99.1	+.0089	+10.0
1897	90	97.8	+12	+13.3	62.98	99.6	-3.56	-5.7	.0891	99.4	+.0086	+9.7
1898	85	92.4	+17	+20.0	63.11	99.9	-3.74	-5.9	.0892	99.6	+.0085	+9.5
1899	82	89.1	+20	+24.4	60.59	95.9	-1.22	-2.0	.0941	105.0	+.0036	+3.8
1900	86	93.5	+16	+18.6	60.21	95.3	-.84	-1.4	.0934	104.2	+.0043	+4.6
1901	90	97.8	+12	+13.3	59.78	94.6	-.36	-.6	.0941	105.0	+.0036	+3.8
1902	98	106.5	+4	+4.1	59.78	94.6	-.41	-.7	.0914	102.0	+.0063	+6.9
1903	102	110.9	.....	.....	59.37	93.9	.....	.....	.0977	109.0	.....	.....

ENAMELERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	36	100.0	+19	+52.8	58.88	100.0	-10.44	-17.7	\$0.1631	100.0	+\$0.0686	+42.1
1890	20	55.6	+35	+175.0	60.00	101.9	-11.56	-19.3	.1553	95.2	+.0704	+49.7
1891	28	77.8	+27	+96.4	60.00	101.9	-11.56	-19.3	.1571	96.3	+.0746	+47.5
1892	29	80.6	+26	+99.7	60.00	101.9	-11.56	-19.3	.1560	95.6	+.0757	+48.5
1893	42	116.7	+13	+31.0	60.00	101.9	-11.56	-19.3	.1602	98.2	+.0715	+44.6
1894	44	122.2	+11	+25.0	60.00	101.9	-11.56	-19.3	.1572	96.4	+.0745	+47.7
1895	38	105.6	+17	+44.7	60.00	101.9	-11.56	-19.3	.1586	97.2	+.0731	+46.7
1896	44	122.2	+11	+25.0	60.00	101.9	-11.56	-19.3	.1585	97.2	+.0732	+46.7
1897	41	113.9	+14	+34.1	60.00	101.9	-11.56	-19.3	.1585	97.2	+.0732	+46.7
1898	38	105.6	+17	+44.7	60.00	101.9	-11.56	-19.3	.1632	100.1	+.0685	+42.0
1899	32	88.9	+23	+71.9	48.75	82.8	-.31	-.6	.2068	126.8	+.0249	+12.0
1900	31	86.1	+24	+77.4	48.77	82.8	-.33	-.7	.2103	128.9	+.0214	+10.1
1901	34	94.4	+21	+61.8	48.71	82.7	-.27	-.6	.2199	134.8	+.0118	+5.6
1902	50	138.9	+5	+10.0	48.48	82.3	-.04	-.1	.2206	135.3	+.0111	+5.0
1903	55	152.8	.....	.....	48.44	82.3	.....	.....	.2317	142.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PAPER AND WOOD PULP—Continued.

FINISHERS, Male.

[Data from 14 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
v. 1890-99.	64	100.0	+32	+50.0	61.74	100.0	-1.15	-1.9	\$0.1715	100.0	+\$0.0100	+5.8
890	54	84.4	+42	+77.8	62.07	100.5	-1.48	-2.4	.1719	100.2	+.0096	+5.6
891	56	87.5	+40	+71.4	62.00	100.4	-1.41	-2.3	.1747	101.9	+.0068	+3.9
892	58	90.6	+38	+65.5	61.86	100.2	-1.27	-2.1	.1723	100.5	+.0092	+5.3
893	65	101.6	+31	+47.7	61.11	99.0	-.52	-.9	.1779	103.7	+.0036	+2.0
894	64	100.0	+32	+50.0	61.63	99.8	-1.04	-1.7	.1743	101.6	+.0072	+4.1
895	60	93.8	+36	+60.0	61.77	100.0	-1.18	-1.9	.1731	100.9	+.0084	+4.9
896	61	95.3	+35	+57.4	61.77	100.0	-1.18	-1.9	.1712	99.8	+.0103	+6.0
897	72	112.5	+24	+33.3	61.50	99.6	-.91	-1.5	.1669	97.3	+.0146	+8.7
898	73	114.1	+23	+31.5	61.86	100.2	-1.27	-2.1	.1658	96.7	+.0157	+9.5
899	74	115.6	+22	+29.7	61.84	100.2	-1.26	-2.0	.1671	97.4	+.0144	+8.6
900	82	128.1	+14	+17.1	61.88	100.2	-1.29	-2.1	.1684	98.2	+.0131	+7.8
901	82	128.1	+14	+17.1	61.90	100.3	-1.31	-2.1	.1694	98.8	+.0121	+7.1
902	80	125.0	+16	+20.0	61.18	99.1	-.59	-1.0	.1739	101.4	+.0076	+4.4
903	96	150.0	.....	.....	60.59	98.1	.....	.....	.1815	105.8	.....	.....

FINISHERS, Female.

Data for employees from 4 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1892, 1894-1903; 4 establishments, 1893.]

v. 1890-99.	40	100.0	+3	+7.5	58.66	100.0	-1.84	-3.1	\$0.1009	100.0	+\$0.0075	+7.4
890	35	87.5	+2	+22.9	58.98	100.5	-2.16	-3.7	.0947	93.9	+.0137	+14.5
891	45	112.5	-2	-4.4	58.78	100.2	-1.96	-3.3	.1061	105.2	+.0028	+2.2
892	52	130.0	-9	-17.3	58.69	100.1	-1.87	-3.2	.1039	103.0	+.0045	+4.3
893	49	122.5	-6	-12.2	58.45	99.6	-1.68	-2.8	.1069	105.0	+.0025	+2.4
894	31	77.5	+12	+38.7	58.76	100.2	-1.94	-3.3	.0957	94.8	+.0127	+13.3
895	37	92.5	+6	+16.2	58.56	99.8	-1.74	-3.0	.1005	99.6	+.0079	+7.9
896	38	95.0	+5	+13.2	58.55	99.8	-1.73	-3.0	.1048	103.9	+.0036	+3.4
897	37	92.5	+6	+16.2	58.56	99.8	-1.74	-3.0	.0994	98.5	+.0090	+9.1
898	39	97.5	+4	+10.3	58.58	99.9	-1.76	-3.0	.0954	94.5	+.0130	+13.6
899	36	90.0	+7	+19.4	58.71	100.1	-1.89	-3.2	.1021	101.2	+.0063	+6.2
900	43	107.5	.....	.....	58.61	99.9	-1.79	-3.1	.1043	103.4	+.0041	+3.9
901	42	105.0	+1	+2.4	58.67	100.0	-1.85	-3.2	.1015	100.6	+.0069	+6.8
902	36	90.0	+7	+19.4	57.12	97.4	-.30	-.5	.1059	105.0	+.0025	+2.4
903	43	107.5	.....	.....	56.82	96.9	.....	.....	.1084	107.4	.....	.....

LABORERS, Male.

[Data from 4 establishments.]

v. 1890-99.	177	100.0	+43	+27.1	65.67	100.0	-2.47	-3.8	\$0.1346	100.0	+\$0.0249	+18.5
890	201	113.6	+24	+11.9	64.60	98.4	-1.40	-2.2	.1318	97.9	+.0277	+21.0
891	193	109.0	+32	+16.6	64.97	98.9	-1.77	-2.7	.1328	98.7	+.0267	+20.1
892	175	98.9	+50	+28.6	65.97	100.5	-2.77	-4.2	.1330	98.8	+.0265	+19.9
893	177	100.0	+48	+27.1	66.17	100.8	-2.97	-4.5	.1318	97.5	+.0282	+21.5
894	171	96.6	+54	+31.6	65.89	100.3	-2.69	-4.1	.1317	97.8	+.0278	+21.1
895	133	103.4	+42	+23.0	66.56	101.4	-3.36	-5.0	.1339	99.5	+.0256	+19.1
896	160	90.4	+65	+40.6	67.05	102.1	-3.85	-5.7	.1335	99.2	+.0260	+19.5
897	166	93.8	+59	+35.5	66.65	101.5	-3.45	-5.2	.1345	99.9	+.0250	+18.6
898	150	84.7	+75	+50.0	67.20	102.3	-4.00	-6.0	.1328	98.7	+.0267	+20.1
899	192	108.5	+33	+17.2	61.63	93.8	+1.57	+2.5	.1500	112.2	+.0085	+5.6
900	181	102.3	+44	+24.3	63.12	96.1	+.08	+1	.1494	111.0	+.0101	+6.8
901	238	134.5	-13	-5.5	60.20	91.7	+3.00	+5.0	.1554	115.5	+.0041	+2.6
902	209	118.1	+16	+7.7	63.44	96.6	-.24	-.4	.1468	109.1	+.0127	+8.7
903	225	127.1	.....	.....	63.20	96.2	.....	.....	.1505	118.5	.....	.....

TABLE K.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PAPER AND WOOD PULP—Continued.

MACHINE TENDERS, Male.

[Data for employees from 15 establishments for entire period. Data for hours and wages from 16 establishments, 1890-1892, 1894-1903; 15 establishments, 1893.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	129	100.0	+43	+33.3	68.15	100.0	-8.22	-12.1	\$0.2259	100.0	+\$0.0375	+16.6
1890	116	89.9	+56	+43.3	68.54	100.6	-8.61	-12.6	.2198	97.1	+.0441	+20.1
1891	126	97.7	+40	+36.5	68.58	100.6	-8.60	-12.5	.2248	99.5	+.0586	+17.2
1892	126	97.7	+46	+36.5	68.16	100.0	-8.28	-12.1	.2280	100.0	+.0874	+16.6
1893	135	104.7	+57	+27.4	67.87	99.6	-7.94	-11.7	.2258	100.4	+.0866	+16.6
1894	126	97.7	+40	+36.5	68.06	99.9	-8.13	-11.9	.2252	99.7	+.0882	+17.0
1895	131	101.6	+41	+31.3	68.30	100.2	-8.37	-12.8	.2244	99.8	+.0890	+17.0
1896	132	102.3	+40	+30.3	68.38	100.8	-8.40	-12.8	.2227	98.6	+.0407	+18.0
1897	129	100.0	+49	+35.3	68.70	100.8	-8.77	-12.8	.2247	99.6	+.0887	+17.0
1898	131	101.6	+41	+31.3	68.84	101.0	-8.91	-12.9	.225	100.0	+.0875	+16.6
1899	137	106.2	+55	+25.5	66.18	97.0	-6.20	-9.4	.2385	105.7	+.0246	+10.0
1900	158	118.6	+19	+12.4	66.74	97.9	-6.81	-10.2	.2351	104.1	+.0288	+12.0
1901	160	124.0	+12	+7.5	62.22	91.8	-2.29	-3.7	.2522	111.6	+.0112	+4.0
1902	161	124.8	+11	+6.8	60.59	88.9	-.66	-1.1	.2561	118.4	+.0073	+2.0
1903	172	133.3	.....	.....	59.98	87.9	.....	.....	.2634	116.6	.....	.....

PRESS TENDERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 2 establishments, 1890-1893; 4 establishments, 1894-1903.]

Av. 1890-99.	12	100.0	.....	.....	72.00	100.0	.....	.....	\$0.1170	100.0	+\$0.0375	+32.0
1890	14	116.7	-2	-14.3	72.00	100.0	.....	.....	.1146	97.9	+.0399	+34.0
1891	14	116.7	-2	-14.3	72.00	100.0	.....	.....	.1146	97.9	+.0399	+34.0
1892	14	116.7	-2	-14.3	72.00	100.0	.....	.....	.1146	97.9	+.0399	+34.0
1893	12	100.0	.....	.....	72.00	100.0	.....	.....	.1129	96.5	+.0416	+36.0
1894	11	91.7	+1	+9.1	72.00	100.0	.....	.....	.1187	101.5	+.0353	+30.0
1895	12	100.0	.....	.....	72.00	100.0	.....	.....	.1189	101.6	+.0356	+29.0
1896	12	100.0	.....	.....	72.00	100.0	.....	.....	.1189	101.6	+.0356	+29.0
1897	12	100.0	.....	.....	72.00	100.0	.....	.....	.1189	101.6	+.0356	+29.0
1898	11	91.7	+1	+9.1	72.00	100.0	.....	.....	.1187	101.5	+.0353	+30.0
1899	12	100.0	.....	.....	72.00	100.0	.....	.....	.1189	101.6	+.0356	+29.0
1900	13	108.3	-1	-7.7	72.00	100.0	.....	.....	.1217	104.0	+.0328	+27.0
1901	13	108.3	-1	-7.7	72.00	100.0	.....	.....	.1242	106.2	+.0308	+24.0
1902	15	125.0	-8	-20.0	72.00	100.0	.....	.....	.1243	106.2	+.0302	+24.0
1903	12	100.0	.....	.....	72.00	100.0	.....	.....	.1545	132.1	.....	.....

PULP GRINDERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 2 establishments, 1890-1892, 1894-1903; 3 establishments, 1893.]

Av. 1890-99.	81	100.0	-2	-6.5	72.00	100.0	.....	.....	\$0.1236	100.0	+\$0.0190	+15.0
1890	29	98.5	.....	.....	72.00	100.0	.....	.....	.1234	99.8	+.0192	+15.0
1891	29	98.5	.....	.....	72.00	100.0	.....	.....	.1234	99.8	+.0192	+15.0
1892	29	98.5	.....	.....	72.00	100.0	.....	.....	.1234	99.8	+.0192	+15.0
1893	32	108.2	-3	-9.4	72.00	100.0	.....	.....	.1191	96.4	+.0235	+19.0
1894	32	108.2	-3	-9.4	72.00	100.0	.....	.....	.1235	99.9	+.0191	+15.0
1895	30	96.8	-1	-3.3	72.00	100.0	.....	.....	.1240	100.3	+.0186	+15.0
1896	32	108.2	-3	-9.4	72.00	100.0	.....	.....	.1250	101.1	+.0176	+14.0
1897	30	96.8	-1	-3.3	72.00	100.0	.....	.....	.1250	101.1	+.0176	+14.0
1898	30	96.8	-1	-3.3	72.00	100.0	.....	.....	.1250	101.1	+.0176	+14.0
1899	32	108.2	-3	-9.4	72.00	100.0	.....	.....	.1245	100.7	+.0181	+14.0
1900	32	108.2	-3	-9.4	72.00	100.0	.....	.....	.1245	100.7	+.0181	+14.0
1901	32	108.2	-3	-9.4	72.00	100.0	.....	.....	.1255	101.5	+.0171	+13.0
1902	32	108.2	-3	-9.4	72.00	100.0	.....	.....	.1255	101.5	+.0171	+13.0
1903	29	98.5	.....	.....	72.00	100.0	.....	.....	.1426	115.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

PAPER AND WOOD PULP—Continued.

BAG SORTERS, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	50	100.0	+17	+34.0	52.26	100.0	+1.65	+3.2	\$0.1724	100.0	+\$0.0065	+3.8
1890	51	102.0	+16	+31.4	51.53	98.6	+2.38	+4.6	.1630	94.5	+.0159	+9.8
1891	45	90.0	+22	+48.9	52.00	99.5	+1.91	+3.7	.1679	97.4	+.0110	+6.6
1892	55	110.0	+12	+21.8	51.27	98.1	+2.64	+5.1	.1721	99.8	+.0068	+4.0
1893	52	104.0	+15	+28.8	51.69	98.9	+2.22	+4.3	.1743	101.1	+.0046	+2.6
1894	46	92.0	+21	+45.7	52.17	99.8	+1.74	+3.8	.1777	103.1	+.0012	+ .7
1895	49	98.0	+18	+36.7	52.16	99.8	+1.75	+3.4	.1766	102.4	+.0023	+1.3
1896	52	104.0	+15	+28.8	52.38	100.2	+1.53	+2.9	.1711	99.2	+.0078	+4.6
1897	59	118.0	+8	+13.6	51.46	98.5	+2.45	+4.8	.1757	101.9	+.0032	+1.8
1898	49	98.0	+18	+36.7	53.98	103.3	— .07	— .1	.1689	98.0	+.0100	+5.9
1899	44	88.0	+23	+52.3	54.00	103.8	— .09	— .2	.1763	102.8	+.0026	+1.5
1900	57	114.0	+10	+17.5	53.47	102.3	+ .44	+ .8	.1744	101.2	+.0045	+2.6
1901	44	88.0	+23	+52.3	50.27	96.2	+3.64	+7.2	.1778	103.1	+.0011	+ .6
1902	55	110.0	+12	+21.8	54.11	103.5	— .20	— 3.7	.1742	101.0	+.0047	+2.7
1903	67	134.0	.....	.....	53.91	103.2	.....	.....	.1789	103.8	.....	.....

BAG SORTERS, Female.

[Data from 5 establishments.]

Av. 1890-99.	156	100.0	+18	+11.5	53.54	100.0	+0.84	+1.6	\$0.0926	100.0	—\$0.0022	—2.4
1890	147	94.2	+27	+18.4	54.20	101.2	+ .18	+ .3	.0904	97.6	.....	.....
1891	169	108.3	+5	+ 3.0	53.49	99.9	+ .89	+1.7	.0928	100.2	+.0024	—2.6
1892	171	109.6	+8	+ 1.8	54.05	101.0	+ .33	+ .6	.0924	99.8	+.0020	—2.2
1893	176	112.8	— 2	— 1.1	53.27	99.5	+1.11	+2.1	.0921	99.5	+.0017	—1.8
1894	141	90.4	+33	+23.4	52.78	98.6	+1.60	+3.0	.0947	102.3	+.0043	—4.5
1895	163	104.5	+11	+ 6.7	53.17	99.3	+1.21	+2.3	.0940	101.5	+.0036	—3.8
1896	169	108.3	+5	+ 3.0	52.95	98.9	+1.43	+2.7	.0929	100.3	+.0025	—2.7
1897	135	86.5	+39	+28.9	53.61	100.1	+ .77	+1.4	.0919	99.2	+.0015	—1.6
1898	135	86.5	+39	+28.9	54.05	101.0	+ .33	+ .6	.0939	101.4	+.0035	—3.7
1899	157	100.6	+17	+10.8	53.83	100.5	+ .55	+1.0	.0904	97.6	.....	.....
1900	184	117.9	—10	— 5.4	53.83	100.5	+ .55	+1.0	.0924	99.8	+.0020	—2.2
1901	144	92.3	+30	+20.8	54.95	102.6	— .57	—1.0	.0927	100.1	+.0023	—2.5
1902	136	87.2	+38	+27.9	54.13	101.1	+ .25	+ .5	.0895	96.7	+.0009	+1.0
1903	174	111.5	.....	.....	54.33	101.6	.....	.....	.0904	97.6	.....	.....

WOOD COOKERS, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890-1898; 2 establishments, 1894-1903.]

Av. 1890-99.	16	100.0	+8	+18.8	61.56	100.0	— 7.80	—12.7	\$0.1522	100.0	+\$0.0473	+31.1
1890	12	75.0	+7	+58.8	60.00	97.5	— 6.24	—10.4	.1450	95.3	+.0545	+37.6
1891	11	68.8	+8	+72.7	60.00	97.5	— 6.24	—10.4	.1442	94.7	+.0558	+38.3
1892	9	56.3	+10	+111.1	60.00	97.5	— 6.24	—10.4	.1496	98.3	+.0499	+33.4
1893	7	43.8	+12	+171.4	60.00	97.5	— 6.24	—10.4	.1519	99.8	+.0476	+31.3
1894	4	25.0	+15	+875.0	68.00	110.5	—14.24	—20.9	.1487	97.7	+.0508	+34.2
1895	16	100.0	+8	+18.8	64.00	104.0	—10.24	—16.0	.1517	99.7	+.0478	+31.5
1896	16	100.0	+8	+18.8	64.00	104.0	—10.24	—16.0	.1516	99.6	+.0479	+31.6
1897	28	175.0	—9	—32.1	62.67	101.8	— 8.91	—14.2	.1464	96.2	+.0531	+36.3
1898	30	187.5	—11	—36.7	62.53	101.6	— 8.77	—14.0	.1510	99.2	+.0485	+32.1
1899	22	137.5	—3	—13.6	54.40	88.4	+ .64	+ 1.2	.1816	119.3	+.0179	+ 9.9
1900	26	162.5	—7	—26.9	53.65	87.2	+ .11	+ .2	.1862	122.3	+.0133	+ 7.1
1901	32	200.0	—13	—40.6	52.80	85.8	+ .96	+ 1.8	.1847	121.4	+.0148	+ 8.0
1902	32	200.0	—13	—40.6	52.80	85.8	+ .96	+ 1.8	.1816	119.3	+.0179	+ 9.9
1903	19	118.8	.....	.....	53.76	87.3	.....	.....	.1995	131.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

PAPER AND WOOD PULP—Concluded.

WOOD PREPARERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 4 establishments, 1890-1892, 1901-1903; 3 establishments, 1893; 5 establishments, 1894-1900.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	19	100.0	+2	+10.5	66.45	100.0	-3.09	-4.7	\$0.1276	100.0	+\$0.0429	+33.6
1890	12	63.2	+9	+75.0	66.00	99.3	-2.64	-4.0	.1294	101.4	+.0411	+31.8
1891	12	63.2	+9	+75.0	66.00	99.3	-2.64	-4.0	.1294	100.6	+.0421	+32.8
1892	14	73.7	+7	+50.0	66.67	100.3	-3.31	-5.0	.1281	100.4	+.0424	+33.1
1893	19	100.0	+2	+10.5	66.95	100.8	-3.59	-5.4	.1315	103.1	+.0390	+29.7
1894	18	94.7	+3	+16.7	66.82	100.6	-3.46	-5.2	.1247	97.7	+.0458	+36.7
1895	20	105.3	+1	+5.0	66.62	100.3	-3.26	-4.9	.1255	98.4	+.0450	+35.9
1896	25	131.6	-4	-16.0	66.68	100.3	-3.32	-5.0	.1260	98.7	+.0445	+35.3
1897	23	121.1	-2	-8.7	66.55	100.2	-3.19	-4.8	.1261	98.8	+.0444	+35.2
1898	26	136.8	-5	-19.2	66.74	100.4	-3.38	-5.1	.1260	98.7	+.0445	+35.3
1899	25	131.6	-4	-16.0	65.45	98.5	-2.09	-3.2	.1302	102.0	+.0403	+31.0
1900	24	126.3	-3	-12.5	65.23	98.2	-1.87	-2.9	.1325	103.8	+.0380	+28.7
1901	24	126.3	-3	-12.5	64.23	96.7	-.93	-1.4	.1457	114.2	+.0248	+17.0
1902	24	126.3	-3	-12.5	64.23	96.7	-.93	-1.4	.1507	113.1	+.0198	+13.1
1903	21	110.5	.....	.....	63.36	95.3	.....	.....	.1705	133.6	.....	.....

PETROLEUM, REFINING.

BOILER MEN, Male.

[No data, 1890-1893; data from 3 establishments, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	16	(a)	+12	+75.0	80.25	(a)	+1.61	+2.0	\$0.1909	(a)	+\$0.0132	+6.9
1895	20	(a)	+8	+40.0	81.00	(a)	+.86	+1.1	.1884	(a)	+.0157	+8.3
1896	20	(a)	+8	+40.0	81.00	(a)	+.86	+1.1	.1884	(a)	+.0157	+8.3
1897	28	(a)	.....	.....	81.86	(a)	.....	.....	.1856	(a)	+.0185	+10.0
1898	28	(a)	.....	.....	81.86	(a)	.....	.....	.1856	(a)	+.0185	+10.0
1899	28	(a)	.....	.....	81.86	(a)	.....	.....	.1856	(a)	+.0185	+10.0
1900	24	(a)	+4	+16.7	81.50	(a)	+.36	+.4	.2007	(a)	+.0034	+1.7
1901	24	(a)	+4	+16.7	81.50	(a)	+.36	+.4	.2030	(a)	+.0011	+.5
1902	26	(a)	+2	+7.7	81.69	(a)	+.17	+.2	.2047	(a)	-.0006	-.3
1903	28	(a)	.....	.....	81.86	(a)	.....	.....	.2041	(a)	.....	.....

CAN MAKERS, Male.

[No data, 1890-1893; data from 1 establishment, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	166	(a)	-33	-50.0	60.00	(a)	-6.00	-10.0	\$0.1723	(a)	+\$0.0201	+11.7
1895	111	(a)	-28	-25.2	60.00	(a)	-6.00	-10.0	.1741	(a)	+.0183	+10.5
1896	137	(a)	-54	-48.6	60.00	(a)	-6.00	-10.0	.1727	(a)	+.0197	+11.4
1897	149	(a)	-66	-44.3	60.00	(a)	-6.00	-10.0	.1735	(a)	+.0189	+10.9
1898	123	(a)	-45	-35.9	60.00	(a)	-6.00	-10.0	.1753	(a)	+.0171	+9.8
1899	112	(a)	-29	-25.9	60.00	(a)	-6.00	-10.0	.1751	(a)	+.0173	+9.9
1900	107	(a)	-24	-22.4	54.00	(a)	.....	.....	.1929	(a)	-.0005	-.3
1901	110	(a)	-27	-24.5	54.00	(a)	.....	.....	.1922	(a)	+.0002	+.1
1902	101	(a)	-18	-17.8	54.00	(a)	.....	.....	.1929	(a)	-.0005	-.3
1903	83	(a)	.....	.....	54.00	(a)	.....	.....	.1924	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

PETROLEUM, REFINING—Continued.

COOPERS, Male.

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.	
			Num-ber.	Per-cent.			Num-ber.	Per-cent.			Amount.	Per-cent.
v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
394.....	15	(a)	— 1	— 6.7	59.20	(a)	—5.20	—3.8	\$0.2563	(a)	+\$0.0255	+9.9
395.....	13	(a)	+ 1	+ 7.7	59.08	(a)	—5.08	—3.6	.2573	(a)	+ .0245	+9.5
396.....	14	(a)	.....	.....	59.14	(a)	—5.14	—3.7	.2567	(a)	+ .0251	+9.8
397.....	6	(a)	+ 8	+133.3	58.00	(a)	—4.00	—6.9	.2657	(a)	+ .0181	+6.1
398.....	14	(a)	.....	.....	58.14	(a)	—5.14	—8.7	.2567	(a)	+ .0251	+9.8
399.....	12	(a)	+ 3	+ 27.3	58.91	(a)	—4.91	—8.3	.2536	(a)	+ .0232	+9.0
400.....	11	(a)	+ 2	+ 16.7	54.00	(a)	.....	.....	.2801	(a)	+ .0077	+ 6
401.....	12	(a)	+ 3	+ 27.3	54.00	(a)	.....	.....	.2803	(a)	+ .0015	+ 5
402.....	11	(a)	+ 3	+ 27.3	54.00	(a)	.....	.....	.2803	(a)	+ .0015	+ 5
403.....	14	(a)	.....	.....	54.00	(a)	.....	.....	.2818	(a)	.....	.....

PACKERS AND LABORERS, Male.

[No data, 1890-1893; data from 1 establishment, 1894-1903.]

v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
394.....	214	(a)	+26	+ 12.1	60.00	(a)	—6.00	—10.0	\$0.1829	(a)	+\$0.0076	+ 4.1
395.....	209	(a)	+31	+ 14.8	60.00	(a)	—6.00	—10.0	.1786	(a)	+ .0118	+ 6.6
396.....	187	(a)	+53	+ 28.3	60.00	(a)	—6.00	—10.0	.1799	(a)	+ .0105	+ 5.8
397.....	194	(a)	+46	+ 23.7	60.00	(a)	—6.00	—10.0	.1791	(a)	+ .0113	+ 6.3
398.....	145	(a)	+95	+ 65.5	60.00	(a)	—6.00	—10.0	.1807	(a)	+ .0097	+ 5.4
399.....	156	(a)	+84	+ 53.8	60.00	(a)	—6.00	—10.0	.1742	(a)	+ .0162	+ 9.3
400.....	226	(a)	+14	+ 6.2	54.00	(a)	.....	.....	.1924	(a)	— .0020	— 1.0
401.....	260	(a)	—20	— 7.7	54.00	(a)	.....	.....	.1919	(a)	— .0015	— 1.8
402.....	230	(a)	+10	+ 4.3	54.00	(a)	.....	.....	.1937	(a)	— .0033	— 1.7
403.....	240	(a)	.....	.....	54.00	(a)	.....	.....	.1904	(a)	.....	.....

PIPE FITTERS, Male.

[No data, 1890-1893; data from 3 establishments, 1894-1903.]

v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
394.....	22	(a)	+57	+259.1	59.73	(a)	—5.73	—9.6	\$0.2263	(a)	+\$0.0110	+ 4.9
395.....	22	(a)	+57	+259.1	59.73	(a)	—5.73	—9.6	.2268	(a)	+ .0110	+ 4.9
396.....	21	(a)	+58	+276.2	59.71	(a)	—5.71	—9.6	.2358	(a)	+ .0015	+ 6
397.....	22	(a)	+57	+259.1	59.73	(a)	—5.73	—9.6	.2376	(a)	— .0003	— .1
398.....	25	(a)	+54	+216.0	59.76	(a)	—5.76	—9.6	.2381	(a)	— .0008	— .3
399.....	22	(a)	+57	+259.1	59.73	(a)	—5.73	—9.6	.2331	(a)	+ .0042	+1.8
400.....	20	(a)	+59	+295.0	54.00	(a)	.....	.....	.2514	(a)	— .0141	— 5.6
401.....	54	(a)	+25	+ 46.3	54.00	(a)	.....	.....	.2332	(a)	+ .0041	+1.8
402.....	62	(a)	+17	+ 27.4	54.00	(a)	.....	.....	.2434	(a)	— .0061	— 2.5
403.....	79	(a)	.....	.....	54.00	(a)	.....	.....	.2372	(a)	.....	.....

* Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PETROLEUM, REFINING—Concluded.**PUMP MEN, Male.**

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	9	(a)	+9	+100.0	79.89	(a)	+1.28	+1.6	\$0.1869	(a)	+\$0.0272	+14.6
1895	11	(a)	+7	+63.6	80.64	(a)	+ .53	+ .7	.1832	(a)	+ .0309	+16.9
1896	11	(a)	+7	+63.6	80.64	(a)	+ .53	+ .7	.1886	(a)	+ .0255	+13.5
1897	16	(a)	+2	+12.5	81.25	(a)	- .08	- .1	.1849	(a)	+ .0292	+15.8
1898	16	(a)	+2	+12.5	81.25	(a)	- .08	- .1	.1849	(a)	+ .0292	+15.8
1899	16	(a)	+2	+12.5	81.25	(a)	- .08	- .1	.1849	(a)	+ .0292	+15.8
1900	16	(a)	+2	+12.5	81.25	(a)	- .08	- .1	.2086	(a)	+ .0105	+ 5.2
1901	16	(a)	+2	+12.5	80.81	(a)	+ .36	+ .4	.2072	(a)	+ .0069	+ 3.3
1902	16	(a)	+2	+12.5	80.81	(a)	+ .36	+ .4	.2091	(a)	+ .0060	+ 2.4
1903	18	(a)	.....	.....	81.17	(a)	.....	.....	.2141	(a)	.....	.....

STILL FIREMEN, Male.

[No data, 1890-1893; data from 1 establishment, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	10	(a)	.....	.....	84.00	(a)	.....	.....	\$0.1788	(a)	+\$0.0175	+9.8
1895	10	(a)	.....	.....	84.00	(a)	.....	.....	.1788	(a)	+ .0175	+9.8
1896	10	(a)	.....	.....	84.00	(a)	.....	.....	.1788	(a)	+ .0175	+9.8
1897	10	(a)	.....	.....	84.00	(a)	.....	.....	.1788	(a)	+ .0175	+9.8
1898	10	(a)	.....	.....	84.00	(a)	.....	.....	.1788	(a)	+ .0175	+9.8
1899	10	(a)	.....	.....	84.00	(a)	.....	.....	.1788	(a)	+ .0175	+9.8
1900	10	(a)	.....	.....	84.00	(a)	.....	.....	.1958	(a)	.....	.....
1901	10	(a)	.....	.....	84.00	(a)	.....	.....	.1958	(a)	.....	.....
1902	10	(a)	.....	.....	84.00	(a)	.....	.....	.1958	(a)	.....	.....
1903	10	(a)	.....	.....	84.00	(a)	.....	.....	.1958	(a)	.....	.....

STILL MEN, Male.

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	20	(a)	+6	+30.0	84.00	(a)	.....	.....	\$0.2095	(a)	+\$0.0327	+15.6
1895	20	(a)	+6	+30.0	84.00	(a)	.....	.....	.2095	(a)	+ .0327	+15.6
1896	20	(a)	+6	+30.0	84.00	(a)	.....	.....	.2095	(a)	+ .0327	+15.6
1897	26	(a)	.....	.....	84.00	(a)	.....	.....	.2157	(a)	+ .0265	+12.8
1898	26	(a)	.....	.....	84.00	(a)	.....	.....	.2157	(a)	+ .0265	+12.8
1899	26	(a)	.....	.....	84.00	(a)	.....	.....	.2157	(a)	+ .0265	+12.8
1900	24	(a)	+2	+ 8.3	84.00	(a)	.....	.....	.2390	(a)	+ .0032	+ 1.1
1901	24	(a)	+2	+ 8.3	84.00	(a)	.....	.....	.2390	(a)	+ .0032	+ 1.1
1902	24	(a)	+2	+ 8.3	84.00	(a)	.....	.....	.2390	(a)	+ .0032	+ 1.1
1903	26	(a)	.....	.....	84.00	(a)	.....	.....	.2422	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

PLANING MILL.

CARPENTERS, Male.

[Data from 65 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (—) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (—) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (—) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	769	100.0	+276	+35.9	57.15	100.0	-1.98	-3.5	\$0.2349	100.0	+\$0.0453	+19.3
1890	728	94.7	+317	+43.5	58.26	101.9	-3.09	-5.9	.2318	98.7	+.0484	+20.9
1891	725	94.3	+320	+44.1	57.77	101.1	-2.60	-4.5	.2348	100.0	+.0454	+19.3
1892	771	100.9	+274	+35.6	57.92	101.5	-2.75	-4.7	.2330	99.2	+.0472	+20.3
1893	759	98.7	+286	+37.7	57.27	100.2	-2.10	-3.7	.2354	100.2	+.0448	+19.0
1894	708	92.1	+337	+47.6	57.23	99.1	-2.06	-3.6	.2272	96.7	+.0530	+23.3
1895	718	92.7	+332	+46.6	57.03	98.8	-1.86	-3.9	.2303	98.0	+.0499	+21.7
1896	805	104.7	+240	+29.8	56.03	98.0	-.96	-1.5	.2368	100.8	+.0434	+18.3
1897	782	101.7	+268	+33.0	56.63	99.1	-1.46	-2.6	.2375	101.1	+.0427	+18.0
1898	795	103.4	+260	+31.4	56.82	99.4	-1.65	-2.9	.2404	102.3	+.0398	+16.6
1899	899	116.9	+146	+16.2	56.57	99.0	-1.40	-2.5	.2414	102.8	+.0388	+16.1
1900	942	122.5	+103	+10.9	56.23	98.4	-1.06	-1.9	.2507	106.7	+.0295	+11.8
1901	999	129.9	+46	+4.6	56.10	98.2	-.93	-1.7	.2537	108.0	+.0265	+10.4
1902	1,021	132.8	+24	+2.4	55.44	97.0	-.27	-.5	.2669	113.6	+.0133	+5.0
1903	1,045	135.9	.....	.....	55.17	96.5	.....	.....	.2802	119.3	.....	.....

FRAMERS, Male.

[Data from 26 establishments.]

Av. 1890-99.	188	100.0	+44	+23.4	58.91	100.0	-1.26	-2.1	\$0.2043	100.0	+\$0.0291	+14.2
1890	164	87.2	+68	+41.5	59.23	100.5	-1.58	-2.7	.2049	100.3	+.0285	+13.9
1891	171	91.0	+61	+35.7	58.91	100.0	-1.26	-2.1	.2073	101.5	+.0261	+12.6
1892	181	96.3	+51	+28.2	58.90	100.0	-1.25	-2.1	.2104	103.8	+.0230	+10.9
1893	179	95.2	+53	+29.6	58.82	99.8	-1.17	-2.0	.2091	102.3	+.0243	+11.6
1894	169	89.9	+63	+37.3	59.22	100.5	-1.57	-2.7	.2004	98.1	+.0330	+16.5
1895	193	105.9	+33	+16.6	58.77	99.8	-1.12	-1.9	.1981	97.0	+.0353	+17.8
1896	193	102.7	+39	+20.2	59.05	100.2	-1.40	-2.4	.1959	95.9	+.0375	+19.1
1897	199	105.9	+33	+16.6	59.05	100.2	-1.40	-2.4	.1993	97.6	+.0341	+17.1
1898	208	110.6	+24	+11.5	58.90	100.0	-1.25	-2.1	.2048	100.2	+.0286	+14.0
1899	213	113.3	+19	+8.9	58.26	98.9	-.61	-1.0	.2125	104.0	+.0209	+9.8
1900	209	111.2	+23	+11.0	58.45	99.2	-.80	-1.4	.2150	105.2	+.0184	+8.6
1901	224	119.1	+8	+3.6	58.06	98.6	-.41	-.7	.2218	108.6	+.0116	+5.2
1902	217	115.4	+15	+6.9	57.65	97.9	.....	.....	.2274	111.3	+.0060	+2.6
1903	232	123.4	.....	.....	57.65	97.9	.....	.....	.2334	114.2	.....	.....

GLAZIERS, Male.

[Data from 6 establishments.]

Av. 1890-99.	11	100.0	+17	+154.5	59.49	100.0	-0.56	-0.9	\$0.1939	100.0	+\$0.0135	+7.0
1890	9	81.8	+19	+211.1	59.78	100.5	-.85	-1.4	.1855	95.7	+.0219	+11.8
1891	9	81.8	+19	+211.1	59.78	100.5	-.85	-1.4	.1920	99.0	+.0154	+8.0
1892	9	81.8	+19	+211.1	59.78	100.5	-.85	-1.4	.1948	100.5	+.0126	+6.5
1893	9	81.8	+19	+211.1	59.78	100.5	-.85	-1.4	.2031	104.7	+.0043	+2.1
1894	10	90.9	+18	+180.0	59.20	99.5	-.27	-.5	.1993	102.8	+.0081	+4.1
1895	11	100.0	+17	+154.5	59.27	99.6	-.34	-.6	.1895	97.7	+.0179	+9.4
1896	11	100.0	+17	+154.5	59.27	99.6	-.34	-.6	.1876	96.8	+.0198	+10.6
1897	11	100.0	+17	+154.5	59.27	99.6	-.34	-.6	.1953	100.7	+.0121	+6.2
1898	11	100.0	+17	+154.5	59.27	99.6	-.34	-.6	.1935	99.8	+.0139	+7.2
1899	15	136.4	+13	+86.7	59.47	100.0	-.54	-.9	.1985	102.4	+.0089	+4.5
1900	16	145.5	+12	+75.0	58.50	98.3	+.43	+.7	.2069	105.7	+.0005	+.2
1901	20	181.8	+8	+40.0	58.50	98.3	+.43	+.7	.2050	106.7	+.0024	+1.2
1902	22	200.0	+6	+27.3	58.64	98.6	+.29	+.5	.1999	103.1	+.0075	+3.8
1903	28	254.5	.....	.....	58.93	99.1	.....	.....	.2074	107.0	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PLANING MILL—Continued.

LABORERS, Male.

[Data from 13 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	256	100.0	+40	+15.6	59.61	100.0	-0.05	-0.1	\$0.1103	100.0	+\$0.0147	+13.3
1890	220	85.9	+76	+34.5	59.66	100.1	-.10	-.2	.1129	102.4	+.0121	+10.7
1891	230	89.8	+66	+28.7	59.67	100.1	-.11	-.2	.1162	105.3	+.0088	+7.6
1892	227	88.7	+69	+30.4	59.65	100.1	-.09	-.2	.1120	101.5	+.0130	+11.6
1893	223	87.1	+73	+32.7	59.54	99.9	+.02	+.03	.1084	98.3	+.0166	+15.3
1894	240	93.8	+56	+23.3	59.59	100.0	-.03	-.1	.1038	94.1	+.0212	+20.4
1895	261	102.0	+35	+13.4	59.61	100.0	-.05	-.1	.1058	95.9	+.0192	+18.1
1896	269	105.1	+27	+10.0	59.49	99.8	+.07	+.1	.1064	96.5	+.0186	+17.5
1897	265	103.5	+31	+11.7	59.55	99.9	+.01	+.02	.1059	96.0	+.0191	+18.0
1898	274	107.0	+22	+8.0	59.63	100.0	-.07	-.1	.1120	101.5	+.0130	+11.6
1899	348	135.9	-52	-14.9	59.73	100.2	-.17	-.3	.1197	108.5	+.0053	+4.4
1900	282	110.2	+14	+5.0	59.54	99.9	+.02	+.03	.1134	102.8	+.0116	+10.2
1901	344	134.4	-48	-14.0	59.61	100.0	-.05	-.1	.1222	110.8	+.0028	+2.2
1902	327	127.7	-31	-9.5	59.60	100.0	-.04	-.01	.1222	110.8	+.0028	+2.2
1903	296	115.6	.....	.....	59.56	99.9	.....	.....	.1250	113.8	.....	.....

MACHINE WOODWORKERS, Male.

[Data from 92 establishments.]

Av. 1890-99.	965	100.0	+214	+22.2	58.82	100.0	-1.95	-3.3	\$0.2071	100.0	+\$0.0339	+16.4
1890	939	97.3	+240	+25.6	59.53	101.2	-2.66	-4.5	.2088	98.4	+.0372	+18.3
1891	940	97.4	+239	+25.4	59.20	100.6	-2.33	-3.9	.2054	99.2	+.0356	+17.3
1892	950	98.4	+229	+24.1	59.16	100.6	-2.29	-3.9	.2065	99.7	+.0345	+16.7
1893	945	97.9	+234	+24.8	58.90	100.1	-2.03	-3.4	.2063	99.6	+.0347	+16.8
1894	926	96.0	+253	+27.3	59.05	100.4	-2.18	-3.7	.2017	97.4	+.0393	+19.5
1895	944	97.8	+235	+24.9	58.59	99.6	-1.72	-2.9	.2047	98.8	+.0363	+17.7
1896	963	99.8	+216	+22.4	58.44	99.4	-1.57	-2.7	.2065	99.7	+.0345	+16.7
1897	983	101.9	+196	+19.9	58.66	99.7	-1.79	-3.1	.2091	101.0	+.0319	+15.3
1898	1,021	105.8	+158	+15.5	58.37	99.2	-1.50	-2.6	.2113	102.0	+.0297	+14.1
1899	1,035	107.3	+144	+13.9	58.26	99.0	-1.39	-2.4	.2153	104.0	+.0257	+11.9
1900	1,075	111.4	+104	+9.7	58.19	98.9	-1.32	-2.3	.2208	106.6	+.0202	+9.1
1901	1,097	113.7	+82	+7.5	58.04	98.7	-1.17	-2.0	.2251	108.7	+.0159	+7.1
1902	1,166	120.8	+13	+1.1	57.24	97.3	-.37	-.6	.2341	113.0	+.0069	+2.9
1903	1,179	122.2	.....	.....	56.87	96.7	.....	.....	.2410	116.4	.....	.....

SAWYERS, BAND, Male.

[Data from 31 establishments.]

Av. 1890-99.	49	100.0	+11	+22.4	58.31	100.0	-0.29	-0.5	\$0.2143	100.0	+\$0.0223	+10.4
1890	47	95.9	+13	+27.7	59.30	101.7	-1.28	-2.2	.2156	100.7	+.0210	+9.7
1891	47	95.9	+13	+27.7	58.40	100.2	-.38	-.7	.2176	101.5	+.0190	+8.7
1892	48	98.0	+12	+25.0	58.31	100.0	-.29	-.5	.2162	100.9	+.0204	+9.4
1893	47	95.9	+13	+27.7	58.40	100.2	-.38	-.7	.2142	100.0	+.0224	+10.5
1894	47	95.9	+13	+27.7	59.17	101.5	-1.15	-1.9	.2092	97.6	+.0274	+13.1
1895	47	95.9	+13	+27.7	57.38	98.4	+.14	+1.1	.2127	99.3	+.0239	+11.2
1896	50	102.0	+10	+20.0	58.22	99.8	-.20	-.3	.2114	98.6	+.0252	+11.9
1897	51	104.1	+9	+17.6	58.10	99.6	-.08	-.1	.2140	99.9	+.0226	+10.6
1898	52	106.1	+8	+15.4	58.02	99.5	.....	.....	.2155	100.6	+.0211	+9.8
1899	52	106.1	+8	+15.4	57.83	99.2	+.19	+.3	.2169	101.2	+.0197	+9.1
1900	54	110.2	+6	+11.1	58.59	100.5	-.57	-1.0	.2189	102.1	+.0177	+8.1
1901	55	112.2	+5	+9.1	58.58	100.5	-.56	-1.0	.2221	103.6	+.0145	+6.5
1902	57	116.3	+3	+5.8	58.12	99.7	-.10	-.2	.2285	106.6	+.0081	+3.6
1903	60	122.4	.....	.....	58.02	99.5	.....	.....	.2366	110.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PLANING MILL—Concluded.

SAWYERS, CIRCULAR, Male.

[Data from 45 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	178	100.0	+66	+37.1	58.54	100.0	-0.99	-1.7	\$0.2015	100.0	+\$0.0284	+14.1
1890	164	92.1	+80	+43.8	59.03	100.8	-1.48	-2.5	.2020	100.2	+.0279	+13.8
1891	167	93.8	+77	+46.1	58.80	100.4	-1.25	-2.1	.2025	100.5	+.0274	+13.5
1892	166	93.3	+78	+47.0	58.76	100.4	-1.21	-2.1	.2023	100.4	+.0276	+13.6
1893	167	93.8	+77	+46.1	58.59	100.1	-1.04	-1.8	.2040	101.2	+.0259	+12.7
1894	175	98.3	+69	+39.4	58.83	100.5	-1.28	-2.2	.1991	98.8	+.0308	+15.5
1895	175	98.3	+69	+39.4	58.27	99.5	-.72	-1.2	.1990	98.8	+.0309	+15.5
1896	181	101.7	+63	+34.8	58.04	99.1	-.49	-.8	.1976	98.1	+.0323	+16.3
1897	183	102.8	+61	+33.3	58.51	99.9	-.96	-1.6	.1985	98.5	+.0314	+15.8
1898	199	111.8	+45	+22.6	58.30	99.6	-.75	-1.3	.2009	99.7	+.0290	+14.4
1899	207	116.3	+37	+17.9	58.24	99.5	-.69	-1.2	.2087	103.6	+.0212	+10.2
1900	215	120.8	+29	+13.5	58.23	99.5	-.68	-1.2	.2115	105.0	+.0184	+8.7
1901	229	128.7	+15	+6.6	58.04	99.1	-.49	-.8	.2186	108.5	+.0118	+5.2
1902	234	131.5	+10	+4.3	57.97	99.0	-.42	-.7	.2233	110.8	+.0066	+3.0
1903	244	137.1	.....	.....	57.55	98.3	.....	.....	.2299	114.1	.....	.....

SAWYERS, JIG, Male.

[Data from 19 establishments.]

Av. 1890-99.	26	100.0	+2	+7.7	57.94	100.0	-0.12	-0.2	\$0.2044	100.0	+\$0.0204	+10.0
1890	26	100.0	+2	+7.7	59.46	102.6	-1.64	-2.8	.2008	98.2	+.0240	+12.0
1891	26	100.0	+2	+7.7	58.08	100.2	-.26	-.4	.2058	100.4	+.0195	+9.5
1892	26	100.0	+2	+7.7	58.08	100.2	-.26	-.4	.2047	100.1	+.0201	+9.8
1893	27	103.8	+1	+3.7	57.93	100.0	-.11	-.2	.2034	99.5	+.0214	+10.5
1894	27	103.8	+1	+3.7	59.26	102.3	-1.44	-2.4	.1988	97.3	+.0260	+13.1
1895	27	103.8	+1	+3.7	56.15	96.9	+1.67	+3.0	.2065	101.0	+.0183	+8.9
1896	26	100.0	+2	+7.7	57.85	99.8	-.03	-.1	.2009	98.3	+.0239	+11.9
1897	26	100.0	+2	+7.7	57.62	99.4	+.20	+.3	.2037	99.7	+.0211	+10.4
1898	26	100.0	+2	+7.7	57.62	99.4	+.20	+.3	.2063	100.9	+.0185	+9.0
1899	27	103.8	+1	+3.7	57.33	98.9	+.49	+.9	.2135	104.5	+.0113	+5.3
1900	28	107.7	.....	.....	58.75	101.4	-.93	-1.6	.2119	103.7	+.0129	+6.1
1901	28	107.7	.....	.....	58.86	101.6	-1.04	-1.8	.2168	106.1	+.0080	+3.7
1902	27	103.8	+1	+3.7	58.19	100.4	-.37	-.6	.2205	107.9	+.0043	+2.0
1903	28	107.7	.....	.....	57.82	99.8	.....	.....	.2248	110.0	.....	.....

SAWYERS, NOT SPECIFIED, Male.

[Data from 17 establishments.]

Av. 1890-99.	30	100.0	.....	.....	57.64	100.0	-3.51	-6.1	\$0.2052	100.0	+\$0.0367	+17.9
1890	29	96.7	+1	+3.4	58.38	101.3	-4.25	-7.3	.2032	99.0	+.0387	+19.0
1891	29	96.7	+1	+3.4	58.17	100.9	-4.04	-6.9	.2042	99.5	+.0377	+18.5
1892	31	103.3	-1	-3.2	58.29	101.1	-4.16	-7.1	.2082	101.5	+.0337	+16.2
1893	30	100.0	.....	.....	57.83	100.3	-3.70	-6.4	.2069	100.8	+.0350	+16.9
1894	28	93.3	+2	+7.1	58.00	100.6	-3.87	-6.7	.1973	96.2	+.0446	+22.6
1895	29	96.7	+1	+3.4	57.86	100.4	-3.73	-6.5	.1999	97.4	+.0420	+21.0
1896	29	96.7	+1	+3.4	56.90	98.7	-2.77	-4.9	.2007	100.7	+.0352	+17.0
1897	30	100.0	.....	.....	57.37	99.5	-3.24	-5.6	.2069	100.8	+.0350	+16.9
1898	29	96.7	+1	+3.4	56.86	98.6	-2.73	-4.8	.2073	101.0	+.0346	+16.7
1899	31	103.3	-1	-3.2	56.74	98.4	-2.61	-4.6	.2118	103.2	+.0301	+14.2
1900	30	100.0	.....	.....	56.23	97.6	-2.10	-3.7	.2161	105.3	+.0258	+11.9
1901	30	100.0	.....	.....	55.50	96.3	-1.37	-2.5	.2275	110.9	+.0144	+6.3
1902	31	103.3	-1	-3.2	53.94	93.6	+.19	+.4	.2467	120.2	+.0048	-1.9
1903	30	100.0	.....	.....	54.13	93.9	.....	.....	.2419	117.9	.....	.....

TABLE K.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

POTTERY.**DIPPERS, Male.**

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	5	100.0	—1	—20.0	44.88	100.0	+0.87	+1.9	\$0.4665	100.0	+\$0.0632	+13.5
1890	5	100.0	—1	—20.0	43.80	97.6	+1.95	+4.5	.4435	95.1	+ .0862	+19.4
1891	5	100.0	—1	—20.0	43.80	97.6	+1.95	+4.5	.4435	95.1	+ .0862	+19.4
1892	5	100.0	—1	—20.0	43.80	97.6	+1.95	+4.5	.4422	96.3	+ .0805	+17.9
1893	5	100.0	—1	—20.0	43.80	97.6	+1.95	+4.5	.4365	106.2	+ .0941	+ 6.9
1894	5	100.0	—1	—20.0	43.80	97.6	+1.95	+4.5	.4841	103.7	+ .0456	+ 9.4
1895	4	80.0	.....	.....	44.75	99.7	+1.00	+2.2	.4545	97.4	+ .0752	+16.5
1896	4	80.0	.....	.....	44.75	99.7	+1.00	+2.2	.4146	88.9	+ .1151	+27.8
1897	4	80.0	.....	.....	46.75	104.2	—1.00	—2.1	.4893	104.9	+ .0404	+ 8.3
1898	4	80.0	.....	.....	46.75	104.2	—1.00	—2.1	.4893	104.9	+ .0404	+ 8.3
1899	4	80.0	.....	.....	46.75	104.2	—1.00	—2.1	.5010	107.4	+ .0237	+ 5.7
1900	4	80.0	.....	.....	44.75	99.7	+1.00	+2.2	.4717	101.1	+ .0580	+12.3
1901	4	80.0	.....	.....	45.75	101.9	.....	.....	.5112	109.6	+ .0185	+ 3.6
1902	4	80.0	.....	.....	45.75	101.9	.....	.....	.5112	109.6	+ .0185	+ 3.6
1903	4	80.0	.....	.....	45.75	101.9	.....	.....	.5297	113.5	.....	.....

JIGGER MEN, Male.

[Data from 3 establishments.]

Av. 1890-99.	14	100.0	+1	+7.1	54.55	100.0	—2.15	—3.9	\$0.3531	100.0	+\$0.0465	+13.2
1890	15	107.1	.....	.....	54.40	99.7	—2.00	—3.7	.3556	100.7	+ .0420	+11.8
1891	15	107.1	.....	.....	54.40	99.7	—2.00	—3.7	.3572	101.2	+ .0424	+11.9
1892	13	92.9	.....	.....	54.62	100.1	—2.22	—4.1	.3455	97.8	+ .0541	+15.7
1893	17	121.4	+2	+15.4	54.24	99.4	—1.84	—3.4	.3896	104.7	+ .0300	+ 8.1
1894	16	114.3	—1	—6.3	54.31	99.6	—1.91	—3.5	.3496	99.0	+ .0500	+14.3
1895	11	78.6	+4	+36.4	54.91	100.7	—2.51	—4.6	.3304	93.6	+ .0692	+20.9
1896	14	100.0	+1	+7.1	54.50	99.9	—2.10	—3.9	.3427	97.1	+ .0569	+16.6
1897	12	85.7	+3	+25.0	54.75	100.4	—2.35	—4.3	.3257	92.2	+ .0739	+22.7
1898	13	92.9	+2	+15.4	54.62	100.1	—2.22	—4.1	.3605	102.1	+ .0391	+10.8
1899	12	85.7	+3	+25.0	54.75	100.4	—2.35	—4.3	.3963	111.6	+ .0057	+ 1.4
1900	12	85.7	+3	+25.0	55.33	101.4	—2.93	—5.3	.3599	101.9	+ .0397	+11.0
1901	12	85.7	+3	+25.0	54.75	100.4	—2.35	—4.3	.3843	108.8	+ .0153	+ 4.0
1902	12	85.7	+3	+25.0	54.75	100.4	—2.35	—4.3	.3915	110.9	+ .0081	+ 2.1
1903	15	107.1	.....	.....	52.40	96.1	.....	.....	.3996	113.2	.....	.....

KILN FIREMEN, Male.

[Data from 3 establishments.]

Av. 1890-99.	3	100.0	.....	.....	60.00	100.0	.....	.....	\$0.2944	100.0	+\$0.0306	+10.4
1890	3	100.0	.....	.....	60.00	100.0	.....	.....	.2694	91.5	+ .0556	+20.6
1891	3	100.0	.....	.....	60.00	100.0	.....	.....	.2694	91.5	+ .0556	+20.6
1892	3	100.0	.....	.....	60.00	100.0	.....	.....	.2972	101.0	+ .0278	+ 9.4
1893	3	100.0	.....	.....	60.00	100.0	.....	.....	.2972	101.0	+ .0278	+ 9.4
1894	3	100.0	.....	.....	60.00	100.0	.....	.....	.2972	101.0	+ .0278	+ 9.4
1895	3	100.0	.....	.....	60.00	100.0	.....	.....	.2806	95.3	+ .0444	+15.8
1896	3	100.0	.....	.....	60.00	100.0	.....	.....	.2806	95.3	+ .0444	+15.8
1897	3	100.0	.....	.....	60.00	100.0	.....	.....	.3361	114.2	+ .0111	+ 3.3
1898	3	100.0	.....	.....	60.00	100.0	.....	.....	.3361	114.2	+ .0111	+ 3.3
1899	3	100.0	.....	.....	60.00	100.0	.....	.....	.2806	95.3	+ .0444	+15.8
1900	3	100.0	.....	.....	60.00	100.0	.....	.....	.2806	95.3	+ .0444	+15.8
1901	3	100.0	.....	.....	60.00	100.0	.....	.....	.2806	95.3	+ .0444	+15.8
1902	3	100.0	.....	.....	60.00	100.0	.....	.....	.3083	104.7	+ .0167	+ 5.4
1903	3	100.0	.....	.....	60.00	100.0	.....	.....	.3250	110.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

POTTERY—Continued.

KILN MEN, Male.

[Data from 5 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	44	100.0	+1	+ 2.3	49.89	100.0	+0.44	+0.9	\$0.2874	100.0	-\$0.0045	-1.6
1890	41	93.2	+4	+ 9.8	49.78	99.8	+ .55	+1.1	.2912	101.8	- .0083	-2.9
1891	46	104.5	-1	- 2.2	49.48	99.2	+ .85	+1.7	.2894	104.2	- .0165	-5.5
1892	45	102.3	.....	.....	49.58	99.3	+ .80	+1.6	.2884	103.8	- .0155	-5.2
1893	45	102.3	.....	.....	49.58	99.3	+ .80	+1.6	.2890	104.0	- .0161	-5.4
1894	45	102.3	.....	.....	49.58	99.3	+ .80	+1.6	.2916	101.5	- .0087	-3.0
1895	44	100.0	+1	+ 2.3	49.59	99.4	+ .74	+1.5	.2836	102.2	- .0107	-3.6
1896	39	88.6	+6	+15.4	50.54	101.3	- .21	- .4	.2701	94.0	+ .0128	+4.7
1897	43	97.7	+2	+ 4.7	50.21	100.6	+ .12	+ .2	.2765	96.2	+ .0064	+2.3
1898	42	95.6	+3	+ 7.1	50.29	100.8	+ .04	+ .1	.2748	95.6	+ .0081	+2.9
1899	47	106.8	-2	- 4.3	50.45	101.1	- .12	- .2	.2796	97.3	+ .0033	+1.2
1900	50	113.6	-5	-10.0	50.24	100.7	+ .09	+ .5	.2837	98.7	- .0008	- .3
1901	45	102.3	.....	.....	50.60	101.4	- .27	- .5	.2750	95.7	+ .0079	+2.9
1902	46	104.5	-1	- 2.2	50.62	101.3	- .19	- .4	.2833	98.6	- .0004	- .1
1903	45	102.3	.....	.....	50.33	100.9	.....	.....	.2829	98.4	.....	.....

MOLD MAKERS, Male.

[Data from 5 establishments.]

Year.	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Wages per hour.
			Num-ber.	Per cent.			Amount.
Av. 1890-99.	6	100.0	+2	+33.8	56.00	100.0	-\$0.3023
1890	6	100.0	+2	+33.8	56.17	100.3	99.7 + \$0.0433
1891	6	100.0	+2	+33.8	56.17	100.3	99.7 + .0441
1892	6	100.0	+2	+33.8	56.17	100.3	99.3 + .0453
1893	6	100.0	+2	+33.8	56.17	100.3	99.1 + .0459
1894	6	100.0	+2	+33.8	56.17	100.3	94.1 + .0612
1895	6	100.0	+2	+33.8	56.17	100.3	97.8 + .0501
1896	6	100.0	+2	+33.8	56.17	100.3	97.6 + .0510
1897	7	116.7	+1	+14.3	55.71	99.5	97.3 + .0515
1898	7	116.7	+1	+14.3	55.71	99.5	96.0 + .0554
1899	8	133.3	.....	.....	55.38	98.9	114.1 + .0097
1900	8	133.3	.....	.....	55.38	98.9	105.0 + .0281
1901	8	133.3	.....	.....	55.38	98.9	101.2 + .0396
1902	8	133.3	.....	.....	55.38	98.9	104.2 + .0366
1903	8	133.3	.....	.....	54.68	97.6	105.5 + .0287

PRESSERS, Male.

[Data from 5 establishments.]

Year.	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Wages per hour.
			Num-ber.	Per cent.			Amount.
Av. 1890-99.	135	100.0	+7	+ 5.2	53.91	100.0	-\$0.3651
1890	131	97.0	+11	+ 8.4	53.66	99.5	101.7 + \$0.0130
1891	149	110.4	-7	- 4.7	53.70	99.6	105.6 + .0067
1892	128	94.8	+14	+10.9	53.83	99.9	103.0 + .0076
1893	136	100.7	+6	+ 4.4	53.82	99.8	100.0 + .0200
1894	125	92.6	+17	+13.6	53.99	100.1	110.7 + .0262
1895	119	88.1	+23	+19.3	53.99	100.1	94.9 + .0316
1896	123	91.1	+19	+15.4	54.02	100.2	87.9 + .0573
1897	147	108.9	-5	- 3.4	53.88	99.9	92.7 + .0396
1898	150	111.1	-8	- 5.3	53.95	100.1	99.9 + .0134
1899	146	108.1	-4	- 2.7	54.21	100.6	101.2 + .0058
1900	140	103.7	+2	+ 1.4	54.20	100.5	102.4 + .0044
1901	141	104.4	+1	+ .7	54.05	100.3	94.4 + .0333
1902	125	92.6	+17	+13.6	54.42	100.9	102.1 + .0055
1903	142	105.2	.....	.....	54.04	100.2	99.5 + .0148

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 715.]

POTTERY—Concluded.**SAGGER MAKERS, Male.**

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	6	100.0	.....	.....	50.67	100.0	-1.00	-2.0	\$0.3537	100.0	+\$0.0268	+ 7.6
1890	7	116.7	-1	-14.3	51.00	100.7	-1.33	-2.6	.3525	99.7	+ .0280	+ 7.9
1891	7	116.7	-1	-14.3	51.00	100.7	-1.33	-2.6	.3524	99.6	+ .0281	+ 8.0
1892	7	116.7	-1	-14.3	51.00	100.7	-1.33	-2.6	.3517	99.4	+ .0285	+ 8.2
1893	6	100.0	.....	.....	50.67	100.0	-1.00	-2.0	.3465	98.0	+ .0340	+ 9.8
1894	6	100.0	.....	.....	50.67	100.0	-1.00	-2.0	.3506	99.1	+ .0299	+ 8.5
1895	6	100.0	.....	.....	50.67	100.0	-1.00	-2.0	.3445	97.4	+ .0360	+10.4
1896	6	100.0	.....	.....	50.67	100.0	-1.00	-2.0	.3451	97.6	+ .0354	+10.2
1897	6	100.0	.....	.....	50.67	100.0	-1.00	-2.0	.3415	96.6	+ .0390	+11.4
1898	4	66.7	+2	+50.0	50.50	99.7	- .33	-1.6	.3305	107.6	.....	.....
1899	5	83.3	+1	+20.0	49.80	98.8	- .18	- .9	.3718	105.0	+ .0092	+ 2.5
1900	6	100.0	.....	.....	50.33	99.8	- .66	-1.3	.3720	105.2	+ .0085	+ 2.3
1901	6	100.0	.....	.....	50.33	99.8	- .66	-1.3	.3661	103.5	+ .0144	+ 3.9
1902	6	100.0	.....	.....	50.33	99.8	- .66	-1.3	.3767	106.5	+ .0038	+ 1.0
1903	6	100.0	.....	.....	49.67	98.0	.....	.....	.3805	107.6	.....	.....

SETTERS-OUT, Male.

[Data from 4 establishments.]

Av. 1890-99.	7	100.0	.....	.....	47.43	100.0	-0.57	-1.2	\$0.4181	100.0	+\$0.0029	+0.7
1890	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4212	100.7	- .0002	- .05
1891	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4212	100.7	- .0002	- .05
1892	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4195	100.3	+ .0015	+ .4
1893	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4220	100.9	- .0010	- .2
1894	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4161	99.5	+ .0049	+1.2
1895	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4162	99.5	+ .0048	+1.2
1896	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4143	99.1	+ .0067	+1.6
1897	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4161	99.5	+ .0049	+1.2
1898	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4156	99.4	+ .0054	+1.3
1899	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4186	100.1	+ .0024	+ .6
1900	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4199	100.4	+ .0011	+ .3
1901	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4188	100.2	+ .0022	+ .5
1902	7	100.0	.....	.....	47.43	100.0	- .57	-1.2	.4236	101.3	- .0026	- .6
1903	7	100.0	.....	.....	46.86	98.8	.....	.....	.4210	100.7	.....	.....

PRINTING AND PUBLISHING, BOOK AND JOB.**BOOKBINDERS, Male.**

[Data for employees from 32 establishments for entire period. Data for hours and wages from 32 establishments, 1890-1894; 33 establishments, 1895-1903.]

Av. 1890-99.	258	100.0	+ 95	+36.8	57.66	100.0	-3.20	-5.5	\$0.2792	100.0	+\$0.0333	+11.9
1890	226	87.6	+127	+56.2	58.29	101.1	-3.83	-6.6	.2684	96.1	+ .0441	+16.4
1891	230	89.1	+123	+53.5	58.24	101.0	-3.78	-6.5	.2687	96.2	+ .0438	+16.3
1892	238	92.2	+116	+48.3	58.12	100.8	-3.66	-6.3	.2740	98.1	+ .0385	+14.1
1893	246	95.3	+107	+45.3	57.83	100.8	-3.37	-5.8	.2793	100.0	+ .0332	+11.9
1894	240	93.0	+118	+47.1	57.80	100.2	-3.34	-5.8	.2773	99.3	+ .0352	+12.7
1895	236	91.5	+117	+49.6	58.01	100.6	-3.55	-6.1	.2777	99.5	+ .0348	+12.5
1896	267	99.6	+ 66	+37.4	57.91	100.4	-3.45	-6.0	.2797	100.2	+ .0328	+11.7
1897	289	112.0	+ 64	+22.1	57.33	99.5	-2.92	-5.1	.2861	102.5	+ .0264	+ 9.2
1898	304	117.8	+ 49	+16.1	56.95	98.8	-2.49	-4.4	.2883	103.3	+ .0242	+ 8.4
1899	314	121.7	+ 39	+12.4	56.07	97.2	-1.61	-2.9	.2926	104.8	+ .0199	+ 6.8
1900	333	129.1	+ 20	+ 6.0	55.47	96.2	-1.01	-1.8	.2930	104.9	+ .0195	+ 6.7
1901	340	131.5	+ 13	+ 3.8	55.13	95.6	- .67	-1.2	.3041	108.9	+ .0084	+ 2.8
1902	346	134.1	+ 7	+ 2.0	54.64	94.8	- .18	- .3	.3103	111.1	+ .0022	+ .7
1903	353	136.8	.....	.....	54.46	94.5	.....	.....	.3125	111.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PRINTING AND PUBLISHING, BOOK AND JOB—Continued.

COMPOSITORS, Male.

[Data from 25 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
v. 1890-99.	1,045	100.0	+209	+20.0	58.67	100.0	-4.47	-7.6	\$0.2734	100.0	+\$0.0428	+15.7
890	971	92.9	+283	+29.1	59.28	101.0	-5.08	-8.6	.2672	97.7	+ .0490	+18.3
891	973	93.1	+281	+28.9	59.27	101.0	-5.07	-8.6	.2700	98.8	+ .0162	+17.1
892	987	94.4	+267	+27.1	59.17	100.9	-4.97	-8.4	.2704	98.9	+ .0458	+16.9
893	996	95.3	+258	+25.9	58.91	100.4	-4.71	-8.0	.2722	99.6	+ .0440	+16.2
894	1,019	97.5	+235	+23.1	58.85	100.3	-4.65	-7.9	.2741	100.3	+ .0421	+15.4
895	1,041	99.6	+213	+20.5	58.76	100.2	-4.66	-7.8	.2781	99.9	+ .0431	+15.8
896	1,039	99.4	+215	+20.7	58.66	100.0	-4.46	-7.6	.2718	99.4	+ .0444	+16.3
897	1,107	105.9	+147	+13.3	58.63	99.9	-4.43	-7.6	.2743	100.3	+ .0419	+15.3
898	1,128	107.9	+126	+11.2	58.37	99.5	-4.17	-7.1	.2761	101.0	+ .0401	+14.5
899	1,187	113.6	+ 67	+ 5.6	56.84	96.9	-2.64	-4.6	.2852	104.3	+ .0310	+10.9
900	1,277	122.2	- 23	- 1.8	55.50	94.6	-1.30	-2.3	.2934	107.3	+ .0228	+ 7.8
901	1,262	120.8	- 34	- 2.6	54.99	93.7	- 79	-1.4	.2997	109.6	+ .0165	+ 5.5
902	1,220	116.7	+ 8	+ 0.8	54.24	92.4	- .04	- .1	.3108	113.7	+ .0054	+ 1.7
903	1,254	120.0	.....	.....	54.20	92.4	.....	.....	.3162	115.7	.....	.....

COMPOSITORS, Female.

Data for employees from 3 establishments for entire period. Data for hours and wages from 5 establishments, 1890, 1891, 1893-1896, 1898, 1899; 6 establishments, 1892, 1897; 4 establishments, 1900; 3 establishments, 1901-1903.]

v. 1890-99.	25	100.0	+6	+24.0	55.96	100.0	-2.15	-3.8	\$0.2401	100.0	+\$0.0384	+16.0
890	25	100.0	+6	+24.0	57.78	103.8	-3.97	-6.9	.2280	95.0	+ .0505	+22.1
891	25	100.0	+6	+24.0	57.96	103.6	-4.15	-7.2	.2278	94.9	+ .0507	+22.3
892	24	96.0	+7	+29.2	56.21	100.4	-2.40	-4.3	.2374	98.9	+ .0411	+17.3
893	26	104.0	+5	+19.2	55.86	99.8	-2.05	-3.7	.2431	101.2	+ .0354	+14.6
894	25	100.0	+6	+24.0	55.22	98.7	-1.41	-2.6	.2406	100.2	+ .0379	+15.8
895	24	96.0	+7	+29.2	55.12	98.5	-1.31	-2.4	.2521	105.0	+ .0264	+10.5
896	27	108.0	+4	+14.8	55.31	98.8	-1.50	-2.7	.2435	101.4	+ .0350	+14.4
897	29	116.0	+2	+ 6.9	55.22	98.7	-1.41	-2.6	.2466	102.7	+ .0319	+12.9
898	25	100.0	+6	+24.0	55.63	99.4	-1.82	-3.3	.2382	99.2	+ .0403	+16.9
899	24	96.0	+7	+29.2	55.27	98.8	-1.46	-2.6	.2436	101.5	+ .0349	+14.3
900	25	100.0	+6	+24.0	55.50	99.2	-1.69	-3.0	.2589	107.8	+ .0196	+ 7.6
901	28	112.0	+3	+10.7	53.82	96.2	- .01	- .02	.2622	109.2	+ .0163	+ 6.2
902	28	112.0	+3	+10.7	53.82	96.2	- .01	- .02	.2622	109.2	+ .0163	+ 6.2
903	31	124.0	.....	.....	53.81	96.2	.....	.....	.2785	116.0	.....	.....

ELECTROTYPERS, Male.

[Data from 4 establishments.]

v. 1890-99.	38	100.0	+1	+ 2.6	56.00	100.0	-2.00	-3.6	\$0.3217	100.0	+\$0.0166	+5.2
90	37	97.4	+2	+ 5.4	56.19	100.3	-2.19	-3.9	.3238	100.7	+ .0145	+4.5
91	37	97.4	+2	+ 5.4	56.19	100.3	-2.19	-3.9	.3238	100.7	+ .0145	+4.5
92	36	94.7	+3	+ 8.3	56.25	100.4	-2.25	-4.0	.3235	100.6	+ .0148	+4.6
93	35	92.1	+4	+11.4	56.03	100.1	-2.03	-3.6	.3263	101.4	+ .0120	+3.7
94	37	97.4	+2	+ 5.4	56.19	100.3	-2.19	-3.9	.3224	100.2	+ .0159	+4.9
95	38	100.0	+1	+ 2.6	56.26	100.5	-2.26	-4.0	.3179	98.8	+ .0204	+6.4
96	38	100.0	+1	+ 2.6	56.26	100.5	-2.26	-4.0	.3188	99.1	+ .0195	+6.1
97	42	110.5	-3	- 7.1	56.40	100.7	-2.40	-4.3	.3196	99.0	+ .0197	+6.2
98	41	107.9	-2	- 4.9	55.85	99.7	-1.85	-3.3	.3211	99.8	+ .0172	+5.4
99	40	105.3	-1	- 2.5	54.40	97.1	- .40	- .7	.3208	99.7	+ .0175	+5.5
00	37	97.4	+2	+ 5.4	54.43	97.2	- .43	- .8	.3221	100.1	+ .0162	+5.0
01	38	100.0	+1	+ 2.6	54.00	96.4	.....	.....	.3424	106.4	+ .0041	-1.2
02	40	105.3	-1	- 2.5	54.00	96.4	.....	.....	.3382	105.1	+ .0001	+ .03
03	39	102.6	.....	.....	54.00	96.4	.....	.....	.3383	105.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

PRINTING AND PUBLISHING, BOOK AND JOB—Continued.

LINOTYPE OPERATORS, Male.

[No data, 1890, 1891; data from 1 establishment, 1892; 2 establishments, 1893; 3 establishments, 1896 establishments, 1895; 8 establishments, 1896; 9 establishments, 1897, 1898; 11 establishments, 1899; 12 establishments, 1900, 1901; 15 establishments, 1902, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1892	1	(a)	(b)	(b)	59.00	(a)	-8.08	-13.7	\$0.9051	(a)	+\$0.1277	+41.
1893	6	(a)	(b)	(b)	54.83	(a)	-3.91	-7.1	.3595	(a)	+.0733	+20.
1894	14	(a)	(b)	(b)	50.93	(a)	-.01	-.02	.3907	(a)	+.0421	+10.
1895	35	(a)	(b)	(b)	55.51	(a)	-4.59	-8.3	.3597	(a)	+.0731	+20.
1896	31	(a)	(b)	(b)	55.23	(a)	-4.31	-7.8	.3820	(a)	+.0508	+13.
1897	47	(a)	(b)	(b)	56.47	(a)	-5.55	-9.8	.3696	(a)	+.0632	+17.
1898	45	(a)	(b)	(b)	56.00	(a)	-5.08	-9.1	.3985	(a)	+.0343	+8.
1899	68	(a)	(b)	(b)	52.90	(a)	-1.98	-3.7	.4123	(a)	+.0205	+5.
1900	73	(a)	(b)	(b)	52.08	(a)	-1.16	-2.2	.4338	(a)	-.0010	-
1901	77	(a)	(b)	(b)	52.38	(a)	-1.46	-2.8	.4259	(a)	+.0069	+1.
1902	87	(a)	(b)	(b)	51.31	(a)	-.39	-.8	.4312	(a)	+.0016	+
1903	88	(a)	.....	.....	50.92	(a)	.....	.....	.4328	(a)	.....	.....

PRESS FEEDERS, Male.

[Data from 23 establishments.]

Av. 1890-99.	246	100.0	+ 84	+34.1	57.97	100.0	- 3.50	-6.0	\$0.1445	100.0	+\$0.0359	+24
1890	207	84.1	+123	+59.4	58.41	100.8	-3.94	-6.7	.1414	97.9	+.0390	+27
1891	209	85.0	+121	+57.9	58.17	100.3	-3.70	-6.4	.1445	100.0	+.0359	+24
1892	219	89.0	+111	+50.7	58.15	100.3	-3.68	-6.3	.1430	99.0	+.0374	+26
1893	229	93.1	+101	+44.1	58.02	100.1	-3.55	-6.1	.1423	98.5	+.0381	+26
1894	227	92.3	+103	+45.4	57.93	99.9	-3.46	-6.0	.1447	100.1	+.0357	+24
1895	251	102.0	+ 79	+31.5	58.15	100.3	-3.68	-6.3	.1461	101.1	+.0343	+23
1896	257	104.5	+ 73	+28.4	58.18	100.4	-3.71	-6.4	.1433	99.2	+.0371	+25
1897	270	109.8	+ 60	+22.2	58.21	100.4	-3.74	-6.4	.1433	99.2	+.0371	+25
1898	290	117.9	+ 40	+13.8	57.36	98.9	-2.89	-5.0	.1468	101.6	+.0336	+22
1899	301	122.4	+ 29	+ 9.6	57.13	98.6	-2.66	-4.7	.1496	103.5	+.0308	+20
1900	321	130.5	+ 9	+ 2.8	55.27	95.3	-.80	-1.4	.1731	119.8	+.0073	+4
1901	307	124.8	+ 23	+ 7.5	55.34	95.5	-.87	-1.6	.1736	120.1	+.0068	+3
1902	336	136.6	- 6	- 1.8	54.58	94.2	-.11	-.2	.1756	121.5	+.0048	+2
1903	330	134.1	.....	.....	54.47	94.0	.....	.....	.1804	124.8	.....	.....

a Not computed, as data reported do not cover entire base period.

b Not computed, as number of establishments varies for different years.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PRINTING AND PUBLISHING, BOOK AND JOB—Continued.

PRESS FEEDERS, Female.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1897, 1900, 1901; 6 establishments, 1898, 1899, 1902, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	34	100.0	+ 6	+17.6	58.82	100.0	-4.82	-8.2	\$0.0918	100.0	+\$0.0155	+16.9
1890	32	94.1	+ 8	+25.0	59.18	100.6	-5.18	-8.8	.0912	99.3	+ .0161	+17.7
1891	32	94.1	+ 8	+25.0	59.18	100.6	-5.18	-8.8	.0912	99.3	+ .0161	+17.7
1892	30	88.2	+10	+33.3	59.18	100.6	-5.18	-8.8	.0918	100.0	+ .0155	+16.9
1893	33	97.1	+7	+21.2	59.18	100.6	-5.18	-8.8	.0904	98.5	+ .0169	+18.7
1894	31	91.2	+9	+29.0	59.16	100.6	-5.16	-8.7	.0902	98.3	+ .0171	+19.0
1895	31	91.2	+9	+29.0	59.13	100.5	-5.13	-8.7	.0895	97.5	+ .0178	+19.9
1896	31	91.2	+9	+29.0	59.18	100.6	-5.18	-8.8	.0917	99.9	+ .0156	+17.0
1897	35	102.9	+5	+14.3	59.19	100.6	-5.19	-8.8	.0914	99.6	+ .0159	+17.4
1898	35	102.9	+5	+14.3	58.02	98.6	-4.02	-6.9	.0941	102.5	+ .0132	+14.0
1899	50	147.1	-10	-20.0	56.80	96.6	-2.80	-4.9	.0967	105.3	+ .0106	+11.0
1900	44	129.4	-4	-9.1	54.22	92.2	-.22	-.4	.1000	108.9	+ .0073	+ 7.3
1901	45	132.4	-5	-11.1	54.21	92.2	-.21	-.4	.1024	111.5	+ .0049	+ 4.8
1902	43	126.5	-3	-7.0	54.15	92.1	-.15	-.3	.1050	114.4	+ .0023	+ 2.2
1903	40	117.6	.....	.....	54.00	91.8	.....	.....	.1073	116.9	.....	.....

PRESSMEN, Male.

[Data from 64 establishments.]

Av. 1890-99.	383	100.0	+ 79	+20.6	58.71	100.0	-4.23	-7.2	\$0.2765	100.0	+\$0.0407	+14.7
1890	347	90.6	+115	+33.1	59.11	100.7	-4.63	-7.8	.2705	97.8	+ .0467	+17.3
1891	356	93.0	+106	+29.8	59.02	100.5	-4.54	-7.7	.2738	99.0	+ .0434	+15.9
1892	360	94.0	+102	+28.3	59.00	100.5	-4.62	-7.7	.2749	99.4	+ .0423	+15.4
1893	367	95.8	+95	+25.9	58.99	100.5	-4.51	-7.6	.2734	98.9	+ .0438	+16.0
1894	365	95.3	+97	+26.6	58.81	100.2	-4.38	-7.4	.2747	99.3	+ .0425	+15.5
1895	371	96.9	+91	+24.5	58.81	100.2	-4.38	-7.4	.2754	99.6	+ .0418	+15.2
1896	389	101.6	+73	+18.8	58.86	100.8	-4.38	-7.4	.2750	99.5	+ .0422	+15.3
1897	402	105.0	+60	+14.9	58.88	100.8	-4.40	-7.5	.2787	100.8	+ .0385	+13.8
1898	431	112.5	+31	+7.2	58.46	99.6	-3.98	-6.8	.2793	101.0	+ .0379	+13.6
1899	443	115.7	+19	+4.3	57.13	97.3	-2.65	-4.6	.2894	104.7	+ .0278	+ 9.6
1900	451	117.8	+11	+2.4	56.08	95.5	-1.60	-2.9	.2967	107.3	+ .0205	+ 6.9
1901	460	120.1	+2	+.4	55.15	93.9	-.67	-1.2	.3072	111.1	+ .0100	+ 3.3
1902	455	118.8	+7	+1.5	54.47	92.8	+ .01	+ .02	.3111	112.5	+ .0061	+ 2.0
1903	462	120.6	.....	.....	54.48	92.8	.....	.....	.3172	114.7	.....	.....

PROOF READERS, Male.

[Data for employees from 11 establishments for entire period. Data for hours and wages from 13 establishments, 1890, 1891; 12 establishments, 1892-1894, 1902, 1903; 11 establishments, 1895-1901.]

Av. 1890-99.	28	100.0	+ 9	+32.1	59.57	100.0	-6.96	-11.7	\$0.3233	100.0	+\$0.0690	+21.3
1890	29	103.6	+ 8	+27.6	59.94	100.6	-7.38	-12.2	.3254	100.6	+ .0669	+20.6
1891	29	103.6	+ 8	+27.6	59.94	100.6	-7.38	-12.2	.3270	101.1	+ .0658	+20.0
1892	29	103.6	+ 8	+27.6	59.93	100.6	-7.32	-12.2	.3199	98.9	+ .0724	+22.6
1893	29	103.6	+ 8	+27.6	59.93	100.6	-7.32	-12.2	.3232	100.0	+ .0691	+21.4
1894	27	96.4	+10	+37.0	59.93	100.6	-7.32	-12.2	.3213	99.4	+ .0710	+22.1
1895	26	92.9	+11	+42.3	59.96	100.7	-7.35	-12.3	.3259	100.8	+ .0664	+20.4
1896	28	100.0	+ 9	+32.1	59.96	100.7	-7.35	-12.3	.3229	99.9	+ .0694	+21.5
1897	28	100.0	+ 9	+32.1	59.96	100.7	-7.35	-12.3	.3235	100.1	+ .0688	+21.3
1898	28	100.0	+ 9	+32.1	59.61	100.1	-7.00	-11.7	.3264	101.0	+ .0659	+20.2
1899	30	107.1	+7	+23.3	56.50	94.8	-3.89	-6.9	.3173	98.1	+ .0750	+23.6
1900	32	114.3	+5	+15.6	55.00	92.3	-2.39	-4.3	.3469	107.3	+ .0454	+13.1
1901	34	121.4	+3	+ 8.8	55.03	92.4	-2.42	-4.4	.3538	109.4	+ .0385	+10.9
1902	35	125.0	+2	+ 5.7	52.69	88.5	-.08	-.2	.3853	119.2	+ .0070	+ 1.8
1903	37	132.1	.....	.....	52.61	88.8	.....	.....	.3923	121.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

PRINTING AND PUBLISHING, BOOK AND JOB—Continued.

PROOF READERS, Female.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 6 establishments, 1890, 1891; 7 establishments, 1892-1894, 1902, 1903; 8 establishments, 1895-1901.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	10	100.0	+1	+10.0	57.10	100.0	-3.96	-6.9	\$0.2722	100.0	+\$0.0426	+15.7
1890	11	110.0	.....	.....	57.92	101.4	-4.78	-8.3	.2745	100.8	+.0403	+14.7
1891	14	140.0	-3	-21.4	58.33	102.2	-5.19	-8.9	.2929	107.6	+.0219	+7.5
1892	10	100.0	+1	+10.0	56.93	99.7	-3.79	-6.7	.2893	106.3	+.0255	+8.8
1893	11	110.0	.....	.....	57.36	100.5	-4.22	-7.4	.2753	101.1	+.0395	+14.3
1894	10	100.0	+1	+10.0	56.93	99.7	-3.79	-6.7	.2710	99.6	+.0438	+16.2
1895	11	110.0	.....	.....	57.25	100.8	-4.11	-7.2	.2530	92.9	+.0618	+24.4
1896	8	80.0	+3	+37.5	56.62	99.2	-3.48	-6.1	.2703	99.3	+.0445	+16.5
1897	12	120.0	-1	-8.3	57.63	100.9	-4.49	-7.8	.2416	88.8	+.0732	+30.3
1898	8	80.0	+3	+37.5	56.58	99.1	-3.44	-6.1	.2654	97.5	+.0494	+18.6
1899	9	90.0	+2	+22.2	55.46	97.1	-2.32	-4.2	.2888	106.1	+.0260	+9.0
1900	10	100.0	+1	+10.0	53.93	94.4	-.79	-1.5	.3162	116.2	+.0014	-.4
1901	10	100.0	+1	+10.0	53.14	93.1	.....	.....	.2936	107.9	+.0212	+7.2
1902	11	110.0	.....	.....	53.14	93.1	.....	.....	.3148	115.7	.....	.....
1903	11	110.0	.....	.....	53.14	93.1	.....	.....	.3148	115.7	.....	.....

SEWERS, BOOK, Female.

[Data from 10 establishments.]

Av. 1890-99.	42	100.0	+21	+50.0	58.68	100.0	-2.84	-4.8	\$0.1030	100.0	-\$0.0015	-1.5
1890	47	111.9	+16	+34.0	59.11	100.7	-3.27	-5.5	.0939	91.2	+.0076	+8.1
1891	39	92.9	+24	+61.5	58.92	100.4	-3.08	-5.2	.1022	99.2	+.0007	-.7
1892	42	100.0	+21	+50.0	59.10	100.7	-3.26	-5.5	.1023	99.3	+.0008	-.8
1893	33	78.6	+30	+90.9	58.85	100.8	-3.01	-5.1	.1056	102.5	+.0041	+3.9
1894	36	85.7	+27	+75.0	58.78	100.2	-2.94	-5.0	.1040	101.0	+.0025	-2.4
1895	38	90.5	+25	+65.8	58.68	100.0	-2.84	-4.8	.1033	100.3	+.0018	-1.7
1896	42	100.0	+21	+50.0	58.57	99.8	-2.73	-4.7	.1071	104.0	+.0056	+5.2
1897	43	102.4	+20	+46.5	58.60	99.9	-2.76	-4.7	.1041	101.1	+.0026	-2.5
1898	48	114.3	+15	+31.3	58.15	99.1	-2.31	-4.0	.1051	102.0	+.0036	+3.4
1899	51	121.4	+12	+23.5	58.02	98.9	-2.18	-3.8	.1025	99.5	+.0010	-1.0
1900	50	119.0	+13	+26.0	56.78	96.8	-.94	-1.7	.1056	102.5	+.0041	+3.9
1901	63	150.0	.....	.....	56.33	96.8	-.99	-1.7	.0988	95.9	+.0027	+2.7
1902	58	126.2	+10	+18.9	55.96	95.4	-.12	-.2	.1051	102.0	+.0036	+3.4
1903	63	150.0	.....	.....	55.84	95.2	.....	.....	.1015	98.6	.....	.....

STEREOTYPERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	14	100.0	+1	+7.1	59.52	100.0	-5.52	-9.3	\$0.3146	100.0	+\$0.0447	+14.2
1890	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1891	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3137	99.7	+.0456	+14.5
1892	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1893	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1894	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1895	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1896	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1897	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1898	14	100.0	+1	+7.1	59.86	100.6	-5.86	-9.8	.3126	99.4	+.0467	+14.9
1899	14	100.0	+1	+7.1	56.43	94.5	-2.43	-4.3	.3316	105.4	+.0277	+8.4
1900	14	100.0	+1	+7.1	56.00	94.1	-2.00	-3.6	.3308	105.1	+.0285	+8.6
1901	14	100.0	+1	+7.1	56.00	94.1	-2.00	-3.6	.3335	106.0	+.0258	+7.7
1902	15	107.1	.....	.....	54.00	90.7	.....	.....	.3543	112.6	+.0050	+1.4
1903	15	107.1	.....	.....	54.00	90.7	.....	.....	.3593	114.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

verage 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

PRINTING AND PUBLISHING, BOOK AND JOB—Concluded.

STITCHERS, BOOK, Female.

[Data from 10 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.				
	Num-ber.	Relative num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.	
1890-99.	47	100.0	+30	+63.8	59.62	100.0	-4.98	-8.4	\$0.0827	100.0	+\$0.0313	+37.8	
0	45	95.7	+32	+71.1	59.87	100.4	-5.23	-8.7	.0804	97.2	+	.0336	+41.8
1	44	93.6	+33	+75.0	59.86	100.4	-5.22	-8.7	.0813	98.3	+	.0327	+40.2
2	52	110.6	+25	+48.1	59.88	100.4	-5.24	-8.8	.0755	91.3	+	.0385	+51.0
3	46	97.9	+31	+67.4	59.87	100.4	-5.23	-8.7	.0834	100.8	+	.0306	+36.7
4	43	91.5	+34	+79.1	59.86	100.4	-5.22	-8.7	.0815	98.5	+	.0325	+39.9
5	44	93.6	+33	+75.0	59.86	100.4	-5.22	-8.7	.0817	98.8	+	.0323	+39.5
6	44	93.6	+33	+75.0	59.84	100.4	-5.20	-8.7	.0842	101.8	+	.0298	+35.4
7	47	100.0	+30	+63.8	59.85	100.4	-5.21	-8.7	.0804	97.2	+	.0336	+41.8
8	53	112.8	+24	+45.3	58.89	98.8	-4.25	-7.2	.0873	105.6	+	.0267	+30.6
9	50	106.4	+27	+54.0	58.40	98.0	-3.76	-6.4	.0912	110.3	+	.0223	+25.0
0	68	144.7	+9	+13.2	55.65	93.8	-1.01	-1.8	.1028	124.3	+	.0112	+10.9
1	71	151.1	+6	+8.5	55.03	92.8	—	.39	.1091	131.9	+	.0049	+4.5
2	79	168.1	-2	-2.5	54.95	92.2	—	.31	.1108	134.0	+	.0032	+2.9
3	77	163.8	.....	.....	54.64	91.6	.....	.....	.1140	137.8	.....	.....	.....

PRINTING AND PUBLISHING, NEWSPAPER.

COMPOSITORS, Male.

ata for employees from 91 establishments for entire period. Data for hours and wages from 91 establishments, 1890; 92 establishments, 1891, 1892; 93 establishments, 1893; 94 establishments, 1894; 95 establishments, 1895-1903.]

1890-99.	1,148	100.0	-139	-12.1	52.53	100.0	-2.72	-5.2	\$0.3939	100.0	+\$0.0528	+13.4	
0	1,508	131.4	-499	-33.1	53.15	101.2	-3.34	-6.3	.3980	101.0	+	.0487	+12.2
1	1,530	133.3	-521	-34.1	52.62	100.2	-2.81	-5.3	.3997	101.5	+	.0470	+11.8
2	1,494	130.1	-485	-32.5	52.58	100.1	-2.77	-5.3	.4013	101.9	+	.0454	+11.3
3	1,327	115.6	-318	-24.0	53.13	101.1	-3.32	-6.2	.3933	99.8	+	.0534	+13.6
4	1,055	91.9	-46	-4.4	52.75	100.4	-2.94	-5.6	.3796	96.4	+	.0671	+17.7
5	915	79.7	+94	+10.3	52.73	100.4	-2.92	-5.5	.3827	97.2	+	.0640	+16.7
6	833	76.9	+126	+14.3	52.58	100.1	-2.77	-5.3	.3897	98.9	+	.0570	+14.6
7	928	80.8	+81	+8.7	52.47	99.9	-2.66	-5.1	.3925	99.6	+	.0542	+13.8
8	898	78.2	+111	+12.4	52.06	99.1	-2.25	-4.3	.3934	99.9	+	.0533	+13.5
9	944	82.2	+65	+6.9	51.26	97.6	-1.45	-2.8	.4086	103.7	+	.0381	+9.3
0	969	84.4	+40	+4.1	51.09	97.3	-1.28	-2.5	.4071	103.4	+	.0396	+9.7
1	959	83.5	+50	+5.2	50.37	95.9	—	.56	.4252	107.9	+	.0215	+5.1
2	954	83.1	+55	+5.8	49.96	95.1	—	.15	.4352	110.5	+	.0115	+2.6
3	1,009	87.9	.....	.....	49.81	94.8	.....	.....	.4467	113.4	.....	.....	.....

COMPOSITORS, Female.

ata for employees from 4 establishments for entire period. Data for hours and wages from 7 establishments, 1890, 1891, 1894, 1895; 8 establishments, 1892, 1893; 6 establishments, 1896-1898, 1901, 1903; 5 establishments, 1899, 1900, 1902.]

1890-99.	34	100.0	-20	-58.8	55.20	100.0	-5.01	-9.1	\$0.2857	100.0	+\$0.0811	+28.4	
0	45	132.4	-31	-68.9	54.16	98.1	-3.97	-7.3	.3146	110.1	+	.0522	+16.6
1	44	129.4	-30	-68.2	55.16	99.9	-4.97	-9.0	.2785	97.5	+	.0883	+31.7
2	51	150.0	-37	-72.5	55.08	99.8	-4.89	-8.9	.2991	104.7	+	.0677	+22.6
3	45	132.4	-31	-63.9	55.86	101.2	-5.67	-10.2	.2722	95.3	+	.0946	+34.8
4	38	111.8	-24	-63.2	55.57	100.7	-5.38	-9.7	.2668	93.4	+	.1000	+37.5
5	26	76.5	-12	-46.2	55.95	101.4	-5.76	-10.3	.2474	86.6	+	.1194	+48.3
6	28	82.4	-14	-50.0	56.40	102.2	-6.21	-11.0	.2513	91.5	+	.1055	+40.4
7	25	73.5	-11	-44.0	56.54	102.4	-6.35	-11.2	.2677	93.7	+	.0991	+37.0
8	20	58.8	-6	-30.0	54.66	99.0	-4.47	-8.2	.3096	108.4	+	.0572	+18.5
9	15	44.1	-1	-6.7	52.64	95.4	-2.45	-4.7	.3399	119.0	+	.0269	+7.9
0	13	38.2	+1	+7.7	52.20	94.6	-2.01	-3.9	.3388	118.6	+	.0230	+8.3
1	15	44.1	-1	-6.7	52.64	95.4	-2.45	-4.7	.3186	111.5	+	.0482	+15.1
2	15	44.1	-1	-6.7	52.50	95.1	-2.31	-4.4	.3383	118.4	+	.0285	+8.4
3	14	41.2	.....	.....	50.19	90.9	.....	.....	.3668	128.4	.....	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903 as compared with previous years, see note on page 718.]

PRINTING AND PUBLISHING, NEWSPAPER—Continued.

LINOTYPE OPERATORS, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890; 5 establishments, 1891; 16 establishments, 1892; 32 establishments, 1893; 54 establishments, 1894; 69 establishments, 1895; 80 establishments, 1896; 88 establishments, 1897; 94 establishments, 1898; 99 establishments, 1899; 100 establishments, 1900; 102 establishments, 1901; 103 establishments, 1902; 104 establishments, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	39	100.0	- 5	-12.8	47.95	100.0	-0.20	-0.4	\$0.5076	100.0	+\$0.0201	+ 4.
1890	36	92.3	- 2	- 5.6	48.00	100.1	- 25	- 5	.5625	110.8	- .0348	- 6.
1891	39	100.0	- 5	-12.8	47.26	98.6	+ 49	+1.0	.5393	106.2	- .0116	- 2.
1892	46	117.9	-12	-26.1	48.64	101.4	- 39	-1.8	.4666	91.9	+ .0611	+13.
1893	38	97.4	- 4	-10.5	49.15	102.5	-1.40	-2.8	.4949	97.9	+ .0328	+ 6.
1894	30	76.9	+ 4	+13.3	48.22	100.6	- 47	-1.0	.5069	99.9	+ .0208	+ 4.
1895	36	92.3	- 2	- 5.6	47.66	99.4	+ .09	+ 2	.5047	99.4	+ .0230	+ 4.
1896	43	110.3	- 9	-20.9	47.57	99.2	+ 18	+ 4	.5030	99.1	+ .0247	+ 4.
1897	43	110.3	- 9	-20.9	47.63	99.3	+ 12	+ 3	.5010	98.7	+ .0267	+ 5.
1898	37	94.9	- 3	- 8.1	47.72	99.5	+ .03	+ 1	.4987	98.2	+ .0290	+ 5.
1899	39	100.0	- 5	-12.8	47.69	99.5	+ .06	+ 1	.4983	98.2	+ .0294	+ 5.
1900	33	84.6	+ 1	+ 3.0	47.67	99.4	+ .08	+ 2	.5054	99.6	+ .0223	+ 4.
1901	30	76.9	+ 4	+13.3	47.89	99.9	- .14	- 3	.5056	99.6	+ .0221	+ 4.
1902	39	100.0	- 5	-12.8	47.67	99.4	+ .08	+ 2	.5129	101.0	+ .0148	+ 2.
1903	34	87.2	.....	.....	47.75	99.6	.....	.....	.5277	104.0	.....	.....

LINOTYPE OPERATORS, Female.

[No data, 1890, 1891; data from 1 establishment, 1892, 1893; 2 establishments, 1894; 4 establishments, 1895; 5 establishments, 1896; 6 establishments, 1897; 7 establishments, 1898, 1901-1903; 8 establishments, 1899, 1900.]

Year.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Av. 1890-99.	4	(a)	(a)	(a)	49.50	(a)	+3.56	+7.2	\$0.1620	(a)	+\$0.1073	+68.
1892	4	(a)	(a)	(a)	49.50	(a)	+3.56	+7.2	.1620	(a)	+ .1073	+68.
1893	4	(a)	(a)	(a)	51.00	(a)	+2.06	+4.0	.2665	(a)	+ .0028	+ 1.
1894	6	(a)	(a)	(a)	51.50	(a)	+1.56	+3.0	.3607	(a)	- .0914	-25.
1895	18	(a)	(a)	(a)	50.71	(a)	+2.35	+4.6	.3351	(a)	- .0658	-19.
1896	21	(a)	(a)	(a)	51.13	(a)	+1.93	+3.8	.3372	(a)	- .0679	-20.
1897	24	(a)	(a)	(a)	51.67	(a)	+1.39	+2.7	.2998	(a)	- .0305	-10.
1898	27	(a)	(a)	(a)	51.83	(a)	+1.23	+2.4	.2944	(a)	- .0251	- 8.
1899	29	(a)	(a)	(a)	51.83	(a)	+1.23	+2.4	.2945	(a)	- .0252	- 8.
1900	29	(a)	(a)	(a)	51.52	(a)	+1.54	+3.0	.2820	(a)	- .0127	- 4.
1901	28	(a)	(a)	(a)	53.14	(a)	- .08	- 2	.2830	(a)	- .0187	- 6.
1902	28	(a)	(a)	(a)	53.06	(a)	.....	.....	.2693	(a)	.....	.....
1903	32	(a)	.....	.....	53.06	(a)	.....	.....	.2693	(a)	.....	.....

PRESSMEN, Male.

[Data for employees from 106 establishments for entire period. Data for hours and wages, from 1 establishments, 1890; 107 establishments, 1891-1894; 108 establishments, 1895-1903.]

Year.	358	100.0	+138	+38.5	51.26	100.0	-1.48	-2.9	\$0.3675	100.0	+\$0.0462	+12
Av. 1890-99.	310	86.6	+186	+60.0	51.81	101.1	-2.03	-3.9	.3596	97.9	+ .0541	+15
1890	317	88.5	+179	+56.5	51.78	101.0	-2.00	-3.9	.3590	97.7	+ .0547	+15
1891	331	92.5	+165	+49.8	51.73	100.9	-1.95	-3.8	.3586	97.6	+ .0551	+15
1892	339	94.7	+157	+46.3	51.76	101.0	-1.98	-3.8	.3613	98.3	+ .0524	+14
1893	342	95.5	+154	+45.0	51.52	100.5	-1.74	-3.4	.3633	98.9	+ .0504	+13
1894	341	95.3	+155	+45.5	51.33	100.1	-1.55	-3.0	.3655	99.5	+ .0482	+12
1895	379	105.9	+117	+30.9	51.06	99.6	-1.28	-2.5	.3731	101.5	+ .0406	+10
1896	384	107.3	+112	+29.2	50.66	98.8	- .88	-1.7	.3740	101.8	+ .0397	+10
1897	410	114.5	+ 86	+21.0	50.57	98.7	- .79	-1.6	.3781	102.9	+ .0356	+ 9
1898	426	119.0	+ 70	+16.4	50.36	98.2	- .58	-1.2	.3828	104.2	+ .0309	+ 8
1899	441	123.2	+ 55	+12.5	50.12	97.8	- .34	- .7	.3856	104.9	+ .0231	+ 7
1900	458	127.9	+ 38	+ 8.3	50.00	97.5	- .22	- .4	.3898	106.1	+ .0239	+ 6
1901	479	133.8	+ 17	+ 3.5	49.90	97.3	- .12	- .2	.4008	109.1	+ .0129	+ 3
1902	496	138.5	.....	.....	49.78	97.1	.....	.....	.4187	112.6	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

^aNot computed, as data do not cover entire base period.

^bNot computed, as number of establishments varies for different years.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

PRINTING AND PUBLISHING, NEWSPAPER—Concluded.

STEREOTYPERS, Male.

[Data for employees from 76 establishments for entire period. Data for hours and wages from 76 establishments, 1890; 77 establishments, 1891-1898; 78 establishments, 1894, 1895; 79 establishments, 1896-1903].

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	301	100.0	+ 69	+22.9	48.77	100.0	-0.72	-1.5	\$0.4445	100.0	+\$0.0367	+ 8.3
1890	254	84.4	+116	+45.7	48.93	100.3	— .88	-1.8	.4199	94.5	+ .0613	+14.6
1891	255	84.7	+115	+45.1	49.05	100.6	-1.00	-2.0	.4205	94.6	+ .0607	+14.4
1892	273	90.7	+ 97	+35.5	49.09	100.7	-1.04	-2.1	.4340	97.6	+ .0472	+10.9
1893	292	97.0	+ 78	+26.7	49.01	100.5	— .96	-2.0	.4413	99.3	+ .0399	+ 9.0
1894	293	97.3	+ 77	+26.3	49.01	100.5	— .96	-2.0	.4380	98.5	+ .0432	+ 9.9
1895	300	99.7	+ 70	+23.3	48.99	100.5	— .94	-1.9	.4407	99.1	+ .0405	+ 9.2
1896	330	109.6	+ 40	+12.1	48.77	100.0	— .72	-1.5	.4549	102.3	+ .0263	+ 5.8
1897	330	109.6	+ 40	+12.1	48.50	99.4	— .45	— .9	.4573	102.9	+ .0239	+ 5.2
1898	336	111.6	+ 34	+10.1	48.29	99.0	— .24	— .5	.4671	105.1	+ .0141	+ 3.0
1899	346	115.0	+ 24	+ 6.9	48.10	98.6	— .05	— .1	.4710	106.0	+ .0102	+ 2.2
1900	346	115.0	+ 24	+ 6.9	48.14	98.7	— .09	— .2	.4675	105.2	+ .0137	+ 2.9
1901	359	119.3	+ 11	+ 3.1	48.01	98.4	+ .04	+ .1	.4749	106.8	+ .0063	+ 1.3
1902	369	122.6	+ 1	+ .3	48.02	98.5	+ .03	+ .1	.4773	107.4	+ .0089	+ .8
1903	370	122.9	.....	.....	48.05	98.5	.....	.....	.4812	108.3	.....	.....

ROPE AND TWINE.

FINISHERS, Female.

[Data from 1 establishment.]

Av. 1890-99.	19	100.0	-1	- 5.8	60.00	100.0	.....	.....	\$0.0800	100.0	.....	.....
1890	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1891	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1892	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1893	20	105.3	-2	-10.0	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1894	20	105.3	-2	-10.0	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1895	20	105.3	-2	-10.0	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1896	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1897	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1898	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1899	20	105.3	-2	-10.0	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1900	20	105.3	-2	-10.0	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1901	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1902	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....
1903	18	94.7	.....	.....	60.00	100.0	.....	.....	.0800	100.0	.....	.....

HEMP PREPARERS, MACHINE, Male.

[Data from 1 establishment.]

Av. 1890-99.	12	100.0	+ 9	+ 75.0	60.00	100.0	.....	.....	\$0.1674	100.0	-\$0.0003	-0.2
1890	11	91.7	+10	+ 90.9	60.00	100.0	.....	.....	.1636	97.7	+ .0035	+2.1
1891	10	83.3	+11	+110.0	60.00	100.0	.....	.....	.1650	98.6	+ .0021	+1.3
1892	11	91.7	+10	+ 90.9	60.00	100.0	.....	.....	.1636	97.7	+ .0035	+2.1
1893	12	100.0	+ 9	+ 75.0	60.00	100.0	.....	.....	.1667	99.6	+ .0004	+ .2
1894	10	83.3	+11	+110.0	60.00	100.0	.....	.....	.1642	98.1	+ .0029	+1.8
1895	12	100.0	+ 9	+ 75.0	60.00	100.0	.....	.....	.1701	101.6	+ .0030	+1.8
1896	10	83.3	+11	+110.0	60.00	100.0	.....	.....	.1733	103.5	+ .0062	+3.6
1897	14	116.7	+7	+ 50.0	60.00	100.0	.....	.....	.1708	102.0	+ .0037	+2.2
1898	16	133.3	+5	+ 31.3	60.00	100.0	.....	.....	.1677	100.2	+ .0006	+ .4
1899	15	125.0	+6	+ 40.0	60.00	100.0	.....	.....	.1694	101.2	+ .0023	+1.4
1900	13	108.3	+8	+ 61.5	60.00	100.0	.....	.....	.1692	101.1	+ .0021	+1.2
1901	14	116.7	+7	+ 50.0	60.00	100.0	.....	.....	.1685	100.7	+ .0014	+ .8
1902	24	200.0	- 3	-12.5	60.00	100.0	.....	.....	.1649	98.5	+ .0022	+1.3
1903	21	175.0	.....	.....	60.00	100.0	.....	.....	.1671	99.8	.....	.....

TABLE K.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

ROPE AND TWINE—Continued.

LABORERS, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	63	100.0	— 6	- 9.5	60.00	100.0	.....	.....	\$0.1416	100.0	+\$0.0017	+1.2
1890	51	81.0	+ 6	+11.8	60.00	100.0	.....	.....	.1395	98.5	+ .0038	+2.7
1891	48	76.2	+ 9	+18.8	60.00	100.0	.....	.....	.1411	99.6	+ .0022	+1.0
1892	79	125.4	-22	-27.8	60.00	100.0	.....	.....	.1401	98.9	+ .0032	+2.3
1893	80	127.0	-23	-28.8	60.00	100.0	.....	.....	.1417	100.1	+ .0016	+1.1
1894	53	84.1	+ 4	+ 7.5	60.00	100.0	.....	.....	.1418	100.1	+ .0015	+1.1
1895	76	120.6	-19	-25.0	60.00	100.0	.....	.....	.1431	101.1	+ .0002	+ .1
1896	79	125.4	-22	-27.8	60.00	100.0	.....	.....	.1429	100.9	+ .0004	+ .3
1897	64	101.6	- 7	-10.9	60.00	100.0	.....	.....	.1396	98.6	+ .0037	+2.7
1898	50	79.4	+ 7	+14.0	60.00	100.0	.....	.....	.1428	100.8	+ .0005	+ .4
1899	53	84.1	+ 4	+ 7.5	60.00	100.0	.....	.....	.1434	101.3	- .0001	- .1
1900	49	77.8	+ 8	+16.3	60.00	100.0	.....	.....	.1427	100.8	+ .0006	+ .4
1901	53	84.1	+ 4	+ 7.5	60.00	100.0	.....	.....	.1423	100.5	+ .0010	+ .7
1902	61	96.8	- 4	- 6.6	60.00	100.0	.....	.....	.1441	101.8	- .0008	- .6
1903	57	90.5	.....	.....	60.00	100.0	.....	.....	.1433	101.2	.....	.....

LAYERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	2	100.0	.....	.....	60.00	100.0	.....	.....	\$0.1400	100.0	.....	.....
1890	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1891	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1892	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1893	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1894	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1895	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1896	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1897	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1898	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1899	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1900	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1901	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1902	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....
1903	2	100.0	.....	.....	60.00	100.0	.....	.....	.1400	100.0	.....	.....

ROPE MAKERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	46	100.0	+2	+ 4.3	60.00	100.0	.....	.....	\$0.1829	100.0	+\$0.0041	+2.
1890	49	106.5	-1	- 2.0	60.00	100.0	.....	.....	.1770	96.8	+ .0100	+5.
1891	42	91.3	+6	+14.3	60.00	100.0	.....	.....	.1804	98.6	+ .0066	+3.
1892	46	100.0	+2	+ 4.3	60.00	100.0	.....	.....	.1833	100.2	+ .0037	+2.
1893	50	108.7	-2	- 4.0	60.00	100.0	.....	.....	.1855	101.4	+ .0015	+ .1
1894	43	93.5	+5	+11.6	60.00	100.0	.....	.....	.1870	102.2	.....	.....
1895	49	106.5	-1	- 2.0	60.00	100.0	.....	.....	.1806	98.7	+ .0064	+3.
1896	53	115.2	-5	- 9.4	60.00	100.0	.....	.....	.1778	97.2	+ .0092	+5.
1897	44	95.7	+4	+ 9.1	60.00	100.0	.....	.....	.1884	103.0	- .0014	- .1
1898	40	87.0	+8	+20.0	60.00	100.0	.....	.....	.1829	100.0	+ .0041	+2.
1899	42	91.3	+6	+14.3	60.00	100.0	.....	.....	.1863	101.9	+ .0007	+ .5
1900	40	87.0	+8	+20.0	60.00	100.0	.....	.....	.1917	104.8	- .0047	-2.
1901	47	102.2	+1	+ 2.1	60.00	100.0	.....	.....	.1833	100.2	+ .0037	+2.
1902	46	100.0	+2	+ 4.3	60.00	100.0	.....	.....	.1861	101.7	+ .0009	+ .6
1903	48	104.3	.....	.....	60.00	100.0	.....	.....	.1870	102.2	.....	.....

TABLE II.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

ROPE AND TWINE—Concluded.

SPINNERS, HEMP, Female.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	67	100.0	+2	+3.0	60.00	100.0	.....	.....	\$0.1235	100.0	+\$0.0027	+2.2
1890	65	97.0	+4	+6.2	60.00	100.0	.....	.....	.1277	103.4	— .0015	-1.2
1891	63	94.0	+6	+9.5	60.00	100.0	.....	.....	.1232	99.8	+ .0030	+2.4
1892	69	103.0	.....	.....	60.00	100.0	.....	.....	.1271	102.9	— .0009	- .7
1893	69	103.0	.....	.....	60.00	100.0	.....	.....	.1182	95.7	+ .0030	+6.8
1894	67	100.0	+2	+3.0	60.00	100.0	.....	.....	.1200	97.2	+ .0062	+5.2
1895	70	104.5	-1	-1.4	60.00	100.0	.....	.....	.1369	110.9	— .0107	-7.8
1896	68	101.5	+1	+1.5	60.00	100.0	.....	.....	.1191	96.4	+ .0071	+6.0
1897	66	98.5	+3	+4.5	60.00	100.0	.....	.....	.1201	97.2	+ .0061	+5.1
1898	66	98.5	+3	+4.5	60.00	100.0	.....	.....	.1196	96.8	+ .0066	+5.5
1899	66	98.5	+3	+4.5	60.00	100.0	.....	.....	.1232	99.8	+ .0030	+2.4
1900	64	95.5	+5	+7.8	60.00	100.0	.....	.....	.1236	99.3	+ .0036	+2.9
1901	64	95.5	+5	+7.8	60.00	100.0	.....	.....	.1177	95.3	+ .0085	+7.2
1902	67	100.0	+2	+3.0	60.00	100.0	.....	.....	.1265	102.4	— .0003	- .2
1903	69	103.0	.....	.....	60.00	100.0	.....	.....	.1262	102.2	.....	.....

TWISTERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	11	100.0	—1	— 9.1	60.00	100.0	.....	.....	\$0.1300	100.0	.....	.....
1890	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1891	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1892	12	109.1	-2	-16.7	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1893	12	109.1	-2	-16.7	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1894	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1895	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1896	12	109.1	-2	-16.7	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1897	12	109.1	-2	-16.7	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1898	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1899	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1900	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1901	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1902	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....
1903	10	90.9	.....	.....	60.00	100.0	.....	.....	.1300	100.0	.....	.....

SHIPBUILDING.

BLACKSMITHS, Male.

[Data for employees from 11 establishments for entire period. Data for hours and wages from 11 establishments, 1890; 12 establishments, 1891-1895; 13 establishments, 1896-1898; 14 establishments, 1899-1903.]

Av. 1890-99.	119	100.0	+37	+ 31.1	59.29	100.0	-0.68	-1.1	\$0.2696	100.0	+\$0.0152	+ 5.6
1890	78	65.5	+78	+100.0	59.60	100.5	— .99	-1.7	.2614	97.0	+ .0234	+ 9.0
1891	89	74.8	+67	+ 75.3	59.58	100.5	— .97	-1.6	.2702	100.2	+ .0146	+ 5.4
1892	100	84.0	+56	+ 56.0	59.58	100.5	— .97	-1.6	.2687	99.7	+ .0161	+ 6.0
1893	97	81.5	+59	+ 60.8	59.24	99.9	— .68	-1.1	.2676	99.3	+ .0172	+ 6.4
1894	118	99.2	+38	+ 32.2	59.29	100.0	— .68	-1.1	.2610	96.8	+ .0238	+ 9.1
1895	164	137.8	- 8	- 4.9	59.40	100.2	— .79	-1.3	.2638	97.8	+ .0210	+ 8.0
1896	115	96.6	+41	+ 35.7	58.95	99.4	— .34	- .6	.2824	104.7	+ .0024	+ .8
1897	120	100.8	+36	+ 30.0	58.97	99.5	— .36	- .6	.2805	104.0	+ .0043	+ 1.5
1898	167	140.3	-11	- 6.6	59.26	99.9	— .65	-1.1	.2680	99.4	+ .0168	+ 6.3
1899	145	121.8	+11	+ 7.6	59.03	99.6	— .42	- .7	.2724	101.0	+ .0124	+ 4.6
1900	139	116.8	+17	+ 12.2	59.09	99.7	— .48	- .8	.2727	101.1	+ .0121	+ 4.4
1901	146	122.7	+10	+ 6.8	59.06	99.6	— .45	- .7	.2711	100.6	+ .0138	+ 5.1
1902	169	142.0	-13	- 7.7	58.79	99.2	— .18	- .3	.2799	103.8	+ .0049	+ 1.8
1903	156	131.1	.....	.....	58.61	98.9	.....	.....	.2848	105.6	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

SHIPBUILDING—Continued.

BOILER MAKERS, Male.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 6 establishments, 1890, 1894, 1895; 7 establishments, 1891-1893, 1896-1898; 8 establishments, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	141	100.0	+102	+ 72.3	59.63	100.0	-0.40	-0.7	\$0.2522	100.0	+\$0.0046	+1.8
1890	78	55.3	+165	+211.5	59.56	99.9	— .33	— .6	.2477	98.2	+ .0091	+3.7
1891	63	44.7	+180	+255.7	59.66	100.1	— .43	— .7	.2486	98.6	+ .0082	+3.3
1892	88	62.4	+155	+176.1	59.72	100.2	— .49	— .8	.2536	100.6	+ .0082	+1.3
1893	127	90.1	+116	+ 91.3	59.78	100.3	— .55	— .9	.2503	99.2	+ .0065	+2.6
1894	135	95.7	+108	+ 80.0	59.76	100.2	— .58	— .9	.2404	95.3	+ .0164	+6.8
1895	151	107.1	+ 92	+ 60.9	59.61	100.0	— .38	— .6	.2523	100.0	+ .0045	+1.8
1896	127	90.1	+116	+ 91.3	59.47	99.7	— .24	— .4	.2633	104.4	+ .0065	+2.5
1897	124	87.9	+119	+ 96.0	59.46	99.7	— .23	— .4	.2567	101.8	+ .0001	+ .04
1898	206	209.9	— 53	— 17.9	59.69	100.1	— .46	— .8	.2535	100.5	+ .0033	+1.3
1899	217	153.9	+ 26	+ 12.0	59.59	99.9	— .36	— .6	.2560	101.5	+ .0008	+ .3
1900	292	207.1	— 49	— 16.8	59.65	100.0	— .42	— .7	.2511	99.6	+ .0057	+2.3
1901	248	175.9	— 5	— 2.0	59.62	99.8	— .29	— .5	.2559	101.5	+ .0009	+ .4
1902	262	185.8	— 19	— 7.3	59.43	99.7	— .20	— .3	.2587	102.6	+ .0019	+ .7
1903	243	172.3	.....	.....	59.23	99.3	.....	.....	.2568	101.8	.....	.....

CALKERS, IRON, Male.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 4 establishments, 1890, 1895; 5 establishments, 1891-1894, 1896-1898; 6 establishments, 1899-1902; 7 establishments, 1903.]

Av. 1890-99.	34	100.0	+19	+ 55.9	58.67	100.0	-1.37	-2.3	\$0.2259	100.0	+\$0.1080	+47.8
1890	29	85.3	+24	+ 82.8	58.97	100.5	-1.67	-2.8	.2086	92.3	+ .1253	+60.1
1891	61	179.4	— 8	— 13.1	59.44	101.3	-2.14	-8.6	.1913	84.7	+ .1426	+74.5
1892	26	76.5	+27	+103.8	58.87	100.3	-1.57	-2.7	.2117	93.7	+ .1222	+57.7
1893	19	55.9	+34	+178.9	58.23	99.3	— .93	-1.6	.2327	103.0	+ .1012	+43.5
1894	18	52.9	+35	+194.4	57.91	98.7	— .61	-1.1	.2265	100.3	+ .1074	+47.4
1895	17	50.0	+36	+211.8	57.94	98.8	— .64	-1.1	.2338	103.5	+ .1001	+42.8
1896	40	117.6	+13	+ 32.5	59.02	100.6	-1.72	-2.9	.2418	107.0	+ .0921	+38.1
1897	34	100.0	+19	+ 55.9	58.42	99.6	-1.12	-1.9	.2329	103.1	+ .1010	+43.4
1898	43	126.5	+10	+ 23.3	59.02	100.6	-1.72	-2.9	.2475	109.6	+ .0864	+34.9
1899	52	152.9	+ 1	+ 1.9	58.85	100.3	-1.55	-2.6	.2324	102.9	+ .1015	+43.7
1900	41	120.6	+12	+ 29.3	58.64	99.9	-1.34	-2.3	.2443	108.1	+ .0896	+36.7
1901	62	182.4	— 9	— 14.5	56.37	96.1	+ .93	+1.6	.2471	109.4	+ .0863	+35.1
1902	68	200.0	—15	—22.1	55.30	94.3	+2.00	+8.6	.2806	124.2	+ .0533	+19.0
1903	53	155.9	.....	.....	57.30	97.7	.....	.....	.3339	147.8	.....	.....

CALKERS, WOOD, Male.

[Data from 9 establishments.]

Av. 1890-99.	143	100.0	+ 93	+65.0	54.17	100.0	-3.40	-6.3	\$0.3463	100.0	+\$0.0334	+ 9.6
1890	132	92.3	+104	+78.8	54.41	100.4	-3.64	-6.7	.3443	99.4	+ .0354	+10.3
1891	132	92.3	+104	+78.8	54.50	100.6	-3.73	-6.8	.3435	99.2	+ .0362	+10.5
1892	128	89.5	+108	+84.4	54.23	100.2	-3.51	-6.5	.3422	98.8	+ .0375	+11.0
1893	159	111.2	+ 77	+48.4	54.15	100.0	-3.38	-6.2	.3440	99.3	+ .0357	+10.4
1894	119	83.2	+117	+98.3	54.10	99.9	-3.33	-6.2	.3406	98.4	+ .0391	+11.5
1895	132	92.3	+104	+78.8	53.95	99.6	-3.18	-5.9	.3405	98.3	+ .0392	+11.5
1896	131	91.6	+106	+80.2	54.13	100.0	-3.41	-6.3	.3410	98.5	+ .0387	+11.3
1897	145	101.4	+ 91	+62.8	54.00	99.7	-3.23	-6.0	.3473	100.3	+ .0324	+ 9.3
1898	179	125.2	+ 57	+31.8	54.00	99.7	-3.23	-6.0	.3596	103.8	+ .0201	+ 5.6
1899	174	121.7	+ 62	+35.6	54.14	99.9	-3.37	-6.2	.3602	104.0	+ .0195	+ 5.4
1900	176	123.1	+ 60	+34.1	54.03	99.7	-3.26	-6.0	.3657	105.6	+ .0140	+ 3.8
1901	222	155.2	+ 14	+ 6.3	54.05	99.8	-3.28	-6.1	.3813	110.1	+ .0016	+ .4
1902	223	155.9	+ 13	+ 5.8	53.95	99.6	-3.18	-5.9	.3755	108.4	+ .0042	+ 1.1
1903	236	165.0			50.77	93.7			.3797	109.6		

TABLE II.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

SHIPBUILDING—Continued.

CARPENTERS, Male.

[Data for employees from 18 establishments for entire period. Data for hours and wages from 19 establishments, 1890-1892, 1894, 1895; 20 establishments, 1893, 1896-1898; 21 establishments, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	742	100.0	+396	+53.4	57.57	100.0	-1.76	-3.1	\$0.2887	100.0	+\$0.0292	+10.1
1890	619	83.4	+519	+70.8	58.19	101.1	-2.38	-4.1	.2848	98.6	+ .0831	+11.6
1891	697	93.9	+441	+60.3	57.79	100.4	-1.98	-3.4	.2881	99.8	+ .0298	+10.3
1892	634	85.4	+504	+68.1	57.51	99.9	-1.70	-3.0	.2856	98.9	+ .0524	+11.3
1893	625	84.2	+513	+69.2	57.45	99.8	-1.64	-2.9	.2882	99.8	+ .0297	+10.3
1894	614	82.7	+524	+70.8	57.37	99.7	-1.56	-2.7	.2904	100.6	+ .0275	+ 9.5
1895	740	99.7	+395	+53.2	57.48	99.8	-1.67	-2.9	.2896	100.3	+ .0283	+ 9.8
1896	724	97.6	+414	+55.7	57.46	100.1	-1.68	-2.9	.2859	99.0	+ .0520	+11.2
1897	785	105.2	+350	+47.1	57.27	99.5	-1.65	-2.9	.2900	100.5	+ .0279	+ 9.6
1898	884	119.1	+254	+33.8	57.27	99.5	-1.65	-2.9	.2901	100.5	+ .0279	+ 9.6
1899	1,092	147.3	+ 45	+ 6.1	57.56	100.0	-1.75	-3.0	.2947	102.1	+ .0232	+ 7.9
1900	1,070	144.2	+ 68	+ 9.1	57.47	99.8	-1.66	-2.9	.3013	104.4	+ .0166	+ 5.5
1901	1,078	145.3	+ 60	+ 8.0	56.70	98.5	— .89	-1.6	.3058	105.9	+ .0121	+ 4.0
1902	1,089	146.0	+ 99	+ 13.3	56.32	97.8	— .51	— .9	.3157	109.4	+ .0022	+ .7
1903	1,138	153.4	.....	.....	55.81	96.9	.....	.....	.3179	110.1	.....	.....

DRILLERS, Male.

[Data for employees from 2 establishments for entire period. Data for hours and wages from 2 establishments, 1890, 1895; 3 establishments, 1891, 1892, 1894, 1896-1898; 4 establishments, 1893, 1899-1903.]

Av. 1890-99.	15	100.0	+11	+ 73.3	59.44	100.0	-4.81	-8.1	\$0.1725	100.0	+\$0.0381	+22.1
1890	17	113.3	+ 9	+ 52.9	60.00	100.9	-5.37	-9.0	.1667	96.6	+ .0439	+26.3
1891	10	66.7	+16	+160.0	59.00	99.3	-4.37	-7.4	.1593	92.3	+ .0513	+32.2
1892	15	100.0	+11	+ 73.3	58.87	99.0	-4.24	-7.2	.1636	94.8	+ .0470	+28.7
1893	13	86.7	+13	+100.0	58.87	99.0	-4.24	-7.2	.1639	95.0	+ .0467	+28.5
1894	8	53.3	+18	+225.0	58.23	98.0	-3.60	-6.2	.1477	85.6	+ .0629	+42.6
1895	10	66.7	+16	+160.0	60.00	100.9	-5.37	-9.0	.1608	93.2	+ .0498	+31.0
1896	12	80.0	+14	+116.7	60.00	100.9	-5.37	-9.0	.1823	105.7	+ .0288	+15.5
1897	23	153.3	+ 3	+ 13.0	60.00	100.9	-5.37	-9.0	.1847	107.1	+ .0259	+14.0
1898	14	93.3	+12	+ 85.7	60.00	100.9	-5.37	-9.0	.1978	114.7	+ .0128	+ 6.5
1899	27	180.0	- 1	- 3.7	59.39	99.9	-4.76	-8.0	.1978	114.7	+ .0128	+ 6.5
1900	20	133.3	+ 6	+ 30.0	58.59	98.6	-3.96	-6.8	.1908	110.6	+ .0198	+10.4
1901	21	140.0	+ 5	+ 23.8	56.51	95.1	-1.88	-3.3	.1912	110.8	+ .0194	+10.1
1902	22	146.7	+ 4	+ 18.2	56.20	94.6	-1.57	-2.8	.2167	125.6	+ .0061	+ 2.8
1903	26	173.3	.....	.....	54.63	91.9	.....	.....	.2106	122.1	.....	.....

FITTERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages, from 6 establishments, 1890; 7 establishments, 1891-1895; 8 establishments, 1896, 1897; 9 establishments, 1898; 10 establishments, 1899-1903.]

Av. 1890-99.	129	100.0	+ 80	+ 62.0	59.07	100.0	-0.27	-0.5	\$0.2473	100.0	+\$0.0174	+ 7.0
1890	78	60.5	+131	+167.9	58.49	99.0	+ .31	+ .5	.2392	96.7	+ .0255	+10.7
1891	123	95.3	+ 86	+ 69.9	59.20	100.2	- .40	- .7	.2296	92.8	+ .0351	+15.3
1892	117	90.7	+ 92	+ 78.6	59.12	100.1	- .32	- .6	.2432	98.3	+ .0215	+ 8.8
1893	115	89.1	+ 94	+ 81.7	58.97	99.8	- .17	- .3	.2465	99.8	+ .0192	+ 7.8
1894	183	141.9	+ 26	+ 14.2	59.17	100.2	- .37	- .6	.2285	92.4	+ .0362	+15.8
1895	138	107.0	+ 71	+ 51.4	59.47	100.7	- .67	-1.1	.2458	99.4	+ .0189	+ 7.7
1896	134	103.9	+ 75	+ 56.0	59.43	100.6	- .63	-1.1	.2525	102.1	+ .0122	+ 4.8
1897	113	87.6	+ 96	+ 85.0	59.00	99.9	- .20	- .3	.2610	105.5	+ .0037	+ 1.4
1898	112	86.8	+ 97	+ 85.6	59.03	99.9	- .23	- .4	.2705	109.4	+ .0058	+ 2.1
1899	172	133.3	+ 37	+ 21.5	58.83	99.6	- .08	- .1	.2576	104.2	+ .0071	+ 2.8
1900	251	217.8	- 72	- 25.6	59.32	100.4	- .52	- .9	.2484	100.4	+ .0163	+ 6.6
1901	247	191.5	- 38	- 15.4	58.26	98.6	+ .54	+ .9	.2560	103.5	+ .0087	+ 3.4
1902	213	165.1	- 4	- 1.9	58.86	99.6	- .06	- .1	.2615	105.7	+ .0052	+ 1.2
1903	209	162.0	-	-	58.80	99.5	-	-	.2647	107.0	-	-

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

SHIPBUILDING—Continued.

JOINERS, Male.

[Data for employees from 11 establishments for entire period. Data for hours and wages from 12 establishments, 1890-1892, 1894, 1895; 13 establishments, 1893, 1896-1898; 14 establishments, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	347	100.0	+123	+ 35.4	58.07	100.0	-0.67	-1.2	\$0.2777	100.0	+\$0.0173	+ 6.2
1890	305	87.9	+165	+ 54.1	58.73	101.1	-1.33	-2.3	.2675	96.3	+ .0275	+10.3
1891	238	68.6	+232	+ 77.5	57.70	99.4	- .30	- .5	.2763	99.5	+ .0187	+ 6.8
1892	335	96.5	+135	+ 40.3	58.02	99.9	- .62	-1.1	.2754	99.2	+ .0196	+ 7.1
1893	318	91.6	+152	+ 47.8	57.88	99.7	- .48	- .8	.2802	100.9	+ .0148	+ 5.3
1894	337	97.1	+133	+ 39.5	58.25	100.3	- .85	-1.5	.2751	99.1	+ .0199	+ 7.2
1895	731	210.7	-261	- 35.7	59.15	101.9	-1.75	-3.0	.2663	95.9	+ .0287	+10.8
1896	330	95.1	+140	+ 42.4	57.99	99.9	- .59	-1.0	.2799	100.8	+ .0151	+ 5.4
1897	162	46.7	+308	+130.1	56.58	97.4	+ .82	+1.4	.2965	106.8	- .0015	- .5
1898	324	93.4	+146	+ 45.1	58.32	100.4	- .92	-1.6	.2868	103.8	+ .0082	+ 2.9
1899	385	111.0	+ 85	+ 22.1	58.11	100.1	- .71	-1.2	.2731	98.3	+ .0219	+ 8.0
1900	513	147.8	- 43	- 8.4	58.69	101.1	-1.29	-2.2	.2809	101.2	+ .0141	+ 5.0
1901	501	144.4	- 31	- 6.2	58.25	100.3	- .85	-1.5	.2817	101.4	+ .0133	+ 4.7
1902	520	149.9	- 50	- 9.6	58.06	100.0	- .66	-1.1	.2852	102.7	+ .0098	+ 3.4
1903	470	135.4	.....	.....	57.40	98.8	.....	.....	.2950	106.2	.....	.....

LABORERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890-1894; 4 establishments, 1895-1903.]

Av. 1890-99.	72	100.0	+68	+ 94.4	58.09	100.0	-0.61	-1.1	\$0.1677	100.0	+\$0.0178	+10.6
1890	148	205.6	- 8	- 5.4	58.99	101.5	-1.51	-2.6	.1421	84.7	+ .0434	+30.5
1891	52	72.2	+88	+169.2	57.00	98.1	+ .48	+ .8	.1740	103.8	+ .0115	+ 6.6
1892	61	84.7	+79	+129.5	57.54	99.1	- .06	- .1	.1631	97.3	+ .0224	+13.7
1893	50	69.4	+90	+180.0	57.00	98.1	+ .48	+ .8	.1710	102.0	+ .0145	+ 8.5
1894	53	73.6	+87	+164.2	57.17	98.4	+ .31	+ .5	.1741	103.8	+ .0114	+ 6.5
1895	51	70.8	+89	+174.5	58.02	99.9	- .54	- .9	.1780	106.1	+ .0075	+ 4.2
1896	46	63.9	+94	+204.3	58.83	101.3	-1.35	-2.3	.1702	101.5	+ .0153	+ 9.0
1897	57	79.2	+83	+145.6	58.91	101.4	-1.43	-2.4	.1683	100.4	+ .0172	+10.2
1898	75	104.2	+65	+ 86.7	58.52	100.7	-1.04	-1.8	.1683	100.4	+ .0172	+10.2
1899	122	169.4	+18	+ 14.8	58.89	101.4	-1.41	-2.4	.1679	100.1	+ .0176	+10.5
1900	207	287.5	-67	- 32.4	58.80	101.2	-1.32	-2.2	.1674	99.8	+ .0181	+10.8
1901	179	248.6	-39	- 21.8	59.00	101.6	-1.52	-2.6	.1685	100.5	+ .0170	+10.1
1902	169	234.7	-29	- 17.2	57.43	98.9	+ .05	+ .1	.1816	108.3	+ .0039	+ 2.1
1903	140	194.4	.....	.....	57.48	98.9	.....	.....	.1855	110.6	.....	.....

MACHINISTS, Male.

[Data for employees from 8 establishments for entire period. Data for hours and wages from 8 establishments, 1890; 9 establishments, 1891-1898; 10 establishments, 1899-1903.]

Av. 1890-99.	497	100.0	+498	+100.2	59.50	100.0	-0.99	-1.7	\$0.2549	100.0	+\$0.0257	+10.1
1890	331	66.6	+664	+200.6	59.58	100.1	-1.07	-1.8	.2467	96.8	+ .0339	+13.7
1891	333	67.0	+662	+198.8	59.58	100.1	-1.07	-1.8	.2491	97.7	+ .0315	+12.6
1892	485	97.6	+510	+105.2	59.63	100.3	-1.17	-2.0	.2495	97.9	+ .0311	+12.5
1893	451	90.7	+544	+120.6	59.67	100.3	-1.16	-1.9	.2486	97.5	+ .0320	+12.9
1894	446	89.7	+549	+123.1	59.63	100.2	-1.12	-1.9	.2451	96.2	+ .0365	+14.5
1895	517	104.0	+478	+ 92.5	59.43	100.0	- .97	-1.6	.2562	100.1	+ .0254	+10.0
1896	518	104.2	+477	+ 92.1	59.39	99.8	- .88	-1.5	.2636	103.4	+ .0170	+ 6.4
1897	519	104.4	+476	+ 91.7	59.26	99.6	- .75	-1.3	.2635	103.4	+ .0171	+ 6.5
1898	546	109.9	+449	+ 82.2	59.22	99.5	- .71	-1.2	.2669	104.3	+ .0147	+ 5.5
1899	824	165.8	+171	+ 20.8	59.51	100.0	-1.00	-1.7	.2613	102.5	+ .0193	+ 7.4
1900	674	135.6	+321	+ 47.6	59.43	99.9	- .92	-1.5	.2698	105.8	+ .0108	+ 4.0
1901	963	193.8	+ 32	+ 3.3	59.29	99.6	- .78	-1.3	.2680	105.1	+ .0126	+ 4.7
1902	1,144	230.2	-149	- 13.0	58.81	98.8	- .30	- .5	.2758	108.2	+ .0048	+ 1.7
1903	995	200.2	.....	.....	58.51	98.3	.....	.....	.2806	110.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SHIPBUILDING—Continued.

MOLDERS, IRON, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890; 4 establishments, 1891-1898; 5 establishments, 1899-1901; 6 establishments, 1902, 1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	52	100.0	+11	+21.2	59.01	100.0	-1.11	-1.9	\$0.2570	100.0	+\$0.0402	+15.6
1890	50	96.2	+13	+26.0	59.10	100.2	-1.20	-2.0	.2710	105.4	+.0262	+9.7
1891	51	98.1	+12	+23.5	59.58	101.0	-1.68	-2.9	.2447	95.2	-.0525	-21.5
1892	51	98.1	+12	+23.5	59.34	100.6	-1.44	-2.4	.2494	97.0	-.0478	-19.2
1893	44	84.6	+19	+43.2	59.28	100.5	-1.38	-2.3	.2539	98.8	-.0433	-17.1
1894	38	73.1	+25	+65.8	58.84	99.7	-.94	-1.6	.2464	95.9	-.0508	-20.6
1895	49	94.2	+14	+28.6	58.88	99.8	-.98	-1.7	.2561	99.6	-.0411	-16.0
1896	58	111.6	+5	+8.6	58.87	99.8	-.97	-1.6	.2499	97.3	-.0473	-18.9
1897	51	98.1	+12	+23.5	58.58	99.3	-.68	-1.2	.2656	108.3	+.0317	+11.9
1898	60	115.4	+3	+5.0	58.87	99.8	-.97	-1.6	.2629	102.3	+.0343	+13.0
1899	64	123.1	-1	-1.6	58.79	99.6	-.89	-1.5	.2690	105.0	+.0273	+10.1
1900	57	109.6	+0	+10.5	58.82	99.7	-.92	-1.6	.2764	107.5	+.0208	+7.5
1901	61	117.3	+2	+3.3	58.76	99.6	-.86	-1.5	.2831	110.2	+.0141	+5.0
1902	66	126.9	-3	-4.6	67.97	98.2	-.07	-.1	.2892	112.5	+.0080	+2.8
1903	63	121.2	.....	.....	57.90	98.1	.....	.....	.2972	115.6	.....	.....

PAINTERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890; 11 establishments, 1891-1894, 1899-1903; 10 establishments, 1895-1898.]

Av. 1890-99.	208	100.0	+66	+31.7	57.34	100.0	-1.25	-2.2	\$0.2756	100.0	+\$0.0073	+2.6
1890	163	78.4	+111	+68.1	59.11	103.1	-3.02	-5.1	.2621	95.1	-.0208	-7.9
1891	163	78.4	+111	+68.1	58.71	102.4	-2.62	-4.5	.2584	93.8	-.0245	-9.5
1892	177	85.1	+97	+54.8	58.70	102.4	-2.61	-4.4	.2617	95.0	-.0212	-8.1
1893	234	112.5	+40	+17.1	58.96	102.8	-2.87	-4.9	.2738	99.3	+.0091	+3.3
1894	213	102.4	+61	+28.6	58.88	102.7	-2.79	-4.7	.2708	98.3	-.0121	-4.5
1895	322	154.8	-48	-14.9	57.30	99.9	-1.21	-2.1	.2911	105.6	+.0082	+2.8
1896	202	97.1	+72	+35.6	55.99	97.6	+1.10	+2.2	.2914	105.7	+.0085	+2.9
1897	174	83.7	+100	+57.5	54.34	94.8	+1.75	+3.2	.2909	105.6	+.0080	+2.8
1898	210	101.0	+64	+30.5	55.45	96.7	+1.64	+1.2	.2830	102.7	+.0001	-.04
1899	226	108.7	+48	+21.2	55.94	97.6	+1.15	+3.8	.2728	99.0	+.0101	+3.7
1900	275	132.2	-1	-4	56.73	98.9	-.64	-1.1	.2797	101.6	+.0032	+1.1
1901	272	130.8	+2	+7	56.43	98.4	-.84	-.6	.2797	101.5	+.0032	+1.1
1902	279	134.1	-5	-1.7	55.64	97.0	+1.45	+8	.2846	103.8	+.0017	-.6
1903	274	131.7	.....	.....	56.09	97.8	.....	.....	.2829	102.6	.....	.....

PATTERN MAKERS, Male.

[Data for employees from 8 establishments for entire period. Data for hours and wages from 8 establishments, 1890; 9 establishments, 1891-1898; 10 establishments, 1899-1903.]

Av. 1890-99.	76	100.0	+33	+43.4	59.59	100.0	-1.61	-2.7	\$0.2789	100.0	+\$0.0398	+14.3
1890	46	60.5	+63	+137.0	59.54	99.9	-1.56	-2.6	.2870	102.9	+.0317	+11.0
1891	62	81.6	+47	+75.8	59.72	100.2	-1.74	-2.9	.2727	97.8	-.0460	-16.9
1892	63	82.9	+46	+73.0	59.72	100.2	-1.74	-2.9	.2724	97.7	-.0463	-17.0
1893	64	84.2	+45	+70.3	59.73	100.2	-1.75	-2.9	.2730	97.9	-.0457	-16.7
1894	77	101.3	+82	+41.6	59.72	100.2	-1.74	-2.9	.2658	95.3	-.0380	-13.5
1895	87	114.5	+22	+25.3	59.60	100.0	-1.62	-2.7	.2807	100.6	+.0404	+14.5
1896	97	127.6	+12	+12.4	59.64	100.1	-1.66	-2.8	.2783	99.8	+.0323	+11.3
1897	76	100.0	+33	+43.4	59.32	99.5	-1.34	-2.3	.2864	102.7	+.0377	+13.4
1898	84	110.5	+25	+29.8	59.47	99.8	-1.49	-2.5	.2810	100.4	+.0275	+9.4
1899	103	135.5	+6	+5	59.42	99.7	-1.44	-2.4	.2912	104.4	+.0203	+6.8
1900	99	130.3	+10	+10.1	59.52	99.9	-1.54	-2.6	.2984	107.0	+.0130	+4.3
1901	95	125.0	+14	+14.7	59.03	99.1	-1.05	-1.8	.3057	109.6	+.0061	+2.0
1902	108	142.1	+1	+9	58.64	98.4	-.66	-1.1	.3126	112.1	.....	.....
1903	109	143.4	.....	.....	57.98	97.3	.....	.....	.3187	114.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

SHIPBUILDING—Continued.

RIGGERS, Male.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890; 8 establishments, 1891-1898; 9 establishments, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	100	100.0	+128	+128.0	57.44	100.0	+1.09	+1.9	\$0.2551	100.0	—\$0.0018	— 0.7
1890	79	79.0	+149	+188.6	57.27	99.7	+1.26	+2.2	.2859	112.1	— .0326	—11.4
1891	70	70.0	+158	+225.7	56.33	98.1	+2.20	+3.9	.2705	106.0	— .0172	— 6.4
1892	100	100.0	+128	+128.0	56.79	98.9	+1.74	+3.1	.2587	101.4	— .0054	— 2.1
1893	119	119.0	+109	+91.6	57.63	100.3	+ .90	+1.6	.2423	95.0	+ .0110	+ 4.5
1894	115	115.0	+118	+98.3	57.33	100.7	+ .70	+1.2	.2216	86.9	+ .0317	+14.3
1895	110	110.0	+118	+107.3	57.92	100.8	+ .61	+1.1	.2369	92.9	+ .0164	+ 6.9
1896	71	71.0	+157	+221.1	57.66	100.4	+ .87	+1.5	.2605	102.1	— .0072	— 2.8
1897	54	54.0	+174	+322.2	57.22	99.6	+1.31	+2.3	.2762	108.3	— .0229	— 8.3
1898	94	94.0	+134	+142.6	57.51	100.1	+1.02	+1.8	.2658	104.2	— .0125	— 4.7
1899	184	184.0	+44	+23.9	58.23	101.4	+ .80	+ .5	.2322	91.0	+ .0211	+ 9.1
1900	244	244.0	— 16	— 6.6	58.59	102.0	— .06	— .1	.2275	89.2	+ .0258	+11.3
1901	98	98.0	+130	+132.7	57.39	99.9	+1.14	+2.0	.2538	99.5	— .0036	— .2
1902	242	242.0	— 14	— 5.8	58.58	102.0	— .05	— .1	.2421	94.9	+ .0112	+ 4.6
1903	228	228.0	.....	.....	58.53	101.9	.....	.....	.2533	99.3	.....	.....

RIVETERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 4 establishments, 1890, 1894, 1895; 5 establishments, 1891-1893, 1896-1898; 6 establishments, 1899-1903.]

Av. 1890-99.	69	100.0	+149	+215.9	59.35	100.0	—0.58	—1.0	\$0.2364	100.0	+\$0.0167	+ 7.1
1890	40	58.0	+178	+445.0	60.00	101.1	—1.23	—2.1	.1936	81.9	+ .0595	+30.7
1891	95	137.7	+123	+129.5	59.69	100.6	— .92	—1.5	.1993	84.3	+ .0538	+27.0
1892	107	155.1	+111	+103.7	59.67	100.5	— .90	—1.5	.2187	92.5	+ .0344	+15.7
1893	11	15.9	+207	+1881.8	58.43	98.4	+ .34	+ .6	.2227	94.2	+ .0304	+13.7
1894	10	14.5	+208	+2080.0	58.45	98.5	+ .32	+ .5	.2014	85.2	+ .0517	+25.7
1895	8	11.6	+210	+2625.0	59.31	99.9	— .54	— .9	.3029	128.1	— .0498	—16.4
1896	16	23.2	+202	+1262.5	59.43	100.1	— .66	—1.1	.2534	107.2	— .0003	— .1
1897	19	27.5	+199	+1047.4	59.29	99.9	— .52	— .9	.2792	118.1	— .0261	— 9.3
1898	171	247.8	+47	+27.5	59.74	100.7	— .97	—1.6	.2453	103.8	+ .0078	+ 3.2
1899	208	301.4	+10	+4.8	59.49	100.2	— .72	—1.2	.2476	104.7	+ .0055	+ 2.2
1900	146	211.6	+72	+49.3	59.46	100.2	— .69	—1.2	.2452	103.7	+ .0079	+ 3.2
1901	229	331.9	—11	—4.8	59.20	99.7	— .43	— .7	.2229	94.3	+ .0302	+13.5
1902	194	281.2	+24	+12.4	58.68	98.9	+ .09	+ .2	.2534	107.2	— .0003	— .1
1903	218	315.9	.....	.....	58.77	99.0	.....	.....	.2531	107.1	.....	.....

SAWYERS, CIRCULAR, Male.

[Data from 5 establishments.]

Av. 1890-99.	9	100.0	+1	+11.1	55.31	100.0	—3.71	— 6.7	\$0.2925	100.0	+\$0.0208	+ 7.1
1890	7	77.8	+3	+42.9	57.43	103.8	—5.83	—10.2	.2737	93.6	+ .0396	+14.5
1891	9	100.0	+1	+11.1	57.33	103.7	—5.78	—10.0	.2829	96.7	+ .0304	+10.7
1892	8	88.9	+2	+25.0	57.00	103.1	—5.40	— 9.5	.2808	96.0	+ .0325	+11.6
1893	9	100.0	+1	+11.1	57.33	103.7	—5.78	—10.0	.2829	96.7	+ .0304	+10.7
1894	9	100.0	+1	+11.1	54.00	97.6	—2.40	— 4.4	.3015	103.1	+ .0118	+ 3.9
1895	9	100.0	+1	+11.1	54.00	97.6	—2.40	— 4.4	.3015	103.1	+ .0118	+ 3.9
1896	8	88.9	+2	+25.0	54.00	97.6	—2.40	— 4.4	.2975	101.7	+ .0158	+ 5.3
1897	9	100.0	+1	+11.1	54.00	97.6	—2.40	— 4.4	.3015	103.1	+ .0118	+ 3.9
1898	9	100.0	+1	+11.1	54.00	97.6	—2.40	— 4.4	.3015	103.1	+ .0118	+ 3.9
1899	9	100.0	+1	+11.1	54.00	97.6	—2.40	— 4.4	.3015	103.1	+ .0118	+ 3.9
1900	8	88.9	+2	+25.0	54.00	97.6	—2.40	— 4.4	.2975	101.7	+ .0158	+ 5.3
1901	9	100.0	+1	+11.1	51.78	93.6	— .18	— .3	.3163	108.1	— .0030	— .9
1902	9	100.0	+1	+11.1	51.78	93.6	— .18	— .3	.3235	110.6	— .0102	— 3.2
1903	10	111.1	.....	.....	51.60	93.8	.....	.....	.3133	107.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (–) in 1903, as compared with previous years, see note on page 718.]

SHIPBUILDING—Concluded.

SPAR MAKERS, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (–) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (–) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (–) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	23	100.0	–2	–8.7	57.21	100.0	–3.21	–5.6	\$0.3557	100.0	–\$0.0091	–2.6
1890	25	108.7	–4	–16.0	57.60	100.7	–3.60	–6.3	.3892	109.4	–.0426	–10.9
1891	24	104.3	–3	–12.5	56.50	98.8	–2.50	–4.4	.3884	109.2	–.0418	–10.8
1892	24	104.3	–3	–12.5	57.00	99.6	–3.00	–5.3	.3775	106.1	–.0309	–8.2
1893	26	113.0	–5	–19.2	57.23	100.0	–3.23	–5.6	.3610	101.5	–.0144	–4.0
1894	20	87.0	+1	+5.0	57.60	100.7	–3.60	–6.3	.3294	92.6	+ .0172	+ 5.2
1895	21	91.3	.....	.....	57.43	100.4	–3.43	–6.0	.3283	92.3	+ .0185	+ 5.6
1896	21	91.3	.....	.....	57.43	100.4	–3.43	–6.0	.3307	93.0	+ .0159	+ 4.8
1897	20	87.0	+1	+5.0	57.30	100.2	–3.30	–5.8	.3322	93.4	+ .0144	+ 4.3
1898	23	100.0	–2	–8.7	56.87	99.4	–2.87	–5.0	.3614	101.8	–.0148	–4.1
1899	23	100.0	–2	–8.7	57.13	99.9	–3.13	–5.5	.3589	100.9	–.0128	–3.4
1900	24	104.3	–3	–12.5	57.25	100.1	–3.25	–5.7	.3461	97.3	+ .0095	+ 1
1901	25	108.7	–4	–16.0	57.12	99.8	–3.12	–5.5	.3564	100.2	–.0098	–2.7
1902	24	104.3	–3	–12.5	57.00	99.6	–3.00	–5.3	.3567	100.3	–.0101	–2.8
1903	21	91.3	.....	.....	64.00	94.4	.....	.....	.3466	97.4	.....	.....

SILK GOODS.

BEAMERS, Male.

[Data for employees from 2 establishments for entire period. Data for hours and wages from 2 establishments, 1890-1896; 3 establishments, 1897-1903.]

Av. 1890-99.	4	100.0	+1	+25.0	57.68	100.0	–0.82	–1.4	\$0.1795	100.0	+\$0.0024	+ 1.3
1890	4	100.0	+1	+25.0	60.00	104.0	–3.14	–5.2	.1875	104.5	–.0068	–3.0
1891	4	100.0	+1	+25.0	60.00	104.0	–3.14	–5.2	.1792	99.8	+ .0027	+ 1.5
1892	3	75.0	+2	+66.7	60.00	104.0	–3.14	–5.2	.1833	102.1	–.0014	–.8
1893	3	75.0	+2	+66.7	56.67	98.2	+ .19	+ .3	.1833	102.1	–.0014	–.8
1894	3	75.0	+2	+66.7	56.67	98.2	+ .19	+ .3	.1833	102.1	–.0014	–.8
1895	4	100.0	+1	+25.0	56.25	97.5	+ .61	+1.1	.1792	99.8	+ .0027	+ 1.5
1896	3	75.0	+2	+66.7	56.67	98.2	+ .19	+ .3	.1833	102.1	–.0014	–.8
1897	4	100.0	+1	+25.0	56.80	98.5	+ .06	+ .1	.1669	93.0	+ .0150	+ 9.0
1898	3	75.0	+2	+66.7	57.60	99.9	–.74	–1.3	.1579	88.0	+ .0240	+15.2
1899	9	225.0	–4	–44.4	56.18	97.4	+ .68	+1.2	.1914	106.6	–.0095	–5.0
1900	3	75.0	+2	+66.7	57.60	99.9	–.74	–1.3	.1673	93.2	+ .0146	+ 8.7
1901	6	150.0	–1	–16.7	56.63	98.2	+ .23	+ .4	.1805	100.6	+ .0014	+ .8
1902	4	100.0	+1	+25.0	57.17	99.1	–.31	–.5	.1799	100.2	+ .0020	+ 1.1
1903	5	125.0	.....	.....	56.86	98.6	.....	.....	.1819	101.3	.....	.....

DOUBLERS, Female.

[Data from 6 establishments.]

Av. 1890-99.	83	100.0	–8	–9.6	58.36	100.0	–1.15	–2.0	\$0.0796	100.0	+\$0.0186	+23.4
1890	64	77.1	+11	+17.2	60.00	102.8	–2.79	–4.7	.0852	107.0	+ .0130	+15.3
1891	65	78.3	+10	+15.4	60.00	102.8	–2.79	–4.7	.0785	98.6	+ .0197	+25.1
1892	82	98.8	–7	–8.5	59.63	102.2	–2.42	–4.1	.0798	99.6	+ .0189	+23.8
1893	95	114.5	–20	–21.1	57.60	98.7	–.39	–.7	.0783	98.4	+ .0199	+25.4
1894	90	108.4	–15	–16.7	57.38	98.3	–.17	–.3	.0810	101.8	+ .0172	+21.2
1895	77	92.8	–2	–2.6	57.60	98.7	–.39	–.7	.0816	102.5	+ .0166	+20.3
1896	84	101.2	–9	–10.7	57.58	98.7	–.37	–.6	.0812	102.0	+ .0170	+20.9
1897	88	106.0	–13	–14.8	57.97	99.3	–.76	–1.3	.0760	95.5	+ .0222	+29.2
1898	93	112.0	–18	–19.4	57.81	99.1	–.60	–1.0	.0779	97.9	+ .0203	+26.1
1899	89	107.2	–14	–15.7	58.02	99.4	–.81	–1.4	.0766	96.2	+ .0216	+28.2
1900	83	100.0	–8	–9.6	57.96	99.3	–.75	–1.3	.0772	97.0	+ .0210	+27.2
1901	83	100.0	–8	–9.6	57.71	98.9	–.50	–.9	.0851	106.9	+ .0131	+15.4
1902	74	89.2	+1	+1.4	57.80	99.0	–.59	–1.0	.0910	114.3	+ .0072	+ 7.9
1903	75	90.4	.....	.....	57.21	98.0	.....	.....	.0982	123.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SILK GOODS—Continued.

DYERS, Male.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	104	100.0	+262	+251.9	58.17	100.0	-3.02	-5.2	\$0.2138	100.0	+\$0.0066	+3.1
1890	76	73.1	+290	+381.6	60.00	103.1	-4.85	-8.1	.2079	97.2	+.0125	+6.0
1891	96	92.3	+270	+281.3	60.00	103.1	-4.85	-8.1	.2054	96.1	+.0150	+7.3
1892	106	101.9	+260	+245.3	60.00	103.1	-4.85	-8.1	.2033	95.1	+.0171	+8.4
1893	91	87.5	+275	+302.2	60.00	103.1	-4.85	-8.1	.1980	92.6	+.0224	+11.3
1894	89	85.6	+277	+311.2	57.42	98.7	-2.27	-4.0	.2158	100.9	+.0046	+2.1
1895	101	97.1	+265	+262.4	57.13	98.2	-1.98	-3.5	.2181	102.0	+.0023	+1.1
1896	102	98.1	+264	+258.8	56.96	97.9	-1.81	-3.2	.2205	103.1	-.0001	-.1
1897	137	131.7	+229	+167.2	56.39	96.9	-1.24	-2.2	.2279	106.6	-.0075	-3.3
1898	124	119.2	+242	+195.2	56.94	97.9	-1.79	-3.1	.2187	102.3	+.0017	+.2
1899	122	117.3	+244	+200.0	56.89	97.8	-1.74	-3.1	.2224	104.0	-.0020	-.2
1900	114	109.6	+252	+221.1	57.06	98.1	-1.91	-3.3	.2220	103.8	-.0016	-.7
1901	148	137.5	+223	+165.9	56.64	97.4	-1.49	-2.6	.2250	105.2	-.0046	-2.0
1902	400	384.6	-34	-8.5	55.15	94.8	.....	.....	.2184	102.2	+.0020	+.2
1903	366	351.9	.....	.....	55.15	94.8	.....	.....	.2204	103.1	.....	.....

LOOM FIXERS, Male.

[Data from 5 establishments.]

Av. 1890-99.	28	100.0	+9	+39.1	56.57	100.0	-0.79	-1.4	\$0.2875	100.0	+\$0.0095	+3.3
1890	16	69.3	+16	+100.0	59.06	104.4	-3.28	-5.6	.2724	94.7	+.0246	+9.0
1891	17	73.4	+15	+88.2	59.12	104.5	-3.34	-5.6	.2696	93.8	+.0274	+10.0
1892	20	87.3	+12	+60.0	57.50	101.6	-1.72	-3.0	.2771	96.4	+.0199	+7.0
1893	19	82.6	+18	+68.4	55.79	98.6	-.01	-.02	.2846	99.0	+.0124	+4.5
1894	22	95.7	+10	+45.5	55.68	98.4	+1.0	+2.2	.2810	97.7	+.0160	+5.0
1895	27	117.4	+5	+18.5	55.56	98.2	+2.22	+4.4	.2980	103.7	+.0010	+.1
1896	25	108.7	+7	+28.0	55.80	98.6	-.02	-.04	.2905	101.0	+.0065	+2.0
1897	29	126.1	+3	+10.3	55.69	98.4	+0.09	+2.2	.2997	104.2	+.0027	+.2
1898	30	130.4	+2	+6.7	55.67	98.4	+1.11	+2.2	.3023	105.1	+.0053	+1.0
1899	29	126.1	+3	+10.3	55.86	98.7	-.08	-1.1	.3000	104.3	+.0030	+1.0
1900	35	152.2	-3	-8.6	55.71	98.5	+0.07	+1.1	.3052	106.2	-.0082	-2.0
1901	33	143.5	-1	-3.0	55.76	98.6	+0.02	+0.4	.3023	105.3	-.0058	-1.0
1902	33	143.5	-1	-3.0	55.76	98.6	+0.02	+0.4	.2962	103.0	+.0008	+.1
1903	32	139.1	.....	.....	55.78	98.6	.....	.....	.2970	103.3	.....	.....

PICKERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	3	100.0	+1	+33.3	60.00	100.0	.....	.....	\$0.2330	100.0	+\$0.0453	+19.0
1890	2	66.7	+2	+100.0	60.00	100.0	.....	.....	.2565	109.7	+.0228	+8.0
1891	4	133.3	.....	.....	60.00	100.0	.....	.....	.2602	111.7	+.0181	+7.0
1892	3	100.0	+1	+33.3	60.00	100.0	.....	.....	.2297	98.6	+.0486	+21.0
1893	3	100.0	+1	+33.3	60.00	100.0	.....	.....	.1961	84.2	+.0822	+41.0
1894	3	100.0	+1	+33.3	60.00	100.0	.....	.....	.2256	96.8	+.0527	+23.0
1895	3	100.0	+1	+33.3	60.00	100.0	.....	.....	.2428	104.2	+.0355	+14.0
1896	3	100.0	+1	+33.3	60.00	100.0	.....	.....	.1919	82.3	+.0864	+45.0
1897	3	100.0	+1	+33.3	60.00	100.0	.....	.....	.2195	94.2	+.0588	+26.0
1898	4	133.3	.....	.....	60.00	100.0	.....	.....	.2576	110.6	+.0207	+8.0
1899	4	133.3	.....	.....	60.00	100.0	.....	.....	.2509	107.7	+.0274	+10.0
1900	4	133.3	.....	.....	60.00	100.0	.....	.....	.2595	111.4	+.0188	+7.0
1901	4	133.3	.....	.....	60.00	100.0	.....	.....	.2500	107.3	+.0283	+11.0
1902	4	133.3	.....	.....	60.00	100.0	.....	.....	.2598	111.5	+.0185	+7.0
1903	4	133.3	.....	.....	60.00	100.0	.....	.....	.2783	119.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SILK GOODS—Continued.

PICKERS, Female.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	31	100.0	+19	+ 61.3	60.00	100.0	.....	.....	\$0.1009	100.0	+\$0.0234	+23.2
1890	15	48.4	+35	+233.3	60.00	100.0	.....	.....	.0857	84.9	+ .0386	+45.0
1891	19	61.3	+31	+163.2	60.00	100.0	.....	.....	.1096	108.6	+ .0147	+13.4
1892	22	71.0	+28	+127.3	60.00	100.0	.....	.....	.1209	119.8	+ .0034	+ 2.8
1893	21	67.7	+29	+133.1	60.00	100.0	.....	.....	.1092	108.2	+ .0151	+13.8
1894	26	83.9	+24	+92.3	60.00	100.0	.....	.....	.0988	97.9	+ .0255	+25.8
1895	32	103.2	+18	+56.3	60.00	100.0	.....	.....	.1018	100.9	+ .0225	+22.1
1896	33	106.5	+17	+51.5	60.00	100.0	.....	.....	.0809	80.2	+ .0434	+53.6
1897	42	135.5	+8	+19.0	60.00	100.0	.....	.....	.0940	93.2	+ .0303	+32.2
1898	45	145.2	+5	+11.1	60.00	100.0	.....	.....	.1024	101.5	+ .0219	+21.4
1899	52	167.7	-2	- 3.8	60.00	100.0	.....	.....	.1057	104.8	+ .0186	+17.6
1900	48	154.8	+2	+ 4.2	60.00	100.0	.....	.....	.1082	107.2	+ .0161	+14.9
1901	55	177.4	-5	- 9.1	60.00	100.0	.....	.....	.1081	107.1	+ .0162	+15.0
1902	59	190.3	-9	-15.3	60.00	100.0	.....	.....	.1048	103.9	+ .0195	+18.6
1903	50	161.8	.....	.....	60.00	100.0	.....	.....	.1243	123.2	.....	.....

QUILLERS, Female.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890-1896; 7 establishments, 1897-1903.]

Av. 1890-99.	91	100.0	+ 24	+26.4	57.26	100.0	-0.75	-1.3	\$0.0917	100.0	+\$0.0072	+ 7.9
1890	74	81.3	+ 41	+55.4	59.57	104.0	-3.06	-5.1	.0945	103.1	+ .0044	+ 4.7
1891	65	71.4	+50	+76.9	59.23	103.4	-2.72	-4.6	.0912	99.5	+ .0077	+ 8.4
1892	76	83.5	+39	+51.3	58.36	101.9	-1.85	-3.2	.0869	94.8	+ .0120	+13.8
1893	79	86.8	+36	+45.6	56.33	98.4	+ .18	+ .3	.0960	104.7	+ .0029	+ 3.0
1894	80	87.9	+35	+43.8	56.19	98.1	+ .32	+ .6	.0833	96.3	+ .0106	+12.0
1895	129	141.8	-14	-10.9	56.05	97.9	+ .46	+ .8	.0893	97.4	+ .0096	+10.8
1896	78	85.7	+37	+47.4	56.41	98.5	+ .10	+ .2	.1007	109.8	- .0018	- 1.8
1897	101	111.0	+14	+13.9	56.85	99.3	- .34	- .6	.0910	99.2	+ .0079	+ 8.7
1898	108	118.7	+7	+ 6.5	56.68	99.0	- .17	- .3	.0910	99.2	+ .0079	+ 8.7
1899	116	127.5	-1	- .9	56.92	99.4	- .41	- .7	.0877	95.6	+ .0112	+12.8
1900	105	115.4	+10	+ 9.5	57.17	99.8	- .66	-1.2	.0879	95.9	+ .0110	+12.5
1901	121	133.0	-6	- 5.0	56.89	99.4	- .38	- .7	.0884	96.4	+ .0105	+11.9
1902	116	127.5	-1	- .9	56.85	99.3	- .34	- .6	.0895	97.6	+ .0094	+10.5
1903	115	126.4	.....	.....	56.51	98.7	.....	.....	.0989	107.9	.....	.....

SPINNERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	85	100.0	+ 81	+ 95.3	58.44	100.0	-0.12	-0.2	\$0.0754	100.0	+\$0.0040	+ 5.3
1890	45	52.9	+121	+268.9	60.00	102.7	-1.68	-2.8	.0778	103.2	+ .0016	+ 2.1
1891	60	70.6	+106	+176.7	60.00	102.7	-1.68	-2.8	.0708	93.9	+ .0086	+12.1
1892	79	92.9	+87	+110.1	58.48	100.1	- .16	- .3	.0753	99.9	+ .0041	+ 5.4
1893	104	122.4	+62	+59.6	57.97	99.2	+ .35	+ .6	.0743	98.5	+ .0051	+ 6.9
1894	76	89.4	+90	+118.4	58.17	99.5	+ .15	+ .3	.0723	95.9	+ .0071	+ 9.8
1895	96	112.9	+70	+72.9	57.79	98.9	+ .53	+ .9	.0752	99.7	+ .0042	+ 5.6
1896	80	94.1	+86	+107.5	57.89	99.1	+ .43	+ .7	.0730	103.4	+ .0014	+ 1.8
1897	90	105.9	+76	+84.4	57.86	99.0	+ .46	+ .8	.0787	104.4	+ .0007	+ .9
1898	110	129.4	+56	+50.9	58.05	99.3	+ .27	+ .5	.0752	99.7	+ .0042	+ 5.6
1899	105	123.5	+61	+58.1	58.23	99.6	+ .09	+ .2	.0765	101.5	+ .0029	+ 3.8
1900	129	151.8	+37	+28.7	58.34	99.8	- .02	- .03	.0733	97.2	+ .0061	+ 8.3
1901	122	143.5	+44	+36.1	58.39	99.9	- .07	- .1	.0794	105.3	.....	.....
1902	156	183.5	+10	+ 6.4	58.31	99.8	+ .01	+ .02	.0779	103.3	+ .0015	+ 1.9
1903	166	195.3	.....	.....	58.32	99.8	.....	.....	.0794	105.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

SILK GOODS—Continued.

TWISTERS-IN, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	24	100.0	— 3	—12.5	56.50	100.0	—1.50	—2.7	\$0.2529	100.0	+\$0.0085	+ 3.
1890	16	66.7	+ 5	+31.3	60.00	106.2	—5.00	—8.3	.2484	98.2	+ .0130	+ 5.
1891	12	50.0	+ 9	+75.0	60.00	106.2	—5.00	—8.3	.2535	100.2	+ .0079	+ 3.
1892	20	83.3	+ 1	+ 5.0	60.00	106.2	—5.00	—8.3	.2542	100.6	+ .0072	+ 2.
1893	22	91.7	— 1	— 4.5	55.00	97.3	.....	.....	.2471	97.7	+ .0145	+ 5.
1894	19	79.2	+ 2	+10.5	55.00	97.3	.....	.....	.2534	104.2	— .0020	— .
1895	12	50.0	+ 9	+75.0	55.00	97.3	.....	.....	.2551	104.6	+ .0037	+ 1.
1896	54	225.0	—33	—61.1	55.00	97.3	.....	.....	.2501	98.9	+ .0113	+ 4.
1897	35	158.3	—17	—44.7	55.00	97.3	.....	.....	.2586	102.3	+ .0028	+ 1.
1898	20	83.3	+ 1	+ 5.0	55.00	97.3	.....	.....	.2407	95.2	+ .0207	+ 8.
1899	24	100.0	+ 3	+12.5	55.00	97.3	.....	.....	.2479	98.0	+ .0135	+ 5.
1900	20	83.3	+ 1	+ 5.0	55.00	97.3	.....	.....	.2594	102.6	+ .0020	+ .
1901	35	145.8	—14	—40.0	55.00	97.3	.....	.....	.2210	87.4	+ .0404	+18.
1902	35	145.8	—14	—40.0	55.00	97.3	.....	.....	.2533	100.2	+ .0081	+ 3.
1903	21	87.5	.....	.....	55.00	97.3	.....	.....	.2614	103.4	.....	.....

WARPERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	36	100.0	+ 5	+13.9	56.08	100.0	—1.08	—1.9	\$0.2416	100.0	+\$0.0300	+12.
1890	31	86.1	+10	+82.3	59.03	105.3	—4.08	—6.8	.2250	93.1	+ .0466	+20.
1891	33	91.7	+ 8	+24.2	59.09	105.4	—4.09	—6.9	.2189	90.6	+ .0527	+24.
1892	35	97.2	+ 6	+17.1	57.71	102.9	—2.71	—4.7	.2366	97.9	+ .0350	+14.
1893	27	75.0	+14	+51.9	55.00	98.1	.....	.....	.2425	100.4	+ .0291	+12.
1894	42	116.7	— 1	— 2.4	55.00	98.1	.....	.....	.2266	93.8	+ .0450	+19.
1895	48	133.3	— 7	—14.6	55.00	98.1	.....	.....	.2661	110.1	+ .0055	+ 1.
1896	82	227.8	+ 9	+28.1	55.00	98.1	.....	.....	.2339	96.8	+ .0377	+16.
1897	44	122.2	— 3	— 6.8	55.00	98.1	.....	.....	.2670	110.5	+ .0046	+ 1.
1898	40	111.1	+ 1	+ 2.5	55.00	98.1	.....	.....	.2538	105.0	+ .0178	+ 7.
1899	28	77.8	+13	+46.4	55.00	98.1	.....	.....	.2458	101.7	+ .0258	+10.
1900	30	83.3	+11	+36.7	55.00	98.1	.....	.....	.2697	111.6	+ .0019	+ .
1901	37	102.8	+ 4	+10.8	55.00	98.1	.....	.....	.2810	116.3	+ .0094	+ 4.
1902	44	122.2	— 3	— 6.8	55.00	98.1	.....	.....	.2966	122.8	— .0250	— 1.
1903	41	113.9	.....	.....	55.00	98.1	.....	.....	.2716	112.4	.....	.....

WARPERS, Female.

[Data for employees from 5 establishments for entire period. Data for hours and wages from establishments, 1890-1896; 6 establishments, 1897-1903.]

Av. 1890-99.	112	100.0	+19	+17.0	58.17	100.0	.....	.....	\$0.1726	100.0	—\$0.0157	— .
1890	101	90.2	+30	+23.7	60.00	103.1	—1.83	—3.1	.1658	96.1	— .0089	— .
1891	113	100.9	+18	+15.9	60.00	103.1	—1.83	—3.1	.1529	88.6	+ .0040	+ .
1892	114	101.8	+17	+14.9	60.00	103.1	—1.83	—3.1	.1685	97.6	— .0116	— .
1893	93	83.0	+38	+40.9	57.26	98.4	+ .91	+1.6	.1791	103.8	— .0222	— 1.
1894	97	86.6	+34	+35.1	56.91	97.8	+1.26	+2.2	.1800	104.3	— .0231	— 1.
1895	112	100.0	+19	+17.0	57.37	98.6	+ .80	+1.4	.1823	105.6	— .0254	— 1.
1896	114	101.8	+17	+14.9	57.24	98.4	+ .79	+1.6	.1916	111.0	— .0347	— 1.
1897	127	113.4	+ 4	+ 3.1	57.38	98.6	+ .42	+ .7	.1825	105.7	— .0256	— 1.
1898	115	102.7	— 2	— 1.5	57.75	99.3	+ .39	+ .7	.1567	90.8	+ .0002	+ .
1899	115	102.7	+16	+13.9	57.78	99.3	+ .39	+ .7	.1666	96.5	— .0097	— .
1900	118	105.4	+13	+11.0	58.23	100.1	— .16	— .2	.1553	90.0	+ .0016	+ .
1901	118	105.4	+13	+11.0	58.30	100.2	— .13	— .2	.1524	88.3	+ .0045	+ .
1902	128	114.3	+ 3	+ 2.3	58.12	99.9	+ .05	+ .1	.1629	94.4	— .0060	— .
1903	131	117.0	.....	.....	58.17	100.0	.....	.....	.1569	90.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SILK GOODS—Continued.

WEAVERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890; 4 establishments, 1891-1896; 5 establishments, 1897-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	212	100.0	- 82	-38.7	56.41	100.0	+0.18	+0.3	\$0.1699	100.0	-\$0.0097	- 5.7
1890	296	139.6	-166	-56.1	58.03	102.9	-1.44	-2.5	.1625	95.6	-.0023	- 1.4
1891	172	81.1	- 42	-24.4	58.47	103.7	-1.88	-3.2	.1665	98.0	-.0063	- 3.8
1892	207	97.6	- 77	-37.2	57.03	101.1	- .44	- .8	.1743	102.6	-.0141	- 8.1
1893	180	84.9	- 50	-27.8	55.42	98.2	+1.17	+2.1	.1798	105.8	-.0196	-10.9
1894	197	92.9	- 67	-34.0	55.39	98.2	+1.20	+2.2	.1719	101.2	-.0117	- 6.8
1895	218	102.8	- 88	-40.4	55.47	98.3	+1.12	+2.0	.1653	97.3	-.0051	- 3.1
1896	164	77.4	- 34	-20.7	55.34	98.1	+1.25	+2.3	.1889	111.2	-.0287	-15.2
1897	214	100.9	- 84	-39.3	56.01	99.8	+ .58	+1.0	.1664	97.9	-.0062	- 3.7
1898	234	110.4	-104	-44.4	56.45	100.1	+ .14	+ .2	.1623	95.5	-.0021	- 1.3
1899	235	110.8	-105	-44.7	56.51	100.2	+ .08	+ .1	.1608	94.6	-.0006	- .4
1900	185	87.8	- 55	-29.7	56.54	100.2	+ .05	+ .1	.1680	98.9	-.0078	- 4.6
1901	177	83.5	- 47	-26.6	56.74	100.6	+ .15	+ .3	.1542	90.8	-.0060	+ 3.9
1902	162	76.4	- 32	-19.8	56.90	100.9	- .31	- .6	.1654	97.4	-.0052	- 3.1
1903	130	61.8	.....	.....	56.59	100.3	.....	.....	.1602	94.3	.....	.....

WEAVERS, Female.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890-1896; 7 establishments, 1897-1903.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.
Av. 1890-99.	408	100.0	+221 + 54.2	58.14	100.0	-0.15 -0.8	\$0.1550	100.0	-\$0.0016 - 1.0
1890	340	83.8	+501 +147.4	58.60	100.8	- .61 -1.0	.1482	95.6	-.0062 - 3.5
1891	268	65.7	+573 +213.8	59.32	102.0	-1.38 -2.2	.1393	89.9	-.0141 +10.1
1892	351	86.0	+490 +139.6	58.46	100.6	- .47 - .8	.1559	100.6	-.0025 - 1.6
1893	350	85.8	+491 +140.3	57.37	98.7	+ .62 +1.1	.1631	105.2	-.0097 - 5.9
1894	407	99.8	+434 +106.6	57.58	99.0	+ .41 + .7	.1721	111.0	-.0187 -10.9
1895	454	111.3	+387 +85.2	57.37	98.7	+ .62 +1.1	.1565	101.0	-.0031 - 2.0
1896	425	104.2	+416 +97.9	58.25	100.2	- .26 - .4	.1756	113.3	-.0222 -12.6
1897	457	112.0	+319 +61.1	58.19	100.1	- .20 - .3	.1490	96.1	-.0044 + 3.0
1898	532	130.4	+161 +23.7	58.11	99.9	- .12 - .2	.1465	94.5	-.0069 + 4.7
1899	492	120.6	+217 +34.8	58.16	100.0	- .17 - .3	.1439	92.8	-.0095 + 6.6
1900	462	113.2	+223 +36.1	58.17	100.1	- .18 - .3	.1489	96.1	-.0045 + 3.0
1901	598	146.6	+ 89 +11.8	57.65	99.2	+ .34 + .6	.1457	94.0	-.0077 + 5.3
1902	622	152.5	+ 14 + 1.7	57.81	99.4	+ .18 + .3	.1557	100.5	-.0023 - 1.5
1903	629	154.2	.....	57.99	99.7	.....	.1534	99.0	.....

WEAVERS, RIBBON, Male.

[Data from 2 establishments.]

Year.	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.	Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.
Av. 1890-99.	118	100.0	-17.8 -15.8	56.15	100.0	-1.15 -2.0	\$0.2374	100.0	-\$0.0318 -13.2
1890	123	104.2	-26 -21.1	58.98	105.0	-3.98 -6.7	.2765	116.5	-.0704 -25.5
1891	95	80.5	+ 2 + 2.1	58.42	104.0	-3.42 -5.9	.2335	98.4	-.0274 -11.7
1892	113	95.8	-16 -14.2	59.12	105.3	-4.12 -7.0	.2343	98.7	-.0282 -12.0
1893	106	89.8	- 9 - 8.5	55.00	98.0	.....	.2542	107.1	-.0481 -18.9
1894	153	129.7	-56 -36.6	55.00	98.0	.....	.2141	90.2	-.0080 - 3.7
1895	144	122.0	-47 -32.6	55.00	98.0	.....	.2377	100.1	-.0316 -13.3
1896	93	78.8	+ 4 + 4.3	55.00	98.0	.....	.2425	102.1	-.0364 -15.0
1897	118	100.0	-21 -17.8	55.00	98.0	.....	.2105	88.7	-.0044 - 2.1
1898	153	129.7	-56 -36.6	55.00	98.0	.....	.2352	99.1	-.0291 -12.4
1899	80	67.8	+17 +21.3	55.00	98.0	.....	.2350	99.0	-.0289 -12.3
1900	116	98.3	-19 -16.4	55.00	98.0	.....	.2208	93.0	-.0147 - 6.7
1901	67	56.8	+30 +44.8	55.00	98.0	.....	.1979	83.4	-.0082 + 4.1
1902	58	49.2	+39 +67.2	55.00	98.0	.....	.1965	82.8	-.0096 + 4.9
1903	97	82.2	.....	55.00	98.0	.....	.2061	86.8	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SILK GOODS—Concluded.

WEAVERS, RIBBON, Female.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890-1899; 2 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	59	100.0	+13	+22.0	55.00	100.0	.....	.....	\$0.2329	100.0	-\$0.0240	-10.3
1890	80	135.6	-8	-10.0	55.00	100.0	.....	.....	.2312	99.3	-.0223	-9.6
1891	60	101.7	+12	+20.0	55.00	100.0	.....	.....	.2375	102.0	-.0286	-12.0
1892	60	101.7	+12	+20.0	55.00	100.0	.....	.....	.2333	100.2	-.0244	-10.5
1893	45	76.3	+27	+60.0	55.00	100.0	.....	.....	.2361	101.4	-.0272	-11.5
1894	45	76.3	+27	+60.0	55.00	100.0	.....	.....	.2333	100.2	-.0244	-10.5
1895	55	93.2	+17	+30.9	55.00	100.0	.....	.....	.2227	95.6	-.0138	-6.2
1896	70	118.6	+2	+2.9	55.00	100.0	.....	.....	.2321	99.7	-.0232	-10.0
1897	50	84.7	+22	+44.0	55.00	100.0	.....	.....	.2275	97.7	-.0186	-8.2
1898	55	93.2	+17	+30.9	55.00	100.0	.....	.....	.2423	104.0	-.0334	-13.8
1899	65	110.2	+7	+10.8	55.00	100.0	.....	.....	.2330	100.0	-.0241	-10.8
1900	70	118.6	+2	+2.9	55.00	100.0	.....	.....	.2218	95.2	-.0129	-5.8
1901	40	67.8	+32	+80.0	55.00	100.0	.....	.....	.2221	95.4	-.0132	-5.9
1902	95	161.0	-23	-24.2	55.00	100.0	.....	.....	.1971	84.6	+.0118	+6.0
1903	72	122.0	.....	.....	55.00	100.0	.....	.....	.2089	89.7	.....	.....

WINDERS, Female.

[Data from 9 establishments.]

Av. 1890-99.	256	100.0	+34	+13.3	58.06	100.0	-0.39	-0.7	\$0.0972	100.0	+\$0.0149	+15.1
1890	244	95.3	+46	+18.9	59.79	103.0	-2.12	-3.5	.0982	95.9	+.0189	+20.1
1891	212	82.8	+78	+36.8	59.88	103.1	-2.21	-3.7	.0819	84.3	+.0302	+36.1
1892	248	96.9	+42	+16.9	59.33	102.2	-1.66	-2.8	.0902	92.8	+.0219	+24.1
1893	263	102.7	+27	+10.3	57.13	98.4	+.54	+.9	.0956	98.4	+.0165	+17.1
1894	238	93.0	+52	+21.8	57.32	98.7	+.35	+.6	.1038	106.8	+.0083	+8.1
1895	271	105.9	+19	+7.0	57.28	98.7	+.39	+.7	.1032	106.2	+.0089	+8.1
1896	245	95.7	+45	+18.4	57.47	99.0	+.20	+.3	.1003	103.2	+.0118	+11.1
1897	264	103.1	+26	+9.8	57.48	99.0	+.19	+.3	.0986	101.4	+.0135	+13.1
1898	293	114.5	-3	-1.0	57.33	98.8	+.29	+.5	.1044	107.4	+.0077	+7.1
1899	278	108.6	+12	+4.3	57.53	99.1	+.14	+.2	.1004	103.3	+.0117	+11.1
1900	276	107.8	+14	+5.1	57.63	99.3	+.04	+.1	.1024	105.3	+.0097	+9.1
1901	280	109.4	+10	+3.6	57.55	99.1	+.12	+.2	.1060	109.1	+.0061	+5.1
1902	233	110.5	+7	+2.5	57.57	99.2	+.10	+.2	.1081	111.2	+.0040	+3.1
1903	290	113.3	.....	.....	57.67	99.3	.....	.....	.1121	115.3	.....	.....

SLAUGHTERING AND MEAT PACKING.

BACK SKINNERS, CATTLE, Male.

[Data from 4 establishments.]

Av. 1890-99.	15	100.0	+8	+20.0	51.95	100.0	-1.45	-2.8	\$0.3643	100.0	+\$0.0926	+25.1
1890	12	80.0	+6	+50.0	50.92	98.0	-.42	-.8	.3750	102.9	+.0819	+21.1
1891	12	80.0	+6	+50.0	50.92	98.0	-.42	-.8	.3750	102.9	+.0819	+21.1
1892	12	80.0	+6	+50.0	50.92	98.0	-.42	-.8	.3813	104.7	+.0756	+19.1
1893	15	100.0	+3	+20.0	52.78	101.5	-2.23	-4.2	.3800	104.3	+.0769	+20.1
1894	15	100.0	+3	+20.0	52.73	101.5	-2.23	-4.2	.3500	96.1	+.1069	+50.1
1895	16	106.7	+2	+12.5	52.25	100.6	-1.75	-3.3	.3500	96.1	+.1069	+50.1
1896	16	106.7	+2	+12.5	52.25	100.6	-1.75	-3.3	.3500	96.1	+.1069	+50.1
1897	16	106.7	+2	+12.5	52.25	100.6	-1.75	-3.3	.3500	96.1	+.1069	+50.1
1898	16	106.7	+2	+12.5	52.25	100.6	-1.75	-3.3	.3563	97.8	+.1006	+28.1
1899	16	106.7	+2	+12.5	52.25	100.6	-1.75	-3.3	.3750	102.9	+.0819	+21.1
1900	16	106.7	+2	+12.5	52.25	100.6	-1.75	-3.3	.4000	109.8	+.0569	+14.1
1901	16	106.7	+2	+12.5	52.25	100.6	-1.75	-3.3	.4000	109.8	+.0569	+14.1
1902	18	120.0	.....	.....	50.50	97.2	.....	.....	.4131	114.8	+.0388	+9.1
1903	18	120.0	.....	.....	50.50	97.2	.....	.....	.4569	125.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SLAUGHTERING AND MEAT PACKING—Continued.

DRY SALTERS, Male.

[Data from 6 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	172	100.0	+ 77	+ 44.8	60.00	100.0	-0.02	-0.03	\$0.1693	100.0	+\$0.0194	+11.5
1890	114	66.3	+135	+118.4	60.00	100.0	—	—	.1785	105.4	+ .0102	+ 5.7
1891	114	66.3	+135	+118.4	60.00	100.0	—	—	.1769	104.5	+ .0115	+ 6.7
1892	118	68.6	+131	+111.0	60.00	100.0	—	—	.1779	105.1	+ .0108	+ 6.1
1893	127	73.8	+122	+ 96.1	60.00	100.0	—	—	.1764	104.2	+ .0122	+ 7.0
1894	156	90.7	+ 93	+ 59.6	60.00	100.0	—	—	.1646	97.2	+ .0241	+14.6
1895	186	108.1	+ 63	+ 33.9	60.00	100.0	—	—	.1611	95.2	+ .0276	+17.1
1896	206	119.8	+ 43	+ 20.9	60.00	100.0	—	—	.1610	95.1	+ .0277	+17.2
1897	241	140.1	+ 8	+ 3.3	60.00	100.0	—	—	.1590	93.9	+ .0297	+18.7
1898	253	147.1	- 4	- 1.6	60.00	100.0	—	—	.1654	97.7	+ .0233	+14.1
1899	201	116.9	+ 43	+ 23.9	60.00	100.0	—	—	.1725	101.9	+ .0162	+ 9.4
1900	222	129.1	+ 27	+ 12.2	60.00	100.0	—	—	.1678	99.1	+ .0209	+12.5
1901	216	125.6	+ 33	+ 15.3	60.00	100.0	—	—	.1702	100.5	+ .0185	+10.9
1902	223	129.7	+ 26	+ 11.7	59.98	100.0	—	—	.1797	106.1	+ .0090	+ 5.0
1903	249	144.8	.....	.....	59.98	100.0	.....	.....	.1887	111.6	.....	.....

GUTTERS, CATTLE, Male.

[Data from 5 establishments.]

Av. 1890-99.	16	100.0	+3	+18.8	52.48	100.0	-1.48	-2.8	\$0.2171	100.0	+\$0.0433	+19.9
890	13	81.3	+6	+46.2	51.62	98.4	—	—	.2231	102.8	+ .0373	+16.7
891	13	81.3	+6	+46.2	51.62	98.4	—	—	.2231	102.8	+ .0373	+16.7
892	13	81.3	+6	+46.2	51.62	98.4	—	—	.2238	105.4	+ .0316	+13.8
893	16	100.0	+3	+18.8	53.19	101.4	-2.19	-4.1	.2381	105.1	+ .0673	+23.2
894	16	100.0	+3	+18.8	53.19	101.4	-2.19	-4.1	.2031	93.6	+ .0673	+23.2
895	17	106.3	+2	+11.8	52.71	100.4	-1.71	-3.2	.2113	97.6	+ .0486	+22.9
896	17	106.3	+2	+11.8	52.71	100.4	-1.71	-3.2	.2118	97.6	+ .0486	+22.9
897	17	106.3	+2	+11.8	52.71	100.4	-1.71	-3.2	.2118	97.6	+ .0486	+22.9
898	17	106.3	+2	+11.8	52.71	100.4	-1.71	-3.2	.2147	98.9	+ .0457	+21.3
899	17	106.3	+2	+11.8	52.71	100.4	-1.71	-3.2	.2147	98.9	+ .0457	+21.3
900	17	106.3	+2	+11.8	52.71	100.4	-1.71	-3.2	.2265	104.3	+ .0339	+15.0
901	17	106.3	+2	+11.8	52.71	100.4	-1.71	-3.2	.2324	107.0	+ .0280	+12.0
902	20	125.0	-1	- 5.0	51.45	98.0	—	—	.2438	112.3	+ .0166	+ 6.8
903	19	118.8	.....	.....	51.00	97.2	.....	.....	.2604	119.9	.....	.....

GUTTERS, HOG, Male.

[Data from 5 establishments.]

v. 1890-99.	13	100.0	+2	+15.4	56.14	100.0	+0.13	+0.2	\$0.3150	100.0	-\$0.0022	-0.7
990	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
991	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
992	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
993	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
994	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
995	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
996	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
997	13	100.0	+2	+15.4	56.08	99.9	+ .19	+ .3	.3154	100.1	— .0026	— .8
998	14	107.7	+1	+ 7.1	56.36	100.4	— .09	— .2	.3107	98.6	+ .0021	+ .7
999	14	107.7	+1	+ 7.1	56.36	100.4	— .09	— .2	.3161	100.3	— .0083	-1.0
100	14	107.7	+1	+ 7.1	56.36	100.4	— .09	— .2	.3132	99.4	— .0004	— .1
101	15	115.4	.....	.....	56.60	100.8	— .33	- 6	.3090	98.1	+ .0038	+1.2
102	15	115.4	.....	.....	56.27	100.2	.....	.....	.3090	98.1	+ .0038	+1.2
103	15	115.4	.....	.....	56.27	100.2	.....	.....	.3128	99.3	.....	.....

TABLE II.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SLAUGHTERING AND MEAT PACKING—Continued.

HEADERS, CATTLE, Male.

[Data from 5 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	17	100.0		+2	53.21	100.0	-2.21	-4.2	\$0.2689	100.0	+\$0.0621	+23.
1890	18	105.9		+1	58.94	101.4	-2.94	-5.5	.2630	97.8	+ .0680	+25.
1891	18	105.9		+1	58.94	101.4	-2.94	-5.5	.2630	97.8	+ .0680	+25.
1892	18	105.9		+1	58.94	101.4	-2.94	-5.5	.2630	97.8	+ .0680	+25.
1893	17	100.0		+2	53.59	100.7	-2.59	-4.8	.2744	102.0	+ .0566	+20.
1894	17	100.0		+2	53.59	100.7	-2.59	-4.8	.2633	97.9	+ .0677	+25.
1895	17	100.0		+2	52.71	99.1	-1.71	-3.2	.2717	101.0	+ .0593	+24.
1896	17	100.0		+2	52.71	99.1	-1.71	-3.2	.2650	98.5	+ .0660	+24.
1897	17	100.0		+2	52.71	99.1	-1.71	-3.2	.2733	101.6	+ .0577	+21.
1898	16	94.1		+3	62.25	98.2	-1.25	-2.4	.2842	105.7	+ .0468	+16.
1899	17	100.0		+2	52.71	99.1	-1.71	-3.2	.2684	99.8	+ .0626	+23.
1900	17	100.0		+2	52.71	99.1	-1.71	-3.2	.2899	107.8	+ .0411	+14.
1901	16	94.1		+3	52.25	98.2	-1.25	-2.4	.2885	107.3	+ .0425	+14.
1902	19	111.8			51.00	95.9			.3059	113.8	+ .0251	+ 8.
1903	19	111.8			51.00	95.9			.3310	123.1		

HEADERS, HOG, Male.

[Data from 6 establishments.]

Av. 1890-99.	7	100.0		-1	52.59	100.0	+0.74	+1.4	\$0.2642	100.0	+\$0.0175	+ 6.
1890	8	114.3		-2	51.00	97.0	+2.33	+4.6	.2563	97.0	+ .0254	+ 9.
1891	8	114.3		-2	51.00	97.0	+2.33	+4.6	.2563	97.0	+ .0254	+ 9.
1892	8	114.3		-2	51.00	97.0	+2.33	+4.6	.2563	97.0	+ .0254	+ 9.
1893	8	114.3		-2	51.00	97.0	+2.33	+4.6	.2844	107.6	+ .0027	- .
1894	8	114.3		-2	51.00	97.0	+2.33	+4.6	.2844	107.6	+ .0027	- .
1895	6	85.7			54.17	103.0	- .84	-1.6	.2625	99.4	+ .0192	+ 7.
1896	6	85.7			54.17	103.0	- .84	-1.6	.2625	99.4	+ .0192	+ 7.
1897	6	85.7			54.17	103.0	- .84	-1.6	.2625	99.4	+ .0192	+ 7.
1898	6	85.7			54.17	103.0	- .84	-1.6	.2625	99.4	+ .0192	+ 7.
1899	6	85.7			54.17	103.0	- .84	-1.6	.2542	96.2	+ .0275	+10.
1900	6	85.7			54.17	103.0	- .84	-1.6	.2625	99.4	+ .0192	+ 7.
1901	6	85.7			54.17	103.0	- .84	-1.6	.2625	99.4	+ .0192	+ 7.
1902	6	85.7			53.33	101.4			.2583	97.8	+ .0234	+ 9.
1903	6	85.7			53.33	101.4			.2817	106.6		

LABORERS, Male.

[Data from 4 establishments.]

Av. 1890-99.	4,448	100.0		+1.912	60.00	100.0			\$0.1619	100.0	+\$0.0127	+ 7.
1890	3,785	85.1		+2.575	68.00	100.0			.1702	105.1	+ .0044	+ 2.
1891	3,885	87.8		+2.475	63.7	100.0			.1700	105.0	+ .0046	+ 2.
1892	4,085	90.7		+2.325	57.6	100.0			.1702	105.1	+ .0044	+ 2.
1893	3,955	88.9		+2.405	60.8	100.0			.1709	105.6	+ .0037	+ 2.
1894	4,435	99.7		+1.925	43.4	100.0			.1544	95.4	+ .0202	+15.
1895	4,505	101.3		+1.855	41.2	100.0			.1537	94.9	+ .0209	+15.
1896	4,505	101.3		+1.855	41.2	100.0			.1580	94.5	+ .0216	+15.
1897	4,815	108.8		+1.545	32.1	100.0			.1586	94.9	+ .0210	+15.
1898	4,965	111.6		+1.895	28.1	100.0			.1586	98.0	+ .0160	+10.
1899	5,590	125.7		+ 770	13.8	100.0			.1643	101.5	+ .0103	+ 6.
1900	5,500	130.4		+ 560	9.7	100.0			.1586	98.0	+ .0160	+10.
1901	6,110	137.4		+ 250	4.1	100.0			.1574	97.2	+ .0172	+10.
1902	6,420	144.3		- 60	- 9	100.0			.1644	101.5	+ .0102	+ 6.
1903	6,360	143.0				100.0			.1746	107.8		

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

SLAUGHTERING AND MEAT PACKING—Continued.

PICKLERS, Male.

[Data from 7 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	355	100.0	+211	+ 59.4	60.00	100.0	-0.01	-0.02	\$0.1642	100.0	+\$0.0230	+14.0
1890	216	60.8	+350	+162.0	60.00	100.0	— .01	— .02	.1708	104.0	+ .0164	+ 9.6
1891	245	69.0	+321	+131.0	60.00	100.0	— .01	— .02	.1696	103.3	+ .0176	+10.4
1892	251	70.7	+315	+125.5	60.00	100.0	— .01	— .02	.1698	103.4	+ .0174	+10.2
1893	265	74.6	+301	+113.6	60.00	100.0	— .01	— .02	.1698	103.4	+ .0174	+10.2
1894	315	88.7	+251	+ 79.7	60.00	100.0	— .01	— .02	.1580	96.2	+ .0292	+13.5
1895	372	104.8	+194	+ 52.2	60.00	100.0	— .01	— .02	.1561	95.1	+ .0311	+19.9
1896	410	115.6	+156	+ 38.0	60.00	100.0	— .01	— .02	.1568	95.5	+ .0304	+19.4
1897	433	136.1	+ 83	+ 17.2	60.00	100.0	— .01	— .02	.1590	96.8	+ .0282	+17.7
1898	522	147.0	+ 44	+ 8.4	60.00	100.0	— .01	— .02	.1639	99.8	+ .0233	+14.2
1899	470	132.4	+ 96	+ 20.4	60.00	100.0	— .01	— .02	.1678	102.2	+ .0194	+11.6
1900	435	136.6	+ 81	+ 16.7	60.00	100.0	— .01	— .02	.1650	100.5	+ .0222	+13.5
1901	535	150.7	+ 31	+ 5.8	60.00	100.0	— .01	— .02	.1655	100.8	+ .0217	+13.1
1902	546	153.8	+ 20	+ 3.7	59.99	100.0	.....	.....	.1772	107.9	+ .0100	+ 5.6
1903	566	159.4	.....	.....	59.99	100.0	.....	.....	.1872	114.0	.....	.....

RUMP SKINNERS, CATTLE, Male.

[Data from 2 establishments.]

Av. 1890-99.	6	100.0	.....	.....	60.00	100.0	.....	.....	\$0.3158	100.0	+\$0.0925	+29.3
1890	4	66.7	+2	+50.0	60.00	100.0	.....	.....	.3250	102.9	+ .0833	+25.6
1891	4	66.7	+2	+50.0	60.00	100.0	.....	.....	.3250	102.9	+ .0833	+25.6
1892	4	66.7	+2	+50.0	60.00	100.0	.....	.....	.3250	102.9	+ .0833	+25.6
1893	6	100.0	.....	.....	60.00	100.0	.....	.....	.3167	100.3	+ .0916	+28.9
1894	6	100.0	.....	.....	60.00	100.0	.....	.....	.3000	95.0	+ .1083	+36.1
1895	6	100.0	.....	.....	60.00	100.0	.....	.....	.3000	95.0	+ .1083	+36.1
1896	6	100.0	.....	.....	60.00	100.0	.....	.....	.3000	95.0	+ .1083	+36.1
1897	6	100.0	.....	.....	60.00	100.0	.....	.....	.3000	95.0	+ .1083	+36.1
1898	6	100.0	.....	.....	60.00	100.0	.....	.....	.3167	100.3	+ .0916	+28.9
1899	7	116.7	-1	-14.3	60.00	100.0	.....	.....	.3500	110.8	+ .0583	+16.7
1900	7	116.7	-1	-14.3	60.00	100.0	.....	.....	.3500	110.8	+ .0583	+16.7
1901	7	116.7	-1	-14.3	60.00	100.0	.....	.....	.3500	110.8	+ .0583	+16.7
1902	7	116.7	-1	-14.3	60.00	100.0	.....	.....	.3750	118.7	+ .0333	+ 8.9
1903	6	100.0	.....	.....	60.00	100.0	.....	.....	.4033	129.3	.....	.....

SCRAPERS, HOG, Male.

[Data from 5 establishments.]

Av. 1890-99.	19	100.0	-8	-42.1	48.42	100.0	-0.06	-0.1	\$0.2634	100.0	-\$0.0111	- 4.2
1890	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2750	104.4	— .0227	- 8.3
1891	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2750	104.4	— .0227	- 8.3
1892	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2750	104.4	— .0227	- 8.3
1893	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2750	104.4	— .0227	- 8.3
1894	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2763	104.9	— .0240	- 8.7
1895	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2763	104.9	— .0240	- 8.7
1896	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2763	104.9	— .0240	- 8.7
1897	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2763	104.9	— .0240	- 8.7
1898	19	100.0	-8	-42.1	48.63	100.4	— .27	— .6	.2132	80.9	+ .0891	+13.3
1899	16	84.2	-5	-31.3	46.50	96.0	+1.36	+4.0	.2156	81.9	+ .0367	+17.0
1900	11	57.9	.....	.....	48.82	100.8	— .46	— .9	.2682	101.8	— .0159	- 5.9
1901	11	57.9	.....	.....	48.82	100.8	— .46	— .9	.2545	96.6	— .0022	- .9
1902	11	57.9	.....	.....	48.36	99.9	.....	.....	.2545	96.6	— .0022	- .9
1903	11	57.9	.....	.....	48.36	99.9	.....	.....	.2523	95.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SLAUGHTERING AND MEAT PACKING—Continued.

SIDE SKINNERS, CATTLE, Male.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	41	100.0	+ 6	+14.6	51.30	100.0	-0.90	-1.8	\$0.4208	100.0	+\$0.0691	+16.4
1890	36	87.8	+11	+30.6	50.44	98.3	-.04	-.1	.4389	104.8	+.0510	+11.6
1891	36	87.8	+11	+30.6	50.44	98.3	-.04	-.1	.4389	104.8	+.0510	+11.6
1892	36	87.8	+11	+30.6	50.44	98.3	-.04	-.1	.4500	106.9	+.0399	+ 8.9
1893	42	102.4	+ 5	+11.9	51.81	101.0	-1.41	-2.7	.4500	106.9	+.0399	+ 8.9
1894	42	102.4	+ 5	+11.9	51.81	101.0	-1.41	-2.7	.4000	95.1	+.0899	+22.2
1895	43	104.9	+ 4	+ 9.3	51.65	100.7	-1.25	-2.4	.4000	95.1	+.0899	+22.2
1896	43	104.9	+ 4	+ 9.3	51.65	100.7	-1.25	-2.4	.4000	95.1	+.0899	+22.2
1897	43	104.9	+ 4	+ 9.3	51.65	100.7	-1.25	-2.4	.4000	95.1	+.0899	+22.2
1898	43	104.9	+ 4	+ 9.3	51.65	100.7	-1.25	-2.4	.4070	95.7	+.0829	+20.4
1899	44	107.8	+ 3	+ 6.8	51.50	100.4	-1.10	-2.1	.4227	100.5	+.0672	+15.1
1900	44	107.8	+ 3	+ 6.8	51.50	100.4	-1.10	-2.1	.4500	106.9	+.0399	+ 8.9
1901	45	109.8	+ 2	+ 4.1	51.36	100.1	-.96	-1.9	.4500	106.9	+.0399	+ 8.9
1902	49	119.5	- 2	- 4.1	50.80	99.0	-.40	-.8	.4684	111.8	+.0215	+ 4.9
1903	47	114.6	.....	.....	50.40	98.2	.....	.....	.4899	116.4	.....	.....

SPLITTERS, CATTLE, Male.

[Data from 4 establishments.]

Av. 1890-99.	23	100.0	+6	+26.1	50.97	100.0	-0.63	-1.2	\$0.4211	100.0	+\$0.0686	+16.4
1890	21	91.3	+8	+39.0	50.33	98.7	+ .01	+ .02	.4405	104.6	+.0492	+11.6
1891	21	91.3	+8	+39.0	50.33	98.7	+ .01	+ .02	.4405	104.6	+.0492	+11.6
1892	21	91.3	+8	+39.0	50.33	98.7	+ .01	+ .02	.4500	106.9	+.0397	+ 8.9
1893	23	100.0	+0	+26.1	51.17	100.4	-.83	-1.6	.4500	106.9	+.0397	+ 8.9
1894	23	100.0	+0	+26.1	51.17	100.4	-.83	-1.6	.4000	95.0	+.0897	+22.2
1895	25	108.7	+4	+16.0	51.28	100.6	-.94	-1.8	.4000	95.0	+.0897	+22.2
1896	25	108.7	+4	+16.0	51.28	100.6	-.94	-1.8	.4000	95.0	+.0897	+22.2
1897	25	108.7	+4	+16.0	51.28	100.6	-.94	-1.8	.4000	95.0	+.0897	+22.2
1898	25	108.7	+4	+16.0	51.28	103.6	-.94	-1.8	.4080	95.9	+.0817	+20.4
1899	25	108.7	+4	+16.0	51.28	100.6	-.94	-1.8	.4220	100.2	+.0677	+16.4
1900	25	108.7	+4	+16.0	51.28	100.6	-.94	-1.8	.4500	106.9	+.0397	+ 8.9
1901	25	108.7	+4	+16.0	51.28	100.6	-.94	-1.8	.4500	106.9	+.0397	+ 8.9
1902	28	121.7	+1	+ 3.6	50.54	99.2	-.20	-.4	.4688	111.8	+.0209	+ 4.9
1903	29	126.1	.....	.....	50.34	98.8	.....	.....	.4897	116.8	.....	.....

SPLITTERS, HOG, Male.

[Data from 6 establishments.]

Av. 1890-99.	14	100.0	+3	+21.4	53.56	100.0	-0.21	-0.4	\$0.2795	100.0	+\$0.0264	+ 9.9
1890	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2750	98.4	+.0309	+11.6
1891	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2750	98.4	+.0309	+11.6
1892	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2750	98.4	+.0309	+11.6
1893	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2768	99.0	+.0291	+10.0
1894	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2768	99.0	+.0291	+10.0
1895	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2821	100.9	+.0238	+ 8.9
1896	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2821	100.9	+.0238	+ 8.9
1897	14	100.0	+3	+21.4	53.64	100.1	-.29	-.5	.2821	100.9	+.0238	+ 8.9
1898	16	114.3	+1	+ 6.3	53.25	99.4	+ .10	+ .2	.2828	101.2	+.0231	+ 8.9
1899	16	114.3	+1	+ 6.3	53.25	99.4	+ .10	+ .2	.2875	102.9	+.0184	+ 6.9
1900	16	114.3	+1	+ 6.3	53.25	99.4	+ .10	+ .2	.2875	102.9	+.0184	+ 6.9
1901	17	121.4	.....	.....	53.65	100.2	-.30	-.6	.2852	102.0	+.0207	+ 7.9
1902	17	121.4	.....	.....	53.35	99.6	.....	.....	.2852	102.0	+.0207	+ 7.9
1903	17	121.4	.....	.....	53.35	99.6	.....	.....	.3059	109.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899 = 100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

SLAUGHTERING AND MEAT PACKING—Concluded.

STICKERS, CATTLE, Male.

[Data from 5 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	9	100.0	+1	+11.1	54.78	100.0	+0.52	+0.9	\$0.2718	100.0	+\$0.0415	+15.3
1890	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2815	103.6	+ .0318	+11.3
1891	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2815	103.6	+ .0318	+11.3
1892	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2815	103.6	+ .0318	+11.3
1893	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2815	103.6	+ .0318	+11.3
1894	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2648	97.4	+ .0485	+18.3
1895	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2648	97.4	+ .0485	+18.3
1896	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2648	97.4	+ .0485	+18.3
1897	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2648	97.4	+ .0485	+18.3
1898	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2648	97.4	+ .0485	+18.3
1899	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2676	98.5	+ .0457	+17.1
1900	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2759	101.5	+ .0374	+13.6
1901	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2759	101.5	+ .0374	+13.6
1902	9	100.0	+1	+11.1	54.78	100.0	+ .52	+ .9	.2954	108.7	+ .0179	+ 6.1
1903	10	111.1	.....	.....	55.80	100.9	.....	.....	.8133	115.3	.....	.....

STICKERS, HOG, Male.

[Data from 6 establishments.]

Av. 1890-99.	6	100.0	.....	.....	54.17	100.0	−0.84	−1.6	\$0.2638	100.0	+\$0.0362	+13.7
890	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2625	99.5	+ .0375	+14.3
891	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2625	99.5	+ .0375	+14.3
892	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2625	99.5	+ .0375	+14.3
893	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2583	97.9	+ .0417	+16.1
894	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2583	97.9	+ .0417	+16.1
895	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2625	99.5	+ .0375	+14.3
896	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2625	99.5	+ .0375	+14.3
897	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2667	101.1	+ .0333	+12.5
898	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2667	101.1	+ .0333	+12.5
899	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2750	104.2	+ .0250	+ 9.1
900	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2750	104.2	+ .0250	+ 9.1
901	6	100.0	.....	.....	54.17	100.0	− .84	−1.6	.2750	104.2	+ .0250	+ 9.1
902	6	100.0	.....	.....	53.33	98.4	.....	.....	.2792	105.8	+ .0208	+ 7.4
903	6	100.0	.....	.....	53.33	98.4	.....	.....	.8000	113.7	.....	.....

SOAP.

BOILERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	3	100.0	.....	.....	60.00	100.0	.....	.....	\$0.1923	100.0	+\$0.0521	+27.1
890	3	100.0	.....	.....	60.00	100.0	.....	.....	.1750	91.0	+ .0694	+39.7
891	3	100.0	.....	.....	60.00	100.0	.....	.....	.1750	91.0	+ .0694	+39.7
892	3	100.0	.....	.....	60.00	100.0	.....	.....	.1861	96.8	+ .0533	+31.3
893	3	100.0	.....	.....	60.00	100.0	.....	.....	.1945	101.1	+ .0499	+25.7
894	3	100.0	.....	.....	60.00	100.0	.....	.....	.1945	101.1	+ .0499	+25.7
895	3	100.0	.....	.....	60.00	100.0	.....	.....	.1945	101.1	+ .0499	+25.7
896	3	100.0	.....	.....	60.00	100.0	.....	.....	.1972	102.5	+ .0472	+23.9
897	3	100.0	.....	.....	60.00	100.0	.....	.....	.1945	101.1	+ .0499	+25.7
898	3	100.0	.....	.....	60.00	100.0	.....	.....	.2056	106.9	+ .0388	+18.8
899	3	100.0	.....	.....	60.00	100.0	.....	.....	.2056	106.9	+ .0388	+18.8
900	3	100.0	.....	.....	60.00	100.0	.....	.....	.2083	108.3	+ .0361	+17.3
901	3	100.0	.....	.....	60.00	100.0	.....	.....	.2250	117.0	+ .0194	+ 8.6
902	3	100.0	.....	.....	60.00	100.0	.....	.....	.2278	118.5	+ .0166	+ 7.3
903	3	100.0	.....	.....	60.00	100.0	.....	.....	.2444	127.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

SOAP—Continued.

CUTTERS, Male.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	19	100.0	+1	+ 5.3	59.37	100.0	+0.63	+1.1	\$0.1633	100.0	+\$0.0117	+7.2
1890	19	100.0	+1	+ 5.3	58.11	97.9	+1.89	+3.3	.1627	99.6	+ .0123	+7.6
1891	19	100.0	+1	+ 5.3	58.11	97.9	+1.89	+3.3	.1632	99.9	+ .0118	+7.2
1892	19	100.0	+1	+ 5.3	58.11	97.9	+1.89	+3.3	.1636	100.2	+ .0114	+7.0
1893	17	89.5	+3	+17.6	60.00	101.1	.....	.....	.1622	99.3	+ .0128	+7.9
1894	19	100.0	+1	+ 5.3	59.37	100.0	+ .63	+1.1	.1640	100.4	+ .0110	+6.7
1895	19	100.0	+1	+ 5.3	60.00	101.1	.....	.....	.1632	99.9	+ .0118	+7.2
1896	17	89.5	+3	+17.6	60.00	101.1	.....	.....	.1637	100.2	+ .0113	+6.9
1897	19	100.0	+1	+ 5.3	60.00	101.1	.....	.....	.1623	99.4	+ .0127	+7.8
1898	19	100.0	+1	+ 5.3	60.00	101.1	.....	.....	.1645	100.7	+ .0105	+6.4
1899	19	100.0	+1	+ 5.3	60.00	101.1	.....	.....	.1636	100.2	+ .0114	+7.0
1900	17	89.5	+3	+17.6	60.00	101.1	.....	.....	.1668	102.1	+ .0082	+4.9
1901	19	100.0	+1	+ 5.3	60.00	101.1	.....	.....	.1681	102.9	+ .0069	+4.1
1902	19	100.0	+1	+ 5.3	60.00	101.1	.....	.....	.1681	102.9	+ .0069	+4.1
1903	20	105.3	.....	.....	60.00	101.1	.....	.....	.1750	107.2	.....	.....

LABORERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	179	100.0	-12	- 6.7	58.21	100.0	+1.79	+ 3.1	\$0.1645	100.0	+\$0.0106	+ 6.4
1890	183	102.2	-16	- 8.7	54.10	92.9	+5.90	+10.9	.1825	110.9	+ .0074	- 4.1
1891	193	107.8	-26	-13.5	54.09	92.9	+5.91	+10.9	.1826	111.0	+ .0075	- 4.1
1892	208	113.4	-36	-17.7	54.09	92.9	+5.91	+10.9	.1826	111.0	+ .0075	- 4.1
1893	152	84.9	+15	+ 9.9	60.00	103.1	.....	.....	.1497	91.0	+ .0254	+17.0
1894	163	91.1	+4	+ 2.5	59.78	102.7	+ .22	+ .4	.1546	94.0	+ .0205	+18.3
1895	173	96.6	-6	- 3.5	60.00	103.1	.....	.....	.1546	94.0	+ .0205	+18.3
1896	173	96.6	-6	- 3.5	60.00	103.1	.....	.....	.1597	97.1	+ .0154	+ 9.6
1897	172	96.1	-5	- 2.9	60.00	103.1	.....	.....	.1597	97.1	+ .0154	+ 9.6
1898	193	107.8	-26	-13.5	60.00	103.1	.....	.....	.1597	97.1	+ .0154	+ 9.6
1899	183	102.2	-16	- 8.7	60.00	103.1	.....	.....	.1597	97.1	+ .0154	+ 9.6
1900	163	91.1	+4	+ 2.5	60.00	103.1	.....	.....	.1646	100.1	+ .0105	+ 6.3
1901	163	91.1	+4	+ 2.5	60.00	103.1	.....	.....	.1647	100.1	+ .0104	+ 6.3
1902	163	91.1	+4	+ 2.5	60.00	103.1	.....	.....	.1647	100.1	+ .0104	+ 6.3
1903	167	93.3	.....	.....	60.00	103.1	.....	.....	.1751	106.4	.....	.....

MIXERS, Male.

[Data from 2 establishments.]

Av. 1890-99.	13	100.0	.....	.....	58.61	100.0	+1.39	+2.4	\$0.1775	100.0	+\$0.0180	+10.
1890	13	100.0	.....	.....	55.38	94.5	+4.62	+8.3	.1859	104.7	+ .0096	+ 5.
1891	13	100.0	.....	.....	55.38	94.5	+4.62	+8.3	.1853	104.4	+ .0102	+ 5.
1892	13	100.0	.....	.....	55.38	94.5	+4.62	+8.3	.1859	104.7	+ .0096	+ 5.
1893	11	84.6	+2	+18.2	60.00	102.4	.....	.....	.1706	96.1	+ .0249	+14.
1894	13	100.0	.....	.....	60.00	102.4	.....	.....	.1705	96.1	+ .0250	+14.
1895	13	100.0	.....	.....	60.00	102.4	.....	.....	.1705	96.1	+ .0250	+14.
1896	13	100.0	.....	.....	60.00	102.4	.....	.....	.1705	96.1	+ .0250	+14.
1897	13	100.0	.....	.....	60.00	102.4	.....	.....	.1782	100.4	+ .0173	+ 9.
1898	13	100.0	.....	.....	60.00	102.4	.....	.....	.1788	100.7	+ .0167	+ 9.
1899	13	100.0	.....	.....	60.00	102.4	.....	.....	.1788	100.7	+ .0167	+ 9.
1900	13	100.0	.....	.....	60.00	102.4	.....	.....	.1712	96.5	+ .0243	+14.
1901	13	100.0	.....	.....	60.00	102.4	.....	.....	.1795	101.1	+ .0160	+ 8.
1902	13	100.0	.....	.....	60.00	102.4	.....	.....	.1378	105.8	+ .0077	+ 4.
1903	13	100.0	.....	.....	60.00	102.4	.....	.....	.1955	110.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SOAP—Concluded.

MOLDERS, Male.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	4	100.0	.....	.....	60.00	100.0	.....	.....	\$0.1636	100.0	+\$0.0085	+5.0
1890	4	100.0	.....	.....	60.00	100.0	.....	.....	.1667	98.9	+ .0104	+6.2
1891	4	100.0	.....	.....	60.00	100.0	.....	.....	.1638	100.1	+ .0083	+4.9
1892	4	100.0	.....	.....	60.00	100.0	.....	.....	.1667	98.9	+ .0104	+6.2
1893	4	100.0	.....	.....	60.00	100.0	.....	.....	.1638	100.1	+ .0083	+4.9
1894	4	100.0	.....	.....	60.00	100.0	.....	.....	.1638	100.1	+ .0083	+4.9
1895	4	100.0	.....	.....	60.00	100.0	.....	.....	.1638	100.1	+ .0083	+4.9
1896	4	100.0	.....	.....	60.00	100.0	.....	.....	.1638	100.1	+ .0083	+4.9
1897	4	100.0	.....	.....	60.00	100.0	.....	.....	.1638	100.1	+ .0083	+4.9
1898	4	100.0	.....	.....	60.00	100.0	.....	.....	.1638	100.1	+ .0083	+4.9
1899	4	100.0	.....	.....	60.00	100.0	.....	.....	.1709	101.4	+ .0062	+3.6
1900	4	100.0	.....	.....	60.00	100.0	.....	.....	.1709	101.4	+ .0062	+3.6
1901	4	100.0	.....	.....	60.00	100.0	.....	.....	.1729	102.6	+ .0042	+2.4
1902	4	100.0	.....	.....	60.00	100.0	.....	.....	.1750	103.8	+ .0021	+1.2
1903	4	100.0	.....	.....	60.00	100.0	.....	.....	.1771	105.0	.....	.....

PRESSERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	55	100.0	-29	-52.7	58.42	100.0	+1.58	+2.7	\$0.1076	100.0	+\$0.0521	+48.4
890	63	114.5	-37	-58.7	54.76	93.7	+5.24	+9.6	.1134	105.4	+ .0463	+40.8
891	53	105.5	-32	-55.2	54.83	93.9	+5.17	+9.4	.1136	105.6	+ .0461	+40.6
892	58	105.5	-32	-55.2	54.83	93.9	+5.17	+9.4	.1139	105.8	+ .0458	+40.2
893	38	69.1	-12	-31.6	60.00	102.7	.....	.....	.1066	99.1	+ .0531	+49.8
894	48	87.3	-22	-45.8	59.75	102.3	+ .25	+ .4	.1052	97.8	+ .0545	+51.8
895	58	105.5	-32	-55.2	60.00	102.7	.....	.....	.1048	97.4	+ .0549	+52.4
896	58	105.5	-32	-55.2	60.00	102.7	.....	.....	.1045	97.1	+ .0552	+52.8
897	58	105.5	-32	-55.2	60.00	102.7	.....	.....	.1043	96.9	+ .0554	+53.1
898	58	105.5	-32	-55.2	60.00	102.7	.....	.....	.1045	97.1	+ .0552	+52.8
899	53	96.4	-27	-50.9	60.00	102.7	.....	.....	.1050	97.6	+ .0547	+52.1
900	53	96.4	-27	-50.9	60.00	102.7	.....	.....	.1058	98.3	+ .0539	+50.9
901	26	47.3	.....	.....	60.00	102.7	.....	.....	.1468	136.4	+ .0129	+ 8.8
902	26	47.3	.....	.....	60.00	102.7	.....	.....	.1481	137.6	+ .0116	+ 7.8
903	26	47.3	.....	.....	60.00	102.7	.....	.....	.1597	148.4	.....	.....

STOVES.

MOLDERS, Male.

[Data from 7 establishments.]

Av. 1890-99.	373	100.0	+222	+59.5	53.19	100.0	-0.04	-0.1	\$0.2788	100.0	+\$0.1055	+37.8
890	301	80.7	+294	+97.7	53.52	100.6	- .37	- .7	.2671	95.8	+ .1172	+43.9
891	350	93.8	+245	+70.0	58.16	99.9	- .01	-.02	.2658	95.3	+ .1185	+44.6
892	369	98.9	+226	+61.2	53.46	100.5	- .31	- .6	.2711	97.2	+ .1132	+41.8
893	406	108.8	+189	+46.6	52.86	99.4	+ .29	+ .5	.2844	102.0	+ .0999	+35.1
894	293	78.6	+302	+103.1	53.20	100.0	- .05	- .1	.2688	96.4	+ .1155	+43.0
895	363	97.3	+232	+63.9	53.19	100.0	- .04	- .1	.2741	98.3	+ .1102	+40.2
896	374	100.3	+221	+59.1	53.13	99.9	+ .02	+ .04	.2793	100.2	+ .1050	+37.6
897	381	102.1	+214	+56.2	52.99	99.6	+ .16	+ .3	.2821	101.2	+ .1022	+36.2
898	435	116.6	+160	+36.8	53.23	100.1	- .08	- .2	.2836	101.7	+ .1007	+35.5
899	458	122.8	+137	+29.9	53.16	99.9	- .01	-.02	.3120	111.9	+ .0723	+23.2
900	419	112.3	+176	+42.0	53.28	100.2	- .13	- .2	.3213	115.2	+ .0630	+19.6
901	459	123.1	+136	+29.6	53.33	100.3	- .18	- .3	.3392	121.7	+ .0451	+13.3
902	520	139.4	+ 75	+14.4	53.23	100.1	- .08	- .2	.3592	128.8	+ .0251	+ 7.0
903	595	159.5	.....	.....	53.15	99.9	.....	.....	.3843	137.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

STOVES—Concluded.

MOUNTERS, Male.

[Data from 7 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	147	100.0	+10	+ 6.8	58.51	100.0	+0.40	+0.7	\$0.2149	100.0	+\$0.0870	+40.5
1890	147	100.0	+10	+ 6.8	58.52	100.0	+ .39	+ .7	.1866	86.8	+ .1153	+61.8
1891	146	99.3	+11	+ 7.5	58.32	99.7	+ .59	+1.0	.1989	92.6	+ .1030	+51.8
1892	157	106.8	.....	.....	58.55	100.1	+ .36	+ .6	.2031	94.5	+ .0988	+48.6
1893	177	120.4	-20	-11.8	58.29	99.6	+ .62	+1.1	.2114	98.4	+ .0905	+42.8
1894	114	77.6	+43	+37.7	58.34	99.7	+ .57	+1.0	.1953	90.9	+ .1066	+54.6
1895	137	93.2	+20	+14.6	58.36	99.7	+ .55	+ .9	.2172	101.1	+ .0847	+39.0
1896	156	106.1	+1	+ .6	53.70	100.3	+ .21	+ .4	.2002	93.2	+ .1017	+60.8
1897	145	98.6	+12	+ 8.3	58.66	100.3	+ .25	+ .4	.2195	102.1	+ .0824	+37.5
1898	137	93.2	+20	+14.6	58.63	100.2	+ .28	+ .5	.2379	110.7	+ .0640	+26.9
1899	150	102.0	+7	+ 4.7	58.68	100.3	+ .23	+ .4	.2784	129.5	+ .0235	+ 8.4
1900	157	106.8	.....	.....	58.78	100.5	+ .13	+ .2	.2571	119.6	+ .0448	+17.4
1901	168	114.3	-11	- 6.5	58.83	100.5	+ .08	+ .1	.3077	143.2	+ .0058	- 1.9
1902	171	116.3	-14	- 8.2	58.82	100.5	+ .09	+ .2	.2912	135.5	+ .0107	+ 8.7
1903	157	106.8	.....	.....	58.91	100.7	.....	.....	.3019	140.5	.....	.....

PATTERN MAKERS, Male.

[Data from 5 establishments.]

Av. 1890-99.	37	100.0	- 4	-10.8	59.32	100.0	-0.02	-0.03	\$0.2458	100.0	-\$0.0113	- 4.6
1890	31	83.8	+ 2	+ 6.5	59.42	100.2	- .12	- .2	.2393	97.6	- .0053	- 2.2
1891	54	145.9	-21	-38.9	59.24	99.9	+ .06	+ .1	.2407	98.1	- .0067	- 2.8
1892	47	127.0	-14	-29.8	59.26	99.9	+ .04	+ .1	.2323	94.7	+ .0017	+ .7
1893	34	91.9	- 1	- 2.9	59.38	100.1	- .08	- .1	.2381	97.1	- .0041	- 1.7
1894	32	86.5	+1	+ 3.1	59.31	100.0	- .01	- .02	.2461	100.3	- .0121	- 4.9
1895	44	118.9	-11	-25.0	59.25	99.9	+ .05	+ .1	.2337	95.3	+ .0003	+ .1
1896	36	97.3	- 3	- 8.3	59.31	100.0	- .01	- .02	.2421	98.7	- .0081	- 3.3
1897	22	59.5	+11	+50.0	59.45	100.2	- .15	- .3	.2603	106.1	- .0263	-10.1
1898	33	89.2	.....	.....	59.30	100.0	.....	.....	.2623	106.9	- .0283	-10.8
1899	41	110.8	- 8	-19.5	59.24	99.9	+ .06	+ .1	.2581	105.2	- .0241	- 9.3
1900	42	113.5	- 9	-21.4	59.21	99.8	+ .09	+ .2	.2571	104.8	- .0231	- 9.0
1901	46	124.3	-13	-28.3	59.22	99.8	+ .08	+ .1	.2416	98.5	- .0076	- 3.1
1902	54	145.9	-21	-38.9	59.24	99.9	+ .06	+ .1	.2464	100.4	- .0124	- 5.0
1903	33	89.2	.....	.....	59.30	100.0	.....	.....	.2340	95.4	.....	.....

STREETS AND SEWERS, CONTRACT WORK.

LABORERS, Male.

[Data from 36 establishments.]

Av. 1890-99.	3,218	100.0	+127	+ 3.9	58.72	100.0	- 3.40	-5.8	\$0.1534	100.0	+\$0.0481	+31.4
1890	3,292	102.3	+ 53	+ 1.6	59.44	101.2	-4.12	-6.9	.1488	96.7	+ .0582	+35.9
1891	3,917	121.7	-572	-14.6	59.52	101.4	-4.20	-7.1	.1365	89.0	+ .0650	+47.6
1892	3,614	112.3	-269	- 7.3	59.46	101.3	-4.14	-7.0	.1522	99.2	+ .0493	+32.4
1893	3,581	109.7	-186	- 5.4	59.31	101.0	-3.99	-6.7	.1486	96.9	+ .0529	+35.6
1894	3,452	107.3	-107	- 3.1	59.32	101.0	-4.00	-6.7	.1503	98.0	+ .0512	+34.1
1895	2,932	91.1	+413	+14.1	59.06	100.6	-3.74	-6.3	.1526	99.5	+ .0489	+32.0
1896	3,133	98.9	+162	+ 5.1	58.54	99.7	-3.22	-5.5	.1595	104.0	+ .0420	+26.3
1897	2,754	86.6	+591	+21.5	57.18	97.4	-1.86	-3.3	.1607	104.8	+ .0408	+25.4
1898	2,619	81.4	+726	+27.7	57.25	97.5	-1.93	-3.4	.1631	106.3	+ .0384	+23.5
1899	2,894	89.6	+461	+16.0	58.16	99.0	-2.84	-4.9	.1626	106.0	+ .0389	+23.9
1900	3,198	99.4	+147	+ 4.5	58.08	98.8	-2.71	-4.7	.1660	108.2	+ .0355	+21.4
1901	3,222	100.1	+123	+ 3.8	56.02	95.4	- .70	-1.2	.1821	118.7	+ .0194	+10.7
1902	3,243	100.8	+102	+ 3.1	55.31	94.2	+ .01	+ .02	.1940	126.5	+ .0075	+ 8.9
1903	3,345	103.9	.....	.....	55.32	94.2	.....	.....	.2015	131.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

STREETS AND SEWERS, MUNICIPAL WORK.

LABORERS, Male.

[Data for employees from 47 establishments for entire period. Data for hours and wages from 47 establishments, 1890-1893; 48 establishments, 1894-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age num- ber.	Rela- tive num- ber.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.		Aver- age.	Rela- tive.	Increase (+) or decrease (-) in 1903 as com- pared with year specified.	
			Num- ber.	Per cent.			Num- ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	10,816	100.0	-1,362	-12.6	54.71	100.0	-4.12	-7.5	\$0.1816	100.0	+\$0.0215	+11.8
1890	9,701	89.7	-247	-2.5	55.03	100.6	-4.44	-8.1	.1814	99.9	+.0217	+12.0
1891	9,483	87.7	-29	-	54.96	100.5	-4.37	-8.0	.1807	99.5	+.0224	+12.4
1892	10,644	98.4	-1,190	-11.2	54.95	100.4	-4.36	-7.9	.1789	98.5	+.0242	+13.5
1893	11,266	104.2	-1,812	-16.1	55.15	100.8	-4.56	-8.3	.1786	98.3	+.0245	+13.7
1894	12,523	115.8	-3,069	-24.5	55.07	100.7	-4.48	-8.1	.1832	100.9	+.0199	+10.9
1895	11,325	104.7	-1,871	-16.5	54.81	100.2	-4.22	-7.7	.1809	99.6	+.0222	+12.3
1896	11,095	102.6	-1,641	-14.8	54.76	100.1	-4.17	-7.6	.1787	98.4	+.0244	+13.7
1897	11,003	101.7	-1,549	-14.1	54.98	100.5	-4.39	-8.0	.1790	98.6	+.0241	+13.5
1898	10,098	93.4	-644	-6.4	54.65	99.9	-4.06	-7.4	.1827	100.6	+.0204	+11.2
1899	11,021	101.9	-1,567	-14.2	52.74	96.4	-2.15	-4.1	.1919	105.7	+.0112	+5.8
1900	10,903	100.8	-1,449	-13.3	51.39	93.9	-.80	-1.6	.2001	110.2	+.0030	+1.5
1901	11,434	105.7	-1,980	-17.3	51.00	93.2	-.41	-.8	.2009	110.6	+.0022	+1.1
1902	10,179	94.1	-725	-7.1	51.01	93.2	-.42	-.8	.2015	111.0	+.0016	+.8
1903	9,454	87.4	.....	.....	50.59	92.5	.....	.....	.2031	111.8	.....	.....

SUGAR REFINING.

BOILERS, Male.

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	43	(a)	+11	+25.6	65.12	(a)	+2.81	+4.3	\$0.2534	(a)	+\$0.0139	(a)
1895	46	(a)	+8	+17.4	66.35	(a)	+1.58	+2.4	.2471	(a)	+.0052	+2.1
1896	44	(a)	+10	+22.7	64.27	(a)	+3.66	+5.7	.2534	(a)	-.0011	-.4
1897	46	(a)	+8	+17.4	63.91	(a)	+4.02	+6.3	.2533	(a)	-.0010	-.4
1898	45	(a)	+9	+20.0	64.71	(a)	+3.22	+5.0	.2542	(a)	-.0019	-.8
1899	43	(a)	+11	+25.6	62.51	(a)	+5.42	+8.7	.2516	(a)	+.0007	+.3
1900	44	(a)	+10	+22.7	63.00	(a)	+4.93	+7.8	.2520	(a)	+.0003	+.1
1901	43	(a)	+6	+12.5	65.33	(a)	+2.60	+4.0	.2501	(a)	+.0022	+.9
1902	47	(a)	+7	+14.9	65.53	(a)	+2.40	+3.7	.2515	(a)	+.0008	+.3
1903	54	(a)	.....	.....	67.93	(a)	.....	.....	.2523	(a)	.....	.....

CENTRIFUGAL TENDERS, Male.

[No data, 1890-1893; data from 1 establishment, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	111	(a)	+5	+4.5	84.00	(a)	.....	.....	\$0.1417	(a)	-\$0.0084	-5.9
1895	77	(a)	+39	+50.6	84.00	(a)	.....	.....	.1117	(a)	-.0084	-5.9
1896	76	(a)	+40	+52.6	84.00	(a)	.....	.....	.1333	(a)	.....	.....
1897	90	(a)	+26	+28.9	84.00	(a)	.....	.....	.1333	(a)	.....	.....
1898	73	(a)	+43	+58.9	84.00	(a)	.....	.....	.1333	(a)	.....	.....
1899	79	(a)	+37	+46.8	84.00	(a)	.....	.....	.1333	(a)	.....	.....
1900	73	(a)	+43	+58.9	84.00	(a)	.....	.....	.1333	(a)	.....	.....
1901	65	(a)	+51	+78.5	84.00	(a)	.....	.....	.1333	(a)	.....	.....
1902	63	(a)	+48	+70.6	84.00	(a)	.....	.....	.1333	(a)	.....	.....
1903	116	(a)	.....	.....	84.00	(a)	.....	.....	.1333	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

SUGAR REFINING—Continued.

COOPERS, Male.

[No data, 1890-1893; data from 1 establishment, 1894-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	14	(a)	—7	— 50.0	84.00	(a)	.....	.....	\$0.1262	(a)	—\$0.0083	—6.6
1895	14	(a)	—7	— 50.0	84.00	(a)	.....	.....	.1119	(a)	+ .0060	+6.4
1896	11	(a)	—4	— 36.4	84.00	(a)	.....	.....	.1144	(a)	+ .0085	+3.1
1897	8	(a)	—1	— 12.5	84.00	(a)	.....	.....	.1167	(a)	+ .0012	+1.0
1898	8	(a)	—1	— 12.5	84.00	(a)	.....	.....	.1167	(a)	+ .0012	+1.0
1899	6	(a)	+1	+ 16.7	84.00	(a)	.....	.....	.1125	(a)	+ .0054	+4.8
1900	4	(a)	+3	+ 75.0	84.00	(a)	.....	.....	.1125	(a)	+ .0054	+4.8
1901	4	(a)	+3	+ 75.0	84.00	(a)	.....	.....	.1125	(a)	+ .0054	+4.8
1902	3	(a)	+4	+153.3	84.00	(a)	.....	.....	.1139	(a)	+ .0040	+3.6
1903	7	(a)	.....	.....	84.00	(a)	.....	.....	.1179	(a)	.....	.....

FILTER MEN, Male.

[No data, 1890-1893; data from 1 establishment, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	84	(a)	+ 66	+ 78.6	84.00	(a)	.....	.....	\$0.1275	(a)	—\$0.0117	—9.2
1895	66	(a)	+ 84	+127.3	84.00	(a)	.....	.....	.1146	(a)	+ .0012	+1.0
1896	68	(a)	+ 82	+120.6	84.00	(a)	.....	.....	.1137	(a)	+ .0021	+1.8
1897	45	(a)	+105	+253.3	84.00	(a)	.....	.....	.1272	(a)	+ .0114	+9.0
1898	42	(a)	+108	+257.1	84.00	(a)	.....	.....	.1157	(a)	+ .0001	+ .1
1899	51	(a)	+ 99	+154.1	84.00	(a)	.....	.....	.1147	(a)	+ .0011	+1.0
1900	59	(a)	+ 91	+154.2	84.00	(a)	.....	.....	.1168	(a)	+ .0010	+ .9
1901	76	(a)	+ 74	+ 87.4	84.00	(a)	.....	.....	.1174	(a)	+ .0016	+1.4
1902	73	(a)	+ 77	+105.5	84.00	(a)	.....	.....	.1156	(a)	+ .0002	+ .2
1903	150	(a)	.....	.....	84.00	(a)	.....	.....	.1158	(a)	.....	.....

FIREMEN, Male.

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	129	(a)	— 1	— 0.8	75.35	(a)	—2.13	—2.8	\$0.1627	(a)	+ \$0.0025	+1.5
1895	126	(a)	+ 2	+ 1.6	75.24	(a)	—2.02	—2.7	.1639	(a)	+ .0013	+ .8
1896	131	(a)	— 3	— 2.3	75.21	(a)	—1.99	—2.6	.1637	(a)	+ .0015	+ .9
1897	123	(a)	+ 5	+ 4.1	74.34	(a)	—1.12	—1.5	.1644	(a)	+ .0008	+ .5
1898	101	(a)	+27	+26.7	73.43	(a)	— .21	— .3	.1654	(a)	+ .0002	+ .1
1899	104	(a)	+24	+23.1	73.50	(a)	— .28	— .4	.1641	(a)	+ .0011	+ .7
1900	103	(a)	+25	+24.3	73.28	(a)	— .06	— .1	.1643	(a)	+ .0009	+ .5
1901	99	(a)	+29	+29.3	73.58	(a)	— .36	— .5	.1641	(a)	+ .0011	+ .7
1902	153	(a)	—25	—16.3	73.65	(a)	— .43	— .6	.1639	(a)	+ .0013	+ .8
1903	128	(a)	.....	.....	73.22	(a)	.....	.....	.1652	(a)	.....	.....

LABORERS, Male.

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1894	2,147	(a)	—345	—16.1	71.87	(a)	—2.47	—3.4	\$0.1515	(a)	+ \$0.0036	+2.4
1895	1,789	(a)	+ 13	+ .7	70.35	(a)	— .95	—1.4	.1522	(a)	+ .0029	+1.9
1896	1,897	(a)	— 95	— 5.0	69.82	(a)	— .42	— .6	.1537	(a)	+ .0014	+ .9
1897	1,596	(a)	+206	+12.9	70.92	(a)	— .52	—2.1	.1508	(a)	+ .0043	+2.9
1898	1,382	(a)	+420	+30.4	69.53	(a)	— .13	— .2	.1550	(a)	+ .0001	+ .1
1899	1,427	(a)	+375	+26.3	69.58	(a)	— .18	— .3	.1541	(a)	+ .0010	+ .6
1900	1,432	(a)	+370	+25.8	68.93	(a)	+ .47	+ .7	.1559	(a)	+ .0008	+ .5
1901	1,596	(a)	+206	+12.9	70.41	(a)	—1.01	—1.4	.1518	(a)	+ .0033	+2.2
1902	1,895	(a)	— 93	— 4.9	70.45	(a)	—1.05	—1.5	.1513	(a)	+ .0038	+2.5
1903	1,802	(a)	.....	.....	69.40	(a)	.....	.....	.1551	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (−) in 1903, as compared with previous years, see note on page 718.]

SUGAR REFINING—Concluded.

WATER TENDERS, Male.

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (−) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
994	23	(a)	+8	+34.8	72.52	(a)	+2.58	+3.6	\$0.2025	(a)	−\$0.0162	−3.0
995	24	(a)	+7	+29.2	73.50	(a)	+1.60	+2.2	.1970	(a)	−.0107	−5.4
996	23	(a)	+8	+34.8	73.04	(a)	+2.06	+2.8	.1996	(a)	−.0133	−6.7
997	22	(a)	+9	+40.9	72.55	(a)	+2.55	+3.5	.2024	(a)	−.0161	−8.0
998	23	(a)	+8	+34.8	73.04	(a)	+2.06	+2.8	.1996	(a)	−.0133	−6.7
999	23	(a)	+8	+34.8	73.57	(a)	+1.53	+2.1	.1991	(a)	−.0128	−6.4
100	22	(a)	+9	+40.9	73.09	(a)	+2.01	+2.8	.2019	(a)	−.0156	−7.7
101	27	(a)	+4	+14.8	73.78	(a)	+1.32	+1.8	.1957	(a)	−.0094	−4.8
102	26	(a)	+5	+19.2	72.92	(a)	+2.18	+3.0	.2018	(a)	−.0155	−7.7
103	31	(a)	.....	.....	75.10	(a)	.....	.....	.1863	(a)	.....	.....

WEIGHERS, Male.

[No data, 1890-1893; data from 2 establishments, 1894-1903.]

v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
994	31	(a)	−1	−3.2	73.94	(a)	−1.94	−2.6	\$0.1725	(a)	+\$0.0386	+22.4
995	35	(a)	−5	−14.3	75.77	(a)	−3.77	−5.0	.1625	(a)	+.0486	+29.9
996	33	(a)	−3	−9.1	73.09	(a)	−1.09	−1.5	.1748	(a)	+.0363	+20.8
997	36	(a)	−6	−16.7	74.67	(a)	−2.67	−3.6	.1778	(a)	+.0333	+18.7
998	26	(a)	+4	+15.4	69.23	(a)	+2.77	+4.0	.1931	(a)	+.0180	+9.3
999	30	(a)	.....	.....	72.00	(a)	.....	.....	.1861	(a)	+.0250	+13.4
100	27	(a)	+3	+11.1	70.67	(a)	+1.33	+1.9	.2096	(a)	+.0015	+2.6
101	25	(a)	+5	+20.0	68.64	(a)	+3.36	+4.9	.2167	(a)	+.0056	+7.7
102	24	(a)	+6	+25.0	68.00	(a)	+4.00	+5.9	.2188	(a)	−.0077	−3.5
103	30	(a)	.....	.....	72.00	(a)	.....	.....	.2111	(a)	.....	.....

WEIGHERS, SAMPLERS, AND TALLYMEN, RAW SUGAR, Male.

[No data, 1890-1893; data from 1 establishment, 1894-1903.]

v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
994	41	(a)	−7	−17.1	60.00	(a)	.....	.....	\$0.2142	(a)	+\$0.0363	+16.9
995	41	(a)	−7	−17.1	60.00	(a)	.....	.....	.2144	(a)	+.0361	+16.8
996	41	(a)	−7	−17.1	60.00	(a)	.....	.....	.2187	(a)	+.0318	+14.5
997	42	(a)	−8	−19.0	60.00	(a)	.....	.....	.2159	(a)	+.0346	+16.0
998	39	(a)	−5	−12.8	60.00	(a)	.....	.....	.2197	(a)	+.0308	+14.0
999	37	(a)	−3	−8.1	60.00	(a)	.....	.....	.2187	(a)	+.0318	+14.5
100	34	(a)	.....	.....	60.00	(a)	.....	.....	.2218	(a)	+.0287	+12.9
101	34	(a)	.....	.....	60.00	(a)	.....	.....	.2221	(a)	+.0284	+12.8
102	33	(a)	+1	+3.0	60.00	(a)	.....	.....	.2586	(a)	−.0081	−3.1
103	34	(a)	.....	.....	60.00	(a)	.....	.....	.2505	(a)	.....	.....

TIN PLATE.

ASSORTERS, Male.

[No data, 1890-1892; data from 1 establishment, 1893-1903.]

v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
993	3	(a)	.....	.....	56.67	(a)	.....	.....	\$0.3333	(a)	−\$0.0833	−25.0
994	3	(a)	.....	.....	56.67	(a)	.....	.....	.3000	(a)	−.0500	−16.7
995	3	(a)	.....	.....	56.67	(a)	.....	.....	.2500	(a)	.....	.....
996	3	(a)	.....	.....	56.67	(a)	.....	.....	.2500	(a)	.....	.....
997	2	(a)	+1	+50.0	57.00	(a)	−0.33	−0.6	.2500	(a)	.....	.....
998	2	(a)	+1	+50.0	57.00	(a)	−.33	−.6	.2500	(a)	.....	.....
999	3	(a)	.....	.....	56.67	(a)	.....	.....	.2500	(a)	.....	.....
100	3	(a)	.....	.....	56.67	(a)	.....	.....	.2500	(a)	.....	.....
101	3	(a)	.....	.....	56.67	(a)	.....	.....	.2500	(a)	.....	.....
102	3	(a)	.....	.....	56.67	(a)	.....	.....	.2500	(a)	.....	.....
103	3	(a)	.....	.....	56.67	(a)	.....	.....	.2500	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TIN PLATE—Continued.

CATCHERS, Male.

[No data, 1890-1892; data from 1 establishment, 1893-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1893	6	(a)	+3	+ 50.0	56.83	(a)	-0.05	-0.1	\$0.1167	(a)	+\$0.0083	+7
1894	5	(a)	+4	+ 80.0	56.80	(a)	- .02	- .04	.1167	(a)	+ .0083	+7
1895	4	(a)	+5	+125.0	56.75	(a)	+ .03	+ .1	.1167	(a)	+ .0083	+7
1896	6	(a)	+3	+ 50.0	56.83	(a)	- .05	- .1	.1083	(a)	+ .0167	+15
1897	8	(a)	+1	+ 12.5	56.75	(a)	+ .03	+ .1	.1042	(a)	+ .0208	+20
1898	8	(a)	+1	+ 12.5	56.75	(a)	+ .03	+ .1	.1042	(a)	+ .0208	+20
1899	9	(a)	.....	.....	56.78	(a)	.....	.....	.1093	(a)	+ .0157	+14
1900	9	(a)	.....	.....	56.78	(a)	.....	.....	.1056	(a)	+ .0194	+18
1901	10	(a)	-1	- 10.0	56.80	(a)	- .02	- .04	.1067	(a)	+ .0183	+17
1902	9	(a)	.....	.....	56.78	(a)	.....	.....	.1139	(a)	+ .0111	+9
1903	9	(a)	.....	.....	56.78	(a)	.....	.....	.1250	(a)	.....	.....

DUSTERS, Female.

[No data, 1890-1892; data from 1 establishment, 1893-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1893	14	(a)	+10	+ 71.4	56.79	(a)	-0.04	-0.1	\$0.0833	(a)	+\$0.0049	+5
1894	17	(a)	+7	+ 41.2	56.76	(a)	- .01	- .02	.0833	(a)	+ .0049	+5
1895	15	(a)	+9	+ 60.0	56.73	(a)	+ .02	+ .04	.0834	(a)	+ .0048	+5
1896	9	(a)	+15	+166.7	56.78	(a)	- .03	- .1	.0833	(a)	+ .0049	+5
1897	12	(a)	+12	+100.0	56.75	(a)	.....	.....	.0833	(a)	+ .0049	+5
1898	16	(a)	+8	+ 50.0	56.75	(a)	.....	.....	.0833	(a)	+ .0049	+5
1899	10	(a)	+14	+140.0	56.80	(a)	- .05	- .1	.0833	(a)	+ .0049	+5
1900	15	(a)	+9	+ 60.0	56.73	(a)	+ .02	+ .04	.0833	(a)	+ .0049	+5
1901	24	(a)	.....	.....	56.75	(a)	.....	.....	.0833	(a)	+ .0049	+5
1902	27	(a)	-3	- 11.1	56.74	(a)	+ .01	+ .02	.0871	(a)	+ .0011	+1
1903	24	(a)	.....	.....	56.75	(a)	.....	.....	.0882	(a)	.....	.....

LABORERS, Male.

[No data, 1890-1892; data from 1 establishment, 1893-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1893	12	(a)	+2	+ 16.7	56.75	(a)	+0.04	+0.1	\$0.1625	(a)	-\$0.0089	-1
1894	5	(a)	+9	+180.0	56.80	(a)	- .01	- .02	.1500	(a)	+ .0026	+1
1895	15	(a)	-1	- 6.7	56.73	(a)	+ .03	+ .1	.1600	(a)	- .0044	-1
1896	6	(a)	+8	+133.3	56.83	(a)	- .04	- .1	.1584	(a)	- .0048	-1
1897	7	(a)	+7	+100.0	56.71	(a)	+ .08	+ .1	.1524	(a)	+ .0012	+1
1898	6	(a)	+8	+133.3	56.83	(a)	+ .04	+ .1	.1528	(a)	+ .0008	+1
1899	6	(a)	+8	+133.3	56.83	(a)	- .04	- .1	.1500	(a)	+ .0036	+1
1900	11	(a)	+3	+ 27.3	56.73	(a)	+ .06	+ .1	.1500	(a)	+ .0036	+1
1901	15	(a)	-1	- 6.7	56.73	(a)	+ .06	+ .1	.1500	(a)	+ .0036	+1
1902	14	(a)	.....	.....	55.79	(a)	.....	.....	.1500	(a)	+ .0036	+1
1903	14	(a)	.....	.....	56.79	(a)	.....	.....	.1536	(a)	.....	.....

PICKLERS, Male.

[No data, 1890-1892; data from 1 establishment, 1893-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1893	1	(a)	.....	.....	57.00	(a)	.....	.....	\$0.2500	(a)	+\$0.0500	+2
1894	1	(a)	.....	.....	57.00	(a)	.....	.....	.2250	(a)	+ .0750	+3
1895	1	(a)	.....	.....	57.00	(a)	.....	.....	.2500	(a)	+ .0500	+2
1896	1	(a)	.....	.....	57.00	(a)	.....	.....	.2000	(a)	+ .1000	+5
1897	1	(a)	.....	.....	57.00	(a)	.....	.....	.2000	(a)	+ .1000	+5
1898	1	(a)	.....	.....	57.00	(a)	.....	.....	.2333	(a)	+ .0667	+2
1899	1	(a)	.....	.....	57.00	(a)	.....	.....	.2167	(a)	+ .0833	+3
1900	1	(a)	.....	.....	57.00	(a)	.....	.....	.2167	(a)	+ .0833	+3
1901	1	(a)	.....	.....	57.00	(a)	.....	.....	.2167	(a)	+ .0833	+3
1902	1	(a)	.....	.....	57.00	(a)	.....	.....	.2333	(a)	+ .0667	+2
1903	1	(a)	.....	.....	57.00	(a)	.....	.....	.3000	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TIN PLATE—Concluded.

TINMEN, Male.

[No data, 1890-1892; data from 1 establishment, 1893-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
993	11	(a)	-5	- 45.5	56.73	(a)	+0.10	+0.2	\$0.3291	(a)	+\$0.0701	+21.3
994	10	(a)	-4	- 40.0	56.80	(a)	+ .03	+ .1	.3640	(a)	+ .0346	+ 9.5
995	4	(a)	+2	+ 50.0	56.75	(a)	+ .08	+ .1	.3802	(a)	+ .0190	+ 5.0
996	3	(a)	+3	+100.0	56.67	(a)	+ .16	+ .3	.2866	(a)	+ .1126	+39.3
997	3	(a)	+3	+100.0	56.67	(a)	+ .16	+ .3	.3684	(a)	+ .0308	+ 8.4
998	5	(a)	+1	+ 20.0	56.80	(a)	+ .03	+ .1	.3835	(a)	+ .0157	+ 4.1
999	5	(a)	+1	+ 20.0	56.80	(a)	+ .03	+ .1	.3450	(a)	+ .0542	+15.7
900	7	(a)	-1	- 14.3	56.71	(a)	+ .12	+ .2	.3968	(a)	+ .0024	+ .6
901	6	(a)	.....	.....	56.83	(a)	.....	.....	.3809	(a)	+ .0183	+ 4.8
902	6	(a)	.....	.....	56.83	(a)	.....	.....	.3984	(a)	+ .0008	+ .2
903	6	(a)	.....	.....	56.83	(a)	.....	.....	.3992	(a)	.....	.....

WASH MEN, Male.

[No data, 1890-1892; data from 1 establishment, 1893-1903.]

v. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
993	3	(a)	+3	+100.0	56.67	(a)	+0.16	+0.3	\$0.2262	(a)	+\$0.0644	+28.5
994	3	(a)	+3	+100.0	56.67	(a)	+ .16	+ .3	.2297	(a)	+ .0609	+26.5
995	3	(a)	+3	+100.0	56.67	(a)	+ .16	+ .3	.3059	(a)	- .0153	- 5.0
996	3	(a)	+3	+100.0	56.67	(a)	+ .16	+ .3	.2509	(a)	+ .0397	+15.8
997	4	(a)	+2	+ 50.0	56.75	(a)	+ .08	+ .1	.2634	(a)	+ .0272	+10.3
998	4	(a)	+2	+ 50.0	56.75	(a)	+ .08	+ .1	.3104	(a)	+ .0198	+ 6.4
999	7	(a)	-1	- 14.3	56.71	(a)	+ .12	+ .2	.2600	(a)	+ .0306	+11.8
900	6	(a)	.....	.....	56.83	(a)	.....	.....	.3151	(a)	- .0245	- 7.8
901	7	(a)	-1	- 14.3	56.71	(a)	+ .12	+ .2	.3041	(a)	- .0135	- 4.4
902	7	(a)	-1	- 14.3	56.71	(a)	+ .12	+ .2	.3140	(a)	- .0234	- 7.5
903	6	(a)	.....	.....	56.83	(a)	.....	.....	.2906	(a)	.....	.....

TOBACCO, CIGARETTES.

CIGARETTE MACHINE FEEDERS, Male.

Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890-1896; 2 establishments, 1897-1903.]

v. 1890-99.	26	100.0	+30	+115.4	60.00	100.0	.....	.....	\$0.0745	100.0	+\$0.0002	+0.3
90	25	96.2	+31	+124.0	60.00	100.0	.....	.....	.0750	100.7	- .0003	- .4
91	25	96.2	+31	+124.0	60.00	100.0	.....	.....	.0750	100.7	- .0003	- .4
92	25	96.2	+31	+124.0	60.00	100.0	.....	.....	.0750	100.7	- .0003	- .4
93	26	100.0	+30	+115.4	60.00	100.0	.....	.....	.0750	100.7	- .0003	- .4
94	28	107.7	+28	+100.0	60.00	100.0	.....	.....	.0750	100.7	- .0003	- .4
95	25	96.2	+31	+124.0	60.00	100.0	.....	.....	.0750	100.7	- .0003	- .4
96	28	107.7	+28	+100.0	60.00	100.0	.....	.....	.0750	100.7	- .0003	- .4
97	28	107.7	+28	+100.0	60.00	100.0	.....	.....	.0735	98.7	+ .0012	+1.6
98	28	107.7	+28	+100.0	60.00	100.0	.....	.....	.0739	99.2	+ .0008	+1.1
99	26	100.0	+30	+115.4	60.00	100.0	.....	.....	.0723	97.0	+ .0024	+3.3
00	26	100.0	+30	+115.4	60.00	100.0	.....	.....	.0733	98.4	+ .0014	+1.9
01	37	142.3	+19	+ 51.4	60.00	100.0	.....	.....	.0766	102.8	- .0019	-2.5
02	35	134.6	+21	+ 60.0	60.00	100.0	.....	.....	.0780	104.7	- .0033	-4.2
03	56	215.4	.....	.....	60.00	100.0	.....	.....	.0747	100.3	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE M.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, CIGARETTES—Continued.

CIGARETTE MACHINE FEEDERS, Female.

[Data from 1 establishment.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	23	100.0	+2	+ 8.7	57.25	100.0	-0.01	-0.02	\$0.0943	100.0	+\$0.0105	+11.
1890	20	87.0	+5	+25.0	57.25	100.0	-0.01	-0.02	.0873	92.6	+ .0175	+20.
1891	20	87.0	+5	+25.0	57.25	100.0	-0.01	-0.02	.0873	92.6	+ .0175	+20.
1892	21	91.8	+4	+19.0	57.24	100.0	.....	.....	.0873	92.6	+ .0175	+20.
1893	22	95.7	+3	+13.6	57.27	100.0	-0.03	- .1	.0873	92.6	+ .0175	+20.
1894	22	95.7	+3	+13.6	57.27	100.0	-0.03	- .1	.0873	92.6	+ .0175	+20.
1895	24	104.8	+1	+ 4.2	57.25	100.0	-0.01	-0.02	.0873	92.6	+ .0175	+20.
1896	24	104.8	+1	+ 4.2	57.25	100.0	-0.01	-0.02	.1048	111.1	.....	.....
1897	25	108.7	.....	.....	57.24	100.0	.....	.....	.1048	111.1	.....	.....
1898	25	108.7	.....	.....	57.24	100.0	.....	.....	.1048	111.1	.....	.....
1899	25	108.7	.....	.....	57.24	100.0	.....	.....	.1048	111.1	.....	.....
1900	27	117.4	-2	- 7.4	57.26	100.0	-0.02	- .03	.1048	111.1	.....	.....
1901	25	108.7	.....	.....	57.24	100.0	.....	.....	.1048	111.1	.....	.....
1902	25	108.7	.....	.....	57.24	100.0	.....	.....	.1048	111.1	.....	.....
1903	25	108.7	.....	.....	57.21	100.0	.....	.....	.1048	111.1	.....	.....

CIGARETTE MACHINE OPERATORS, Male.

[Data for employees from 2 establishments for entire period. Data for hours and wages from establishments, 1890-1896: 3 establishments, 1897-1903.]

Av. 1890-99.	38	100.0	+14	+36.8	59.25	100.0	+0.15	+0.3	\$0.1171	100.0	+\$0.0262	+22
1890	34	89.5	+18	+52.9	59.26	100.0	+ .14	+ .2	.1029	87.9	+ .0404	+39
1891	35	92.1	+17	+48.6	59.23	100.0	+ .17	+ .3	.1044	89.2	+ .0389	+37
1892	35	92.1	+17	+48.6	59.14	99.8	+ .26	+ .4	.1066	91.0	+ .0867	+34
1893	37	97.4	+15	+40.5	59.19	99.9	+ .21	+ .4	.1053	89.9	+ .0830	+36
1894	37	97.4	+15	+40.5	59.11	99.8	+ .29	+ .5	.1186	101.3	+ .0247	+20
1895	37	97.4	+15	+40.5	59.11	99.8	+ .29	+ .5	.1186	101.3	+ .0247	+20
1896	39	102.6	+13	+33.3	59.15	99.8	+ .25	+ .4	.1168	99.7	+ .0265	+22
1897	40	105.3	+12	+30.0	59.46	100.4	-0.06	- .1	.1302	111.2	+ .0131	+10
1898	41	107.9	+11	+26.8	59.45	100.3	-0.05	- .1	.1338	114.3	+ .0095	+ 7
1899	47	123.7	+ 5	+10.6	59.44	100.3	-0.04	- .1	.1334	113.9	+ .0099	+ 7
1900	50	131.6	+ 2	+ 4.0	59.40	100.3	.....	.....	.1363	116.4	+ .0070	+ 5
1901	51	134.2	+ 1	+ 2.0	59.33	100.1	+ .07	+ .1	.1401	119.6	+ .0032	+ 3
1902	45	118.4	+ 7	+15.6	59.29	100.1	+ .11	+ .2	.1484	126.7	- .0051	- 2
1903	52	136.8	.....	.....	59.40	100.3	.....	.....	.1433	122.4	.....	.....

CIGARETTE MACHINE OPERATORS, Female.

[Data from 1 establishment.]

Av. 1890-99.	23	100.0	+2	+ 8.7	57.25	100.0	-0.01	-0.02	\$0.1362	100.0	+\$0.0210	+11
1890	20	87.0	+5	+25.0	57.25	100.0	-0.01	-0.02	.1223	89.8	+ .0349	+23
1891	20	87.0	+5	+25.0	57.25	100.0	-0.01	-0.02	.1223	89.8	+ .0349	+23
1892	21	91.8	+4	+19.0	57.24	100.0	.....	.....	.1223	89.8	+ .0349	+23
1893	22	95.7	+3	+13.6	57.27	100.0	-0.03	- .1	.1223	89.8	+ .0349	+23
1894	22	95.7	+3	+13.6	57.27	100.0	-0.03	- .1	.1397	102.6	+ .0175	+11
1895	24	104.8	+1	+ 4.2	57.25	100.0	-0.01	-0.02	.1397	102.6	+ .0175	+11
1896	24	104.8	+1	+ 4.2	57.25	100.0	-0.01	-0.02	.1397	102.6	+ .0175	+11
1897	25	108.7	.....	.....	57.24	100.0	.....	.....	.1397	102.6	+ .0175	+11
1898	25	108.7	.....	.....	57.24	100.0	.....	.....	.1572	115.4	.....	.....
1899	25	108.7	.....	.....	57.24	100.0	.....	.....	.1572	115.4	.....	.....
1900	25	108.7	.....	.....	57.24	100.0	.....	.....	.1572	115.4	.....	.....
1901	25	108.7	.....	.....	57.24	100.0	.....	.....	.1572	115.4	.....	.....
1902	25	108.7	.....	.....	57.24	100.0	.....	.....	.1572	115.4	.....	.....
1903	25	108.7	.....	.....	57.24	100.0	.....	.....	.1572	115.4	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, CIGARETTES—Concluded.

PACKING MACHINE FEEDERS, Female.

[No data, 1890-1898; data from 1 establishment, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average number.	Relative number.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Number.	Per cent.			Number.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1899	6	(a)	+10	+166.7	60.00	(a)	.....	.....	\$0.0667	(a)	+\$0.0057	+ 8.5
1900	5	(a)	+11	+220.0	60.00	(a)	.....	.....	.0667	(a)	+ .0057	+ 8.5
1901	13	(a)	+3	+23.1	60.00	(a)	.....	.....	.0731	(a)	- .0007	-10.0
1902	10	(a)	+6	+60.0	60.00	(a)	.....	.....	.0717	(a)	+ .0007	+10.0
1903	16	(a)	.....	.....	60.00	(a)	.....	.....	.0724	(a)	.....	.....

PACKING MACHINE OPERATORS, Female.

[No data, 1890-1898; data from 1 establishment, 1899-1903.]

Year.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1899	10	(a)	+3	+30.0	60.00	(a)	.....	.....	\$0.0833	(a)	.....	.....
1900	10	(a)	+3	+30.0	60.00	(a)	.....	.....	.0833	(a)	.....	.....
1901	17	(a)	-4	-23.5	60.00	(a)	.....	.....	.0833	(a)	.....	.....
1902	11	(a)	+2	+18.2	60.00	(a)	.....	.....	.0833	(a)	.....	.....
1903	13	(a)	.....	.....	60.00	(a)	.....	.....	.0833	(a)	.....	.....

TOBACCO, CIGARS.

BUNCH MAKERS, HAND, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 2 establishments, 1890-1895; 1 establishment, 1896-1903.]

Year.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Av. 1890-99.	43	100.0	+15	+34.9	57.23	100.0	+2.77	+4.8	\$0.1676	100.0	+\$0.0287	+17.1
1890	32	74.4	+26	+81.3	56.93	99.5	+3.07	+5.4	.1657	98.9	+.0306	+18.5
1891	35	81.4	+23	+65.7	56.24	98.3	+3.76	+6.7	.1551	92.5	+.0412	+26.6
1892	28	65.1	+30	+107.1	53.42	93.3	+6.58	+12.3	.1412	84.2	+.0551	+39.0
1893	35	81.4	+23	+65.7	55.12	96.3	+4.88	+8.9	.1381	112.2	+.0682	+4.4
1894	44	102.3	+14	+31.8	55.23	96.5	+4.77	+8.6	.1708	101.9	+.0255	+14.9
1895	37	86.0	+21	+66.8	55.40	96.8	+4.60	+8.3	.1630	97.3	+.0333	+20.4
1896	38	88.4	+20	+52.6	60.00	104.8	.....	.....	.1685	100.5	+.0273	+16.5
1897	52	120.9	+6	+11.5	60.00	104.8	.....	.....	.1902	113.5	+.0061	+3.2
1898	55	127.9	+3	+5.5	60.00	104.8	.....	.....	.1682	100.4	+.0281	+16.7
1899	69	160.5	-11	-15.9	60.00	104.8	.....	.....	.1650	98.5	+.0313	+19.0
1900	12	27.9	+46	+383.3	60.00	104.8	.....	.....	.1677	100.1	+.0286	+17.1
1901	39	90.7	+19	+48.7	60.00	104.8	.....	.....	.1797	107.2	+.0166	+9.2
1902	44	102.3	+14	+31.8	60.00	104.8	.....	.....	.1705	101.7	+.0258	+15.1
1903	58	134.9	.....	.....	60.00	104.8	.....	.....	.1963	117.1	.....	.....

BUNCH MAKERS, HAND, Female.

[Data for employees from 6 establishments for entire period. Data for hours and wages from 6 establishments, 1890-1895; 7 establishments, 1896-1903.]

Year.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Av. 1890-99.	249	100.0	+25	+10.0	55.59	100.0	+0.11	+0.2	\$0.1457	100.0	+\$0.0368	+25.3
1890	223	89.6	+51	+22.9	55.59	100.0	+ .11	+ .2	.1415	97.1	+.0410	+29.0
1891	225	90.4	+49	+21.8	55.72	100.2	- .02	- .04	.1459	100.1	+.0366	+25.1
1892	210	84.3	+64	+30.5	55.28	98.4	+ .42	+ .8	.1430	98.1	+.0395	+27.6
1893	227	91.2	+47	+20.7	55.10	100.9	- .40	- .7	.1448	99.4	+.0377	+26.0
1894	252	101.2	+22	+8.7	66.34	101.3	- .64	- 1.1	.1455	99.9	+.0370	+25.4
1895	236	94.5	+38	+16.1	56.25	101.2	- .55	- 1.0	.1428	98.0	+.0397	+27.8
1896	231	92.8	+43	+18.6	55.08	99.1	+ .62	+ 1.1	.1469	100.8	+.0356	+24.2
1897	292	117.3	-18	-6.2	54.94	98.8	+ .76	+ 1.4	.1570	107.8	+.0255	+16.2
1898	271	108.8	+3	+1.1	55.06	99.0	+ .64	+ 1.2	.1432	101.7	+.0343	+23.1
1899	321	128.9	-47	-14.6	55.53	99.9	+ .17	+ .3	.1418	97.3	+.0407	+28.7
1900	151	60.6	+123	+31.5	61.86	93.3	+3.84	+7.4	.1339	91.9	+.0486	+36.3
1901	225	90.4	+49	+21.8	53.93	97.0	+1.77	+3.9	.1520	104.3	+.0305	+20.1
1902	242	97.2	+32	+13.2	55.21	99.3	+ .49	+ .8	.1474	101.2	+.0351	+23.8
1903	274	110.0	.....	.....	55.70	100.2	.....	.....	.1825	125.3	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE II.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, CIGARS—Continued.

BUNCH MAKERS, MACHINE, Female.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	135	100.0	+ 95	+ 70.4	59.40	100.0	-0.42	-0.7	\$0.1090	100.0	+\$0.0149	+13.7
1890	101	74.8	+129	+127.7	59.82	100.7	- .84	-1.4	.1110	101.8	+ .0129	+11.6
1891	108	80.0	+122	+113.0	59.83	100.7	- .85	-1.4	.1112	102.0	+ .0127	+11.4
1892	118	87.4	+112	+ 94.9	59.85	100.8	- .87	-1.5	.1129	103.6	+ .0110	+ 9.7
1893	106	78.6	+124	+117.0	59.83	100.7	- .85	-1.4	.1102	101.1	+ .0137	+12.4
1894	125	92.6	+105	+ 84.0	59.86	100.8	- .88	-1.5	.1036	95.0	+ .0203	+19.6
1895	182	134.8	+ 48	+ 26.4	59.90	100.8	- .92	-1.5	.1044	95.8	+ .0195	+18.7
1896	129	95.6	+101	+ 78.3	58.74	98.9	+ .24	+ .4	.1055	96.8	+ .0184	+17.4
1897	189	140.0	+ 41	+ 21.7	58.97	99.8	+ .01	+ .02	.1044	95.8	+ .0195	+18.7
1898	135	100.0	+ 95	+ 70.4	58.49	98.5	+ .49	+ .8	.1184	104.0	+ .0105	+ 9.2
1899	152	112.6	+ 78	+ 51.3	58.78	98.9	+ .25	+ .4	.1138	104.4	+ .0101	+ 8.6
1900	182	134.8	+ 48	+ 26.4	58.88	99.1	+ .10	+ .2	.1184	108.6	+ .0055	+ 4.6
1901	201	148.9	+ 29	+ 14.4	58.86	99.1	+ .12	+ .2	.1147	105.2	+ .0092	+ 8.0
1902	220	163.0	+ 10	+ 4.5	58.98	99.8	.....	.....	.1286	113.4	+ .0008	+ .2
1903	230	170.4	.....	.....	58.98	99.8	.....	.....	.1289	113.7	.....	.....

CIGAR MAKERS, Male.

[Data from 9 establishments.]

Av. 1890-99.	432	100.0	+118	+27.3	53.99	100.0	+2.89	+5.4	\$0.2630	100.0	+\$0.0209	+ 7.4
1890	361	83.6	+189	+52.4	52.88	97.9	+4.00	+7.6	.2703	102.8	+ .0136	+ 5.0
1891	439	101.6	+111	+25.3	52.05	96.4	+4.83	+9.3	.2846	108.2	+ .0007	- .5
1892	457	105.8	+ 93	+20.4	53.59	99.3	+3.29	+6.1	.2786	105.9	+ .0053	+ 1.9
1893	628	145.4	- 78	-12.4	54.42	100.8	+2.46	+4.5	.2661	101.2	+ .0178	+ 6.7
1894	521	120.6	+ 29	+ 5.6	53.70	99.5	+3.18	+5.9	.2644	100.5	+ .0195	+ 7.4
1895	478	110.6	+ 72	+15.1	53.42	98.9	+3.46	+6.5	.2605	99.0	+ .0234	+ 9.0
1896	390	90.3	+160	+41.0	55.47	102.7	+1.41	+2.5	.2471	94.0	+ .0368	+14.9
1897	301	69.7	+249	+82.7	53.30	98.7	+3.58	+6.7	.2545	96.8	+ .0294	+11.6
1898	305	70.6	+245	+80.3	54.75	101.4	+2.18	+3.9	.2431	92.4	+ .0408	+16.8
1899	443	102.5	+107	+24.2	56.33	104.3	+ .55	+1.0	.2610	99.2	+ .0229	+ 8.3
1900	590	136.6	- 40	- 6.8	56.75	105.1	+ .13	+ .2	.2622	99.7	+ .0217	+ 8.0
1901	753	174.3	-208	-27.0	57.42	106.4	- .54	- .9	.2764	105.1	+ .0075	+ 2.9
1902	543	125.7	+ 7	+ 1.3	56.58	104.8	+ .30	+ .5	.2784	105.9	+ .0055	+ 2.0
1903	550	127.3	.....	.....	56.88	105.4	.....	.....	.2839	107.9	.....	.....

CIGAR ROLLERS, HAND, Male.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 5 establishments, 1890-1895; 5 establishments, 1896, 1897; 4 establishments, 1898-1903.]

Av. 1890-99.	199	100.0	-17	- 8.5	53.61	100.0	-0.09	-0.2	\$0.1957	100.0	+\$0.0260	+13.1
1890	185	93.0	- 3	- 1.6	53.15	99.1	+ .37	+ .7	.1980	101.2	+ .0237	+12.0
1891	189	95.0	- 7	- 3.7	53.04	98.9	+ .48	+ .9	.1925	98.4	+ .0292	+15.0
1892	177	88.9	+ 5	+ 2.8	52.17	97.8	+1.35	+2.6	.1897	96.9	+ .0320	+16.0
1893	183	94.5	- 6	- 3.2	52.97	98.8	+ .55	+1.0	.2002	102.3	+ .0215	+10.0
1894	192	96.5	-10	- 5.2	53.45	99.7	+ .07	+ .1	.1942	99.2	+ .0275	+13.0
1895	197	99.0	-15	- 7.6	53.21	99.3	+ .31	+ .6	.1958	100.1	+ .0259	+13.0
1896	190	95.5	- 8	- 4.2	53.97	100.7	- .45	- .8	.1959	100.1	+ .0258	+13.0
1897	222	111.6	-40	-18.0	54.70	102.0	-1.18	-2.2	.1936	98.9	+ .0281	+14.0
1898	221	111.1	-39	-17.6	54.56	101.8	-1.04	-1.9	.1967	100.5	+ .0250	+12.0
1899	233	117.1	-51	-21.9	54.83	102.3	-1.31	-2.4	.2001	102.2	+ .0216	+10.0
1900	143	71.9	+39	+27.3	51.69	96.4	+1.83	+3.5	.2014	102.9	+ .0203	+10.0
1901	173	86.9	+ 9	+ 5.2	53.06	99.0	+ .46	+ .9	.2220	113.4	- .0003	- .1
1902	181	91.0	+ 1	+ .6	53.30	99.4	+ .22	+ .4	.2298	117.4	- .0081	- 3.0
1903	182	91.5	.....	.....	53.52	99.8	.....	.....	.2217	113.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, CIGARS—Continued.

CIGAR ROLLERS, HAND, Female.

[Data for employees from 4 establishments for entire period. Data for hours and wages from 4 establishments, 1890-1895; 6 establishments, 1896, 1897; 7 establishments, 1898-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
v. 1890-99.	336	100.0	- 43	- 12.5	58.22	100.0	-1.37	-2.4	\$0.1650	100.0	+\$0.0275	+16.7
890	295	87.8	- 2	- .7	58.83	101.0	-1.98	-3.4	.1645	99.7	+ .0280	+17.0
891	301	89.6	- 8	- 2.7	58.82	101.0	-1.97	-3.3	.1645	99.7	+ .0280	+17.0
892	259	77.1	+ 34	+13.1	58.60	100.7	-1.75	-3.0	.1672	101.3	+ .0253	+15.1
893	307	91.4	- 14	- 4.6	58.70	100.8	-1.85	-3.2	.1611	97.6	+ .0314	+19.5
894	354	105.4	- 61	-17.2	58.93	101.2	-2.08	-3.5	.1633	99.0	+ .0292	+17.9
895	327	97.3	- 34	-10.4	58.92	101.2	-2.07	-3.5	.1737	105.3	+ .0188	+10.8
896	296	88.1	- 8	- 1.0	56.94	97.8	- .09	- .2	.1610	97.6	+ .0315	+19.6
897	413	122.9	-120	-29.1	57.41	98.6	- .56	-1.0	.1628	98.7	+ .0297	+18.2
898	390	116.1	- 97	-24.9	57.47	98.7	- .62	-1.1	.1627	98.6	+ .0298	+18.3
899	421	125.3	-128	-30.4	57.59	98.9	- .74	-1.3	.1696	102.8	+ .0229	+13.5
900	164	48.8	+129	+78.7	54.52	93.6	+2.33	+4.3	.1470	89.1	+ .0455	+31.0
901	250	74.4	+ 43	+17.2	55.76	95.8	+1.09	+2.0	.1746	105.8	+ .0179	+10.3
902	277	82.4	+ 16	+ 5.8	56.47	97.0	+ .88	+ .7	.1841	111.6	+ .0084	+ 4.6
903	293	87.2	.....	.....	56.85	97.6	.....	.....	.1925	116.7	.....	.....

CIGAR ROLLERS, MACHINE, Female.

[Data from 2 establishments.]

v. 1890-99.	329	100.0	+345	+104.9	59.74	100.0	-0.19	-0.3	\$0.1181	100.0	+\$0.0345	+29.2
890	178	54.1	+496	+278.7	60.00	100.4	- .45	- .8	.1234	104.5	+ .0292	+23.7
891	178	54.1	+496	+278.7	60.00	100.4	- .45	- .8	.1246	105.5	+ .0280	+22.5
892	259	78.7	+415	+160.2	60.00	100.4	- .45	- .8	.1232	104.3	+ .0294	+23.9
893	213	64.7	+461	+216.4	60.00	100.4	- .45	- .8	.1272	107.7	+ .0254	+20.0
894	307	93.3	+367	+119.5	60.00	100.4	- .45	- .8	.1290	109.2	+ .0236	+18.3
895	455	138.3	+219	+48.1	60.00	100.4	- .45	- .8	.1139	96.4	+ .0337	+34.0
896	424	128.9	+250	+59.0	59.48	99.6	+ .07	+ .1	.1086	92.0	+ .0440	+40.5
897	411	124.9	+263	+64.0	59.29	99.2	+ .26	+ .4	.1120	94.8	+ .0406	+36.3
898	465	141.3	+299	+44.9	59.37	99.4	+ .18	+ .3	.1035	91.9	+ .0441	+40.6
899	402	122.2	+272	+67.7	59.28	99.2	+ .27	+ .5	.1108	93.8	+ .0418	+37.7
900	498	151.4	+176	+35.3	59.42	99.5	+ .13	+ .2	.1270	107.5	+ .0256	+20.2
901	545	165.7	+129	+23.7	59.45	99.5	+ .10	+ .2	.1529	129.5	- .0003	- .2
902	672	204.3	+ 2	+ .3	59.55	99.7	.....	.....	.1453	123.0	+ .0073	+ 5.0
903	674	204.9	.....	.....	59.55	99.7	.....	.....	.1526	129.2	.....	.....

PACKERS, Male.

Data for employees from 11 establishments for entire period. Data for hours and wages from 11 establishments, 1890-1892; 12 establishments, 1893-1898; 11 establishments, 1899-1903.]

v. 1890-99.	129	100.0	-21	-16.3	51.12	100.0	+0.45	+0.8	\$0.3255	100.0	+\$0.0463	+14.2
890	96	74.4	+12	+12.5	54.27	100.3	+ .30	+ .6	.2989	91.8	+ .0729	+24.4
891	97	75.2	+11	+11.3	54.21	100.2	+ .36	+ .7	.3285	100.9	+ .0433	+13.2
892	123	95.3	- 5	- 12.2	54.46	100.6	+ .11	+ .2	.3232	99.3	+ .0496	+15.0
893	113	87.6	- 15	- 4.4	54.39	100.5	+ .18	+ .3	.3203	98.4	+ .0515	+16.1
894	133	103.1	-25	-18.8	54.32	100.4	+ .25	+ .5	.3213	98.7	+ .0515	+16.1
895	132	102.3	-24	-18.2	54.41	100.5	+ .25	+ .5	.3258	100.1	+ .0460	+14.8
896	121	93.8	-13	-10.7	53.67	99.2	+ .90	+1.7	.3355	103.1	+ .0363	+10.1
897	152	117.8	-44	-23.9	53.93	99.6	+ .64	+1.2	.3233	100.9	+ .0435	+13.3
898	157	121.7	-49	-31.2	53.76	99.3	+ .81	+1.5	.3326	102.2	+ .0392	+11.8
899	170	131.8	-62	-36.5	53.80	99.4	+ .69	+1.3	.3405	104.7	+ .0309	+ 9.1
900	94	72.9	+14	+14.9	53.88	99.6	+ .69	+1.3	.3516	108.0	+ .0202	+ 5.7
901	99	76.7	+ 9	+ 9.1	53.88	99.9	+1.04	+1.9	.3516	108.0	+ .0202	+ 5.7
902	122	94.6	-14	-11.5	54.06	99.9	+ .51	+ .9	.3356	103.1	+ .0362	+10.3
903	108	83.7	.....	.....	54.57	100.8	.....	.....	.3718	114.2	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 715.]

TOBACCO, CIGARS—Concluded.

PACKERS, Female.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890-1899; 4 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	13	100.0	+3	+ 23.1	50.05	100.0	+3.48	+7.0	\$0.1511	100.0	-\$0.0212	-14.
1890	8	61.5	+8	+100.0	50.88	101.7	+2.65	+5.2	.1649	109.1	- .0850	-21.
1891	12	92.3	+4	+ 33.3	49.92	99.7	+3.61	+7.2	.1628	107.7	- .0829	-20.
1892	14	107.7	+2	+ 14.8	49.64	99.2	+3.89	+7.8	.1649	109.1	- .0850	-21.
1893	17	130.8	-1	- 5.9	49.35	98.6	+4.18	+8.5	.1459	96.6	- .0160	-11.
1894	15	115.4	+1	+ 6.7	49.58	99.0	+4.00	+8.1	.1350	89.3	- .0051	- 3.
1895	15	115.4	+1	+ 6.7	49.58	99.0	+4.00	+8.1	.1333	88.2	- .0034	- 2.
1896	8	61.5	+8	+100.0	50.88	101.7	+2.65	+5.2	.1542	102.1	- .0243	-15.
1897	13	100.0	+3	+ 23.1	49.77	99.4	+3.76	+7.6	.1457	96.4	- .0158	-10.
1898	12	92.3	+4	+ 33.3	49.92	99.7	+3.61	+7.2	.1541	102.0	- .0242	-15.
1899	11	84.6	+5	+45.5	51.09	102.1	+2.44	+4.8	.1506	99.6	- .0206	-13.
1900	15	115.4	+1	+ 6.7	53.35	106.6	+ .18	+ .4	.1221	80.1	+ .0088	+ 7.
1901	13	100.0	+3	+ 23.1	53.38	106.7	+ .15	+ .3	.1765	116.8	- .0466	-26.
1902	18	138.5	-2	- 11.1	53.08	106.1	+ .45	+ .8	.1564	103.5	- .0265	-16.
1903	16	123.1			53.53	107.0			.1299	86.0		

STEMMERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 4 establishments, 1890-1897, 1899; 3 establishments, 1898, 1900-1903.]

Av. 1890-99.	94	100.0	-25	-26.6	59.96	100.0	+0.04	+0.1	\$0.0909	100.0	+\$0.0380	+41	
1890	49	52.1	+20	+40.8	59.92	99.9	+ .08	+ .1	.0969	106.6	+	.0320	+33
1891	71	75.5	- 2	- 2.8	59.97	100.0	+ .03	+ .1	.0936	103.0	+	.0353	+37
1892	103	109.6	-34	-33.0	59.95	100.0	+ .05	+ .1	.0868	95.5	+	.0421	+43
1893	136	144.7	-67	-49.3	59.96	100.0	+ .04	+ .1	.0813	89.4	+	.0476	+58
1894	93	104.3	-29	-29.6	59.96	100.0	+ .04	+ .1	.0871	95.8	+	.0418	+43
1895	117	124.5	-43	-41.0	59.95	100.0	+ .05	+ .1	.0835	91.9	+	.0454	+54
1896	113	120.2	-44	-38.9	59.95	100.0	+ .05	+ .1	.0856	94.2	+	.0433	+50
1897	53	56.4	+16	+30.2	59.91	99.9	+ .09	+ .2	.0994	109.4	+	.0295	+29
1898	86	91.5	-17	-19.8	60.00	100.1	.....	.....	.0990	108.9	+	.0299	+30
1899	114	121.3	-45	-39.5	59.99	100.1	+ .01	+ .02	.0962	105.8	+	.0327	+34
1900	108	114.9	-39	-36.1	60.00	100.1	.....	.....	.1079	118.7	+	.0210	+19
1901	57	60.6	+12	+21.1	60.00	100.1	.....	.....	.1107	121.8	+	.0182	+16
1902	68	72.3	+ 1	+ 1.5	60.00	100.1	.....	.....	.1021	112.3	+	.0268	+26
1903	69	73.4	.....	.....	60.00	100.1	.....	.....	.1289	141.8	.....	.....	.....

STEMMERS, Female.

[Data for employees from 13 establishments for entire period. Data for hours and wages from establishments, 1890, 1894-1896, 1898-1903; 13 establishments, 1891-1893, 1897.]

Av. 1890-99.	442	100.0	+ 4	+ 0.9	55.89	100.0	+0.55	+1.0	\$0.0711	100.0	+\$0.0145	+26	
1890	402	91.0	+44	+10.9	56.40	100.9	+ .04	+ .1	.0641	90.2	+	.0215	+33
1891	453	102.5	- 7	- 1.5	55.78	99.8	+ .66	+1.2	.0630	88.6	+	.0226	+35
1892	413	93.4	+33	+ 8.0	56.00	100.2	+ .44	+ .8	.0692	97.3	+	.0164	+23
1893	419	94.8	+27	+ 6.4	55.05	98.5	+1.39	+2.5	.0671	94.4	+	.0185	+27
1894	461	104.3	-15	- 3.3	55.83	99.9	+ .61	+1.1	.0716	100.7	+	.0140	+15
1895	469	106.1	-23	- 4.9	55.50	99.3	+ .94	+1.7	.0691	97.2	+	.0165	+22
1896	407	92.1	+39	+ 9.6	55.85	99.9	+ .59	+1.1	.0732	103.0	+	.0124	+16
1897	443	100.2	+ 3	+ .7	55.76	99.8	+ .63	+1.2	.0803	112.9	+	.0053	+ 6
1898	458	103.6	-12	- 2.6	56.27	100.7	+ .17	+ .3	.0781	109.8	+	.0075	+ 9
1899	495	112.0	-49	- 9.9	56.47	101.0	- .03	- .1	.0752	105.8	+	.0104	+15
1900	430	97.3	+16	+ 3.7	55.76	99.8	+ .68	+1.2	.0750	105.5	+	.0106	+15
1901	434	98.2	+12	+ 2.8	55.52	99.3	+ .92	+1.7	.0853	120.0	+	.0003	+ 0
1902	464	105.0	-18	- 3.9	55.90	100.0	+ .54	+1.0	.0832	117.0	+	.0024	+ 3
1903	446	100.9	.....	.....	56.44	101.0	.....	.....	.0856	120.4	.....	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, PLUG, FINE CUT, AND GRANULATED SMOKING.

CASERS, Male.

Data for employees from 4 establishments for entire period. Data for hours and wages from 4 establishments, 1890, 1891; 6 establishments, 1892-1897; 7 establishments, 1898, 1899; 3 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
1890-1899.	11	100.0	.....	.....	59.70	100.0	+0.20	+0.3	\$0.1363	100.0	—\$0.0051	—3.7
1890	11	100.0	.....	.....	60.55	101.4	— .65	—1.1	.1419	104.1	— .0107	—7.5
1891	11	100.0	.....	.....	60.55	101.4	— .65	—1.1	.1419	104.1	— .0107	—7.5
1892	11	100.0	.....	.....	59.36	99.4	+ .54	+ .9	.1335	97.9	— .0023	—1.7
1893	11	100.0	.....	.....	59.33	99.4	+ .57	+1.0	.1322	97.0	— .0010	— .8
1894	11	100.0	.....	.....	59.34	99.4	+ .56	+ .9	.1334	97.9	— .0022	—1.6
1895	11	100.0	.....	.....	59.38	99.5	+ .52	+ .9	.1423	104.4	— .0111	—7.8
1896	11	100.0	.....	.....	59.46	99.6	+ .44	+ .7	.1422	104.3	— .0110	—7.7
1897	11	100.0	.....	.....	59.58	99.8	+ .32	+ .5	.1373	100.7	— .0061	—4.4
1898	11	100.0	.....	.....	59.72	100.0	+ .18	+ .3	.1289	94.6	+ .0023	+1.8
1899	11	100.0	.....	.....	59.72	100.0	+ .18	+ .3	.1290	94.6	+ .0022	+1.7
1900	11	100.0	.....	.....	59.92	100.4	— .02	— .03	.1253	91.9	+ .0059	+4.7
1901	11	100.0	.....	.....	59.85	100.3	+ .05	+ .1	.1271	93.3	+ .0041	+3.2
1902	11	100.0	.....	.....	59.89	100.3	+ .01	+ .02	.1315	96.5	— .0008	— .2
1903	11	100.0	.....	.....	59.90	100.3	.....	.....	.1312	96.3	.....	.....

CASERS, Female.

Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890, 1891, 1902, 1903; 2 establishments, 1892-1901.]

1890-1899.	4	100.0	+1	+25.0	57.75	100.0	—2.75	—4.8	\$0.1039	100.0	+\$0.0852	+ 82.0
1890	4	100.0	+1	+25.0	55.00	95.2	.....	.....	.1364	131.3	+ .0527	+ 58.6
1891	4	100.0	+1	+25.0	55.00	95.2	.....	.....	.1364	131.3	+ .0527	+ 58.6
1892	4	100.0	+1	+25.0	58.53	101.4	—3.53	—6.0	.0905	87.1	+ .0986	+109.0
1893	4	100.0	+1	+25.0	58.64	101.5	—3.64	—6.2	.0910	87.6	+ .0981	+107.8
1894	4	100.0	+1	+25.0	58.62	101.5	—3.62	—6.2	.0915	88.1	+ .0976	+106.7
1895	3	75.0	+2	+66.7	58.71	101.7	—3.71	—6.3	.0910	87.6	+ .0981	+107.8
1896	4	100.0	+1	+25.0	58.45	101.2	—3.45	—5.9	.0966	93.0	+ .0925	+ 95.8
1897	4	100.0	+1	+25.0	58.16	100.7	—3.16	—5.4	.1030	99.1	+ .0861	+ 83.6
1898	4	100.0	+1	+25.0	58.30	101.0	—3.30	—5.7	.0982	94.5	+ .0909	+ 92.6
1899	5	125.0	.....	.....	58.05	100.5	—3.05	—5.3	.1041	100.2	+ .0850	+ 81.7
1900	4	100.0	+1	+25.0	57.00	98.7	—2.00	—3.5	.1274	122.6	+ .0617	+ 48.4
1901	5	125.0	.....	.....	56.78	98.3	—1.78	—3.1	.1375	132.3	+ .0516	+ 37.5
1902	5	125.0	.....	.....	55.00	95.2	.....	.....	.1836	176.7	+ .0055	+ 3.0
1903	5	125.0	.....	.....	55.00	95.2	.....	.....	.1891	182.0	.....	.....

GRANULATORS, Male.

[Data from 1 establishment.]

1890-1899.	23	100.0	+17	+ 73.9	58.00	100.0	.....	.....	\$0.0885	100.0	—\$0.0052	— 5.9
1890	26	113.0	+14	+ 53.8	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1891	24	104.3	+16	+ 66.6	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1892	25	108.7	+15	+ 60.0	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1893	24	104.3	+16	+ 66.6	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1894	24	104.3	+16	+ 66.6	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1895	22	95.7	+18	+ 81.8	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1896	23	100.0	+17	+ 73.9	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1897	20	87.0	+20	+100.0	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1898	21	91.3	+19	+ 90.5	58.00	100.0	.....	.....	.0900	101.7	— .0067	— 7.4
1899	20	87.0	+20	+100.0	58.00	100.0	.....	.....	.0750	84.7	+ .0038	+11.1
1900	20	87.0	+20	+100.0	58.00	100.0	.....	.....	.0750	84.7	+ .0038	+11.1
1901	19	82.6	+21	+110.5	58.00	100.0	.....	.....	.0800	90.4	+ .0033	+ 4.1
1902	10	43.5	+30	+300.0	58.00	100.0	.....	.....	.0833	94.1	.....	.....
1903	40	173.9	.....	.....	58.00	100.0	.....	.....	.0833	94.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, PLUG, FINE CUT, AND GRANULATED SMOKING—Continued.

LUMP MAKERS, HAND, Male.

[Data from 2 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as compared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (—) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	108	100.0	—22	—20.4	55.17	100.0	—1.43	—2.6	\$0.1411	100.0	+\$0.0047	+ 3
1890	96	88.9	—10	—10.4	55.31	100.8	—1.57	—2.8	.1617	114.6	— .0159	— 9
1891	115	106.5	—29	—25.2	55.10	99.9	—1.36	—2.5	.1518	107.6	— .0060	— 4
1892	125	115.7	—39	—31.2	55.01	99.7	—1.27	—2.3	.1327	94.3	+ .0181	+ 9
1893	105	100.0	—22	—20.4	55.17	100.0	—1.43	—2.6	.1351	94.3	+ .0127	+ 9
1894	111	102.8	—25	—22.5	55.14	99.9	—1.40	—2.5	.1390	98.5	+ .0068	+ 4
1895	107	99.1	—21	—19.6	55.18	100.0	—1.44	—2.6	.1411	100.0	+ .0047	+ 3
1896	104	96.3	—18	—17.3	55.21	100.1	—1.47	—2.7	.1318	98.4	+ .0140	+10
1897	101	93.5	—15	—14.9	55.25	100.1	—1.51	—2.7	.1310	92.8	+ .0148	+11
1898	110	101.9	—24	—21.8	55.15	100.0	—1.41	—2.6	.1435	101.7	+ .0023	+ 1
1899	106	98.1	—20	—18.9	55.19	100.0	—1.45	—2.6	.1455	103.1	+ .0003	+
1900	111	102.8	—25	—22.5	55.14	99.9	—1.40	—2.5	.1390	98.5	+ .0068	+ 4
1901	105	97.2	—19	—18.1	55.20	100.1	—1.46	—2.6	.1407	99.7	+ .0051	+ 3
1902	97	89.8	—11	—11.3	55.30	100.2	—1.56	—2.8	.1585	108.8	— .0077	— 5
1903	86	79.6	.....	.....	53.74	97.4	.....	.....	.1458	103.3	.....	.....

LUMP MAKERS, MACHINE, Male.

[Data from 3 establishments.]

Av. 1890-99.	31	100.0	—1	— 3.2	55.42	100.0	—2.09	—3.8	\$0.1352	100.0	+\$0.0488	+36
1890	25	80.6	+5	+20.0	55.20	99.6	—1.87	—3.4	.1183	87.5	+ .0697	+56
1891	26	83.9	+4	+15.4	55.38	99.9	—2.05	—3.7	.1225	90.6	+ .0615	+54
1892	30	96.8	.....	.....	55.67	100.5	—2.34	—4.2	.1183	87.5	+ .0657	+56
1893	29	93.5	+1	+ 3.4	55.52	100.2	—2.19	—3.9	.1234	97.9	+ .0516	+38
1894	33	106.5	—3	— 9.1	55.21	99.6	—1.88	—3.4	.1328	98.2	+ .0512	+38
1895	31	100.0	—1	— 3.2	55.29	99.8	—1.96	—3.5	.1321	97.7	+ .0519	+38
1896	29	93.5	+1	+ 3.4	55.38	99.9	—2.05	—3.7	.1354	100.1	+ .0486	+36
1897	34	109.7	—4	—11.8	55.59	100.3	—2.26	—4.1	.1472	108.9	+ .0368	+28
1898	38	122.6	—8	—21.1	55.47	100.1	—2.14	—3.9	.1551	114.7	+ .0239	+18
1899	37	119.4	—7	—18.9	55.51	100.2	—2.18	—3.9	.1579	116.8	+ .0261	+16
1900	35	112.9	—5	—14.3	55.71	100.5	—2.38	—4.3	.1498	110.8	+ .0342	+22
1901	35	112.9	—5	—14.3	55.71	100.5	—2.38	—4.3	.1611	119.2	+ .0229	+16
1902	32	103.2	—2	— 6.3	54.38	98.1	—1.05	—1.9	.1801	133.2	+ .0039	+ 1
1903	30	96.8	.....	.....	53.33	96.2	.....	.....	.1840	136.1	.....	.....

LUMP MAKERS, N. S., Female.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890, 1891; 2 establishments, 1892-1903.]

Av. 1890-99.	2	100.0	.....	.....	59.00	100.0	.....	.....	\$0.1278	100.0	+\$0.0321	+21
1890	2	100.0	.....	.....	59.00	100.0	.....	.....	.1060	82.9	+ .0539	+54
1891	2	100.0	.....	.....	59.00	100.0	.....	.....	.1060	82.9	+ .0539	+54
1892	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.1462	114.4	+ .0137	+ 8
1893	2	100.0	.....	.....	59.00	100.0	.....	.....	.1196	93.6	+ .0403	+31
1894	3	150.0	—1	—100.0	59.00	100.0	.....	.....	.1330	104.1	+ .0269	+21
1895	3	150.0	—1	—100.0	59.00	100.0	.....	.....	.1393	109.0	+ .0206	+14
1896	2	100.0	.....	.....	59.00	100.0	.....	.....	.1321	103.4	+ .0278	+22
1897	2	100.0	.....	.....	59.00	100.0	.....	.....	.1178	92.2	+ .0421	+31
1898	2	100.0	.....	.....	59.00	100.0	.....	.....	.1342	105.0	+ .0257	+11
1899	2	100.0	.....	.....	59.00	100.0	.....	.....	.1441	112.8	+ .0158	+11
1900	2	100.0	.....	.....	59.00	100.0	.....	.....	.1568	122.7	+ .0031	+ 1
1901	2	100.0	.....	.....	59.00	100.0	.....	.....	.1358	106.3	+ .0241	+11
1902	1	50.0	+1	+100.0	59.00	100.0	.....	.....	.1244	97.3	+ .0355	+23
1903	2	100.0	.....	.....	59.00	100.0	.....	.....	.1599	125.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, PLUG, FINE CUT, AND GRANULATED SMOKING—Continued.

MIXERS, Male.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 1 establishment, 1890, 1891; 3 establishments, 1892-1897; 4 establishments, 1898; 5 establishments, 1899-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	1	100.0	.....	.....	58.94	100.0	+0.87	+1.5	\$0.1119	100.0	+\$0.0361	+32.3
1890	1	100.0	.....	.....	58.00	93.4	+1.81	+3.1	.1000	89.4	+ .0480	+48.0
1891	1	100.0	.....	.....	58.00	93.4	+1.81	+3.1	.1000	89.4	+ .0480	+48.0
1892	1	100.0	.....	.....	59.00	100.1	+ .81	+1.4	.1176	105.1	+ .0304	+26.9
1893	1	100.0	.....	.....	59.00	100.1	+ .81	+1.4	.1015	90.7	+ .0465	+45.8
1894	1	100.0	.....	.....	59.00	100.1	+ .81	+1.4	.1117	99.8	+ .0363	+32.5
1895	1	100.0	.....	.....	59.00	100.1	+ .81	+1.4	.1161	103.8	+ .0319	+27.5
1896	1	100.0	.....	.....	59.00	100.1	+ .81	+1.4	.1053	94.1	+ .0427	+40.6
1897	1	100.0	.....	.....	59.00	100.1	+ .81	+1.4	.1305	116.6	+ .0175	+13.4
1898	1	100.0	.....	.....	59.64	101.2	+ .17	+ .3	.1204	107.6	+ .0276	+22.9
1899	1	100.0	.....	.....	59.71	101.9	+ .10	+ .2	.1159	103.6	+ .0321	+27.7
1900	1	100.0	.....	.....	59.85	101.9	- .04	- .1	.1476	131.9	+ .0004	+ .3
1901	1	100.0	.....	.....	59.83	101.9	- .02	- .03	.1496	133.7	- .0016	- 1.1
1902	1	100.0	.....	.....	59.85	101.9	- .04	- .1	.1483	132.5	- .0003	- .2
1903	1	100.0	.....	.....	59.81	101.5	.....	.....	.1480	132.3	.....	.....

PACKERS, Female.

[Data from 1 establishment.]

Av. 1890-99.	9	100.0	- 6	-66.7	59.00	100.0	.....	.....	\$0.0791	100.0	+\$0.0103	+13.0
1890	14	155.6	-11	-78.6	59.00	100.0	.....	.....	.0835	105.6	+ .0069	+ 7.1
1891	11	122.2	- 8	-72.7	59.00	100.0	.....	.....	.1050	132.7	- .0156	-14.9
1892	12	133.3	- 9	-75.0	59.00	100.0	.....	.....	.0890	112.5	+ .0004	+ .4
1893	9	100.0	- 6	-66.7	59.00	100.0	.....	.....	.0581	73.5	+ .0313	+53.9
1894	10	111.1	- 7	-70.0	59.00	100.0	.....	.....	.0615	77.7	+ .0279	+45.4
1895	11	122.2	- 8	-72.7	59.00	100.0	.....	.....	.0685	86.6	+ .0209	+30.5
1896	7	77.8	- 4	-57.1	59.00	100.0	.....	.....	.0820	103.7	+ .0074	+ 9.0
1897	7	77.8	- 4	-57.1	59.00	100.0	.....	.....	.0811	102.5	+ .0083	+10.2
1898	4	44.4	- 1	-25.0	59.00	100.0	.....	.....	.0747	94.4	+ .0147	+19.7
1899	5	55.6	- 2	-40.0	58.00	100.0	.....	.....	.0879	111.1	+ .0015	+ 1.7
1900	6	66.7	- 3	-50.0	59.00	100.0	.....	.....	.0740	93.6	+ .0154	+20.8
1901	4	44.4	- 1	-25.0	59.00	100.0	.....	.....	.0858	108.5	+ .0036	+ 4.2
1902	4	44.4	- 1	-25.0	59.00	100.0	.....	.....	.0868	109.7	+ .0026	+ 3.0
1903	3	33.3	.....	.....	59.00	100.0	.....	.....	.0894	113.0	.....	.....

PACKING MACHINE OPERATORS, GRANULATED SMOKING TOBACCO, Male.

[No data, 1890-1898; data from 1 establishment, 1899-1903.]

Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1899	20	(a)	+ 9	+ 45.0	58.00	(a)	.....	.....	\$0.0963	(a)	+\$0.0358	+37.2
1900	14	(a)	+15	+107.1	58.00	(a)	.....	.....	.0917	(a)	+ .0404	+44.1
1901	21	(a)	+ 8	+ 38.1	58.00	(a)	.....	.....	.0963	(a)	+ .0358	+37.2
1902	26	(a)	+ 3	+ 11.5	58.00	(a)	.....	.....	.1181	(a)	+ .0140	+11.9
1903	29	(a)	.....	.....	58.00	(a)	.....	.....	.1321	(a)	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 715.]

TOBACCO, PLUG, FINE CUT, AND GRANULATED SMOKING—Continued.

PRESS HANDS, PLUG, Male.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890, 1891; 7 establishments, 1892-1897; 8 establishments, 1898; 9 establishments, 1899; 10 establishments, 1900-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	111	100.0	+35	+31.5	59.12	100.0	+0.86	+1.5	\$0.1440	100.0	+\$0.0268	+18.6
1890	94	84.7	+52	+55.3	59.22	100.2	+ .76	+1.3	.1170	81.3	+ .0538	+46.0
1891	98	88.8	+48	+49.0	59.12	100.0	+ .86	+1.5	.1275	88.5	+ .0433	+34.0
1892	101	91.0	+45	+44.6	59.08	99.8	+ .95	+1.6	.1506	104.6	+ .0202	+13.4
1893	106	96.5	+40	+37.7	58.98	99.8	+1.00	+1.7	.1507	104.7	+ .0201	+13.3
1894	107	96.4	+39	+36.4	59.01	99.8	+ .97	+1.6	.1593	110.6	+ .0115	+ 7.2
1895	115	103.6	+31	+27.0	58.98	99.7	+1.05	+1.8	.1572	109.2	+ .0136	+ 8.7
1896	116	104.5	+30	+25.9	59.09	99.9	+ .89	+1.5	.1463	101.6	+ .0245	+16.7
1897	126	113.5	+20	+15.9	59.15	100.1	+ .83	+1.4	.1390	96.6	+ .0318	+22.9
1898	119	107.2	+27	+22.7	59.29	100.3	+ .69	+1.2	.1456	101.1	+ .0252	+17.3
1899	125	112.6	+21	+16.8	59.37	100.4	+ .61	+1.0	.1464	101.7	+ .0244	+16.7
1900	142	127.9	+ 4	+ 2.8	59.86	101.8	+ .12	+ 2	.1526	106.0	+ .0182	+11.9
1901	141	127.0	+ 5	+ 3.5	59.84	101.2	+ .14	+ 2	.1609	111.7	+ .0099	+ 6.2
1902	135	121.6	+11	+ 8.1	59.97	101.4	+ .01	+ .02	.1676	116.4	+ .0032	+ 1.9
1903	146	131.5	.....	.....	59.98	101.5	.....	.....	.1708	118.6	.....	.....

SORTERS, Male.

[Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890, 1891; 4 establishments, 1892-1897; 5 establishments, 1898; 6 establishments, 1899-1903.]

Av. 1890-99.	16	100.0	+4	+25.0	59.29	100.0	+0.34	+0.6	\$0.1530	100.0	-\$0.0014	- 0.9
1890	14	87.5	+6	+42.9	59.14	99.7	+ .49	+ .8	.1641	107.3	- .0125	- 7.6
1891	14	87.5	+6	+42.9	59.14	99.7	+ .49	+ .8	.1641	107.3	- .0125	- 7.6
1892	14	87.5	+6	+42.9	59.10	99.7	+ .53	+ .9	.1586	103.7	- .0070	- 4.4
1893	16	100.0	+4	+25.0	59.16	99.8	+ .47	+ .8	.1571	102.7	- .0055	- 3.5
1894	15	93.8	+5	+33.3	59.17	99.8	+ .46	+ .8	.1552	101.4	- .0036	- 2.3
1895	15	93.8	+5	+33.3	59.17	99.8	+ .46	+ .8	.1524	99.6	- .0008	- .5
1896	17	106.3	+3	+17.6	59.26	99.9	+ .37	+ .6	.1581	103.3	- .0065	- 4.1
1897	17	106.3	+3	+17.6	59.29	100.0	+ .34	+ .6	.1587	103.7	- .0071	- 4.5
1898	19	118.8	+1	+ 5.3	59.73	100.7	- .10	- .2	.1316	86.0	+ .0200	+15.2
1899	19	118.8	+1	+ 5.3	59.74	100.8	- .11	- .2	.1304	85.2	+ .0212	+16.3
1900	19	118.8	+1	+ 5.3	59.75	100.8	- .12	- .2	.1532	100.1	- .0016	- 1.0
1901	19	118.8	+1	+ 5.3	59.66	100.6	- .03	- .1	.1489	97.3	+ .0027	+ 1.8
1902	19	118.8	+1	+ 5.3	59.65	100.6	- .02	- .03	.1492	97.5	+ .0024	+ 1.6
1903	20	125.0	.....	.....	59.63	100.6	.....	.....	.1516	99.1	.....	.....

SORTERS, Female.

[Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890, 1891; 6 establishments, 1892-1896; 7 establishments, 1897, 1898; 8 establishments, 1899; 9 establishments, 1900-1903.]

Av. 1890-99.	82	100.0	- 2	- 2.4	59.98	100.0	+1.66	+2.8	\$0.0652	100.0	+\$0.0075	+11.5
1890	83	101.2	- 3	- 3.6	59.41	99.0	+2.23	+3.8	.0573	87.9	+ .0154	+26.9
1891	81	96.8	- 1	- 1.2	59.60	99.4	+2.04	+3.4	.0607	98.1	+ .0120	+19.8
1892	78	95.1	+ 2	+ 2.6	59.45	99.1	+2.19	+3.7	.0712	109.2	+ .0015	+ 2.1
1893	80	97.6	.....	.....	59.24	98.8	+2.40	+4.1	.0717	110.0	+ .0010	+ 1.4
1894	87	106.1	- 7	- 8.0	59.15	98.6	+2.49	+4.2	.0699	107.2	+ .0028	+ 4.0
1895	93	113.4	-13	-14.0	59.22	98.7	+2.42	+4.1	.0696	106.7	+ .0031	+ 4.5
1896	90	109.8	-10	-11.1	59.16	98.6	+2.48	+4.2	.0713	109.4	+ .0014	+ 2.0
1897	82	100.0	- 2	- 2.4	61.61	102.7	+ .08	+ .05	.0606	92.9	+ .0121	+20.0
1898	80	97.6	.....	.....	60.97	101.7	+ .67	+1.1	.0639	98.0	+ .0088	+13.2
1899	66	80.5	+14	+21.2	62.00	108.4	- .36	- .6	.0588	85.6	+ .0169	+30.3
1900	83	101.2	- 3	- 3.6	61.12	101.9	+ .62	+ .9	.0687	105.4	+ .0040	+ 5.2
1901	77	93.9	+ 3	+ 3.9	61.23	102.1	+ .41	+ .7	.0689	105.7	+ .0038	+ 5.5
1902	77	93.9	+ 3	+ 3.9	61.37	102.3	+ .27	+ .4	.0735	112.7	- .0008	- 1.1
1903	80	97.6	.....	.....	61.64	102.8	.....	.....	.0727	111.5	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, PLUG, FINE CUT, AND GRANULATED SMOKING—Continued.

STEMMERS, Male.

[Data for employees from 2 establishments for entire period. Data for hours and wages from 2 establishments, 1890, 1891; 3 establishments, 1892-1894; 4 establishments, 1895-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (—) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	83	100.0	+ 6	+ 7.2	60.36	100.0	-4.03	- 6.7	\$0.0542	100.0	+\$0.0198	+36.5
890	81	97.6	+ 8	+ 9.9	63.73	105.6	-7.40	-11.6	.0397	73.2	+ .0343	+86.4
891	83	100.0	+ 6	+ 7.2	63.61	105.4	-7.28	-11.4	.0397	73.2	+ .0343	+86.4
892	79	95.2	+10	+12.7	63.55	105.3	-7.22	-11.4	.0460	84.9	+ .0280	+60.9
893	80	96.4	+ 9	+11.3	63.22	104.7	-6.89	-10.9	.0430	88.6	+ .0260	+54.2
894	69	83.1	+20	+29.0	63.57	105.3	-7.24	-11.4	.0470	86.7	+ .0270	+57.4
895	77	92.8	+12	+15.6	57.40	95.1	-1.07	- 1.9	.0648	119.6	+ .0092	+14.2
896	82	98.8	+ 7	+ 8.5	57.47	95.2	-1.14	- 2.0	.0645	119.0	+ .0095	+14.7
897	89	107.2	.....	.....	57.45	95.2	-1.12	- 1.9	.0634	117.0	+ .0106	+15.7
898	89	107.2	.....	.....	56.85	94.2	-. 52	- .9	.0645	119.0	+ .0095	+14.7
899	105	126.5	-16	-15.2	56.74	94.0	-. 41	- .7	.0648	119.6	+ .0092	+14.2
900	90	108.4	- 1	- 1.1	56.81	94.1	- .48	- .8	.0665	122.7	+ .0075	+11.8
901	100	120.5	-11	-11.0	56.59	93.8	-. 26	- .5	.0700	129.2	+ .0040	+ 5.7
902	87	104.8	+ 2	+ 2.3	56.91	94.3	-. 58	- 1.0	.0678	125.1	+ .0062	+ 9.1
903	89	107.2	.....	.....	56.33	93.3	.....	.....	.0740	136.5	.....	.....

STEMMERS, Female.

Data for employees from 5 establishments for entire period. Data for hours and wages from 5 establishments, 1890, 1891; 6 establishments, 1892-1894; 7 establishments, 1895-1900; 8 establishments, 1901-1903.]

Av. 1890-99.	266	100.0	-52	-19.5	55.47	100.0	+0.32	+0.6	\$0.0770	100.0	+\$0.0152	+19.7
890	260	97.7	-46	-17.7	55.43	99.9	+ .36	+ .6	.0554	71.9	+ .0368	+66.4
891	233	87.6	-19	- 8.2	55.24	99.6	+ .55	+1.0	.0573	74.4	+ .0349	+60.9
892	267	100.4	-53	-19.9	56.46	101.8	-. 67	- 1.2	.0852	110.6	+ .0070	+ 8.2
893	259	97.4	-45	-17.4	56.35	101.6	-. 56	- 1.0	.0842	109.4	+ .0080	+ 9.5
894	276	103.8	-62	-22.5	56.35	101.6	-. 56	- 1.0	.0836	108.6	+ .0086	+10.3
895	272	102.3	-58	-21.3	55.38	99.8	+ .41	+ .7	.0807	104.8	+ .0115	+14.3
896	280	105.3	-66	-23.6	55.10	99.3	+ .69	+1.3	.0809	105.1	+ .0113	+14.0
897	291	109.4	-77	-26.5	54.80	98.8	+ .99	+1.8	.0812	105.5	+ .0110	+13.5
898	251	94.4	-37	-14.7	54.90	99.0	+ .89	+1.6	.0833	108.2	+ .0089	+10.7
899	267	100.4	-53	-19.9	54.70	98.6	+1.09	+2.0	.0781	101.4	+ .0141	+18.1
900	300	112.8	-86	-28.7	54.43	98.1	+1.36	+2.5	.0776	100.8	+ .0146	+18.8
901	276	103.8	-62	-22.5	56.10	101.1	-. 31	- .6	.0775	100.6	+ .0147	+19.0
902	226	85.0	-12	- 5.3	56.13	101.2	-. 34	- .6	.0874	113.5	+ .0048	+ 5.5
903	214	80.5	.....	.....	55.79	100.6	.....	.....	.0922	119.7	.....	.....

WRAPPERS, Male.

Data for employees from 3 establishments for entire period. Data for hours and wages from 3 establishments, 1890-1898; 4 establishments, 1899, 1900; 5 establishments, 1901-1903.]

v. 1890-99.	49	100.0	+1	+2.0	56.40	100.0	+0.32	+0.6	\$0.1518	100.0	+\$0.0835	+ 58.3
890	50	102.0	.....	.....	57.43	101.9	-. 76	-1.3	.1201	79.1	+ .1202	+100.1
891	50	102.0	.....	.....	56.52	100.2	+ .20	+ .4	.1298	85.2	+ .1110	+ 85.8
892	47	95.9	+3	+6.4	56.68	100.5	+ .04	+ .1	.1370	90.3	+ .1033	+ 75.4
893	46	93.9	+4	+8.7	56.74	100.6	-. 02	-. 04	.1432	94.3	+ .0971	+ 67.8
894	53	108.2	-3	-5.7	56.38	100.0	+ .34	+ .6	.1471	96.9	+ .0932	+ 63.4
895	48	98.0	+2	+4.2	56.63	100.4	+ .09	+ .2	.1438	94.7	+ .0965	+ 67.1
896	46	93.9	+4	+8.7	56.74	100.6	-. 02	-. 04	.1460	96.2	+ .0943	+ 64.6
897	50	102.0	.....	.....	56.52	100.2	+ .20	+ .4	.1672	110.1	+ .0781	+ 43.7
898	51	104.1	-1	-2.0	56.47	100.1	+ .25	+ .4	.1744	114.9	+ .0659	+ 37.8
899	48	98.0	+2	+4.2	53.79	95.4	+2.93	+5.4	.2101	135.4	+ .0302	+ 14.4
900	46	93.9	+4	+8.7	51.69	91.6	+5.03	+9.7	.1754	115.5	+ .0649	+ 37.0
901	48	98.0	+2	+4.2	55.99	99.3	+ .73	+1.3	.2266	149.3	+ .0137	+ 6.0
902	50	102.0	.....	.....	56.75	100.6	-. 03	- .1	.2318	152.7	+ .0085	+ 8.7
903	50	102.0	.....	.....	56.72	100.6	.....	.....	.2403	158.3	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, PLUG, FINE CUT, AND GRANULATED SMOKING—Concluded.

WRAPPERS, Female.

[No data, 1890, 1891. Data for employees from 1 establishment, 1892-1903. Data for hours and wages from 1 establishment, 1892-1900; 2 establishments, 1901-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Average.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
1892	139	(a)	- 72	-51.8	59.00	(a)	+0.68	+1.2	\$0.1485	(a)	+\$0.0629	+42.
1893	152	(a)	- 85	-55.9	59.00	(a)	+ .68	+1.2	.1342	(a)	+ .0772	+57.
1894	175	(a)	-108	-61.7	59.00	(a)	+ .68	+1.2	.1490	(a)	+ .0624	+41.
1895	162	(a)	- 96	-58.6	59.00	(a)	+ .68	+1.2	.1333	(a)	+ .0781	+58.
1896	123	(a)	- 56	-45.5	59.00	(a)	+ .68	+1.2	.1457	(a)	+ .0657	+45.
1897	71	(a)	- 4	- 5.6	59.00	(a)	+ .68	+1.2	.1390	(a)	+ .0724	+52.
1898	110	(a)	- 43	-39.1	59.00	(a)	+ .68	+1.2	.1424	(a)	+ .0690	+48.
1899	95	(a)	- 28	-23.5	59.00	(a)	+ .68	+1.2	.1505	(a)	+ .0609	+40.
1900	66	(a)	+ 1	+ 1.5	59.00	(a)	+ .68	+1.2	.1853	(a)	+ .0261	+14.
1901	65	(a)	+ 2	+ 3.1	59.69	(a)	- .01	- .02	.1998	(a)	+ .0116	+ 5.
1902	77	(a)	- 10	-13.0	59.65	(a)	+ .08	+ .1	.1882	(a)	+ .0232	+12.
1903	67	(a)	.....	.....	59.68	(a)	.....	.....	.2114	(a)	.....	.....

WOOLEN AND WORSTED GOODS.

BURLERS, Female.

[Data from 10 establishments.]

Av. 1890-99.	187	100.0	+141	+ 75.4	58.69	100.0	-0.24	-0.4	\$0.0840	100.0	+\$0.0163	+19.
1890	187	100.0	+141	+ 75.4	60.52	108.1	-2.07	-3.4	.0784	93.8	+ .0219	+27.
1891	200	107.0	+128	+ 64.0	60.52	108.1	-2.07	-3.4	.0787	93.7	+ .0216	+27.
1892	202	108.0	+126	+ 62.4	60.34	102.8	-1.89	-3.1	.0819	97.5	+ .0184	+22.
1893	195	104.3	+133	+ 68.2	58.42	99.5	+ .03	+ .1	.0844	100.5	+ .0159	+18.
1894	147	78.6	+181	+123.1	54.46	92.8	+3.99	+7.3	.0833	99.2	+ .0170	+20.
1895	176	94.1	+152	+ 86.4	59.68	101.7	-1.23	-2.1	.0837	99.6	+ .0167	+19.
1896	167	89.3	+161	+ 96.4	59.60	101.6	-1.15	-1.9	.0906	107.9	+ .0097	+10.
1897	188	100.5	+140	+ 74.5	54.24	92.4	+4.21	+7.8	.0843	100.4	+ .0160	+19.
1898	202	108.0	+126	+ 62.4	59.69	101.7	-1.24	-2.1	.0864	102.9	+ .0139	+16.
1899	210	112.8	+118	+ 56.2	59.40	101.2	- .95	-1.6	.0886	105.5	+ .0117	+13.
1900	226	120.9	+102	+ 45.1	59.58	101.4	-1.08	-1.8	.0935	111.3	+ .0068	+ 7.
1901	291	155.6	+ 87	+ 12.7	59.58	101.5	-1.13	-1.9	.0910	108.3	+ .0093	+10.
1902	307	164.2	+ 21	+ 6.8	58.76	100.1	- .31	- .5	.0952	113.3	+ .0051	+ 5.
1903	328	175.4	.....	.....	58.45	99.6	.....	.....	.1003	119.4	.....	.....

CARDERS, Male.

[Data from 13 establishments.]

Av. 1890-99.	195	100.0	+70	+35.9	59.25	100.0	-0.27	-0.5	\$0.1022	100.0	+\$0.0086	+ 9.
1890	190	97.4	+75	+39.5	60.35	101.9	-1.37	-2.3	.1013	99.1	+ .0105	+10.
1891	201	103.1	+64	+31.8	60.33	101.8	-1.35	-2.2	.1018	99.6	+ .0100	+ 9.
1892	216	110.8	+49	+22.7	60.34	101.8	-1.36	-2.3	.1039	101.7	+ .0079	+ 7.
1893	186	95.4	+79	+42.5	59.56	100.5	- .58	-1.0	.1057	103.4	+ .0061	+ 5.
1894	193	99.0	+72	+37.3	59.55	100.5	- .57	-1.0	.1007	98.5	+ .0111	+11.
1895	207	106.2	+58	+28.0	59.49	100.4	- .51	- .9	.0999	97.7	+ .0119	+11.
1896	201	103.1	+64	+31.8	59.55	100.5	- .57	-1.0	.1003	98.1	+ .0115	+11.
1897	199	102.1	+66	+33.2	54.38	91.8	+4.60	+8.5	.1039	101.7	+ .0079	+ 7.
1898	184	94.4	+81	+44.0	59.49	100.4	- .51	- .9	.1020	99.8	+ .0098	+ 9.
1899	172	88.2	+93	+54.1	59.45	100.3	- .47	- .8	.1022	100.0	+ .0096	+ 9.
1900	193	99.0	+72	+37.3	59.39	100.2	- .41	- .7	.1133	110.9	+ .0015	- 1
1901	226	115.9	+39	+17.3	59.45	100.3	- .47	- .8	.1085	106.2	+ .0033	+ 3.
1902	225	115.4	+40	+17.8	59.19	99.9	- .21	- .4	.1090	106.7	+ .0028	+ 2.
1903	265	135.9	.....	.....	58.98	99.5	.....	.....	.1118	109.4	.....	.....

a Not computed, as data reported do not cover entire base period.

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716, for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

WOOLEN AND WORSTED GOODS—Continued.

CARDERS, Female.

[Data for employees from 1 establishment for entire period. Data for hours and wages from 4 establishments, 1890, 1901; 2 establishments, 1892, 1895, 1897; 1 establishment, 1893; 3 establishments, 1891, 1894, 1896, 1899, 1900, 1902, 1903; 5 establishments, 1898.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	4	100.0	.....	.....	59.69	100.0	+0.31	+0.5	\$0.0632	100.0	+\$0.0075	+11.9
1890	4	100.0	.....	.....	60.00	100.5	.....	.....	.0658	104.1	+ .0049	+ 7.4
1891	4	100.0	.....	.....	60.00	100.5	.....	.....	.0661	104.6	+ .0046	+ 7.0
1892	4	100.0	.....	.....	60.00	100.5	.....	.....	.0639	101.1	+ .0068	+10.6
1893	4	100.0	.....	.....	60.00	100.5	.....	.....	.0500	79.1	+ .0207	+41.4
1894	4	100.0	.....	.....	57.50	96.3	+2.50	+4.3	.0617	97.6	+ .0090	+14.6
1895	4	100.0	.....	.....	60.00	100.5	.....	.....	.0654	108.5	+ .0053	+ 8.1
1896	4	100.0	.....	.....	59.78	100.2	+ .22	+ .4	.0634	100.3	+ .0073	+11.5
1897	4	100.0	.....	.....	60.00	100.5	.....	.....	.0607	96.0	+ .0100	+16.5
1898	4	100.0	.....	.....	59.64	99.9	+ .36	+ .6	.0633	108.1	+ .0024	+ 3.5
1899	4	100.0	.....	.....	60.00	100.5	.....	.....	.0667	105.5	+ .0040	+ 6.0
1900	4	100.0	.....	.....	60.00	100.5	.....	.....	.0676	107.0	+ .0031	+ 4.6
1901	4	100.0	.....	.....	59.92	100.4	+ .08	+ .1	.0713	112.8	+ .0006	- .8
1902	4	100.0	.....	.....	60.00	100.5	.....	.....	.0688	108.9	+ .0019	+ 2.8
1903	4	100.0	.....	.....	60.00	100.5	.....	.....	.0707	111.9	.....	.....

CARD STRIPPERS, Male.

[Data from 3 establishments.]

Av. 1890-99.	13	100.0	-4	-30.8	60.00	100.0	.....	.....	\$0.0959	100.0	+\$0.0169	+17.6
1890	12	92.3	-3	-25.0	60.00	100.0	.....	.....	.0886	92.4	+ .0242	+27.3
1891	13	100.0	-4	-30.8	60.00	100.0	.....	.....	.0952	99.3	+ .0176	+18.5
1892	9	69.2	.....	.....	60.00	100.0	.....	.....	.0991	103.3	+ .0137	+13.8
1893	10	76.9	-1	-10.0	60.00	100.0	.....	.....	.0954	99.5	+ .0174	+18.2
1894	12	92.3	-3	-25.0	60.00	100.0	.....	.....	.0949	99.0	+ .0179	+18.9
1895	14	107.7	-5	-35.7	60.00	100.0	.....	.....	.0925	96.5	+ .0203	+21.9
1896	13	100.0	-4	-30.8	60.00	100.0	.....	.....	.0997	104.0	+ .0131	+13.1
1897	15	115.4	-6	-40.0	60.00	100.0	.....	.....	.0961	100.2	+ .0167	+17.4
1898	16	123.1	-7	-43.8	60.00	100.0	.....	.....	.0948	98.9	+ .0130	+19.0
1899	13	100.0	-4	-30.8	60.00	100.0	.....	.....	.1023	106.7	+ .0105	+10.3
1900	14	107.7	-5	-35.7	60.00	100.0	.....	.....	.1063	111.4	+ .0060	+ 5.6
1901	14	107.7	-5	-35.7	60.00	100.0	.....	.....	.1076	112.2	+ .0052	+ 4.8
1902	11	84.6	-2	-18.2	60.00	100.0	.....	.....	.1118	116.6	+ .0010	+ .9
1903	9	69.2	.....	.....	60.00	100.0	.....	.....	.1128	117.6	.....	.....

COMBERS, Male.

[Data from 1 establishment.]

Av. 1890-99.	9	100.0	+13	+144.4	58.60	100.0	-0.60	-1.0	\$0.1306	100.0	+\$0.0028	+2.1
1890	3	33.3	+19	+633.3	60.00	102.4	-2.00	-3.3	.1250	95.7	+ .0084	+6.7
1891	11	122.2	+11	+100.0	60.00	102.4	-2.00	-3.3	.1291	98.9	+ .0043	+3.3
1892	9	100.0	+13	+144.4	60.00	102.4	-2.00	-3.3	.1250	95.7	+ .0084	+6.7
1893	7	77.8	+15	+214.3	58.00	99.0	.....	.....	.1300	99.5	+ .0034	+2.6
1894	7	77.8	+15	+214.3	58.00	99.0	.....	.....	.1400	107.2	+ .0066	+4.7
1895	9	100.0	+13	+144.4	58.00	99.0	.....	.....	.1228	94.0	+ .0106	+8.6
1896	9	100.0	+13	+144.4	58.00	99.0	.....	.....	.1366	104.6	+ .0032	+2.3
1897	14	155.6	+8	+57.1	58.00	99.0	.....	.....	.1246	95.4	+ .0088	+7.1
1898	14	155.6	+8	+57.1	58.00	99.0	.....	.....	.1252	95.9	+ .0082	+6.5
1899	11	122.2	+11	+100.0	58.00	99.0	.....	.....	.1480	113.3	+ .0146	+9.9
1900	13	144.4	+9	+69.2	58.00	99.0	.....	.....	.1392	106.6	+ .0058	+4.2
1901	11	122.2	+11	+100.0	58.00	99.0	.....	.....	.1409	107.9	+ .0075	+5.3
1902	17	188.9	+5	+29.4	58.00	99.0	.....	.....	.1356	103.8	+ .0022	+1.6
1903	22	244.4	.....	.....	58.00	99.0	.....	.....	.1334	102.1	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

WOOLEN AND WORSTED GOODS—Continued.

COMBERS, Female.

[Data from 4 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average num-ber.	Relative num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Average.	Relative.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	55	100.0	+ 9	+16.4	59.73	100.0	-0.95	-1.6	\$0.0992	100.0	+\$0.0103	+10.4
1890.	42	76.4	+22	+52.4	60.00	100.5	-1.22	-2.0	.0975	98.3	+ .0120	+12.3
1891.	53	96.4	+11	+20.8	60.00	100.5	-1.22	-2.0	.0980	98.8	+ .0115	+11.7
1892.	64	116.4	.....	.....	60.00	100.5	-1.22	-2.0	.0977	98.5	+ .0118	+12.1
1893.	71	129.1	.....	.....	59.35	99.4	-.57	-1.0	.1005	101.3	+ .0090	+ 9.0
1894.	47	85.5	+17	+38.2	59.70	99.9	-.92	-1.5	.0927	93.4	+ .0168	+18.1
1895.	49	89.1	+15	+30.6	59.71	100.0	-.93	-1.6	.0955	96.3	+ .0140	+14.7
1896.	54	98.2	+10	+18.5	59.70	99.9	-.92	-1.5	.1023	103.1	+ .0072	+ 7.0
1897.	56	101.8	+ 8	+14.3	59.61	99.8	-.83	-1.4	.1021	102.9	+ .0074	+ 7.2
1898.	60	109.1	+ 4	+ 6.7	59.63	99.8	-.85	-1.4	.1032	104.0	+ .0063	+ 6.1
1899.	55	100.0	+ 9	+16.4	59.60	99.8	-.85	-1.4	.1025	103.3	+ .0070	+ 6.8
1900.	60	109.1	+ 4	+ 6.7	59.67	99.9	-.89	-1.5	.1094	110.3	+ .0001	+ .1
1901.	64	116.4	.....	.....	59.59	99.8	-.81	-1.4	.1102	111.1	+ .0007	+ .6
1902.	61	110.9	+ 3	+ 4.9	58.69	98.3	+ .09	+ 2	.1117	112.6	+ .0022	+ 2.0
1903.	64	116.4	.....	.....	58.78	98.4	.....	.....	.1095	110.4	.....	.....

DYERS, Male.

[Data from 13 establishments.]

Av. 1890-99.	193	100.0	+13	+ 6.7	60.56	100.0	-0.22	-0.4	\$0.1234	100.0	+\$0.0101	+ 8.2
1890.	181	93.8	+25	+13.8	60.24	99.5	+ .10	+ .2	.1237	100.2	+ .0098	+ 7.9
1891.	175	90.7	+31	+17.7	60.32	99.6	+ .02	+ .08	.1253	101.5	+ .0082	+ 6.5
1892.	207	107.3	-1	- .5	60.27	99.5	+ .07	+ .1	.1243	100.7	+ .0092	+ 7.4
1893.	193	100.0	+13	+ 6.7	59.60	98.4	+ .74	+1.2	.1272	103.1	+ .0063	+ 5.0
1894.	189	97.9	+17	+ 9.0	61.66	101.8	-1.32	-2.1	.1179	95.5	+ .0156	+13.2
1895.	206	106.7	.....	.....	61.38	101.4	-1.04	-1.7	.1191	96.5	+ .0144	+12.1
1896.	190	98.4	+16	+ 8.4	60.79	100.4	-.45	-.7	.1216	98.5	+ .0119	+ 9.8
1897.	208	107.8	- 2	- 1.0	59.22	97.8	+1.12	+1.9	.1227	99.4	+ .0108	+ 8.8
1898.	194	100.5	+12	+ 6.2	61.01	100.7	-.67	-1.1	.1251	101.4	+ .0084	+ 6.7
1899.	182	94.3	+24	+12.2	61.07	100.8	-.73	-1.2	.1266	102.6	+ .0069	+ 5.5
1900.	185	95.9	+21	+11.4	60.86	100.5	-.52	-.9	.1349	109.3	+ .0014	+ 1.0
1901.	196	101.6	+10	+ 5.1	60.92	100.6	-.58	-1.0	.1318	102.8	+ .0017	+ 1.3
1902.	204	105.7	+ 2	+ 1.0	60.04	99.1	+ .30	+ .5	.1338	108.4	+ .0003	+ .2
1903.	206	106.7	.....	.....	60.34	99.6	.....	.....	.1336	108.2	.....	.....

LOOM FIXERS, Male.

[Data from 15 establishments.]

Av. 1890-99.	152	100.0	+22	+14.5	59.19	100.0	-0.60	-1.0	\$0.2116	100.0	+\$0.0336	+15.9
1890.	152	100.0	+22	+14.5	59.46	100.5	-.87	-1.5	.2081	98.3	+ .0371	+17.8
1891.	147	96.7	+27	+18.4	59.44	100.4	-.85	-1.4	.2077	98.2	+ .0375	+18.1
1892.	154	101.3	+20	+13.0	59.36	100.3	-.77	-1.3	.2120	100.2	+ .0382	+15.7
1893.	146	96.1	+28	+19.2	59.14	99.9	-.65	-.9	.2158	102.0	+ .0294	+13.6
1894.	137	90.1	+37	+27.0	57.45	97.1	+1.14	+2.0	.2039	96.4	+ .0413	+20.3
1895.	142	93.4	+32	+22.5	59.44	100.4	-.85	-1.4	.2047	96.7	+ .0405	+19.8
1896.	150	98.7	+24	+16.0	59.44	100.4	-.85	-1.4	.2142	101.2	+ .0310	+14.5
1897.	157	103.8	+17	+10.8	59.43	100.4	-.84	-1.4	.2159	102.0	+ .0293	+13.6
1898.	169	111.2	+ 5	+ 3.0	59.33	100.2	-.74	-1.2	.2153	102.0	+ .0294	+13.6
1899.	162	106.6	+12	+ 7.4	59.45	100.4	-.86	-1.4	.2176	102.8	+ .0276	+12.7
1900.	179	117.8	- 5	- 2.8	59.37	100.3	-.78	-1.3	.2381	112.5	+ .0071	+ 3.0
1901.	170	111.8	+ 4	+ 2.4	59.35	100.3	-.76	-1.3	.2374	112.2	+ .0078	+ 3.3
1902.	175	115.1	- 1	- .6	58.63	99.1	-.04	-.1	.2412	114.0	+ .0040	+ 1.7
1903.	174	114.6	.....	.....	58.59	99.0	.....	.....	.2452	115.9	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

WOOLEN AND WORSTED GOODS—Continued.

SPINNERS, FRAME, Female.

[Data from 3 establishments.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as com-pared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	209	100.0	+154	+ 73.7	59.47	100.0	-1.16	-2.0	\$0.0930	100.0	+\$0.0216	+23.2
1890	154	73.7	+209	+135.7	60.00	100.9	-1.69	-2.8	.0899	96.7	+.0247	+27.5
1891	171	81.8	+192	+112.3	60.00	100.9	-1.69	-2.8	.0908	97.6	+.0238	+26.2
1892	248	118.7	+115	+ 46.4	60.00	100.9	-1.69	-2.8	.0915	98.4	+.0231	+25.2
1893	209	100.0	+154	+ 73.7	59.22	99.6	-.91	-1.5	.0963	103.5	+.0183	+19.0
1894	228	106.7	+140	+ 62.8	59.35	99.8	-1.04	-1.8	.0876	94.2	+.0270	+30.8
1895	221	105.7	+142	+ 64.3	59.37	99.8	-1.06	-1.8	.0884	95.1	+.0262	+29.6
1896	197	94.3	+166	+ 84.3	59.30	99.7	-.99	-1.7	.0940	101.1	+.0206	+21.9
1897	224	107.2	+139	+ 62.1	59.21	99.6	-.90	-1.5	.0958	102.5	+.0193	+20.3
1898	248	118.7	+115	+ 46.4	59.19	99.5	-.88	-1.5	.0971	104.4	+.0175	+18.0
1899	198	94.7	+165	+ 83.3	59.08	99.3	-.77	-1.3	.0990	106.5	+.0156	+15.8
1900	231	110.5	+132	+ 57.1	58.98	99.2	-.67	-1.1	.1097	118.0	+.0049	+ 4.5
1901	249	119.1	+114	+ 45.8	59.10	99.4	-.79	-1.3	.1078	115.4	+.0073	+ 6.8
1902	307	146.9	+ 56	+ 18.2	58.12	97.7	+ .19	+ .3	.1142	122.8	+.0004	+ .4
1903	363	173.7	.....	.....	58.31	98.0	.....	.....	.1146	123.2	.....	.....

SPINNERS, MULE, Male.

Data for employees from 9 establishments for entire period. Data for hours and wages from 9 establishments, 1890-1892; 10 establishments, 1893-1896; 11 establishments, 1897-1903.]

Av. 1890-99.	146	100.0	+73	+50.0	58.87	100.0	+0.22	+ 0.4	\$0.1801	100.0	+\$0.0323	+24.8
1890	145	99.3	+74	+51.0	60.46	102.7	-1.37	- 2.3	.1257	96.6	+.0367	+29.2
1891	153	104.8	+66	+43.1	60.47	102.7	-1.38	- 2.3	.1243	95.5	+.0381	+30.7
1892	143	97.9	+76	+53.1	60.38	102.6	-1.29	- 2.1	.1222	93.9	+.0402	+32.9
1893	132	90.4	+87	+65.9	58.42	99.2	+ .67	+ 1.1	.1321	101.5	+.0303	+22.9
1894	124	84.9	+95	+76.6	53.20	90.4	+5.39	+11.1	.1276	98.1	+.0348	+27.3
1895	154	105.5	+65	+42.2	59.84	101.6	-.75	- 1.3	.1252	96.2	+.0372	+29.7
1896	150	102.7	+69	+46.0	59.79	101.6	-.70	- 1.2	.1349	103.7	+.0275	+20.4
1897	149	102.1	+70	+47.0	55.67	94.6	+3.42	+ 6.1	.1356	104.2	+.0268	+19.8
1898	161	110.3	+53	+36.0	59.33	101.6	-.74	- 1.3	.1446	111.1	+.0178	+12.3
1899	148	101.4	+71	+48.0	60.59	102.9	-1.60	- 2.5	.1288	99.0	+.0336	+26.1
1900	157	107.5	+62	+39.5	59.94	101.8	-.85	- 1.4	.1504	115.6	+.0120	+ 8.0
1901	154	105.5	+65	+42.2	59.88	101.7	-.79	- 1.3	.1437	114.3	+.0137	+ 9.2
1902	203	139.0	+16	+ 7.9	59.42	100.9	-.83	- 1.4	.1438	114.0	+.0141	+ 9.5
1903	219	150.0	.....	.....	59.09	100.4	.....	.....	.1624	124.8	.....	.....

SPINNERS, MULE, Female.

Data for employees from 2 establishments for entire period. Data for hours and wages from 3 establishments, 1890-1892, 1894-1896, 1901-1903; 2 establishments, 1893, 1897-1900.]

v. 1890-99.	35	100.0	- 8	-22.9	60.00	100.0	.....	.....	\$0.0556	100.0	+\$0.0077	+13.8
1890	45	123.6	-13	-40.0	60.00	100.0	.....	.....	.0551	99.1	+.0082	+14.9
1891	46	131.4	-19	-41.3	60.00	100.0	.....	.....	.0555	99.8	+.0078	+14.1
1892	44	125.7	-17	-38.6	60.00	100.0	.....	.....	.0554	99.6	+.0079	+14.3
1893	28	80.0	- 1	- 3.6	60.00	100.0	.....	.....	.0613	110.3	+.0020	+ 3.3
1894	30	85.7	- 3	-10.0	60.00	100.0	.....	.....	.0541	97.3	+.0092	+17.0
1895	33	108.6	-11	-23.9	60.00	100.0	.....	.....	.0545	98.0	+.0088	+16.1
1896	29	82.9	- 2	- 6.9	60.00	100.0	.....	.....	.0543	97.7	+.0090	+16.6
1897	29	82.9	- 2	- 6.9	60.00	100.0	.....	.....	.0552	99.3	+.0081	+14.7
1898	26	74.3	+ 1	+ 3.8	60.00	100.0	.....	.....	.0550	98.9	+.0083	+15.1
1899	30	85.7	- 3	-10.0	60.00	100.0	.....	.....	.0553	99.5	+.0080	+14.5
1900	23	65.7	+ 4	+17.4	60.00	100.0	.....	.....	.0561	100.9	+.0072	+12.3
1901	13	51.4	+ 9	+50.0	60.00	100.0	.....	.....	.0582	104.7	+.0051	+ 8.8
1902	21	60.0	+ 6	+28.6	60.00	100.0	.....	.....	.0675	121.4	+.0042	- 6.2
1903	27	77.1	.....	.....	60.00	100.0	.....	.....	.0633	113.8	.....	.....

TABLE I.—WAGES AND HOURS OF LABOR, 1890-1903—Concluded.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

WOOLEN AND WORSTED GOODS—Concluded.

WEAVERS, Male.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 10 establishments, 1890-1900; 11 establishments, 1901-1903.]

Year.	Employees.				Hours per week.				Wages per hour.			
	Num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age num-ber.	Rela-tive num-ber.	Increase (+) or decrease (-) in 1903 as compared with year specified.		Aver-age.	Rela-tive.	Increase (+) or decrease (-) in 1903 as compared with year specified.	
			Num-ber.	Per cent.			Num-ber.	Per cent.			Amount.	Per cent.
Av. 1890-99.	661	100.0	+478	+ 71.6	59.62	100.0	-0.97	-1.6	\$0.1481	100.0	+\$0.0368	+24.
1890	609	92.1	+525	+ 86.2	60.00	100.6	-1.35	-2.3	.1505	101.6	+ .0344	+22.
1891	652	98.6	+482	+ 78.9	60.00	100.6	-1.35	-2.3	.1515	102.3	+ .0334	+22.
1892	687	103.9	+447	+ 65.1	60.00	100.6	-1.35	-2.3	.1538	103.8	+ .0311	+20.
1893	619	93.6	+515	+ 83.2	59.34	99.5	-.69	-1.2	.1624	109.7	+ .0225	+13.
1894	535	80.9	+599	+112.0	59.42	99.7	-.77	-1.3	.1375	92.8	+ .0474	+34.
1895	639	96.7	+495	+ 77.5	59.47	99.7	-.82	-1.4	.1406	94.9	+ .0443	+31.
1896	681	103.0	+453	+ 66.5	59.49	99.8	-.84	-1.4	.1403	94.7	+ .0446	+31.
1897	751	113.6	+383	+ 51.0	59.45	99.7	-.80	-1.3	.1451	98.0	+ .0398	+27.
1898	765	115.7	+369	+ 48.2	59.50	99.8	-.85	-1.4	.1498	101.1	+ .0351	+23.
1899	668	101.1	+466	+ 69.8	59.53	99.8	-.88	-1.5	.1495	100.9	+ .0354	+23.
1900	915	138.4	+219	+ 23.9	59.38	99.6	-.78	-1.2	.1655	111.7	+ .0194	+11.
1901	944	142.8	+190	+ 20.1	59.38	99.6	-.78	-1.2	.1683	113.6	+ .0166	+ 9.
1902	920	139.2	+214	+ 23.3	58.84	98.7	-.19	-.3	.1733	120.4	+ .0066	+ 3.
1903	1,134	171.6	.....	.....	58.65	98.4	.....	.....	.1849	124.8	.....	.....

WEAVERS, Female.

[Data for employees from 9 establishments for entire period. Data for hours and wages from 10 establishments, 1890-1896, 1901-1903; 9 establishments, 1896-1900.]

Av. 1890-99.	1,272	100.0	+103	+ 8.1	59.40	100.0	-1.08	-1.8	\$0.1349	100.0	+\$0.0216	+16
1890	1,354	106.4	+ 21	+ 1.6	60.00	101.0	-1.68	-2.8	.1355	100.4	+ .0210	+15
1891	1,432	112.6	- 57	- 4.0	60.00	101.0	-1.68	-2.8	.1338	98.4	+ .0227	+17
1892	1,222	96.1	+153	+12.5	60.00	101.0	-1.68	-2.8	.1360	100.8	+ .0205	+15
1893	1,362	107.1	+ 13	+ 1.0	59.12	99.5	-.80	-1.4	.1441	106.8	+ .0124	+ 8
1894	1,278	100.5	+ 97	+ 7.6	59.18	99.6	-.86	-1.5	.1272	94.3	+ .0293	+23
1895	1,182	92.9	+193	+16.3	59.19	99.6	-.87	-1.5	.1265	93.8	+ .0300	+23
1896	1,189	93.5	+186	+15.6	59.21	99.7	-.89	-1.5	.1305	96.7	+ .0260	+19
1897	1,176	92.5	+199	+16.9	59.20	99.7	-.88	-1.5	.1359	100.7	+ .0206	+15
1898	1,338	105.2	+ 37	+ 2.8	59.06	99.4	-.74	-1.3	.1411	104.6	+ .0154	+10
1899	1,187	93.3	+188	+15.8	59.02	99.4	-.70	-1.2	.1383	102.5	+ .0182	+13
1900	1,336	105.0	+ 39	+ 2.9	59.07	99.4	-.75	-1.3	.1481	109.8	+ .0084	+ 5
1901	1,361	107.0	+ 14	+ 1.0	59.02	99.4	-.70	-1.2	.1517	112.5	+ .0048	+ 3
1902	1,353	106.4	+ 22	+ 1.6	58.32	98.2	.....	.....	.1517	112.5	+ .0048	+ 3
1903	1,375	108.1	.....	.....	58.32	98.2	.....	.....	.1555	116.0	.....	.....

TABLE II.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

AGRICULTURAL IMPLEMENTS.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	86.2	+44.8	100.3	-0.9	97.1	+20.7
1891	88.2	+41.5	100.3	— .9	100.8	+16.3
1892	95.1	+31.2	100.3	— .9	101.6	+15.4
1893	105.1	+18.7	100.3	— .9	102.5	+14.3
1894	95.8	+30.3	99.2	+ .2	97.3	+20.5
1895	98.1	+27.2	100.3	— .9	96.4	+21.6
1896	94.5	+32.1	99.9	— .5	102.0	+14.9
1897	95.3	+31.0	99.0	+ .4	99.4	+17.9
1898	120.9	+ 3.2	100.2	— .8	101.0	+16.0
1899	120.6	+ 3.5	100.2	— .8	101.8	+15.1
1900	130.7	— 4.5	100.2	— .8	105.8	+10.8
1901	105.9	+17.8	100.2	— .8	107.6	+ 8.9
1902	115.8	+ 7.8	100.2	— .8	112.8	+ 3.9
1903	124.8	.....	99.4	.....	117.2	.....

BAKERY, BREAD.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	98.4	+43.2	100.8	-6.8	99.2	+19.8
1891	94.7	+41.3	100.7	-6.8	99.7	+19.2
1892	96.1	+39.2	100.9	-6.9	100.2	+18.6
1893	96.1	+39.2	100.5	-6.6	100.6	+18.1
1894	97.3	+37.5	100.4	-6.5	98.3	+20.9
1895	100.3	+33.4	99.8	-5.9	98.6	+20.5
1896	102.2	+30.9	99.5	-5.6	99.5	+19.4
1897	102.7	+30.3	100.2	-6.3	99.7	+19.2
1898	107.3	+24.7	99.7	-5.8	101.2	+17.4
1899	109.9	+21.7	97.7	-3.9	103.0	+15.3
1900	114.0	+17.4	96.8	-3.0	106.5	+11.5
1901	121.1	+10.5	96.2	-2.4	108.7	+ 9.3
1902	130.5	+ 2.5	95.8	-2.0	113.8	+ 4.4
1903	133.8	.....	93.9	.....	118.8	.....

BLACKSMITHING AND HORSESHOEING.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	101.8	+0.1	101.1	-4.6	98.9	+13.4
1891	100.9	+1.0	101.1	-4.6	98.7	+13.7
1892	102.5	— .6	101.0	-4.6	98.8	+13.6
1893	101.1	+ .8	100.2	-5.8	99.2	+13.1
1894	98.7	+3.2	99.7	-5.3	99.1	+13.2
1895	96.6	+5.5	99.6	-5.2	99.1	+13.2
1896	98.7	+3.2	99.5	-3.1	99.9	+12.3
1897	97.9	+4.1	99.4	-3.0	100.9	+11.2
1898	101.1	+ .8	99.3	-2.9	102.2	+ 9.8
1899	101.3	+ .6	99.0	-2.6	102.9	+ 9.0
1900	102.4	— .5	98.4	-2.0	104.5	+ 7.4
1901	105.1	-3.0	97.7	-1.3	106.6	+ 5.3
1902	101.5	+ .4	97.0	— .6	108.6	+ 3.3
1903	101.9	.....	96.4	.....	112.2	.....

BOOTS AND SHOES.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	77.2	+68.9	100.2	-3.6	97.9	+13.1
1891	80.0	+63.0	100.8	-4.2	96.2	+20.2
1892	86.4	+50.9	100.5	-3.9	98.2	+17.7
1893	97.1	+34.3	100.1	-3.5	100.5	+15.0
1894	99.0	+31.7	99.9	-3.3	99.5	+16.2
1895	103.2	+26.4	99.9	-3.3	100.6	+14.9
1896	110.5	+18.0	99.8	-3.2	100.7	+14.8
1897	111.3	+17.2	99.7	-3.1	102.5	+12.8
1898	111.3	+17.2	99.6	-3.0	101.8	+13.6
1899	118.4	+10.1	99.5	-2.9	102.3	+13.0
1900	123.2	+ 5.8	99.0	-2.4	105.3	+ 9.8
1901	127.7	+ 2.1	99.2	-2.6	105.2	+ 9.9
1902	124.0	+ 5.2	98.0	-1.4	108.8	+ 6.3
1903	130.4	.....	96.6	.....	115.6	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

BOOTS AND SHOES, RUBBER.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	88.4	+42.8	100.0	.....	100.3	+ 6.1
1891	90.7	+39.1	100.0	.....	100.4	+ 6.0
1892	99.9	+26.3	100.0	.....	103.2	+ 3.1
1893	101.7	+24.1	100.0	.....	97.7	+ 8.9
1894	101.8	+24.0	100.0	.....	98.8	+ 7.7
1895	101.8	+24.0	100.0	.....	101.4	+ 4.9
1896	87.6	+44.1	100.0	.....	94.0	+13.2
1897	105.1	+20.1	100.0	.....	102.8	+ 3.5
1898	111.9	+12.8	100.0	.....	101.8	+ 4.5
1899	113.9	+10.8	100.0	.....	99.8	+ 6.6
1900	112.6	+12.1	100.0	.....	97.4	+ 9.2
1901	115.7	+ 9.1	100.0	.....	100.6	+ 5.8
1902	120.0	+ 5.2	100.0	.....	104.7	+ 1.6
1903	126.2	.....	103.0	.....	106.4	.....

BOXES, PAPER.

1890	79.1	+43.2	100.1	-1.1	99.6	+ 8.7
1891	82.0	+38.2	100.1	-1.1	100.6	+ 7.7
1892	83.0	+36.5	100.0	-1.0	102.9	+ 5.2
1893	88.4	+28.2	100.0	-1.0	100.2	+ 8.1
1894	97.9	+15.7	100.0	-1.0	99.0	+ 9.4
1895	89.0	+27.3	100.0	-1.0	100.4	+ 7.9
1896	99.3	+14.1	100.0	-1.0	98.8	+ 9.6
1897	100.4	+12.8	100.0	-1.0	98.0	+10.5
1898	97.1	+16.7	100.0	-1.0	98.6	+ 9.8
1899	100.7	+12.5	99.9	- .9	102.1	+ 6.1
1900	95.4	+18.8	100.0	-1.0	103.3	+ 4.8
1901	101.3	+11.8	100.0	-1.0	104.3	+ 3.8
1902	111.6	+ 1.5	100.0	-1.0	106.5	+ 1.7
1903	113.3	.....	99.0	.....	108.3	.....

BRICK.

1890	98.6	+11.5	99.9	-0.6	101.0	+11.1
1891	97.6	+12.6	99.9	- .6	101.3	+10.8
1892	99.7	+10.2	100.0	- .7	102.7	+ 9.3
1893	100.2	+ 9.7	100.0	- .7	101.8	+10.2
1894	98.7	+11.3	100.1	- .8	99.1	+13.2
1895	97.9	+12.3	100.0	- .7	98.5	+13.9
1896	100.4	+ 9.5	100.0	- .7	97.1	+15.6
1897	100.9	+ 8.9	99.9	- .6	97.4	+15.2
1898	101.5	+ 8.3	100.1	- .8	100.1	+12.1
1899	104.1	+ 5.6	100.2	- .9	101.1	+11.0
1900	102.7	+ 7.0	99.9	- .6	103.1	+ 8.8
1901	104.6	+ 5.1	100.0	- .7	105.1	+ 6.8
1902	108.5	+ 1.3	99.9	- .6	110.1	+ 1.9
1903	109.9	.....	99.3	.....	112.2	.....

BUILDING TRADES.

1890	96.5	+27.7	102.5	-10.4	96.6	+30.8
1891	100.0	+23.2	101.8	- 9.8	97.9	+29.1
1892	106.8	+15.4	100.7	- 8.8	99.9	+26.5
1893	101.7	+21.1	100.5	- 8.7	100.1	+26.3
1894	90.2	+36.6	100.7	- 8.8	97.7	+29.4
1895	92.4	+33.3	100.3	- 8.5	98.4	+23.5
1896	99.2	+24.2	99.2	- 7.5	99.9	+26.5
1897	99.7	+23.6	98.6	- 6.9	101.3	+24.8
1898	104.1	+18.3	98.1	- 6.4	102.8	+23.0
1899	109.8	+12.2	97.5	- 5.8	105.4	+19.9
1900	113.6	+ 8.5	95.5	- 3.9	110.0	+14.9
1901	119.8	+ 2.8	94.4	- 2.8	114.4	+10.5
1902	126.2	- 2.4	92.6	- .9	121.2	+ 4.3
1903	123.2	.....	91.8	.....	126.4	.....

TABLE II.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

BUTTER AND CHEESE.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	94.0	+12.2	100.3	-0.1	100.0	+6.3
1891	96.0	+ 9.9	100.1	+ .1	99.5	+6.8
1892	99.0	+ 6.6	100.1	+ .1	98.8	+7.6
1893	99.0	+ 6.6	100.1	+ .1	98.9	+7.5
1894	100.0	+ 5.5	100.1	+ .1	98.1	+8.4
1895	101.1	+ 4.4	99.9	+ .3	98.7	+7.7
1896	101.6	+ 3.8	100.0	+ .2	100.5	+5.8
1897	102.1	+ 3.3	100.1	+ .1	99.9	+6.4
1898	102.5	+ 2.9	99.8	+ .4	102.2	+4.0
1899	103.0	+ 2.4	99.8	+ .4	103.5	+2.7
1900	103.0	+ 2.4	99.2	+1.0	104.9	+1.3
1901	105.5	.....	99.8	+ .4	105.0	+1.2
1902	106.0	- .5	100.3	- .1	105.7	+ .6
1903	105.5	.....	100.2	.....	106.3	.....

CANDY.

1890	112.7	- 8.5	99.3	+0.9	102.3	+ 6.8
1891	108.9	- 5.3	99.3	+ .9	103.3	+ 5.8
1892	103.2	- .1	100.0	+ .2	99.8	+ 9.5
1893	104.2	- 1.1	100.0	+ .2	98.2	+11.3
1894	95.7	+ 7.7	99.9	+ .3	98.8	+10.6
1895	95.8	+ 7.6	100.3	- .1	98.9	+10.5
1896	94.8	+ 8.8	100.3	- .1	100.0	+ 9.3
1897	99.2	+ 3.9	100.3	- .1	98.1	+11.4
1898	89.6	+15.1	100.4	- .2	100.5	+ 8.8
1899	92.9	+11.0	100.4	- .2	100.7	+ 8.5
1900	96.6	+ 6.7	100.4	- .2	99.0	+10.4
1901	91.2	+13.0	100.3	- .1	109.5	- .2
1902	91.9	+12.2	100.3	- .1	108.5	+ .7
1903	103.1	.....	100.2	.....	109.3	.....

CARPETS.

1890	104.2	+17.6	101.2	-1.9	99.6	+11.7
1891	100.5	+21.9	101.2	-1.9	97.9	+13.7
1892	100.6	+21.8	100.4	-1.1	100.0	+11.3
1893	105.5	+16.1	99.5	- .2	99.8	+11.5
1894	87.0	+40.8	99.6	- .3	95.3	+16.8
1895	101.8	+20.3	99.5	- .2	97.2	+14.5
1896	102.6	+19.4	99.5	- .2	101.9	+ 9.2
1897	98.1	+31.6	99.6	- .3	101.8	+ 9.3
1898	96.9	+26.4	99.6	- .3	103.0	+ 8.1
1899	106.4	+15.1	99.6	- .3	103.7	+ 7.3
1900	111.5	+ 9.9	99.7	- .4	104.1	+ 6.9
1901	115.2	+ 6.3	99.6	- .3	108.1	+ 3.0
1902	119.4	+ 2.6	99.6	- .3	105.4	+ 5.6
1903	122.5	.....	99.3	.....	111.3	.....

CARRIAGES AND WAGONS.

1890	95.5	+21.7	100.4	-2.0	100.0	+7.6
1891	98.6	+17.8	100.6	-2.2	99.4	+8.2
1892	102.9	+12.9	100.4	-2.0	100.4	+7.2
1893	103.4	+12.4	100.1	-1.7	99.6	+8.0
1894	95.7	+21.4	99.5	-1.1	99.2	+8.5
1895	97.2	+19.5	100.0	-1.6	98.1	+9.7
1896	92.8	+25.2	99.7	-1.3	100.7	+6.9
1897	97.8	+18.8	99.8	-1.4	100.2	+7.4
1898	104.6	+11.1	100.3	-1.9	100.1	+7.5
1899	111.0	+ 4.7	99.2	- .8	102.3	+5.2
1900	112.7	+ 3.1	99.2	- .8	102.2	+5.3
1901	121.4	- 4.3	99.5	-1.1	101.6	+5.9
1902	115.2	+ .9	99.7	-1.3	103.4	+4.1
1903	116.2	.....	98.4	.....	107.6	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

CARS, STEAM RAILROAD.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890.....	101.0	+35.1	101.6	-3.4	102.9	+ 8.4
1891.....	102.2	+33.6	101.1	-3.0	102.4	+ 8.9
1892.....	103.9	+31.4	101.6	-3.4	101.5	+ 9.9
1893.....	107.3	+27.2	101.2	-3.1	104.0	+ 7.2
1894.....	85.8	+59.1	97.1	+1.0	97.8	+14.0
1895.....	88.6	+54.1	98.9	- 8	97.8	+14.0
1896.....	96.6	+41.3	98.8	- 7	97.6	+14.2
1897.....	94.5	+44.4	98.0	+ 1	98.2	+13.5
1898.....	107.3	+27.2	100.8	-2.7	98.0	+13.8
1899.....	111.9	+22.0	101.1	-3.0	99.8	+11.7
1900.....	118.7	+15.0	101.4	-3.3	100.7	+10.7
1901.....	123.8	+10.3	100.6	-2.5	101.7	+ 9.6
1902.....	128.9	+ 5.9	100.6	-2.5	105.7	+ 5.5
1903.....	136.5	.....	98.1	.....	111.5	.....

CLOTHING, FACTORY PRODUCT.

1890.....	97.5	+34.3	100.4	-2.9	100.3	+ 6.4
1891.....	98.2	+33.3	100.3	-2.8	100.5	+ 6.2
1892.....	102.3	+28.0	100.3	-2.8	100.0	+ 6.7
1893.....	100.0	+30.9	100.0	-2.5	100.4	+ 6.3
1894.....	96.0	+36.4	100.1	-2.6	96.2	+10.9
1895.....	96.7	+35.4	100.0	-2.5	97.6	+ 9.3
1896.....	97.9	+33.7	99.8	-2.3	100.0	+ 6.7
1897.....	100.4	+30.4	99.7	-2.2	100.5	+ 6.2
1898.....	103.3	+26.7	99.7	-2.2	101.8	+ 4.8
1899.....	106.9	+22.5	99.7	-2.2	102.3	+ 3.8
1900.....	113.2	+15.6	98.9	-1.4	103.1	+ 3.5
1901.....	117.6	+11.3	98.6	-1.1	105.9	+ 4
1902.....	124.6	+ 5.1	97.7	- 2	102.6	+ 4.0
1903.....	130.9	.....	97.5	.....	106.7	.....

CLOTHING, MEN'S, CUSTOM WORK.

1890.....	96.4	+35.5	100.4	-3.3	100.3	+10.8
1891.....	95.3	+37.0	100.1	-3.0	100.4	+10.7
1892.....	97.9	+33.4	100.1	-3.0	100.4	+10.7
1893.....	99.0	+31.9	100.3	-3.2	101.5	+ 9.8
1894.....	95.4	+36.9	100.3	-3.2	101.0	+10.0
1895.....	96.7	+35.1	100.3	-3.2	100.9	+10.1
1896.....	102.2	+27.8	100.1	-3.0	98.4	+12.0
1897.....	111.8	+16.8	100.2	-3.1	100.2	+10.0
1898.....	113.6	+15.0	99.4	-2.3	100.4	+10.7
1899.....	112.7	+15.9	98.8	-1.7	96.6	+15.0
1900.....	116.8	+11.8	98.9	-1.8	105.2	+ 5.0
1901.....	125.9	+ 8.7	99.0	-1.9	106.6	+ 4.0
1902.....	128.7	+ 1.5	98.8	-1.7	107.7	+ 3.0
1903.....	130.6	.....	97.1	.....	111.1	.....

COOPERAGE.

1890.....	82.1	+23.4	101.4	-3.7	94.3	+32.0
1891.....	84.3	+20.2	101.4	-3.7	95.3	+31.0
1892.....	91.0	+11.3	101.4	-3.7	94.4	+32.0
1893.....	90.6	+11.8	101.3	-3.6	95.4	+31.0
1894.....	98.3	+ 3.1	101.4	-3.7	95.0	+31.0
1895.....	114.9	-11.8	99.1	-6.6	110.2	+13.0
1896.....	121.8	-16.8	99.2	-6.7	104.9	+19.0
1897.....	108.4	- 6.5	99.0	-6.5	106.2	+17.0
1898.....	111.2	- 8.9	98.5	-6.0	105.2	+19.0
1899.....	108.7	- 6.8	97.5	-5.0	98.6	+27.0
1900.....	98.3	+ 3.1	92.9	- 3	106.8	+17.0
1901.....	100.1	+ 1.2	92.8	- 2	105.2	+19.0
1902.....	114.6	-11.6	92.8	- 2	117.8	+ 6.0
1903.....	101.3	.....	92.6	.....	125.2	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

COTTON GOODS.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.
1890.....	87.8	+22.1	99.9	—0.9	102.8	+19.7
1891.....	98.3	+ 9.1	100.7	—1.7	98.9	+24.5
1892.....	95.8	+11.9	101.2	—2.2	100.2	+22.9
1893.....	98.2	+ 9.2	99.9	— .9	103.5	+18.9
1894.....	96.1	+11.6	98.6	+ .4	96.8	+27.2
1895.....	94.8	+13.1	100.0	—1.0	96.9	+27.0
1896.....	98.8	+ 8.5	99.5	— .5	104.8	+17.5
1897.....	104.6	+ 2.5	99.4	— .4	101.1	+21.8
1898.....	112.5	— 4.7	100.3	—1.3	99.9	+23.2
1899.....	112.1	— 4.4	100.4	—1.4	97.7	+26.0
1900.....	115.5	— 7.2	100.2	—1.2	109.1	+12.8
1901.....	109.0	— 1.7	100.0	—1.0	110.3	+11.6
1902.....	117.2	— 8.5	99.2	— .2	116.2	+ 5.9
1903.....	107.2	.....	99.0	.....	123.1	.....

DYEING, FINISHING, AND PRINTING TEXTILES.

Year.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.
1890.....	97.3	+31.7	101.7	—2.1	98.6	+6.5
1891.....	98.9	+29.5	101.7	—2.1	97.5	+7.7
1892.....	99.5	+28.7	101.1	—1.5	99.4	+6.6
1893.....	100.4	+27.6	99.5	+ .1	100.7	+4.3
1894.....	92.7	+33.2	98.9	+ .7	99.4	+5.6
1895.....	95.5	+34.1	99.5	+ .1	99.6	+5.4
1896.....	98.7	+29.8	99.5	+ .1	101.1	+3.9
1897.....	104.4	+22.7	98.9	+ .7	101.0	+4.0
1898.....	102.2	+25.3	99.6	.....	101.5	+3.4
1899.....	110.9	+15.5	99.6	.....	101.2	+3.8
1900.....	112.6	+13.8	99.6	.....	103.3	+1.6
1901.....	117.6	+ 8.9	99.6	.....	108.5	+1.4
1902.....	126.2	+ 1.5	99.6	.....	104.3	+ .7
1903.....	128.1	.....	99.6	.....	105.0	.....

ELECTRICAL APPARATUS AND SUPPLIES.

Year.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.
1890.....	54.7	+356.5	100.0	—5.9	98.6	+12.4
1891.....	55.1	+353.2	100.0	—5.9	98.7	+12.3
1892.....	57.1	+337.8	100.1	—6.0	98.2	+12.8
1893.....	65.6	+280.6	100.1	—6.0	97.7	+13.4
1894.....	79.3	+214.9	100.4	—6.3	95.7	+15.8
1895.....	100.6	+148.2	100.4	—6.3	97.3	+13.9
1896.....	130.1	+ 91.9	99.6	—5.5	99.7	+11.1
1897.....	137.1	+ 82.1	99.9	—5.8	103.0	+ 7.6
1898.....	132.5	+ 88.5	99.7	—5.6	105.8	+ 4.7
1899.....	169.4	+ 47.4	99.9	—5.8	105.5	+ 5.0
1900.....	203.4	+ 22.8	100.1	—6.0	102.6	+ 8.0
1901.....	213.2	+ 17.1	94.1	.....	107.8	+ 2.8
1902.....	231.9	+ 7.7	94.1	.....	107.3	+ 3.3
1903.....	249.7	.....	94.1	.....	110.8	.....

FLOUR.

Year.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.
1890.....	90.3	+37.3	100.3	—2.6	99.4	+11.8
1891.....	89.4	+38.7	100.1	—2.4	100.3	+10.9
1892.....	91.6	+35.4	100.1	—2.4	100.3	+10.9
1893.....	96.1	+29.0	100.1	—2.4	99.7	+11.5
1894.....	92.8	+33.6	100.3	—2.6	98.7	+12.7
1895.....	92.4	+34.2	100.3	—2.6	98.5	+12.9
1896.....	106.5	+16.4	99.9	—2.2	99.8	+11.4
1897.....	107.1	+15.8	100.1	—2.4	100.1	+11.1
1898.....	117.2	+ 5.8	99.5	—1.8	101.5	+ 9.6
1899.....	117.7	+ 5.4	99.4	—1.7	101.8	+ 9.2
1900.....	118.7	+ 4.5	99.3	—1.6	103.3	+ 7.6
1901.....	120.6	+ 2.8	99.3	—1.6	107.6	+ 3.3
1902.....	123.4	+ .5	98.1	— .4	110.4	+ .7
1903.....	124.0	.....	97.7	.....	111.2	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

FOUNDRY AND MACHINE SHOP.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	101.8	+46.4	100.5	-5.1	99.2	+13.1
1891	101.1	+47.4	100.4	-5.0	100.8	+11.9
1892	94.5	+57.7	100.2	-4.8	102.7	+ 9.3
1893	99.6	+49.6	100.0	-4.6	101.6	+10.4
1894	87.7	+69.9	99.9	-4.5	98.7	+13.7
1895	93.2	+59.9	100.1	-4.7	99.2	+13.1
1896	93.9	+58.7	99.8	-4.4	100.5	+11.6
1897	93.5	+59.4	99.7	-4.3	99.8	+12.4
1898	108.1	+37.8	99.9	-4.5	99.0	+13.3
1899	125.1	+19.1	99.4	-4.0	99.1	+13.2
1900	126.8	+17.5	99.2	-3.8	101.5	+10.5
1901	132.0	+12.9	98.1	-2.8	104.7	+ 7.2
1902	139.2	+ 7.0	96.6	-1.2	108.2	+ 3.7
1903	149.0	.....	95.4	.....	112.2	.....

FRUITS AND VEGETABLES, CANNING AND PRESERVING.

1890	108.5	- 3.4	99.9	+0.1	100.7	+ 5.3
1891	111.5	- 6.0	100.4	- .4	101.4	+ 4.5
1892	111.5	- 6.0	100.4	- .4	101.4	+ 4.5
1893	111.5	- 6.0	100.4	- .4	101.4	+ 4.5
1894	100.2	+ 4.6	99.9	+ .1	100.7	+ 5.3
1895	96.5	+ 8.6	100.0	.....	100.8	+ 5.2
1896	89.2	+17.5	99.8	+ .2	100.9	+ 5.1
1897	89.2	+17.5	99.8	+ .2	96.0	+10.4
1898	83.5	+18.4	99.7	+ .3	95.8	+10.6
1899	92.9	+12.8	99.7	+ .3	100.8	+ 5.2
1900	101.3	+ 3.5	99.7	+ .3	100.8	+ 5.2
1901	97.6	+ 7.4	99.8	+ .2	105.4	+ .6
1902	104.8	.....	100.0	.....	105.3	+ .7
1903	104.8	.....	100.0	.....	106.0	.....

FURNITURE.

1890	93.7	+25.1	101.2	-4.0	99.4	+18.9
1891	95.3	+23.0	100.4	-3.2	102.0	+15.9
1892	101.4	+15.3	99.5	-2.3	102.6	+15.2
1893	98.5	+19.0	100.2	-3.0	100.5	+17.6
1894	95.2	+23.1	98.3	-1.1	99.2	+19.2
1895	96.1	+22.0	100.0	-2.8	97.1	+21.7
1896	99.0	+18.4	100.4	-3.2	97.7	+21.0
1897	102.8	+14.0	99.9	-2.7	100.2	+18.0
1898	104.5	+12.2	100.2	-3.0	98.6	+19.9
1899	113.4	+ 3.4	100.0	-2.8	102.9	+14.9
1900	110.0	+ 6.5	99.7	-2.5	103.2	+14.5
1901	113.5	+ 3.3	98.4	-1.2	108.8	+ 7.2
1902	119.8	- 2.2	97.3	- .1	116.8	+ 1.2
1903	117.2	.....	97.2	.....	118.2	.....

GAS.

1890	110.1	+ 8.4	100.6	-4.3	99.5	+1.8
1891	95.4	+25.2	100.7	-4.4	99.0	+2.3
1892	91.3	+30.8	101.0	-4.7	99.6	+1.7
1893	84.1	+41.0	101.0	-4.7	100.4	+ .4
1894	100.5	+18.8	101.0	-4.7	101.2	+ .1
1895	95.6	+24.9	100.7	-4.1	99.7	+1.6
1896	93.2	+28.1	100.9	-4.6	101.0	+ .3
1897	111.0	+ 7.6	100.8	-4.5	100.7	+ .4
1898	129.3	- 8.0	97.3	-1.0	98.6	+2.7
1899	91.6	+30.3	96.3	.....	100.3	+1.4
1900	104.0	+14.8	94.8	+1.6	101.3	.....
1901	99.0	+20.6	97.4	-1.1	96.5	+5.0
1902	121.1	- 1.4	95.3	+1.0	104.9	-3.0
1903	119.4	.....	96.3	.....	101.3	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

GLASS.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	99.4	+17.4	100.1	-0.4	101.5	+18.2
1891	108.2	+ 7.9	99.9	-.2	100.2	+19.8
1892	101.6	+14.9	100.0	-.3	101.3	+18.5
1893	97.6	+19.6	100.1	-.4	100.2	+19.8
1894	93.1	+25.3	99.8	-.1	99.1	+21.1
1895	92.8	+25.8	99.9	-.2	92.6	+29.6
1896	95.7	+21.9	100.0	-.3	96.6	+24.2
1897	95.7	+21.7	100.3	-.6	98.3	+22.1
1898	104.9	+11.2	100.0	-.3	101.2	+18.6
1899	108.7	+ 7.4	99.9	-.2	103.5	+15.9
1900	110.3	+ 5.8	100.3	-.6	107.7	+11.4
1901	112.6	+ 3.6	100.0	-.8	107.5	+11.6
1902	115.0	+ 1.5	99.9	-.2	115.0	+ 4.8
1903	116.7	.....	99.7	.....	120.0	.....

HARNESS.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	91.0	+52.5	100.4	-2.4	100.2	+15.6
1891	91.8	+51.2	100.4	-2.4	100.6	+15.1
1892	94.1	+47.5	100.2	-2.2	100.6	+15.1
1893	94.2	+47.3	100.1	-2.1	101.0	+14.7
1894	94.5	+46.9	100.0	-2.0	99.0	+17.0
1895	99.3	+39.8	99.8	-1.8	98.5	+17.6
1896	104.3	+33.1	99.7	-1.7	98.7	+17.3
1897	105.9	+31.1	99.8	-1.8	99.5	+16.4
1898	110.2	+26.0	99.9	-1.9	100.7	+15.0
1899	117.6	+18.0	99.7	-1.7	101.2	+14.4
1900	124.5	+11.5	99.8	-1.8	102.0	+13.5
1901	128.5	+ 8.0	99.5	-1.5	105.6	+ 9.7
1902	135.7	+ 2.3	99.0	-1.0	108.7	+ 6.5
1903	138.8	.....	98.0	.....	115.8	.....

HATS, FUR.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	86.2	+95.6	100.7	-7.9	104.4	+ 9.0
1891	94.0	+79.4	100.5	-7.8	100.5	+13.2
1892	90.9	+85.5	100.5	-7.8	100.0	+13.8
1893	100.0	+68.6	100.2	-7.6	97.5	+16.7
1894	103.2	+63.4	100.2	-7.6	99.6	+14.3
1895	90.1	+87.1	100.1	-7.4	97.8	+16.4
1896	94.5	+78.4	100.2	-7.5	98.8	+15.2
1897	101.0	+66.9	100.0	-7.3	100.6	+13.1
1898	109.5	+54.0	99.4	-6.7	99.8	+14.0
1899	132.1	+27.6	98.3	-5.7	100.9	+12.8
1900	147.0	+14.7	98.5	-5.9	102.4	+11.1
1901	160.9	+ 4.8	98.7	-6.1	103.0	+10.5
1902	164.6	+ 2.4	94.2	-1.6	110.3	+ 3.2
1903	168.6	.....	92.7	.....	113.8	.....

HOSIERY AND KNIT GOODS.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	81.3	+54.5	101.5	-3.1	106.1	+ 8.9
1891	89.3	+40.6	101.5	-3.1	107.3	+ 7.6
1892	122.6	+ 2.4	101.5	-3.1	99.0	+16.7
1893	116.4	+ 7.9	100.3	-1.9	102.5	+12.7
1894	83.7	+50.1	95.0	+3.6	97.7	+18.2
1895	99.8	+25.0	100.2	-1.8	102.9	+12.2
1896	93.1	+34.9	100.0	-1.6	99.8	+15.7
1897	93.1	+34.9	100.1	-1.7	94.7	+22.0
1898	111.3	+12.8	100.0	-1.6	95.5	+20.9
1899	107.9	+16.4	100.0	-1.6	94.7	+22.0
1900	120.8	+ 4.0	98.9	-.5	98.0	+17.9
1901	131.8	- 4.7	98.7	-.3	102.4	+12.8
1902	121.2	+ 3.6	98.9	-.5	108.7	+ 6.3
1903	125.6	.....	98.4	.....	115.5	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, BAR IRON.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	99.4	+ 9.9	102.7	-4.2	110.3	+23.8
1891	98.4	+11.0	101.6	-3.1	105.0	+30.0
1892	98.3	+11.1	101.8	-3.3	100.0	+36.5
1893	105.9	+ 3.1	101.4	-3.0	95.7	+42.6
1894	100.2	+ 9.0	101.3	-2.9	90.1	+51.5
1895	103.7	+ 5.3	100.7	-2.3	91.6	+49.0
1896	98.9	+16.3	101.0	-2.6	99.3	+37.5
1897	97.7	+11.8	97.1	+1.3	98.0	+39.3
1898	99.7	+ 9.5	96.6	+1.9	96.3	+41.7
1899	101.6	+ 7.5	95.9	+2.6	113.7	+20.1
1900	108.9	+ 3	97.3	+1.1	118.2	+15.6
1901	100.7	+ 8.4	98.4	.....	119.7	+14.0
1902	104.1	+ 4.9	98.8	- .4	132.9	+ 2.7
1903	109.2	.....	98.4	.....	136.5	.....

IRON AND STEEL, BESSEMER CONVERTING.

1890	99.5	+15.6	98.3	-2.3	113.3	+16.3
1891	104.8	+ 9.7	98.1	-2.1	115.9	+13.7
1892	101.2	+13.6	101.8	-5.7	112.3	+17.4
1893	102.3	+12.4	99.2	-3.2	105.5	+24.9
1894	100.0	+15.0	100.1	-4.1	96.1	+37.1
1895	100.0	+15.0	100.2	-4.2	97.3	+35.5
1896	99.0	+16.2	101.1	-5.0	92.5	+42.5
1897	100.1	+14.9	100.2	-4.2	86.3	+52.7
1898	99.0	+16.2	101.0	-5.0	88.1	+49.6
1899	100.1	+14.9	100.2	-4.2	92.8	+42.0
1900	118.7	- 3.1	91.3	+5.1	106.2	+24.1
1901	113.9	+ 1.0	94.6	+1.5	113.1	+16.5
1902	113.9	+ 1.0	94.6	+1.5	122.6	+ 7.5
1903	115.0	.....	96.0	.....	131.8	.....

IRON AND STEEL, BLAST FURNACE.

1890	94.1	+8.1	100.0	.....	104.4	+ 9.6
1891	95.1	+6.9	100.0	.....	105.3	+ 8.6
1892	106.1	-4.1	100.0	.....	107.1	+ 6.8
1893	99.7	+2.0	100.0	.....	105.2	+ 8.7
1894	99.8	+1.9	100.0	.....	91.4	+25.2
1895	100.2	+1.5	100.0	.....	96.5	+18.5
1896	98.9	+2.8	100.0	.....	100.1	+14.2
1897	98.3	+3.5	100.0	.....	93.4	+22.5
1898	102.6	- .9	100.0	.....	93.9	+21.8
1899	104.1	-2.3	100.0	.....	102.8	+11.8
1900	104.1	-2.3	100.0	.....	107.3	+ 6.6
1901	106.5	-4.5	100.0	.....	108.1	+ 5.8
1902	104.2	-2.4	100.0	.....	111.2	+ 2.9
1903	101.7	.....	100.0	.....	114.4	.....

IRON AND STEEL, BLOOMING MILL.

1890	121.3	-14.0	96.2	- 3.2	101.6	+28.4
1891	121.7	-14.3	95.3	- 2.3	104.2	+25.4
1892	119.3	-12.6	98.2	- 5.2	107.9	+21.0
1893	113.1	- 7.8	98.2	- 5.2	109.8	+18.4
1894	90.8	+14.9	103.6	-10.1	90.3	+44.0
1895	92.4	+12.9	103.5	-10.0	96.2	+35.4
1896	88.8	+17.5	103.4	-10.0	101.9	+28.4
1897	89.1	+17.1	103.3	- 9.9	91.4	+42.1
1898	86.4	+20.7	103.4	-10.0	92.4	+41.1
1899	104.2	+ .1	94.7	- 1.7	104.4	+25.4
1900	105.1	- .8	97.0	- 4.0	110.5	+18.4
1901	108.2	- 3.6	98.7	- .6	118.6	+10.4
1902	104.3	.....	98.5	- .4	131.4	- .1
1903	104.3	.....	98.1	.....	130.6	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

IRON AND STEEL, MUCK BAR.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	101.6	+ 6.4	100.2	+2.1	103.7	+24.2
1891	103.5	+ 4.4	100.2	+2.1	102.7	+25.4
1892	105.7	+ 2.3	99.9	+2.4	100.7	+27.9
1893	98.8	+ 9.4	100.0	+2.3	104.8	+22.9
1894	104.1	+ 3.8	100.9	+1.4	93.4	+37.9
1895	98.4	+ 9.9	100.7	+1.6	93.6	+37.6
1896	98.1	+10.2	97.6	+4.8	96.6	+33.3
1897	101.1	+ 6.9	99.8	+2.5	97.4	+32.2
1898	94.9	+13.9	100.7	+1.6	100.8	+27.8
1899	96.5	+12.0	100.1	+2.2	106.3	+21.2
1900	101.9	+ 6.1	104.4	-2.0	117.6	+ 9.5
1901	101.3	+ 6.7	102.5	- .2	115.7	+11.3
1902	104.3	+ 3.6	102.3	.....	119.0	+ 8.2
1903	108.1	.....	102.3	.....	128.8	.....

IRON AND STEEL, OPEN HEARTH STEEL.

Year.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	95.7	+2.5	100.3	.....	104.9	+25.6
1891	106.0	-7.5	100.0	+0.3	103.7	+27.1
1892	104.9	-6.5	100.0	+ .3	98.0	+34.5
1893	105.9	-7.4	100.0	+ .3	97.0	+35.9
1894	102.1	-3.9	99.9	+ .4	89.8	+46.8
1895	93.4	+5.0	99.9	+ .4	97.7	+34.9
1896	95.6	+2.6	100.0	+ .3	101.4	+30.0
1897	93.0	+5.5	100.0	+ .3	98.5	+33.8
1898	95.8	+2.4	100.0	+ .3	100.2	+31.5
1899	108.9	-5.6	93.8	+ .5	107.7	+22.4
1900	95.8	+2.4	99.9	+ .4	119.9	+ 9.9
1901	96.3	+1.9	99.8	+ .5	119.8	+10.0
1902	95.6	+2.6	99.8	+ .5	126.0	+ 4.6
1903	98.1	.....	100.3	.....	131.8	.....

IRON AND STEEL, RAILS.

Year.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	107.9	+ 4.9	90.2	+7.0	118.5	+11.6
1891	107.9	+ 4.9	90.2	+7.0	103.3	+28.0
1892	90.2	+25.5	103.3	-6.6	115.8	+14.2
1893	90.2	+25.5	103.3	-6.6	99.5	+32.9
1894	98.5	+14.9	103.3	-6.6	96.3	+37.3
1895	99.5	+13.8	103.5	-6.8	101.8	+30.0
1896	101.0	+12.1	103.3	-6.6	103.8	+27.4
1897	101.0	+12.1	103.3	-6.6	86.2	+53.4
1898	101.0	+12.1	103.3	-6.6	87.1	+51.8
1899	112.7	+ .4	96.6	- .1	87.9	+50.4
1900	113.2	.....	96.5	.....	122.8	+ 7.7
1901	113.2	.....	96.5	.....	124.8	+ 5.9
1902	113.2	.....	96.5	.....	143.5	- 7.9
1903	113.2	.....	96.5	.....	132.2	.....

LEATHER.

Year.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Percent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	81.7	+62.2	99.9	+0.2	102.1	+4.1
1891	89.9	+47.4	99.9	+ .2	102.5	+3.7
1892	99.7	+32.9	99.8	+ .3	102.3	+3.9
1893	83.9	+57.9	99.9	+ .2	102.1	+4.1
1894	95.5	+38.7	99.9	+ .2	98.3	+8.1
1895	100.9	+31.3	100.0	+ .1	98.8	+7.6
1896	90.5	+46.4	100.0	+ .1	98.9	+7.5
1897	102.9	+28.8	100.2	- .1	98.5	+7.9
1898	129.4	+ 2.4	100.3	- .2	96.9	+9.7
1899	127.1	+ 4.2	100.1	.....	99.6	+6.7
1900	127.9	+ 3.6	100.1	.....	98.1	+8.4
1901	128.0	+ 3.5	100.2	- .1	101.4	+4.8
1902	117.6	+12.7	100.1	.....	104.3	+1.9
1903	132.5	.....	100.1	.....	106.3	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

LIQUORS, DISTILLED.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	93.5	+16.2	100.1	-3.0	98.8	+10.4
1891	99.0	+15.7	100.1	-3.0	98.8	+10.4
1892	98.4	+16.4	100.1	-3.0	98.8	+10.4
1893	97.6	+17.3	100.1	-3.0	99.2	+10.0
1894	99.4	+15.2	100.2	-3.1	99.8	+9.3
1895	98.7	+16.0	100.1	-3.0	99.3	+9.9
1896	97.6	+17.3	100.1	-3.0	100.5	+8.6
1897	102.3	+11.9	99.9	-2.8	100.4	+8.7
1898	99.1	+15.5	99.7	-2.6	103.4	+5.5
1899	100.9	+13.5	99.7	-2.6	100.9	+8.1
1900	97.2	+17.8	100.1	-3.0	100.5	+8.6
1901	122.3	-6.4	98.7	-1.6	105.1	+3.8
1902	113.0	+1.3	98.0	-.9	108.0	+1.0
1903	114.5	.....	97.1	.....	109.1	.....

LIQUORS, MALT.

1890	92.8	+35.9	100.3	-10.8	97.7	+23.1
1891	92.9	+35.7	100.3	-10.4	98.8	+21.8
1892	94.9	+32.9	100.5	-10.5	98.3	+22.4
1893	103.2	+22.2	100.5	-10.5	98.8	+21.8
1894	104.5	+20.7	100.5	-10.5	99.5	+20.9
1895	102.0	+23.6	100.4	-10.5	100.2	+20.1
1896	101.2	+24.6	99.8	-9.9	100.5	+19.7
1897	103.1	+22.3	99.9	-10.0	101.1	+19.0
1898	101.1	+24.7	98.7	-8.9	102.5	+17.0
1899	104.5	+20.7	98.8	-9.0	102.7	+17.0
1900	104.4	+20.8	96.4	-6.7	108.0	+11.4
1901	115.4	+9.3	94.2	-4.6	111.2	+8.1
1902	118.1	+6.8	91.0	-1.2	117.5	+2.1
1903	126.1	.....	89.9	.....	120.3	.....

LITHOGRAPHING

1890	98.3	+27.2	99.8	-0.9	97.7	+9.9
1891	96.3	+29.8	99.9	-1.0	100.6	+6.6
1892	103.5	+20.8	99.7	-.8	98.3	+9.9
1893	100.1	+24.9	99.9	-1.0	99.5	+7.7
1894	96.9	+29.0	100.0	-1.1	98.2	+9.9
1895	96.5	+29.5	100.1	-1.2	98.9	+8.8
1896	91.4	+36.8	100.3	-1.4	98.3	+9.9
1897	102.7	+21.7	100.1	-1.2	101.0	+6.6
1898	101.6	+23.0	100.1	-1.2	103.0	+4.4
1899	112.4	+11.2	100.0	-1.1	104.5	+2.2
1900	116.2	+7.6	100.1	-1.2	104.2	+3.3
1901	123.2	+1.5	100.1	-1.2	104.9	+2.2
1902	122.0	+2.5	99.5	-.6	105.7	+1.1
1903	125.0	.....	98.9	.....	107.3	.....

LUMBER.

1890	94.2	+32.6	100.4	-2.1	102.8	+10.0
1891	95.7	+30.5	100.2	-1.9	102.4	+10.0
1892	96.1	+30.0	100.2	-1.9	102.1	+11.1
1893	95.6	+30.6	99.7	-1.4	101.7	+11.1
1894	95.3	+31.1	99.7	-1.4	97.8	+15.0
1895	96.3	+29.7	100.1	-1.8	97.2	+16.0
1896	99.1	+26.0	100.1	-1.8	97.0	+16.0
1897	105.0	+19.0	99.9	-1.6	97.4	+16.0
1898	107.6	+16.1	99.8	-1.5	99.4	+14.0
1899	111.3	+12.2	99.8	-1.5	102.2	+10.0
1900	115.5	+8.1	99.5	-1.2	104.4	+8.0
1901	118.7	+5.2	99.1	-.8	106.5	+6.0
1902	123.6	+1.1	98.4	-.1	109.5	+3.0
1903	124.9	.....	98.3	.....	113.3	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

MARBLE AND STONE WORK.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	103.8	+ 8.2	101.8	-7.7	38.5	+20.4
1891	102.5	+ 9.6	100.9	-6.8	99.5	+19.2
1892	103.4	+ 8.6	100.4	-6.4	100.3	+18.2
1893	102.0	+10.1	100.5	-6.5	99.7	+19.0
1894	96.3	+16.6	100.6	-6.6	98.0	+21.0
1895	96.4	+16.5	100.6	-6.6	97.0	+22.3
1896	94.9	+18.3	99.6	-5.6	101.0	+17.4
1897	95.7	+17.3	99.2	-5.2	101.6	+16.7
1898	98.6	+13.9	99.3	-5.3	101.2	+17.2
1899	106.3	+ 5.6	97.2	-3.3	103.2	+14.9
1900	107.0	+ 5.0	96.9	-3.0	104.9	+13.1
1901	115.9	- 3.1	96.1	-2.2	109.0	+ 8.8
1902	116.0	- 3.2	95.5	-1.6	113.5	+ 4.5
1903	112.3	.....	94.0	.....	118.6	.....

MUSICAL INSTRUMENTS, ORGANS.

1890	106.6	+35.8	101.7	-9.9	97.6	+8.1
1891	101.6	+42.5	101.6	-9.8	100.8	- .2
1892	116.7	+24.1	101.6	-9.8	102.3	-1.7
1893	106.4	+36.1	101.6	-9.8	105.7	-4.8
1894	86.9	+66.6	101.6	-9.8	101.4	- .8
1895	105.6	+37.1	101.6	-9.8	99.7	+ .9
1896	93.7	+54.5	101.6	-9.8	99.8	+ .8
1897	89.3	+62.2	96.2	-4.8	97.3	+3.4
1898	86.0	+65.4	96.2	-4.8	97.8	+2.9
1899	103.6	+39.8	96.3	-4.9	97.8	+2.9
1900	106.3	+36.2	93.9	-2.4	105.8	-4.9
1901	112.2	+29.1	93.9	-2.4	102.6	-1.9
1902	138.0	+ 4.9	94.0	-2.6	100.6	.....
1903	144.8	.....	91.6	.....	100.6	.....

MUSICAL INSTRUMENTS, PIANOS.

1890	78.5	+118.9	99.5	- 9.7	107.3	+ 5.8
1891	89.4	+ 92.2	99.7	- 9.9	106.3	+ 6.8
1892	92.0	+ 86.7	99.9	-10.1	102.8	+10.4
1893	87.2	+ 97.0	99.9	-10.1	100.9	+12.5
1894	93.5	+ 83.7	100.1	-10.3	95.4	+19.0
1895	106.7	+ 61.0	100.2	-10.4	97.6	+16.3
1896	102.4	+ 67.8	100.3	-10.5	96.6	+17.5
1897	103.6	+ 65.8	100.3	-10.5	96.9	+17.1
1898	114.0	+ 50.7	100.0	-10.2	97.4	+16.5
1899	136.6	+ 25.8	100.1	-10.3	98.8	+14.9
1900	143.5	+ 19.7	97.7	- 8.1	100.8	+12.6
1901	149.1	+ 15.2	97.7	- 8.1	103.6	+ 9.6
1902	163.0	+ 5.4	96.3	- 6.7	107.4	+ 5.7
1903	171.8	.....	89.8	.....	113.5	.....

OIL, COTTON SEED.

1890	97.8	+17.4	99.6	-0.7	104.9	+0.3
1891	100.6	+14.1	100.0	-1.1	105.3	- .1
1892	100.6	+14.1	100.0	-1.1	105.3	- .1
1893	100.6	+14.1	100.0	-1.1	105.3	- .1
1894	100.6	+14.1	100.0	-1.1	96.5	+9.0
1895	100.6	+14.1	100.0	-1.1	96.5	+9.0
1896	100.6	+14.1	100.0	-1.1	96.5	+9.0
1897	100.6	+14.1	100.0	-1.1	96.5	+9.0
1898	100.6	+14.1	100.0	-1.1	96.5	+9.0
1899	100.6	+14.1	100.0	-1.1	96.5	+9.0
1900	100.6	+14.1	100.0	-1.1	96.5	+9.0
1901	100.6	+14.1	100.0	-1.1	96.5	+9.0
1902	113.3	+ 1.3	99.3	- .4	105.5	- .3
1903	114.8	.....	98.9	.....	105.2	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

OIL, LINSEED.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	126.0	-28.5	100.8	+4.1	98.3	+ 8.7
1891	93.1	- 3.2	100.8	+4.1	98.3	+ 8.7
1892	101.8	-11.5	100.9	+4.0	103.6	+ 3.2
1893	91.9	- 2.0	99.7	+5.2	103.7	+ 3.1
1894	94.1	- 4.3	99.5	+5.4	102.0	+ 4.8
1895	95.1	- 5.3	99.6	+5.3	100.2	+ 6.7
1896	106.0	-15.0	99.7	+5.2	99.6	+ 7.3
1897	102.0	-11.7	99.7	+5.2	98.2	+ 8.9
1898	97.4	- 7.5	99.7	+5.2	99.1	+ 7.9
1899	103.6	-13.0	99.7	+5.2	97.2	+10.0
1900	101.3	-11.1	99.8	+5.1	97.9	+ 9.2
1901	98.2	- 8.2	104.9	.....	106.4	+ .5
1902	94.6	- 4.8	104.9	.....	106.9	.....
1903	90.1	.....	104.9	.....	106.9	.....

PAINTS.

1890	92.2	+52.1	101.9	-2.1	98.3	+13.3
1891	97.4	+43.9	101.9	-2.1	98.7	+12.9
1892	99.6	+40.8	101.9	-2.1	98.9	+12.6
1893	101.3	+38.4	101.8	-2.0	100.5	+10.8
1894	84.7	+65.5	98.7	+6.5	107.6	+ 3.5
1895	100.9	+38.9	98.8	+1.0	98.8	+12.8
1896	94.4	+48.5	101.9	-2.1	97.5	+14.3
1897	101.3	+38.4	99.4	+ .4	99.3	+12.2
1898	112.7	+24.4	99.4	+ .4	100.0	+11.4
1899	121.7	+15.2	99.5	+ .3	100.5	+10.8
1900	139.6	+ .4	99.7	+ .1	101.3	+10.0
1901	108.7	+35.2	99.7	+ .1	106.4	+ 4.7
1902	138.8	+ 1.0	104.1	-4.1	112.3	- .8
1903	140.2	.....	99.8	.....	111.4	.....

PAPER AND WOOD PULP.

1890	92.0	+34.2	100.5	-7.8	96.5	+23.0
1891	95.4	+29.5	100.4	-7.7	98.8	+20.1
1892	98.6	+25.3	100.4	-7.7	99.6	+26.8
1893	100.6	+22.8	99.9	-7.2	99.7	+19.1
1894	98.4	+32.2	100.9	-8.1	98.7	+20.3
1895	100.6	+22.8	100.7	-7.9	99.2	+19.7
1896	108.6	+19.2	100.7	-7.9	100.6	+18.0
1897	107.3	+15.1	100.8	-8.0	99.8	+18.9
1898	105.6	+17.0	101.2	-8.4	99.3	+19.5
1899	102.6	+20.4	99.5	-6.8	108.6	+ 9.3
1900	114.9	+ 7.5	99.6	-6.9	108.7	+ 9.2
1901	115.4	+ 7.0	98.6	-6.0	110.9	+ 7.0
1902	118.3	+ 4.4	98.0	- .3	111.1	+ 6.8
1903	123.5	.....	92.7	.....	118.7	.....

PLANING MILL.

1890	92.4	+46.5	101.2	-3.2	99.3	+14.4
1891	93.4	+45.0	100.4	-2.4	100.8	+12.7
1892	95.6	+41.6	100.5	-2.5	100.8	+12.7
1893	94.9	+42.7	100.1	-2.1	100.7	+12.8
1894	94.9	+42.7	100.6	-2.6	97.7	+16.8
1895	99.2	+36.5	99.3	-1.3	98.2	+15.7
1896	101.4	+33.5	99.4	-1.4	98.4	+15.4
1897	102.2	+32.5	99.7	-1.7	99.5	+14.5
1898	104.6	+29.4	99.5	-1.5	100.9	+12.6
1899	115.5	+17.2	99.2	-1.2	103.8	+ 9.4
1900	115.5	+17.2	99.3	-1.3	104.9	+ 8.8
1901	125.3	+ 8.1	99.0	-1.0	107.9	+ 5.8
1902	128.0	+ 5.8	98.2	- .2	110.8	+ 2.8
1903	135.4	.....	98.0	.....	113.6	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (—) in 1903, as compared with previous years, see note on page 718.]

POTTERY.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (—) in 1903 as compared with year specified.
1890	101.8	+ 1.7	99.7	—0.5	98.8	+ 9.0
1891	104.8	— 1.2	99.6	— .4	99.7	+ 8.0
1892	100.8	+ 2.7	99.7	— .5	100.1	+ 7.6
1893	108.1	+ .4	99.6	— .4	102.5	+ 5.1
1894	101.2	+ 2.3	99.6	— .4	99.6	+ 8.1
1895	98.3	+10.9	100.0	— .8	96.4	+11.7
1896	95.0	+ 8.9	100.2	—1.0	95.3	+13.0
1897	98.6	+ 5.0	100.6	—1.4	99.9	+ 7.8
1898	95.4	+ 8.5	100.6	—1.4	104.9	+ 2.7
1899	99.7	+ 3.8	100.4	—1.2	103.0	+ 4.6
1900	102.0	+ 1.5	100.1	— .9	99.8	+ 7.9
1901	100.7	+ 2.8	100.3	—1.1	102.4	+ 5.2
1902	99.5	+ 4.0	100.3	—1.1	104.6	+ 3.0
1903	103.5	.....	99.2	.....	107.7	.....

PRINTING AND PUBLISHING, BOOK AND JOB.

1890	97.3	+30.1	101.0	—7.8	97.8	+13.7
1891	98.5	+28.5	101.0	—7.8	99.6	+16.6
1892	96.9	+30.7	100.5	—7.4	99.2	+17.0
1893	96.9	+30.7	100.4	—7.3	100.2	+15.9
1894	95.0	+33.3	100.1	—7.0	99.6	+16.6
1895	97.0	+30.5	100.2	—7.1	98.5	+16.7
1896	98.2	+23.9	100.1	—7.0	100.3	+15.8
1897	107.0	+13.3	100.2	—7.1	99.2	+17.0
1898	106.2	+19.2	99.4	—6.8	101.2	+14.7
1899	112.2	+12.8	97.2	—4.2	103.6	+12.1
1900	117.0	+ 8.2	95.1	—2.1	109.3	+ 6.2
1901	122.0	+ 3.8	94.4	—1.4	110.7	+ 4.9
1902	123.9	+ 2.2	93.2	— .1	114.3	+ 1.6
1903	126.6	.....	93.1	.....	116.1	.....

PRINTING AND PUBLISHING, NEWSPAPER.

1890	α 105.4	α— 9.4	100.2	—4.0	102.9	+10.1
1891	α 107.2	α—10.9	100.1	—3.9	99.5	+13.9
1892	α 116.2	α—17.8	100.6	—4.4	98.7	+14.8
1893	α 107.4	α—11.1	101.3	—5.0	98.0	+15.6
1894	α 94.7	α+ .8	100.5	—4.3	97.4	+16.3
1895	α 88.7	α+ 7.6	100.4	—4.2	96.4	+17.5
1896	α 97.0	α— 1.5	100.2	—4.0	98.7	+14.8
1897	α 96.3	α— .8	100.0	—3.8	99.3	+14.1
1898	α 91.6	α+ 4.3	99.1	—2.9	102.9	+10.1
1899	α 92.1	α+ 3.7	97.9	—1.7	106.2	+ 6.7
1900	α 89.1	α+ 7.2	97.6	—1.4	106.3	+ 6.6
1901	α 90.3	α+ 5.8	97.4	—1.2	106.4	+ 6.5
1902	α 96.7	α— 1.2	97.1	— .9	109.3	+ 3.7
1903	α 95.5	.....	96.2	.....	113.3	.....

ROPE AND TWINE.

890	94.5	+14.6	100.0	.....	99.5	+1.3
891	90.1	+20.2	100.0	.....	99.5	+1.3
892	103.4	+ 4.7	100.0	.....	100.0	+ .8
893	107.6	+ 7	100.0	.....	99.5	+1.3
894	98.9	+15.3	100.0	.....	99.7	+1.1
895	104.0	+ 4.1	100.0	.....	101.8	—1.0
896	104.2	+ 3.9	100.0	.....	99.7	+1.1
897	102.3	+ 5.9	100.0	.....	100.1	+ .7
898	97.7	+10.8	100.0	.....	99.7	+1.1
899	99.3	+ 9.1	100.0	.....	100.6	+ .2
900	95.0	+14.0	100.0	.....	100.9	— .1
901	97.7	+10.8	100.0	.....	99.5	+1.3
902	111.8	— 3.1	100.0	.....	100.6	+ .2
903	108.3	.....	100.0	.....	100.8	.....

α These figures include linotype operators in the only establishment in operation the entire period.
 † Linotype operators in other establishments where they were employed beginning at a later date were included the percentages in the later years would be largely increased.

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

SHIPBUILDING.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	86.7	+89.0	100.8	-3.4	97.5	+13.1
1891	89.7	+82.7	100.3	-2.9	97.2	+13.5
1892	98.0	+76.2	100.3	-2.9	97.9	+12.7
1893	87.0	+88.4	100.1	-2.7	98.7	+11.8
1894	86.0	+90.6	99.7	-2.3	95.6	+15.4
1895	101.3	+61.8	100.0	-2.6	101.0	+ 9.2
1896	91.2	+79.7	99.9	-2.5	102.0	+ 8.1
1897	89.3	+83.5	99.3	-1.9	104.0	+ 6.1
1898	122.2	+94.1	99.7	-2.3	103.8	+ 6.3
1899	147.6	+11.0	99.8	-2.4	102.3	+ 7.8
1900	156.2	+ 4.9	99.9	-2.5	102.6	+ 7.5
1901	159.5	+ 2.8	98.8	-1.4	104.2	+ 5.9
1902	169.5	- 8.3	98.2	- .8	108.2	+ 1.9
1903	168.9	.....	97.4	.....	110.3	.....

SILK GOODS.

1890	85.6	+58.8	103.0	-4.1	99.7	+5.2
1891	83.5	+62.8	103.0	-4.1	97.1	+8.0
1892	91.9	+47.9	102.1	-3.2	99.8	+5.1
1893	89.1	+52.5	99.0	- .2	100.5	+4.4
1894	98.8	+44.9	98.6	+ .2	100.1	+4.8
1895	105.2	+29.2	98.6	+ .2	101.9	+2.9
1896	103.7	+81.1	98.8	.....	101.3	+3.6
1897	113.2	+20.1	98.9	- .1	99.4	+5.5
1898	115.9	+17.3	99.1	- .3	99.7	+5.2
1899	120.4	+12.9	99.0	- .2	100.4	+4.5
1900	111.8	+21.6	99.3	- .5	100.3	+4.6
1901	121.0	+12.3	99.1	- .3	99.9	+5.0
1902	142.7	- 4.8	99.0	- .2	101.9	+5.0
1903	135.9	.....	98.8	.....	104.9	.....

SLAUGHTERING AND MEAT PACKING.

1890	89.3	+29.1	99.5	-0.3	102.2	+11.2
1891	90.0	+28.1	99.5	- .3	102.1	+11.3
1892	90.5	+27.4	99.5	- .3	102.7	+10.6
1893	96.9	+19.0	100.2	-1.0	103.4	+ 9.9
1894	99.7	+15.6	100.2	-1.0	97.9	+16.0
1895	101.8	+13.3	100.3	-1.1	97.8	+16.2
1896	103.3	+11.6	100.3	-1.1	97.6	+16.4
1897	106.5	+ 8.3	100.3	-1.1	98.0	+15.9
1898	108.9	+ 5.9	100.2	-1.0	98.0	+15.9
1899	107.5	+ 7.3	100.0	- .8	100.2	+13.4
1900	107.2	+ 7.6	100.3	-1.1	103.6	+ 9.7
1901	109.1	+ 5.7	100.3	-1.1	103.3	+10.0
1902	114.9	+ .3	99.3	- .1	107.1	+ 6.1
1903	115.3	.....	99.2	.....	113.6	.....

SOAP.

1890	102.8	-11.5	96.5	+5.3	101.8	+15.8
1891	102.2	-11.0	96.5	+5.3	102.0	+15.1
1892	103.2	-11.8	96.5	+5.3	102.9	+14.1
1893	88.0	+ 3.4	101.6	.....	97.8	+20.0
1894	96.4	- 5.6	101.2	+ .4	98.3	+19.1
1895	100.4	- 9.4	101.6	.....	98.1	+19.7
1896	98.6	- 7.7	101.6	.....	98.9	+18.7
1897	100.3	- 9.3	101.6	.....	99.2	+18.3
1898	102.2	-11.0	101.6	.....	100.4	+16.3
1899	99.8	- 8.8	101.6	.....	100.7	+16.0
1900	96.2	- 5.4	101.6	.....	101.1	+16.1
1901	89.7	+ 1.4	101.6	.....	110.0	+ 6.1
1902	89.7	+ 1.4	101.6	.....	111.5	+ 5.3
1903	91.0	.....	101.6	.....	117.4	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Continued.

[Average, 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 713.]

STOVES.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	88.2	+34.4	100.3	-0.1	93.4	+33.4
1891	113.0	+ 4.9	99.8	+ .4	95.3	+30.7
1892	110.9	+ 6.9	100.2	.....	95.5	+30.5
1893	107.0	+10.7	99.7	+ .5	99.2	+25.6
1894	80.9	+46.5	99.9	+ .3	95.9	+29.9
1895	103.1	+14.9	99.9	+ .3	98.2	+26.9
1896	101.2	+17.1	100.1	+ .1	97.4	+27.9
1897	86.7	+36.7	100.0	+ .2	103.1	+20.9
1898	99.7	+18.9	100.1	+ .1	106.4	+17.1
1899	111.9	+ 5.9	100.0	+ .2	115.5	+ 7.9
1900	110.9	+ 6.9	100.2	.....	113.2	+10.1
1901	120.6	- 1.7	100.2	.....	121.1	+ 2.9
1902	133.9	-11.5	100.2	.....	121.6	+ 2.5
1903	118.5	.....	100.2	.....	124.6	.....

STREETS AND SEWERS, CONTRACT WORK.

1890	102.3	+ 1.6	101.2	-6.9	96.7	+35.9
1891	121.7	-14.6	101.4	-7.1	89.0	+47.6
1892	112.3	- 7.5	101.3	-7.0	99.2	+32.5
1893	109.7	- 5.3	101.0	-6.7	96.9	+35.6
1894	107.3	- 3.2	101.0	-6.7	95.0	+34.1
1895	91.1	+14.1	100.6	-6.4	99.5	+32.1
1896	98.9	+ 5.1	99.7	-5.5	104.0	+26.3
1897	85.6	+21.4	97.4	-3.3	104.3	+25.4
1898	81.4	+27.6	97.5	-3.4	106.3	+25.6
1899	89.6	+16.0	99.0	-4.8	105.0	+24.0
1900	99.4	+ 4.5	98.8	-4.7	108.2	+21.4
1901	100.1	+ 3.8	95.4	-1.3	113.7	+10.7
1902	100.3	+ 3.1	94.2	.....	126.5	+ 3.9
1903	103.9	.....	94.2	.....	131.4	.....

STREETS AND SEWERS, MUNICIPAL WORK.

1890	89.7	- 2.6	100.6	-8.1	99.9	+11.9
1891	87.7	- 3	100.5	-8.0	99.5	+12.4
1892	98.4	-11.2	100.4	-7.9	98.5	+13.5
1893	104.2	-16.1	100.8	-8.2	98.3	+13.7
1894	115.8	-24.5	100.7	-8.1	100.9	+10.8
1895	104.7	-16.5	100.2	-7.7	99.6	+12.2
1896	102.6	-14.8	100.1	-7.6	98.4	+13.6
1897	101.7	-14.1	100.5	-8.0	98.6	+13.4
1898	93.4	- 6.4	99.9	-7.4	100.6	+11.1
1899	101.9	-14.2	96.4	-4.0	105.7	+ 5.8
1900	100.8	-13.3	93.9	-1.5	110.2	+ 1.5
1901	105.7	-17.3	93.2	- .8	110.6	+ 1.1
1902	94.1	- 7.1	93.2	- .8	111.0	+ .7
1903	87.4	.....	92.5	.....	111.8	.....

TOBACCO, CIGARETTES.

1890	89.9	+58.4	100.0	+0.1	92.8	+21.0
1891	90.6	+57.2	100.0	+ .1	93.1	+20.6
1892	92.7	+53.6	100.0	+ .1	93.5	+20.1
1893	97.2	+46.5	100.0	+ .1	93.3	+20.4
1894	99.1	+43.7	100.0	+ .1	99.3	+13.1
1895	100.6	+41.6	100.0	+ .1	99.3	+13.1
1896	104.7	+36.0	100.0	+ .1	103.5	+ 8.5
1897	107.6	+32.3	100.1	.....	105.9	+ 6.0
1898	108.3	+31.5	100.1	.....	110.0	+ 2.1
1899	110.3	+29.1	100.1	.....	109.4	+ 2.7
1900	114.4	+24.5	100.1	.....	110.3	+ 1.8
1901	123.5	+15.3	100.0	+ .1	112.2	+ .1
1902	117.6	+21.1	100.0	+ .1	114.5	- 1.9
1903	142.4	.....	100.1	.....	112.3	.....

TABLE III.—SUMMARY OF WAGES AND HOURS OF LABOR, 1890-1903, BY INDUSTRIES—Concluded.

[Average 1890-1899=100.0. For explanation of relative figures, see pages 715 and 716; for explanation of increase (+) or decrease (-) in 1903, as compared with previous years, see note on page 718.]

TOBACCO, CIGARS.

Year.	Employees.		Hours per week.		Wages per hour.	
	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	76.0	+56.3	100.1	+1.3	100.3	+16.6
1891	85.2	+39.4	99.6	+1.8	100.6	+16.2
1892	90.3	+31.6	99.2	+2.2	99.6	+17.4
1893	100.5	+18.2	99.7	+1.7	100.0	+16.9
1894	103.5	+14.8	99.9	+1.5	99.0	+18.1
1895	109.9	+ 8.1	99.3	+1.6	97.2	+20.3
1896	95.2	+24.8	100.4	+1.0	98.6	+18.6
1897	107.4	+10.6	100.0	+1.4	102.4	+14.2
1898	107.7	+10.3	100.3	+1.1	101.1	+15.6
1899	119.9	- 9	101.0	+ 4	101.3	+15.4
1900	93.9	+26.5	99.8	+1.6	100.8	+16.0
1901	106.1	+11.9	100.6	+ 8	112.5	+ 3.9
1902	116.0	+ 2.4	100.9	+ .5	110.0	+ 6.3
1903	118.8	.....	101.4	.....	116.9	.....

TOBACCO, PLUG, FINE CUT, AND GRANULATED SMOKING.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	100.6	+ 3.1	100.1	+0.1	94.1	+27.9
1891	98.7	+ 5.1	99.9	+ .3	97.2	+23.9
1892	97.8	+ 6.0	100.5	- .3	100.2	+20.2
1893	98.5	+ 5.3	100.5	- .8	96.1	+25.3
1894	104.7	- 1.0	100.4	- .2	98.3	+22.5
1895	103.3	+ 4	99.6	+ .6	101.8	+18.3
1896	99.0	+ 4.7	99.6	+ .6	102.0	+18.0
1897	100.5	+ 3.2	99.9	+ .3	102.8	+17.1
1898	99.3	+ 4.4	99.9	+ .3	102.9	+17.0
1899	101.6	+ 2.1	99.6	+ .6	104.7	+15.0
1900	102.3	+ 1.4	99.5	+ .7	106.9	+12.6
1901	101.7	+ 2.0	100.2	.....	111.0	+ 8.5
1902	91.6	+13.2	100.3	- .1	116.6	+ 3.3
1903	103.7	.....	100.2	.....	120.4	.....

WOOLEN AND WORSTED GOODS.

Year.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative number.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.	Relative.	Per cent of increase (+) or decrease (-) in 1903 as compared with year specified.
1890	91.8	+46.1	101.0	-1.7	98.1	+17.4
1891	103.5	+29.6	101.0	-1.7	99.1	+16.2
1892	104.3	+28.6	101.0	-1.7	99.6	+15.7
1893	96.2	+39.4	99.6	- .3	101.6	+13.4
1894	90.8	+47.7	98.2	+1.1	97.2	+18.5
1895	100.5	+33.4	100.3	-1.0	96.8	+19.0
1896	97.2	+38.0	100.2	- .9	100.9	+14.2
1897	106.5	+25.9	98.1	+1.2	100.2	+15.0
1898	109.7	+22.2	100.2	- .9	102.5	+12.4
1899	100.0	+34.1	100.3	-1.0	103.7	+11.1
1900	109.4	+22.6	100.1	- .8	110.4	+ 4.3
1901	112.1	+19.6	100.2	- .9	110.6	+ 4.2
1902	121.3	+10.6	99.3	.....	113.5	+ 1.5
1903	134.1	.....	99.3	.....	115.2	.....

AGREEMENTS BETWEEN EMPLOYERS AND EMPLOYEES.

[It is the purpose of this Bureau to publish from time to time important agreements made between large bodies of employers and employees with regard to wages, hours of labor, etc. The Bureau would be pleased to receive copies of such agreements whenever made.]

AGREEMENT BETWEEN MEAT PACKERS AND THEIR WORKMEN.

This agreement, entered into by Swift and Company, Armour & Company, Nelson Morris & Co., the National Packing Company, Schwarzschild & Sulzberger, the Cudahy Packing Company, and Libby, McNeill & Libby and the executive boards of the Amalgamated Meat Cutters and Butcher Workmen of North America and the Packing Trades Council in joint session, shall govern all relations between both parties thereto from September 28th, 1903, to September 27th, 1904. It is understood that the memorandum dated October 1st, 1903, attached hereto, is to be considered as part of this settlement as well as the scale of wages. All other conditions not otherwise provided for are to remain as they are at present. These scales are to be effective in Chicago, Kansas City, South Omaha, East St. Louis, St. Joseph, Sioux City, St. Paul, and Fort Worth.

SCALE OF WAGES PER HOUR.

Penners	\$0. 18½	Gutters	\$0. 26½
Knockers	. 24	Backers	. 45
Shacklers	. 18½	Tail sawyers	. 26½
Hoisters	. 20	Splitters	. 50
Stickers	. 32½	Hangers off	. 22½
Headers	. 32½	Clearing outs	. 30
Droppers	. 20	Hide droppers	. 32½
Pritchers	. 20	Neck splitters	. 31½
Gullet raisers	. 20	Skirt trimmers	. 21
Foot skimmers	. 22½	Ladder men	. 22½
Leg breakers	. 25	Bruise trimmers	. 22½
Rippers open	. 25	Scribe sawyers	. 20
Floormen	. 50	Trimming shanks and cords	. 20
Breast sawyers	. 25	Cutting out tongues	. 21
Caul pullers	. 26½	Trimming necks	. 20
Eich openers	. 20	Trimming paunches	. 20
Tail rippers	. 20	Trimming plucks	. 20
Fell cutters	. 27½	Trimming livers	. 20
Rumpers	. 40	Rennet trimmers	. 20
Tail pullers	. 20	Head boners	(a)
Fell beaters	. 22½	All knife men	. 20
Fell pullers	. 22½	Boys	. 16-20

MEMORANDUM OF AGREEMENT.

OCTOBER 1, 1903.

This agreement entered into by representatives of Swift and Company, Armour & Company, Nelson Morris & Co., the National Packing Company, Schwarzschild & Sulzberger, the Cudahy Packing Company,

a \$1.05 per 100 heads.

and Libby, McNeill & Libby, and the executive boards of the Amalgamated Meat Cutters and Butcher Workmen of North America and the Packing Trades Council in joint session, shall govern all relations between both parties thereto for a period of one year from the date of this agreement.

FIRST. That no business agent shall request to see help during working hours, and under no consideration to visit any department without permission from the superintendent's office.

SECOND. That in case of any disagreement or misunderstanding there is to be no cessation of work in any department pending investigation and settlement. All cases of this kind to be taken up at an hour agreeable to and designated by the various houses.

THIRD. That in the absence of any skilled man those doing the same kind of work will attempt to make up the loss in the amount of work caused by such absentee.

FOURTH. That the present system of piecework remain during the life of this agreement in the departments where it now exists.

FIFTH. It is mutually agreed that the quality of workmanship shall be kept up to the highest possible standard.

SIXTH. That if men absent themselves unnecessarily such absence shall be considered sufficient cause for dismissal, subject to reasonable exceptions.

SEVENTH. That the good offices of the organization shall be used to have the men work steadily, as in former years, thereby avoiding many unnecessary expenses and delays. Furthermore, that any skilled workman shall notify his foreman whenever possible whenever he finds it necessary to absent himself from work.

Signed, _____	_____	SWIFT AND COMPANY.
_____	_____	ARMOUR & COMPANY.
_____	_____	NELSON MORRIS & Co.
_____	_____	NATIONAL PACKING COMPANY.
_____	_____	SCHWARZSCHILD & SULZBERGER.
_____	_____	CUDAHY PACKING COMPANY.
_____	_____	LIBBY, MCNEILL & LIBBY.

Signed, _____

AGREEMENT BETWEEN THE NATIONAL WHOLESALE TAILORS' ASSOCIATION AND THE BROTHERHOOD OF CUSTOM CUTTERS AND TRIMMERS TO THE TRADE, LOCAL UNION NO. 21, OF THE UNITED GARMENT WORKERS OF AMERICA.

This agreement made and entered into this sixth day of February, 1904, by and between the National Wholesale Tailors' Association of the city of Chicago, and its members, parties of the first part; and the Brotherhood of Custom Cutters and Trimmers to the Trade, Local Union No. 21 of the United Garment Workers of America, and all of its members, parties of the second part;

Witnesseth that

Whereas the parties of the first part are in the wholesale tailoring business in the city of Chicago, and the parties of the second part are employed by the wholesale tailoring houses of the said association; and

Whereas the parties hereto are desirous of forming a working agreement for the purpose of insuring peace and harmony and benefiting equally all of the parties hereto.

Now, therefore, it is mutually covenanted and agreed by and between the parties hereto as follows, to wit:

FIRST. Parties of the first part recognize the Brotherhood of Custom Cutters and Trimmers to the Trade, Local Union No. 21, of the United Garment Workers of America, and covenants and agrees to employ in their cutting and trimming departments only members of the said local union.

SECOND. It is agreed by the parties hereto that a week's work shall consist of forty-eight (48) hours, ending twelve (12) o'clock noon Saturday.

THIRD. It is agreed that the following holidays shall be observed: Decoration Day, Fourth of July, Labor Day, Thanksgiving, Christmas and New Years, and not to work on Labor Day. Members of said Local No. 21 receiving regular pay for each and all of them.

FOURTH. It is agreed that members of Local No. 21 shall be paid time and one-half (1½) for all overtime and double pay for Sunday and holiday work. Meaning and intending hereby that members of said Local Union No. 21 working on a Sunday or a holiday, shall receive a double day's pay for such Sunday or holiday work.

FIFTH. It is agreed that the salaries shall be paid to the members of Local Union No. 21 weekly on every Saturday or Monday at the option of the employee.

SIXTH. No employer shall discharge any member of Local Union No. 21 who has been in his employ two successive seasons of sixty days each, without first giving such member one week's notice or one week's pay, meaning and intending that the week's notice must be given the employee before twelve thirty (12.30) p. m. o'clock of the Saturday preceding the week said employee is to be discharged, and to pro rate the lay-off each dull season equally between such members of Local No. 21 as shall be retained in his employ.

SEVENTH. It is agreed that the wage scale shall be as follows:

Suit cutters shall receive not less than twenty dollars (\$20) per week. Pants cutters not less than eighteen dollars (\$18) per week. Trimmers not less than fourteen dollars (\$14) per week. No cutter or trimmer shall receive less than his present salary while with his present employer during the term of this contract. Nothing herein mentioned, however, shall prevent any member of Local No. 21 from exercising his privilege of asking an advance in salary. All members of said Local Union No. 21 employed under the terms of this contract agree to devote themselves conscientiously and diligently to the discharge of their duties to the best of their ability, the amount of work not be governed by any rules or regulations that Local No. 21, its officers, business agent or stewards have adopted, or may adopt, at any time during the period of this contract. It is agreed and understood by and between the parties hereto that in case of unavoidable casualties or labor troubles salaries of the members of Local No. 21 shall cease immediately until such trouble is settled.

EIGHTH. It is agreed that in the event of a misunderstanding or any dispute arising as to the construction of this working agreement, or any misunderstanding in regard to the operation or enforcement of this contract between the parties hereto, or as to all differences of opinion in regard to any section of this contract, between any of the members of the parties of the first part and the members of the parties of the second part, no house shall lock out any member of said Local Union No. 21, and no executive board or business agent shall declare a strike, and said Local No. 21 shall not declare a strike, but such misunderstanding, dispute, or difference of opinion shall be referred within twenty-four (24) hours to the respective executive boards of the parties to this contract for settlement, and in case such executive boards fail to settle such controversy within twenty-four (24) hours after the same shall have been submitted to them, it is agreed that each executive board shall, within said second twenty-four (24) hours name an arbitrator, who may be a member of said executive board, and the two arbitrators so selected shall as speedily as possible name one disinterested person who shall not be a manufacturer or a member of any labor organization, and the three so selected shall within ten days' time settle the difficulty, and the decision so rendered shall be binding on all parties to this agreement.

NINTH. It is further agreed by the party of the second part that no further or other demands shall be made upon the National Wholesale Tailors' Association, or any of its members, until the expiration of this contract, or engage in any sympathetic strike except for union principles. The question as to whether or not a union principle is involved shall be submitted to arbitration, as provided in the eighth section of this contract, before a strike is called.

This contract shall be in effect from March 1st, A. D. 1904, until June 1st, A. D. 1905.

Signed in duplicate, February 6, 1904.

The National Wholesale Tailors' Association:

JOS. C. LAMM, *Vice-Pres.*
 ED. V. PRICE, *Chairman Ex. Board.*
 HENRY X. STRAUSS, *Secretary.*
 EMILE J. ROSE.
 MAURICE M. STRAUSS
 M. L. OBERNDORF.
 J. T. SKINNER.
 MORRIS VEHO.

The Brotherhood of Custom Cutters and Trimmers to the Trade, Local Union No. 21, United Garment Workers of America:

J. J. SONSTEBY, *President.*
 W. A. OLIVEY, *Sec'y-Rep.*
 EXECUTIVE BOARD:
 A. S. LANGILLE, *Chairman.*
 FRANK PANKRATZ.
 JOHN A. HALLINEN.
 FRANK KOHL.
 GEORGE H. ALEXANDER.

RECENT REPORTS OF STATE BUREAUS OF LABOR STATISTICS.

NEW JERSEY.

Twenty-fourth Annual Report of the Bureau of Statistics of Labor and Industries of New Jersey, for the year ending October 31, 1901.
William Stainsby, Chief. vi, 516 pp.

The subjects presented in this report are: Statistics of manufactures, 130 pages; steam railroad transportation, 11 pages; fruit and vegetable canning, 11 pages; current graded weekly wages, 113 pages; cost of living, 17 pages; trade unions, 48 pages; diseases and disease tendencies of occupations, 53 pages; labor chronology, 102 pages; labor legislation and decisions of courts, 10 pages.

STATISTICS OF MANUFACTURES.—Returns were secured from 1,621 establishments representing 85 general industries, and 54 establishments classed as miscellaneous. The facts are grouped in nine tables, as follows: Firms and corporations, partners and stockholders, by industries; capital invested and value of materials and products; three tables showing smallest, greatest, and average number of employees, by industries, and aggregates by months; wages paid and average yearly earnings; classified weekly wages; hours of labor, days in operation, and proportion of business done, and a summary of the foregoing facts for nine principal industries. Additional tables show the aggregate quantities of specified articles of stock used, with their aggregate cost, and the aggregate quantities of specified articles of goods made, with their aggregate selling value. The data are for the year 1900.

Of the 1,675 establishments, 1,674 reported \$263,974,031 capital invested; 1,671 establishments reported value of materials used at \$242,885,017, and value of products at \$407,595,280. The average number of employees in all establishments was 176,268. A total of \$77,118,902 was paid in wages during the year, and the average yearly wages of employees were \$437.51. For the total establishments considered the average days in operation for the year were 288.20, the average hours worked per day 9.64, and the average proportion of business done was 76.24 per cent.

The table following presents, by sex, the number and per cent of persons employed in all industries (1,675 establishments) at the specified weekly rates of wages:

NUMBER AND PER CENT OF EMPLOYEES OF EACH SEX IN 1,675 ESTABLISHMENTS, BY CLASSIFIED WEEKLY WAGES, 1900.

Classified weekly wages.	Males.		Females.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Under \$5.....	15,473	10.60	19,333	38.96	34,806	17.78
\$5 or under \$6.....	6,251	4.28	9,226	18.60	15,477	7.90
\$6 or under \$7.....	7,992	5.47	7,158	14.43	15,150	7.74
\$7 or under \$8.....	14,378	9.84	4,757	9.59	19,135	9.77
\$8 or under \$9.....	13,416	9.17	2,996	6.04	16,412	8.38
\$9 or under \$10.....	19,260	13.17	2,423	4.87	21,683	11.06
\$10 or under \$12.....	19,201	13.13	2,142	4.32	21,343	10.90
\$12 or under \$15.....	21,585	14.77	1,229	2.48	22,814	11.65
\$15 or under \$20.....	19,894	13.60	325	.66	20,219	10.38
\$20 or over.....	8,733	5.97	26	.05	8,759	4.47
Total.....	146,183	100.00	49,615	100.00	195,798	100.00

Of the females employed in the manufactures of the State, 38.96 per cent received less than \$5 per week, and 57.56 per cent of the whole number received less than \$6. About 11 per cent of the males received less than \$5 per week, presumably mostly boys. More than 60 per cent of the males are found in the groups receiving \$9 per week and upward, while in the groups between \$5 and \$9 per week are found 28.76 per cent of the males.

Since the statistics of manufactures are a manufacturing census of the State taken every twelve months, and include practically every establishment in which manufacturing is carried on, it becomes possible to make comparisons from year to year. The returns show the capital invested increased in 1900 over 1899 by \$8,284,481, cost of materials by \$41,983,077, value of products by \$52,129,310, and total wages paid by \$1,030,621.

STEAM RAILROAD TRANSPORTATION.—For the year ending June 30 1901, the seven railroads in the State employed 32,405 persons for an average of 305 days per person, each working an average of 10.7 hour per day. The total paid in wages amounted to \$18,064,986, the average wages per day being \$1.83, and the average yearly earnings \$557.47. Five of the companies reported casualties among employees while on duty as 72 killed and 974 injured.

FRUIT AND VEGETABLE CANNING.—In 1900 the 48 canneries of the State reported an invested capital of \$897,104. They gave employment to 6,428 people—2,395 males and 4,033 females—and paid out in wages a total of \$286,832. The selling value of the product was \$1,480,751.

CURRENT GRADED WEEKLY WAGES.—This is a presentation of the weekly wages paid in 1901, in certain selected cities and towns of the State, to persons engaged in 160 named occupations, with hours of labor per day, number of days employed per week, and number of Sunday

worked during the year. Notice is also taken of the nature of disease tendencies where such are found to be associated with or peculiar to any industry. The number of persons employed in the various lines of industry and for whom wages are given is 20,378—17,983 males and 2,395 females. Of the total, 4,264 were under 18 years of age.

The following table presents, by sex, the number and per cent of persons employed at the specified weekly rates of wages:

NUMBER AND PER CENT OF PERSONS OF EACH SEX EMPLOYED IN 160 SELECTED OCCUPATIONS, BY CLASSIFIED WEEKLY WAGES, 1901.

Classified weekly wages.	Males.		Females.		Total.	
	Number.	Percent.	Number.	Percent.	Number.	Percent.
Under \$5	2,183	12.2	782	32.6	2,965	14.6
\$5 or under \$6	322	1.6	306	12.8	628	3.1
\$6 or under \$7	848	4.9	372	15.5	1,220	6.0
\$7 or under \$8	1,109	6.1	291	12.1	1,400	6.9
\$8 or under \$9	1,147	6.3	218	9.1	1,365	6.7
\$9 or under \$10	3,302	18.5	159	6.7	3,461	17.0
\$10 or under \$11	2,156	11.9	145	6.3	2,304	11.3
\$11 or under \$12	198	1.3	1	.....	199	1.0
\$12 or under \$13	2,004	11.2	61	2.6	2,065	10.1
\$13 or under \$14	647	3.6	10	.4	657	3.2
\$14 or under \$15	1,743	9.6	88	1.5	1,781	8.7
\$15 or under \$20	2,324	12.9	9	.3	2,333	11.4
\$20 or over						
Total	17,983	100.0	2,395	100.0	20,378	100.0

Of the males 12.2 per cent and of the females 32.6 per cent received less than \$5 per week. The proportion of males receiving less than \$9 per week was 31.0 per cent and of females 82.2 per cent.

COST OF LIVING.—This is a continuation of the presentation of previous years, and shows the retail prices of 52 items of food and other commodities in the principal markets in all counties of the State in the month of June, 1901. Summary comparisons with 1898, 1899, and 1900 are also given.

TRADE UNIONS.—Under this head are given 10 tables, showing membership, rates of wages, hours of labor, and benefit features of 63 labor organizations in the State, with extended analysis. The membership of these unions was 13,380. For the year ending May 30, 1901, 38 unions had a total income of \$35,906.78, and 41 unions paid to the national union \$19,556.43. Benefits to the amount of \$13,011.13 were paid by the 43 unions which reported on this point, but it is believed that these figures do not represent more than one-half of the sum actually paid out. As a result of organization, the unions report generally a reduction in hours of labor and an increase of wages.

DISEASES AND DISEASE TENDENCIES OF OCCUPATIONS.—This section of the report is devoted to an inquiry into diseases and disease tendencies of occupations in the glass and in the fur and felt-hat industries. The information was furnished by owners or managers of the establishments represented, and also by physicians who practice largely among the workmen engaged in these industries. The workman's version of

how his health is affected by the conditions surrounding his labor is given in a monograph on each of the industries treated.

LABOR CHRONOLOGY.—Under this caption is presented a brief account of each of the 128 strikes that occurred throughout the State from October, 1900, to August, 1901. Eighteen of the strikes were in the silk trade, 29 among machinists, 47 in the building trades and 34 among other trades. A shorter work day, increase of wages and to prevent the employment of nonunion men were the principal objects sought to be attained by the strikers. Following the record of strikes is a list of the new factories erected or in course of erection in various parts of the State, factories that have moved out of the State, factories that have gone into the hands of receivers, and factories that have been permanently closed. The record covers parts of 1900 and 1901.

LABOR LEGISLATION AND DECISIONS OF COURTS.—This consists of reproduction of the labor legislation enacted at the session of 1900 and recent decisions of the New Jersey courts on cases affecting the interests of labor.

RECENT FOREIGN STATISTICAL PUBLICATIONS.

GERMANY.

The German Workmen's Insurance as a Social Institution. Part I, Origin and Social Importance, 31 pp.; Part II, Statistics of the Workmen's Insurance, 36 pp.; Part III, Prevention of Accidents and Workmen's Hygiene, 23 pp.; Part IV, Workmen's Insurance and National Health, 28 pp.

The Workmen's Insurance of the German Empire, Catalogue and Guide, 36 pp.

Guide to the Workmen's Insurance of the German Empire, 45 pp.

These six pamphlets were prepared by officials of the German imperial insurance office, and were published in the English and German languages for distribution at the Universal Exposition at St. Louis. The information contained in these pamphlets, as the titles indicate, gives a general idea of the origin and scope of the German workingmen's insurance system, its advantages, and its practical operation. The catalogue and guide give a list and indicate the location of the various exhibits of the German imperial insurance office in the department of education and social economy and reproduce some of the figures found in the tables and charts exhibited.

The operations of the German insurance system, outlined in these pamphlets, are considered in greater detail in the work entitled *Einrichtung und Wirkung der Deutschen Arbeiterversicherung*, which was also prepared for distribution at the St. Louis Exposition. A digest of this work appears below.

Einrichtung und Wirkung der Deutschen Arbeiterversicherung.

Dritte unveränderte Ausgabe, vermehrt durch einen den neuesten Stand der Gesetzgebung und Statistik umfassenden Anhang. Für die Weltausstellung in St. Louis 1904, im Auftrage des Reichs-Versicherungsamts bearbeitet von Prof. Dr. Ludwig Lass und Prof. Dr. Friedrich Zahn. Berlin, 1904. ix, 274 pp.

This is the third and revised edition of a volume on workingmen's insurance in Germany prepared by direction of the imperial insurance office. The first part, which relates to the present organization of the labor insurance system in Germany, was prepared by Dr. L. Lass, of

the imperial insurance office, and the second part, which relates to the practical results of the system, was prepared by Dr. Friedrich Zahn, of the imperial statistical office. A statistical summary of German labor insurance, which completes the volume, was prepared by Dr. G. A. Klein, of the imperial insurance office. The volume bears the date of March, 1904, and is, therefore, the latest work on this subject which has been approved by the German insurance authorities.

ORGANIZATION.—The German workingmen's insurance system is divided into three parts, viz, the sick, the accident, and the old age and invalidity insurance. Although each one of these parts is based on different laws, together they constitute a unified system and supplement each other.

Previous to the introduction of the national compulsory insurance there had been a number of attempts made to provide relief for disability caused by sickness, accident, and invalidity. A number of laws were enacted requiring employers to provide sick relief for their servants, commercial employees, seamen, etc., while efforts to secure mutual relief were made by miners, by the guilds of the various trades, and by other societies. Accident relief was provided for by the imperial liability law of 1871, but except in the case of railroads the employer was not responsible for the negligence of the fellow-servants of the injured person. Relief for invalidity and old age existed only in the form of public charity.

The compulsory sick insurance includes practically all workingmen employed for wages in commerce, industry, and the handicraft trades. Workingmen are required to be insured regardless of the amount of their wages. Foremen, technical experts, and persons in similar positions must be insured if their wage or salary does not exceed 6½ marks (\$1.59) per day, or 2,000 marks (\$476) per annum. Voluntary insurance is allowed in a few cases.

To secure the enrollment of individuals to whom the compulsory sick insurance law applies, employers in industries subject to the law are required to send to the proper insurance fund the name of each person who enters or leaves their service. Neglect of this rule is punishable by a fine, and incurs liability for any sick relief needed by the person not enrolled.

It was found impossible to effect the sick insurance of the working population of the whole Empire in one organization. Conditions varied so greatly that eight different forms of organization were finally adopted and are now in use.

The most important of these in point of membership are the local sick funds (*Orts-Krankenkassen*). These funds are independent corporations organized to execute the provisions of the sick insurance laws and have the rights and duties of legal persons. As a rule they are established for persons in one or more industries in a given locality

such as the masons, the weavers, etc., or for all employees of a given type of industry, such as the factory employees, or those engaged in the hand-working trades. The membership in these funds is limited to workingmen, though the employers have a voice in the management of the organizations.

The most numerous funds are those known as establishment sick funds (*Betriebs-Krankenkassen*). Each of these organizations includes the employees of but one establishment, though an establishment must have not less than 50 employees to be entitled to form such a fund. If the industry is classified among the dangerous trades, the employer is required to institute a separate fund for his establishment. Certain duties are imposed on the employer, such as bearing the expense of administration and of making advances of money in case of deficit; otherwise the operation of this kind of fund is similar to that of the local sick fund.

The other organizations are known as building trades sick funds (*Bau-Krankenkassen*), guild sick funds (*Innungs-Krankenkassen*), miners' provident funds (*Knappschaftskassen*), registered auxiliary funds (*Eingeschriebene Hülfskassen*), auxiliary funds authorized by the laws of various German States (*Landesrechtliche Hülfskassen*), and parish sick insurance funds (*Gemeinde-Krankenversicherung*). The last-mentioned funds are intended for persons not insured in any of the other above-named funds. The parish fund is part of the parish administration. The parish officials carry on the work of the fund, the parish pays the cost of administration, and, in case of deficit, advances the amount necessary to meet the same. These eight forms of organization are allowed to form federations for the purpose of reducing the cost of administration or improving their medical service.

The benefits offered by the sick funds vary in amount, but all of them are required to provide the following as a minimum: (1) Free medical attendance, free medicines, and free medical supplies of the smaller sort (bandages, eyeglasses, etc.). These are provided from the first day of sickness. (2) In case the sickness causes inability to work, the fund pays a sick benefit equal to one-half of the wage rate which was used in calculating the member's dues. This benefit begins the third day after the disability sets in, and continues for twenty-six weeks. Instead of receiving medical treatment at home a member is entitled to treatment at a hospital, in which case an amount not exceeding one-half of his daily wage is paid to his dependents. Female members receive similar benefits for a period of six weeks following confinement. (3) In case of death a funeral benefit equal to twenty times the amount of his daily wage, but not less than 50 marks (\$11.90), is paid to the heirs of a member.

The income of the sick funds is derived from the dues of members. The amount of the dues is fixed by each fund for its own members,

but it may not exceed from 3 to 4½ per cent of the member's wage. Provision is made, however, for a possible future increase to 6 per cent. The employee pays two-thirds of the dues and the employer one-third. The employee's share is deducted from his wages and paid direct to the insurance fund by the employer when the latter remits his own share.

The accident insurance now includes nearly all workingmen engaged in industry, agriculture, forestry, transportation by land and water, and sea and coast fisheries. In general, it does not include persons engaged in commerce as such, in the handicraft trades, or in domestic service. All workingmen and technical experts earning less than 3,000 marks (\$714) per annum are required to be insured.

This insurance is administered by associations of employers known as mutual trades associations (*Berufsgenossenschaften*). These include all employers engaged in one industry, as, for example, the Chemical Industries Association, the Brewing and Malt Industries Association, etc. In other cases associations exist for certain districts, such as the Wood Industries Association of Saxony. These associations elect their own officers and have a large measure of self-administration, though the federal government exercises a careful supervision over their actions and financial standing. There are now 66 industrial and 48 agricultural associations.

In case of accident to an insured person, the benefits described above are paid by the sick insurance fund for the first thirteen weeks of disability. From the beginning of the fifth week to the end of the thirteenth week the sick fund is required to increase the amount of its benefit from one-half to two-thirds of the earnings of the injured person. The difference between these two amounts is later returned to the sick fund by the employer. Beginning with the fourteenth week, the trades association provides the following benefits: (1) Free medical treatment, free medicines, and free medical supplies; (2) a pension during the continuation of the disability, whether the disability is partial or complete. In case of complete disability, the pension is equal to two-thirds of the earnings of the injured person; in case of partial disability, the insured receives a fraction of the above pension, proportioned to the degree of disability.

In case the accident results in death, the following benefits are paid: (1) A funeral benefit of not less than 50 marks (\$11.90); (2) a pension to the dependents of the deceased beginning with the day of death. The widow and each child receive 20 per cent of the earnings of the deceased, though the sum of these pensions may not exceed 60 per cent of such earnings. The claim of the widow is not valid if the marriage took place after the accident occurred. If the widow remarries she is granted three times the amount of her annual pension as a marriage portion. The children's pension is paid until they have completed their fifteenth year of age.

The workingmen's share of the expense of the accident insurance consists of the benefits paid out of the sick insurance fund to the injured person during the first thirteen weeks of disability. Otherwise all expenses are defrayed by the employers' associations. The income of the associations is secured by an annual assessment on each employer for his share of the association's expense during the preceding year. The share of the employer is determined from the amount of his pay roll and the danger rate of the occupation or industry, although the agricultural, forestry, and shipping industry associations are permitted to use other methods if they desire. Because of the irregular character of employment in the building trades, the employers' associations in that industry use a premium system instead of the assessment system. A system of investigating each accident with reference to claims for benefits is provided for, as well as special courts for deciding disputes in connection with the insurance laws.

The old age and invalidity insurance includes practically all those persons engaged in agriculture, industry, commerce, domestic service, and the civil service of the State who hold a subordinate position, such as that of workingman or technical expert. The invalidity insurance is administered by "insurance institutes" (*Versicherungsanstalten*). These are 31 in number, each having a separate district. In addition, there are 9 special funds for mining and railway employees. The institutes are corporations possessing the rights of legal persons. Their funds are the security for the performance of their obligations. Though their constitutions and by-laws must be approved by the imperial insurance office, they are almost wholly self-governing.

The benefits of the invalidity insurance are as follows: (1) An invalidity pension; (2) an old age pension; (3) repayment of dues; (4) free medical treatment; (5) miscellaneous assistance.

The invalidity pension is paid without regard to age to those persons whose earning capacity has been permanently reduced to less than one-third. The pension is also paid to those who have been in a state of disability for 26 weeks, and continues as long as the disability lasts. To be eligible for this pension the insured person must have been a member of the institute for 200 weeks, in which time not less than 100 payments of weekly dues must have been made. If this condition has not been complied with, the membership must have existed for 500 weeks. If the disability has been incurred purposely, the right to a pension ceases.

The pension or annuity consists of two parts: First, an annual subsidy of 50 marks (\$11.90), paid by the Empire and added to each pension granted by the institutes; second, the pension granted by the institutes. The latter is calculated in the following manner: Members are divided into five classes on the basis of the wages received. Each class pays a different rate of dues and receives benefits in proportion.

In calculating the pension each wage class receives a certain amount called the base or initial sum, which is increased for each payment of weekly dues. The lowest invalidity pension granted is 116.40 marks (\$27.70). After paying dues for 50 years, the pensions range from 185.40 marks (\$44.13) to 450 marks (\$107.10).

The old age pension is paid without regard to earning capacity when the seventieth year of age is completed. Members must have paid dues for a "waiting time" of 1,200 weeks before they are eligible for such a pension. Provision is made for those persons who reach the age of 70 years before the law has been in operation for the "waiting time" of 1,200 weeks.

One-half of the dues may be returned: (1) To female members who marry and who have been members for 200 weeks; (2) to permanently disabled persons who receive a pension from the accident insurance; (3) to the heirs of a member who dies before receiving a pension and who has paid dues for 200 weeks.

The other benefits of the invalidity insurance consist of medical treatment and other assistance to insured persons with the view of preventing or removing disability. The dues of members range from 14 pfennigs to 36 pfennigs (3½ cents to 8½ cents) per week according to the wage class in which the member is enrolled. One-half of the amount is paid by the employer and one-half by the employee.

A careful review of the different features of the insurance system is given and the reasons for the adoption of certain methods are discussed in the work. Special emphasis is laid on the efforts which have been made to secure the active cooperation and services of both employers and workingmen in the administration of the insurance. The financial soundness of the system is secured by making the employers, the guilds, and the parishes eventually responsible for any deficit in the various forms of sick insurance organizations. The national, State, and local governments guarantee the payment of claims against the accident and invalidity insurance organizations. One noteworthy feature of the system is the extensive use which is made of the postal service in connection with the accident and invalidity insurance. The stamps by which dues are paid are sold by the post-offices, and payments of pensions and other benefits are made free of charge through the money-order service.

PRACTICAL RESULTS.—The effects of the insurance system are treated at some length. According to the author of this part of the report the financial status of the workingmen has been improved, at least to the extent of the benefits received from the amounts contributed by the employers and the government. Experience has shown that employers have not deducted their share of the dues from wages.

The hygienic condition of the workingmen has been improved, both on account of the safeguards which the accident insurance requires

employers to use and on account of the efforts made by the sick funds to reduce the sick rate among members. The general knowledge in regard to matters pertaining to health which the sick funds have disseminated by means of circulars, lectures, etc., has acted in a preventive manner, while the immediate and often elaborate medical service of the funds has been such as the means of the workingmen could but seldom have secured.

In the field of housing of the working people the invalidity organizations have rendered assistance by investing part of their funds in improved dwellings.

The effect of the insurance on the employer has been, first of all, to add to his financial burdens. During the period 1885 to 1900 it is estimated that the employers have paid not less than 1,500,000,000 marks (\$357,000,000) in contributions, etc. The demands on the employers, however, have not been too heavy, nor have they injured Germany's ability to compete in foreign markets.

As to the actual amount of this burden, one authority estimates that the amount paid by the employer for accident insurance is 3 per cent of the wages, for sick insurance $1\frac{1}{2}$ per cent of the wages, and for invalidity insurance 1 per cent of the wages, making a total of $5\frac{1}{2}$ per cent of the wages added to the cost of production. The author concludes that this burden has not been shifted to wages, nor has it resulted in higher prices to the consumer, but has been made up by improvements in methods of production.

The following tables reproduce the greater part of the data contained in the statistical summary given at the end of the volume:

COMPENSATION PAID BY THE GERMAN WORKINGMEN'S INSURANCE.

Year.	Sick insurance.			Accident insurance.		
	Sick relief.	Other relief.	Total relief.	Sick relief.	Pensions and other relief.	Total relief.
1885.....	\$12,533,931	\$351,225	\$12,885,156	\$4	\$4,758	\$4,762
1886.....	13,987,765	290,900	14,278,665	66,902	388,955	455,857
1887.....	14,473,690	316,049	14,789,739	172,941	1,239,096	1,412,037
1888.....	16,010,771	303,919	16,314,690	254,270	2,052,403	2,306,673
1889.....	18,293,852	294,280	18,588,132	351,013	3,097,436	3,448,449
1890.....	21,641,963	337,687	21,979,650	492,968	4,350,669	4,843,637
1891.....	23,122,070	349,623	23,471,693	625,712	5,674,409	6,300,121
1892.....	24,554,299	396,046	24,950,345	788,285	6,921,819	7,710,104
1893.....	26,458,052	349,154	26,807,206	909,522	8,200,773	9,110,295
1894.....	25,773,413	330,979	26,104,392	1,083,837	9,552,468	10,591,305
1895.....	27,132,316	359,782	27,492,098	1,105,826	10,899,403	12,005,229
1896.....	28,255,218	323,992	28,579,210	1,284,032	12,437,543	13,721,575
1897.....	31,045,406	358,208	31,403,614	1,379,950	13,992,616	15,372,566
1898.....	33,005,984	490,174	33,496,158	1,448,938	15,623,523	17,072,461
1899.....	37,593,886	599,660	38,193,546	1,532,582	17,337,072	18,869,654
1900.....	41,005,800	625,765	41,631,565	1,646,951	19,142,720	20,789,671
01.....	42,949,056	646,394	43,595,450	1,848,220	21,785,449	23,633,669
02.....	.....	.....	43,418,589	2,001,331	23,734,348	25,735,679
03.....	.....	.....	43,418,589	.....	.....	28,162,852

^a Estimated.

COMPENSATION PAID BY THE GERMAN WORKINGMEN'S INSURANCE—Concluded.

Year.	Old-age and invalidity insurance.			Total compensation paid by the insurance system.		
	Sick relief.	Pensions and other relief.	Total relief.	Sick relief.	Pensions and other relief.	Total relief.
1885				\$12,533,935	\$355,983	\$12,889,91
1886				14,054,667	679,855	14,734,52
1887				14,646,631	1,555,146	16,201,77
1888				16,265,041	2,356,322	18,621,36
1889				18,644,865	3,391,716	22,036,58
1890				22,134,931	4,688,356	26,823,28
1891	\$89	\$3,641,193	\$3,641,282	23,747,871	9,665,226	33,413,09
1892	7,588	5,322,625	5,330,213	25,350,172	12,640,491	37,990,66
1893	25,785	6,643,224	6,669,009	27,393,359	15,193,151	42,586,51
1894	86,769	8,199,436	8,286,205	26,899,019	18,082,883	44,981,90
1895	150,365	10,007,635	10,158,000	28,388,507	21,266,819	49,655,32
1896	279,770	11,934,881	12,214,651	29,819,020	24,696,416	54,515,43
1897	443,775	13,805,957	14,254,732	32,874,131	28,156,781	61,030,91
1898	625,881	15,781,940	16,407,821	35,080,803	31,895,637	66,976,44
1899	955,917	17,764,360	18,720,277	40,082,385	35,701,092	75,783,47
1900	1,344,396	20,725,169	22,069,565	43,997,147	40,493,654	84,490,80
1901	1,743,137	23,311,452	25,054,589	46,540,414	45,743,294	92,283,70
1902	2,218,822	26,439,737	28,658,559			a 97,812,85
1903			a 31,906,097			a 103,487,54

a Estimated.

INCOME, EXPENDITURES, AND INVESTED FUNDS OF THE INSURANCE SYSTEM.

Items.	Sick insurance, 1901.	Accident insurance, 1902.	Old-age and invalidity insurance, 1902.	Total for all insurance, 1885 to 1901
Dues of employers	\$13,952,723	\$29,907,868	\$16,539,308	\$508,445,5
Dues of employees	31,126,584		16,539,308	487,147,0
Subsidy of imperial government			9,008,227	51,049,9
Interest and other income	2,604,130	3,743,936	8,054,310	93,588,0
Total income	47,683,437	33,651,804	50,141,153	1,140,230,5
Expenses for relief	43,595,450	25,785,679	23,658,559	755,015,7
Cost of administration	2,590,837	3,965,983	2,843,541	79,993,7
Total expenditures	46,186,287	29,701,662	31,502,100	835,009,4
Invested funds	44,421,557	47,408,235	239,779,652	309,020,2

EXPENDITURES FOR SICK INSURANCE RELIEF.

Kind of relief.	Total relief granted from 1885 to 1901.	Relief granted in 1901.
Physicians' services	\$90,864,234	\$8,937,7
Medicines, supplies, etc.	73,111,000	6,795,4
Sick wages to members	195,966,334	19,347,7
Sick wages to dependents of members	3,362,241	410,3
Confinement relief	6,350,799	623,2
Hospital relief, etc.	52,510,488	5,517,7
Funeral benefits	15,672,374	1,316,1
Miscellaneous relief	6,723,839	646,1
Total	444,561,309	43,595,7
Cost of administration	27,526,099	2,590,0

EXPENDITURES FOR ACCIDENT INSURANCE RELIEF.

Kind of relief.	Total relief granted from 1885 to 1901.	Relief granted in 1902.
Medical treatment.....	\$4,634,201	\$599,778
Relief during "waiting time".....	1,097,965	164,167
Sanatorium relief.....	7,285,377	969,139
Pensions to dependents.....	1,929,412	268,247
Pensions to the injured.....	117,959,764	18,653,490
Settlements to injured native persons.....	895,570	330,339
Settlements to injured foreigners.....	563,964	39,319
Funeral benefits.....	1,235,291	128,876
Pensions to widows, orphans, etc.....	31,219,617	4,422,084
Settlements to widows.....	1,326,904	160,240
Total.....	167,648,065	25,735,679
Cost of administration.....	33,856,369	3,965,983

EXPENDITURES FOR OLD-AGE AND INVALIDITY INSURANCE RELIEF.

Kind of relief.	Total relief granted from 1891 to 1901.	Relief granted in 1902.
Medical treatment.....	\$5,605,657	\$2,154,042
Special relief.....	62,816	64,780
Relief at homes for invalids.....	14,313	17,378
Pensions for invalids.....	65,484,181	18,698,696
Sick wages.....	464,338	431,015
Old-age pensions.....	64,256,133	5,694,733
Return of dues on account of—		
Marriage.....	5,205,287	1,238,349
Accident.....	7,126	7,881
Death.....	1,706,493	451,685
•Total.....	142,806,344	28,658,559
Cost of administration.....	18,611,253	2,843,541

DECISIONS OF COURTS AFFECTING LABOR.

[This subject, begun in Bulletin No. 2, has been continued in successive issues. All material parts of the decisions are reproduced in the words of the courts, indicated when short by quotation marks, and when long by being printed solid. In order to save space, matter needed simply by way of explanation is given in the words of the editorial reviser.]

DECISIONS UNDER STATUTORY LAW.

BLACKLISTING—CONSTRUCTION OF STATUTE—PROCURING DISCHARGE—COMMON LAW LIABILITY—LIBEL—*Wabash Railroad Company v. Young, Supreme Court of Indiana, 69 Northeastern Reporter, page 1003.*—In this case John W. Young obtained a judgment in the circuit court of Miami County against the Wabash Railroad Company on the ground that it had prevented him from obtaining employment and had procured his dismissal from positions secured by him.

Young had been employed by the railway company, but had voluntarily left its service and sought employment elsewhere. Recovery for the alleged injuries was claimed under an act of March 9, 1889 (section 7077, Burns' A. S. 1901), quoted in part below, and also on common-law grounds, sufficiently set forth in the opinion of the court.

The case was before the supreme court on an appeal from a ruling made by the judge of the circuit court as to the sufficiency of the pleading of the plaintiff as a whole and as to the two points referred to.

The contentions of the company were sustained and the judgment of the lower court reversed, as appears from the following extracts from the remarks of Judge Dowling, who delivered the opinion of the court:

The title of the act of March 9, 1889, in force at the time the supposed grievances occurred, was "An act for the protection of discharged employees and to prevent blacklisting." The section of the act relied upon by appellee is as follows: "Sec. 2. If any railway company, or any other company, or partnership, or corporation, in this State, shall authorize or allow any of its, or their, agents, to blacklist any discharged employees, or attempt by word or writing, or any other means whatever to prevent such discharged employee, or any employee who may have voluntarily left said company's service, from obtaining employment with any other person or company, except as provided in section one of this act, such company or copartnership shall be liable in treble damages to such employee so prevented from obtaining employment, to be recovered by him in a civil action."

An act of the legislature can embrace but one subject and matters properly connected therewith, which subject must be expressed in the title. If any subject is embraced in an act which is not expressed in its title, such act is void as to so much thereof as is not expressed in its title. (Section 19, art. 4, Const.) The subject of the act of March 9, 1889, *supra*, is the protection of discharged employees. The prevention of blacklisting of discharged employees was a matter properly connected with this subject. But the subject of the protection of discharged employees does not include the protection of employees who have not been discharged, or who voluntarily quit the service of their employer. Nor is the protection of employees who voluntarily quit their employment matter properly connected with the subject of the protection of discharged employees. Every section of the act refers to employees who have been discharged, and only in the second section is any provision found which relates to employees who have voluntarily left the service of an employer. This single provision is the prohibition of any attempt, by word, writing, or other means, to prevent a discharged employee, or any employee who may have voluntarily left such service, from obtaining employment with any other person, except as authorized in the first section of the act. So far as the provision just referred to applies to any employee who may have voluntarily left the service of an employer, it is not embraced in the subject of the act as expressed in its title, nor is it properly connected therewith. The protection of discharged employees was a proper and complete subject for an act of the legislature. But, under that title, provisions for the protection of employees who had not been discharged could not be included without a violation of section 19, art. 4, of the constitution. The blacklisting prohibited by section 2 of the act is expressly confined to discharged employees. The complaint does not allege that the appellee was a discharged employee of the appellant, but, on the contrary, it avers that he voluntarily left the service of the company. Therefore, he does not come within the purview and protection of the statute, and his action can not be maintained under its provisions. (*Indianapolis, etc., Co. v. Foreman* (No. 20,253, at present term) 69 N. E. 669.)

The question remains whether the complaint is good under the rule of the common law in such cases, either as charging the appellant with libel or with a wrongful interference with appellee's occupation. The material facts alleged against the appellant in the first paragraph of the complaint are that, shortly after the appellee voluntarily left its employment, the railroad company, by its agents, falsely accused him of being a "labor agitator," and that by letters, words, and influence the appellant caused the discharge of the appellee after he had obtained employment, and by the same means prevented him from obtaining employment. A further and more specific charge is made that the appellant prevented the appellee from being employed by the Atchison, Topeka & Santa Fé Railroad Company, at Denver, Colo., in November, 1894, by representing and stating to that company that the appellee was a "labor agitator," and unfit for said company to have in its employment, and that he was connected with the Order of Railroad Telegraphers of North America. The second paragraph of the complaint in the original action states substantially the same facts as the first, although with a little more particularity. It alleges that the appellee was a member of the Order of Railroad Telegraphers of North America, and that he assisted in the further organization of that asso-

ciation after he left the service of the appellant, by receiving into that order a large number of telegraphers employed by the appellant and by other railroad companies. This paragraph contains the further allegation that in August, 1894, appellee applied to the officers of the Denver & Rio Grande Railroad Company for employment on said railroad, and that his application was accepted, subject to reference to the appellant; that the appellant, by its agent, wrote to the officers of the Denver & Rio Grande Railroad Company a letter containing the words following: "If you want a man who is strictly a labor agitator, this is your man" (meaning the appellee); that by reason of this false statement the appellee was refused said employment.

It appears that no act was done by the appellant through its agents except to inform the officers of the Atchison, Topeka & Santa Fé Railroad Company and the Denver & Rio Grande Railroad Company that the appellee was a member of a labor organization, and that he was a labor agitator. It is not alleged that a charge of this nature was calculated to injure the appellee, or that any odium attached to members of such orders or to labor agitators. The charge was not libelous per se, and no connection is shown between the statements alleged to have been made by appellant's agents, and the failure of the appellee to obtain employment or his loss of any position. Besides, while the complaint avers that the statements alleged to have been made by the appellant were false, by other averments of each paragraph of the pleading it is admitted that the appellee was, in fact, a member of a labor organization, and that he did actively engage in organizing such an association, and in receiving into it the telegraphers employed on appellant's railroad and on other railroads. Just what constitutes a labor agitator does not appear. Ordinarily, the term would justly apply to one actively engaged in promoting the interests of laboring men. It does not imply the use of unlawful or improper means. For all that is shown in the complaint, the statement made by the appellant's agents concerning the appellee was true, and, if true, it could not render the appellant liable. It is also shown by the complaint that the information given to the officers of the Denver & Rio Grande Railroad Company was not volunteered by the appellant, but was given in answer to an inquiry made by the last-named company. The complaint does not describe and allege such a malicious interference by the appellant with the business of the appellee as created a liability at common law.

EIGHT-HOUR LAW—MINES AND SMELTERS—CONSTITUTIONALITY OF STATUTE—*In re Boyce, Supreme Court of Nevada, 75 Pacific Reporter page 1.*—This was a hearing on the application of William G. Boyce for a writ of habeas corpus following his conviction for a violation of the act of February 23, 1903, of the Nevada legislature, limiting the period of employment in underground mines and in smelters to a term of eight hours per day except in cases of emergency where life or property is in imminent danger. The decision turned on the constitutionality of the statute and was discussed at length, the opinion of the court being in favor of upholding the statute, Chief Justice Belkna

dissenting. The syllabus by the court presents the conclusions of law and is as follows:

1. The act of February 23, 1903 (St. 1903, p. 33, c. 10), providing an eight-hour day for all workmen in mines, smelters, and mills for the reduction of ores, is not void, under section 1 of article 1 of our State constitution, guarantying to citizens the right to acquire and possess property; nor is the statute in conflict with section 21 of article 4, which provides that, in all cases where a general law can be made applicable, all laws must be general and of uniform operation throughout the State.

2. Nor is the act mentioned inimical to the fourteenth amendment to the Federal Constitution, which provides that "no State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life or liberty or property without due process of law; nor deny to any person within its jurisdiction the equal protection of the law."

3. The people, and through them the legislature, have supreme power in all matters of government where not prohibited by constitutional limitations; and, while the powers of the Federal Government are restricted to those delegated, those of the State government embrace all that are not forbidden.

4. All acts of the legislature are presumed to be valid until it is clearly shown that they violate some constitutional restriction.

5. The legislature has inherent authority, under the general police power of the State, to enact laws for the promotion of the health, safety, and welfare of the people, and its arm can not be stayed when exercised for these purposes.

6. If the restriction of the hours of labor be deemed a regulation or limitation on the right to acquire property, the occupations to which the act applies are not considered healthful; and it was therefore within the power and discretion of the legislature to enact the statute for the protection of the health and prolongation of the lives of the workmen affected, and the resulting welfare of the State.

7. Questions relating to the wisdom, policy, and expediency of statutes are for the people's representatives in the legislature assembled, and not for the courts, to determine.

EIGHT-HOUR LAW—PAY FOR OVERTIME—ARMY REGULATIONS—*United States v. Moses, United States Circuit Court of Appeals, Ninth Circuit, 126 Federal Reporter, page 58.*—This was an action arising upon a contract entered into by Chesley C. Moses and the Government of the United States, represented by Maj. G. S. Bingham, chief quartermaster of the Department of Alaska, by which Moses agreed to perform labor as a carpenter in Alaska for the sum of \$5 per working day. His employment continued for a number of months, during a considerable part of which time he worked ten hours per day. In an action to recover pay for the excess over eight hours, which constitute a day's labor under the act of Congress of August 1, 1892, and under article 62, paragraph 812, of the Army Regulations, which is to

the same effect, Moses was awarded a judgment in the district court of the United States for the northern division of the district of Washington. [See Bulletin of the Department of Labor No. 44, p. 163.] From this judgment an appeal was taken by the Government to the circuit court of appeals, and the judgment of the court below was reversed. Judge Morrow, who announced the findings of the circuit court, spoke in part as follows:

Whether the statute is limited in its operation to the United States and the District of Columbia, or whether it extends to the Territories, need not be determined in this case. It may be assumed that it extends to the Territories, and the right of the appellee to maintain his claim may be considered under either the statute or the regulations, and the result will be the same upon the question presented on this appeal. There can be no doubt that it is the duty of the officers of the Government in control of the construction of buildings for the use of the War Department to observe the requirements of the statute and the regulations of that department relating to such work; but it does not follow that a laborer or a mechanic employed by the Government on any of the public works of the United States, performing more than eight hours of service in a calendar day, is entitled to be paid for such extra service in the absence of an agreement to that effect. Prior to the passage of the act of August 1, 1892, Congress had provided an eight-hour law by the act of June 25, 1868 (chapter 72, 15 Stat. 77, Rev. St. 3738 [U. S. Comp. St. 1901, p. 2507]). That statute provides that "eight hours shall constitute a day's work for all laborers, workmen, and mechanics who may be employed by or on behalf of the Government of the United States."

The case of *Timmonds v. United States*, 84 Fed. 933, 28 C. C. A. 570, involved the claim of an employee of the quartermaster's department for compensation for labor performed in excess of eight hours per day. The employment was at a specified salary per month, and the claim was made under the provisions of section 3738 of the Revised Statutes. In all other respects the case was similar to the case at bar. The circuit court of appeals said in that case:

"It is urged that under this provision any laborer, workman, or mechanic who labors in the service of the United States more than eight hours a day may recover as upon a quantum meruit for the value of the extra time so given to the service, irrespective of the contract of employment. This statutory provision has passed under the scrutiny of the Supreme Court in *U. S. v. Martin*, 94 U. S. 400 [24 L. Ed. 128]. It was there ruled that the provision in question is in the nature of a direction by the Government to its agents, and is not a contract between the Government and its servants; that it does not specify what sum shall be paid for the labor of eight hours, nor that the price shall be larger when the hours are more, or smaller when the hours are less; and that, being in the nature of a direction from the Government to its agents, it does not constitute a contract to pay its servants for the excess of time employed. The act, being construed to be merely a direction to the employing officer of the Government, does not furnish grounds of recovery for the supposed excessive service nor confer any right upon or interest in the servant."

The act of August 1, 1892, differs from the act of June 25, 1868, and

the army regulations in making it a misdemeanor for an officer to require more than eight hours of labor per day except in cases of extraordinary emergency. The army regulations differ from the act of 1868 in providing that labor may be required in excess of eight hours per day in an emergency, and in the further exception that the regulation does not apply to certain laborers and mechanics whose employment is peculiar, and whose service may be necessary at any, or occasionally at all, hours of the day; but these provisions can not, under any possible construction, be held to provide for compensation for services rendered in excess of eight hours per calendar day. If the petitioner in this case is entitled to be paid for excess of day labor under the act of August 1, 1892 (assuming that that act extends to the Territory of Alaska), he is entitled to it by reason of the restriction of labor on public works to eight hours per day, and not because of the penal provisions of the act directed against officers and contractors to prevent such excess of labor being required. If the petitioner was required by the officer in charge of the work to perform more labor each day during a part of his term of employment than the law allowed, then the officer is an offender, unless there was an emergency, as claimed by the Government; but that fact does not fix the wages of the petitioner, or establish an agreement, either express or implied, when one did not exist before. That no such agreement existed is clearly established by the petitioner's own testimony.

We are of the opinion that, upon the agreement entered into by the petitioner with the chief quartermaster, the petitioner is not entitled to recover compensation for the labor performed by him in excess of eight hours on each calendar day.

The judgment and decree of the court below is reversed, with instructions to enter a judgment in favor of the defendant.

DECISIONS UNDER COMMON LAW.

BOYCOTTING—INJUNCTION—STRIKES—*Gray et al. v. Building Trades Council et al.*, *Supreme Court of Minnesota*, 97 *Northwestern Reporter*, page 663.—This was a case in which an injunction had been granted against the Building Trades Council of Minneapolis by the district court of Hennepin County forbidding the Building Trades Council and others to interfere with the business of the complainants. Six separate actions were brought at the same time by different complainants against the same organization, the circumstances being much the same in all the cases. The complainants were employers engaged in the business of installing wires and other electrical apparatus in buildings and doing other such work as was incidental thereto. They had formed an association among themselves agreeing, among other things, not to discriminate in the employment of workmen on the grounds of their membership or nonmembership in any labor union. There was no controversy between them and the trades council as to any question except that of the employment of nonunion labor. The members of the trades council had declared this employers' association unfair, and had interfered with the carrying out of some of their contracts and

with the securing of others by threatening the customers of the contractors that if they attempted to do business with the complainants they would prevent the completion of the buildings on which such nonunion labor was employed. On the appeal to the supreme court this court examined the evidence on which the temporary injunction was granted only far enough to determine whether the affidavits fairly tended to support the claims made in the complaints. The injunction granted by the district court was modified in some respects and as modified was affirmed.

Judge Brown, speaking for the supreme court, discussed at some length the principles controlling the use of injunctions in connection with strikes and boycotts, concluding as follows:

It follows from what has been said that the learned trial court was justified in holding that defendants were guilty of a boycott, and ordering the issuance of a temporary injunction restraining them therefrom.

We come, then, to the question whether the contention of defendants, to the effect that the order of the trial court is too broad and restrains acts other than of boycotting, is well taken. The order of the court is as follows:

"Said injunction shall specifically enjoin said defendants and each of them, their members, agents, and employees, from in any manner interfering with the business of plaintiffs by means of threats or intimidation, of any kind or nature, directed against the customers or prospective customers of said plaintiffs.

"Said injunction shall specifically enjoin the said defendant council and brotherhood, their members, agents, and employees, and each and every one of them, from interfering with the customers or prospective customers of plaintiffs by threats of any kind or nature, and particularly from notifying such customers or prospective customers and patrons of plaintiffs that plaintiffs are unfair.

"Said injunction shall specifically enjoin said defendant council and brotherhood, their members, agents, representatives, and employees, and each and every one of them, from going upon the premises where plaintiffs are engaged or employed, for the purpose of interfering with the business of plaintiffs, and pursuant to said purpose, from ordering and directing or notifying men belonging to the various allied unions to desist from work upon said premises by reason of the fact that plaintiffs are employed thereon."

As already stated, it was proper for the trial court to enjoin defendants from all acts amounting to a boycott, and the question presented is whether the order of the trial court goes beyond this in scope and effect. The first subdivision of the order restrains and enjoins defendants, their members and agents, from in any manner interfering with the business of plaintiffs by means of threats or intimidation, of any kind, directed against their customers or prospective customers. The second subdivision enjoins them from interfering with the customers, or prospective customers, of plaintiffs, by threats of any kind or nature, "*and particularly from notifying such customers or prospective customers that plaintiffs are unfair.*" We are of opinion that neither of these restraining clauses, except the part we have italicized, goes beyond or restrains

defendants from acts other than boycotting, and were therefore proper. It is immaterial whether contract relations actually existed between plaintiffs and their customers at the time, for it would be just as injurious and destructive to plaintiffs' business to prevent them by such means from obtaining customers with whom they could enter into contracts as to interfere by unlawful threats or intimidation and cause existing contract relations to be broken. It is plaintiffs' business as a whole that the law protects, and not some particular transaction involved therein. If a notification to such customers, actual or prospective, that plaintiffs are "unfair," portends injury to them or plaintiffs, and such as to bring the case within the rule against boycotting, it was properly made a part of the temporary injunction. (*Beck v. Ry. Teamsters, etc.* (Mich.) 77 N. W. 13, 42 L. R. A. 407, 74 Am. St. Rep. 421.) Whether such a notification would in any case amount to a threat or intimidation must be determined from all the facts and circumstances of each particular case. Such notice might have special significance in a particular case, and have no meaning in another. But the complaints before us, by which we are controlled in determining the case, there being no finding other than in effect that their allegations are true, contain no allegations that the mere notification of customers that plaintiffs are "unfair" has any special significance, that it portended injury, or was intended as a threat or intimidation, and for this reason we hold that the court below was not justified in making this an element of the injunctive order. In other respects the provisions of the order must be taken to cover and include acts constituting an unlawful conspiracy or boycott—nothing further—and are not open to the objections urged against them by defendants. As to the third subdivision, we are of opinion that the acts there attempted to be restrained are such as might lawfully be committed, and are not subject to equitable control. It is fair to the trial judge to say, however, in this connection, that the order was drawn by plaintiffs' attorney, as is usual in such cases, and was undoubtedly adopted by him as covering only the case made by the complaints. But it goes beyond this, and restrains acts other than acts constituting boycotting. This particular provision specifically enjoins defendants, their members, agents, and representatives, from going upon the premises where plaintiffs are employed, for the purpose of ordering, directing or notifying men belonging to the various allied unions to desist from work upon the premises by reason of the fact that plaintiffs are employed thereon.

The authorities, as already noted, very generally hold that a strike is not unlawful, that members of labor unions may singly or in a body quit the service of their employer, and for the purpose of strengthening their association may persuade and induce others in the same occupation to join their union, and, as a means to that end, refuse to allow their members to work in places where nonunion labor is employed. (18 Am. & Eng. Ency. Law (2d Ed.) 84.) They may refuse to have any sort of dealings with an employer of nonunion labor, singly or collectively; they may persuade and induce their members to join them, and there would seem to be no reason why they should be limited as to the place where they may do such acts. There would be nothing wrongful or unlawful in their going upon the premises of the owner, with his permission, where their associates were engaged at work, for the purpose of notifying or ordering them to desist from

work thereon, unless, perhaps, their conduct in that respect be so persistent and annoying to the owner of the premises or contractor as to constitute a nuisance. It is clear, upon authority, that this particular part of the injunctive order goes beyond the limits of the law, and can not be sustained.

It is therefore ordered that the order appealed from be modified to conform to the views herein expressed, and, as so modified, it is affirmed.

CONSPIRACY—BOYCOTT BY MEMBERS OF ASSOCIATION—COERCION—FINES.—*Martell v. White et al.*, *Supreme Judicial Court of Massachusetts*, 69 *Northeastern Reporter*, page 1085.—In this case one Martell brought an action in the superior court of Norfolk County for damages arising from an alleged conspiracy by the defendants to injure his trade. Martell was engaged in the business of quarrying granite up to the beginning of the year 1899, when his customers left him and refused further to patronize him, through the action of the defendants and their associates. The defendants were all members of a voluntary association known as the Granite Manufacturers' Association of Quincy, Mass. This association had no constitution and no avowed object of existence, but its by-laws prescribed conditions of membership, and provided that "For the purpose of defraying in part the expense of the maintenance of this organization, any member thereof having business transactions with any party or concern in Quincy or its vicinity, not members hereof, and in any way relating to the cutting, quarrying, polishing, buying, or selling of granite (hand polishers excepted), shall for each of said transactions contribute at least \$1 and not more than \$500. The amount to be fixed by the association upon its determining the amount and nature of said transaction."

Members of this association had dealt with Martell, and contributions ranging in amount from \$10 to \$100 had been assessed, one levy of \$100 having been paid. After these proceedings the members generally refused to deal with Martell, for the reason, as understood, that they wished to avoid the penalty therefor.

The case was not allowed to go to the jury in the circuit court, a verdict for the defendants being ordered, and it was from this order that Martell appealed. The appeal resulted in a reversal of the order of the court below, and a declaration by the supreme judicial court that the case should have gone to the jury.

The reasons for this decision appear in the following quotations from the remarks of Judge Hammond, who delivered the opinion of the court:

The jury might properly have found that the euphemistic expression, "shall contribute to the funds of the association," contained an idea which could be more tersely and accurately expressed by the phrase "shall pay a fine," or, in other words, that the plain intent of the sec-

tion was to provide for the imposition upon those who came within its provisions of a penalty in the nature of a substantial fine. The bill of exceptions recites that "there was no evidence of threats or intimidation practiced upon the plaintiff himself, and the acts complained of were confined to the action of the society upon its own members." We understand this statement to mean simply that the acts of the association concerned only such of the plaintiff's customers as were members, and that no pressure was brought to bear upon the plaintiff, except such as fairly resulted from action upon his customers. While it is true that the by-law was not directed expressly against the plaintiff by name, still he belonged to the class whose business it was intended to affect, and the proceedings actually taken were based upon transactions with him alone, and in that way were directed against his business alone. It was the intention of the defendants to withdraw his customers from him, if possible, by the imposition of fines upon them, with the knowledge that the result would be a great loss to the plaintiff. The defendants must be presumed to have intended the natural result of their acts. Here, then, is a clear and deliberate interference with the business of a person, with the intention of causing damage to him, and ending in that result. The defendants combined and conspired together to ruin the plaintiff in his business, and they accomplished their purpose. In all this, have they kept within lawful bounds? It is elemental that the unlawfulness of a conspiracy may be found either in the end sought, or the means to be used. If either is unlawful, within the meaning of the term as applied to the subject, then the conspiracy is unlawful. It becomes necessary, therefore, to examine into the nature of the conspiracy in this case, both as to the object sought and the means used.

The defendants contend that, both as to object and means, they are justified by the law applicable to business competition.

While the purpose to injure the plaintiff appears clearly enough, the object or motive is left somewhat obscure, upon the evidence. The association had no written constitution, and the by-laws do not expressly set forth its objects. The oral testimony tends to show that one object of the association is to see that agreements made between its members and their employees, and between this association and similar associations in the same line of business, be kept and "lived up to." Whether this failure to set out fully in writing the objects, is due to any reluctance to have them clearly appear, or to some other cause, is, of course, not material to this case. The result, however, is that its objects do not so clearly appear as might be desired; but, in view of the conclusion to which we have come as to the means used, it is not necessary to inquire more closely as to the objects. It may be assumed that one of the objects was to enable the members to compete more successfully with others in the same business, and that the acts of which the plaintiff complains were done for the ultimate protection and advancement of their own business interests, with no intention or desire to injure the plaintiff, except so far as such injury was the necessary result of measures taken for their own interests. If that was true, then, so far as respects the end sought, the conspiracy does not seem to have been illegal.

The next question is whether there is anything unlawful or wrongful in the means used, as applied to the acts in question. The right of competition rests upon the doctrine that the interests of the great

public are best subserved by permitting the general and natural laws of business to have their full and free operation, and that this end is best attained when the trader is allowed, in his business, to make free use of these laws. The weapons used by the trader who relies upon this right for justification must be those furnished by the laws of trade, or at least must not be inconsistent with their free operation. No man can justify an interference with another man's business through fraud or misrepresentation, nor by intimidation, obstruction, or molestation. In the case before us the members of the association were to be held to the policy of refusing to trade with the plaintiff by the imposition of heavy fines, or, in other words, they were coerced by actual or threatened injury to their property. It is true that one may leave the association if he desires, but, if he stays in it, he is subjected to the coercive effect of a fine, to be determined and enforced by the majority. This method of procedure is arbitrary and artificial, and is based in no respect upon the grounds upon which competition in business is permitted, but, on the contrary, it creates a motive for business action inconsistent with that freedom of choice out of which springs the benefit of competition to the public, and has no natural or logical relation to the grounds upon which the right to compete is based. Such a method of influencing a person may be coercive and illegal. (*Carew v. Rutherford*, 106 Mass. 1, 8 Am. Rep. 287.)

Nor is the nature of the coercion changed by the fact that the persons fined were members of the association. The words of Munson, J., in *Boutwell v. Marr*, 71 Vt. 1, 42 Atl. 607 [see Bulletin of the Department of Labor No. 39, p. 502], are applicable here: "The law can not be compelled, by any initial agreement of an associate member, to treat him as one having no choice but that of the majority, nor as a willing participant in whatever action may be taken. The voluntary acceptance of by-laws providing for the imposition of coercive fines does not make them legal and collectible, and the standing threat of their imposition may properly be classed with the ordinary threat of suits upon groundless claims. The fact that the relations and processes deemed essential to a recovery are brought within the membership and proceedings of an organized body can not change the result. The law sees in the membership of an association of this character both the authors of its coercive system and the victim of its unlawful pressure. If this were not so, men could deprive their fellows of established rights, and evade the duty of compensation, simply by working through an association."

In view of the considerations upon which the right of competition is based, we are of opinion that, as against the plaintiff, the defendants have failed to show that the coercion or intimidation of the plaintiff's customers by means of a fine is justified by the law of competition. The ground of the justification is not broad enough to cover the acts of interference in their entirety, and the interference, being injurious and unjustifiable, is unlawful. We do not mean to be understood as saying that a fine is of itself necessarily, or even generally, an illegal implement. In many cases it is so slight as not to be coercive in its nature; in many, it serves a useful purpose to call the attention of a member of an organization to the fact of the infraction of some innocent regulation; and, in many it serves as an extra incentive to the performance of some absolute duty or the assertion of some absolute right. But where, as in the case before us, the fine is so

large as to amount to moral intimidation or coercion, and is used as a means to enforce a right not absolute in its nature, but conditional, and is inconsistent with those conditions upon which the right rests, then the coercion becomes unjustifiable, and taints with illegality the act.

LABOR ORGANIZATIONS—CONTRACT FOR EXCLUSIVE EMPLOYMENT OF UNION LABOR—INJUNCTION—PICKETING—*Christensen et al. v. People, Illinois Appellate Court, First District, Official Report.*—This case was before the appellate court on appeal from a judgment rendered in the superior court of Cook County against Christensen and others, found guilty of contempt in violating an injunction issued at the instance of the Kellogg Switchboard and Supply Company, of Chicago. The petition of the company made a number of labor unions and their officers defendants, charging malicious interference with the business of the company by the maintenance of a strike and by preventing the continued employment of former employees and the hiring of others desiring employment. About May 7, 1903, business agents of the labor unions involved had presented drafts of agreements, fixing the terms of employment by the switchboard company, a condition of which was that only members of labor unions should be employed. This agreement the company refused to sign, whereupon the strike was immediately instituted, and, as declared in the affidavits of the company, numerous acts of violence were committed, picketing was maintained, and the company was rendered unable to complete its contracts or otherwise to carry on its business. The injunction was allowed on May 25, by which the defendant unions and their officers named, as well as their confederates, servants, and agents, were, among other things, restrained from in any manner interfering with, obstructing, or stopping any of the business of the company, or entering the grounds or places where the employees of the company were at work for the purpose of such interference or obstruction, and also from the use of threats, intimidation, force, or violence toward the employees or toward those who might desire to continue in or enter the service or employment of the company. Copies of the injunction were posted in and about the company's place of business and notice and information of the same were given as widely as possible among the present and former employees and other persons in the neighborhood, personal service being given in a number of instances. Subsequently, on June 15, as the result of hearings before the court, certain defendants, appellants in the present case, were found guilty of contempt in violating the injunction and fined. A week later similar proceedings were had and additional fines for contempt were assessed, and in a later action penalties of fine and, in two instances, of imprisonment were levied on persons found guilty of violation of the injunction. From these judgments the present appeal was taken. At the

various hearings knowledge of the injunction was in general admitted, the defense being that the acts done by the appellants were simply acts of advice and persuasion and that no violence was committed by them or with their knowledge or approval. Evidence showed, however, that repeated assaults had been made and that many persons, both actual and prospective employees, had been intimidated. The purpose of the strike as set forth by a number of the appellants was to procure the signing of the agreement as to the exclusive employment of union labor above referred to.

The various points raised at the hearing were discussed at length by Judge Adams, who delivered the opinion of the court. The following extracts from his opinion show the grounds on which he supported the judgment of the court below and also his ruling as to the legality of the form of contract demanded by the labor unions:

It is contended that the contempts are criminal, and, therefore, appellants should have been discharged on their answers. The relief sought is a permanent injunction, and preliminary thereto a temporary one of the same character as the permanent one prayed. Manifestly the preliminary injunction is for the benefit of the complainant and, therefore, its enforcement is for its benefit.

The injunction and its enforcement being for the complainant's benefit, the proceedings must be regarded as civil.

It is practically impossible, without extending this opinion beyond all reasonable bounds, to refer to all of the affidavits in support of the petition of June 22nd. They are very numerous and it clearly appears from them that a large number of the former employees of complainant picketed and patrolled in the immediate neighborhood of complainant's factory, and in the approaches thereto, and endeavored, sometimes by warnings, sometimes by threats, and, in a number of times, by actual assault and beatings and the use of opprobrious epithets, to deter complainant's employees from remaining in its employ, and to prevent others seeking employment with it from entering its employ, by means of which constant fear of bodily injury was engendered in the minds of such persons.

The appellants deny that they personally used force, threats or intimidation of any sort, and say that they were very peaceable and mildly persuasive. But the very presence of a large number of pickets, with the avowed purpose of preventing complainant's employees from remaining in its employ, and those seeking employment with it to desist therefrom, was itself intimidation. In *Farmer's Loan & Trust Co. v. N. Pac. R. R. Co.*, 60 Fed. R., 803, 820, Mr. Justice Jenkins quotes the following remarks of Mr. Justice Brewer on the subject: "The common rule as to strikes is this: Not merely do the employees quit the employment, and thus handicap the employer in the use of his property, and perhaps in the discharge of duties which he owes to the public, but they also forcibly prevent others from taking their places. It is useless to say that they only advise; no man is misled. When a thousand laborers gather around a railroad track and say to those who seek employment that they had better not; and when that advice is supplemented every little while by a terrible assault on one who disregards it, every one knows that something more than advice

is intended. It is coercion, force; it is the effort of the many, by the mere weight of numbers, to compel the one to do their bidding."

That the purpose of the strike was to compel the execution of the drafts of agreement is clear. It is averred in the sworn bill and deposed to in the affidavits of De Wolf, complainant's president, Kellogg, its secretary, and treasurer, and Edwards, its superintendent, that business agents of the different unions called on complainant, and insisted on its executing the agreements, and that, when complainant's president refused, on the ground that the proposed agreements were unreasonable, it was threatened by one of said business agents that, unless complainant would sign the agreements, a strike would be called, and that said business agents called a strike, in response to which about 500 of complainant's employees quit its employ. Appellants' counsel admit in their brief, "the purpose of the strike is to bring about the execution of the contracts," and at least three of appellants so admit in their answers. It is unlawful to compel one to execute any contract. A contract executed under duress is voidable, and duress is present where a party "is constrained, under circumstances which deprive him of the exercise of free will, to agree to or to perform the act sought to be avoided." (10 Am. & Eng. Ency., 2nd ed., p. 321.) "Duress per minas exists when a person is induced to perform an act to avoid a threatened and impending calamity." (Ib. 324.) Especially was the purpose to compel complainant to execute the agreements in question an unlawful purpose. Article I strikes at the right of contract, and provides that complainant shall employ none but members of the several unions, thus discriminating in favor of one class of men and excluding all others.

The agreements in question would, if executed, tend to create a monopoly in favor of the members of the different unions, to the exclusion of workmen not members of such unions, and are, in this respect, unlawful. Contracts tending to create a monopoly are void. [Cases cited.]

Not only was the purpose of the strike unlawful, but the means used to achieve the unlawful purpose were unlawful. The means used were the acts heretofore mentioned, and thereby injury to the complainant's business. The appellants and their associates intended to stop the business of the complainant so far as they possibly could, and the evidence shows that they did stop it in great part, to complainant's injury. The following is contained in the brief of appellants' counsel, which we quote as illustrative of their view of the cause. "How do picketing, patrolling, persuading, or even slugging affect property rights, except in the most fantastic sense? Injury to business has no independent existence whatever, because business has no tangible existence to be injured, in the true and unperverted sense."

In *Union Pac. Ry. Co. v. Ruef*, 120 Fed. R., 102, 113, the court say: "And that one's business is his or its property is likewise elementary, and is conceded by all. And that liberty means the right to do as he pleases, when he interferes with the rights of no other person, and the right to make contracts with all persons upon all subjects-matter, save and excepting with reference to immoral or unlawful matters, is also conceded by all who know anything of the propositions."

It is an indispensable condition of the enjoyment by each citizen of the liberty and rights guaranteed by the constitution and laws, that he shall respect and not unlawfully infringe upon the liberty or rights of any other citizen. This can not be done with impunity.

LAWS OF VARIOUS STATES RELATING TO LABOR ENACTED SINCE JANUARY 1, 1896.

[The Second Special Report of this Bureau contains all laws of the various States and Territories and of the United States relating to labor in force January 1, 1896. Later enactments are reproduced in successive issues of the Bulletin from time to time as published.]

MONTANA.

ACTS OF 1903.

CHAPTER 45.—*Employment of children.*

SECTION 1. Section 1920 of the Political Code [shall] be amended to read as follows:

Section 1920. * * * Every parent, guardian or other person having charge of any child between the ages of eight and fourteen years shall send such child to a public, private, or parochial school, for the full time that the school attended is in session, which shall in no case be for less than sixteen weeks during any current year, and said attendance shall begin within the first week of the school term, unless the child is excused from such attendance * * *, upon satisfactory showing, either that the bodily or mental condition of the child does not permit of its attendance at school, or that the child is being instructed at home by a person qualified, * * * or that there is no school taught the required length of time within 2½ miles of the residence of such child by the nearest traveled road: *Provided*, That no child shall be refused admission to any public school on account of race or color. * * *

Sec. 2. Section 1921 [shall] be amended to read as follows:

Section 1921. No child under fourteen years of age shall be employed or be in the employment of any person, company or corporation during the school term and while the public schools are in session, unless such child shall present to such person, company or corporation an age and schooling certificate herein provided for. An age and schooling certificate shall be approved only by the superintendent of schools, or by a person authorized by him, in city or other districts having such superintendent, or by the clerk of the board of trustees in village and township districts not having such superintendent, upon a satisfactory proof of the age of such minor and that he has successfully completed the studies enumerated in section 1920 of this article; or if between the ages of fourteen and sixteen years, a knowledge of his or her ability to read and write legibly the English language. The age and schooling certificate shall be formulated by the superintendent of public instruction and the same furnished, in blank, by the clerk of the board of trustees or the clerk of the district. Every person [,] company, or corporation employing any child under sixteen years of age, shall exact the age and schooling certificate prescribed in this section, as a condition of employment and shall keep the same on file, and shall upon the request of the truant officer hereinafter provided for, permit him to examine such age and schooling certificate. Any person, company, or corporation, employing any minor contrary to the provisions of this section shall be fined not less than twenty-five nor more than fifty dollars for each and every offense.

Sec. 3. Section 1922 [shall] be amended to read as follows:

Section 1922. All minors over the age of fourteen and under the age of sixteen years, who can not read and write the English language shall be required to attend school as provided in section 1920, of this article and all the provisions of said section shall apply to said minors; *Provided*, That such attendance shall not be required of such minors after they have secured a certificate from the superintendent of schools in districts having superintendents, or the clerk of the board of trustees in districts not having superintendents, that they can read, and write the English language. No person, company or corporation shall employ any such minor during the time schools are in session, or having such minor in their employ shall immediately cease

such employment, upon notice from the truant officer who is hereinafter provided. Every person, company, or corporation violating the provisions of this section shall be fined not less than twenty-five nor more than fifty dollars for each and every offense.

SEC. 5. Section 1924 [shall] be amended to read as follows:

Section 1924. * * * The truant officer shall be vested with police powers, the authority to serve warrants, and have authority to enter workshops, factories, stores and all other places where children may be employed, and do whatever may be necessary, in the way of investigation or otherwise to enforce the provisions of this act; * * *

Approved March 3d, 1903.

CHAPTER 53.—*Hours of labor of hoisting engineers at mines.*

SECTION 1. It shall be unlawful for any person or persons, company or corporation, to operate or handle, or to induce, persuade or prevail upon any person or persons to operate or handle for more than eight hours in twenty-four hours of each day, any hoisting engine at or in any mine.

This act shall apply only to such plants as are in continuous operation or are operated sixteen or more hours in twenty-four hours of each day, or at or in any mine where said hoisting engine develops fifteen or more horse power, or at or in any mine wherein there are fifteen or more men employed underground in twenty-four hours of each day: *Provided however*, That the provisions of this act shall not apply to any person or persons operating any hoisting engine more than eight hours in each twenty-four hours for the purpose of relieving another employee in case of sickness or other unforeseen cause or causes.

SEC. 2. Any person or persons, company or corporation, who shall violate any of the provisions of this act, shall, upon conviction, be punished by a fine of not less than ten (\$10) dollars, nor more than one hundred (\$100) dollars; and each and every day that such person or persons, company or corporation may continue to violate any of the provisions of this act, shall be considered a separate and distinct offense and shall be punishable as such.

Approved March 3, 1903.

CHAPTER 60.—*Mine regulations—Safety cages.*

SECTION 1.—Section 705 of Title X of the Penal Code * * * as amended by House Bill No. 77, of the Laws of the Fifth Legislative Assembly, is hereby amended so as to read as follows:

Section 705. It is unlawful for any corporation or person to sink or work, through any vertical shaft where mining cages are used, to a greater depth than three hundred feet, unless said shaft shall be provided with an iron-bonneted safety cage, to be used in the lowering and hoisting of the employees thereof, said cage to be also provided with sheet iron or steel casing not less than one-eighth [one-eighth] inch in diameter [thickness]; doors to be made of the same material shall be hung on hinges or may be made to slide and shall not be less than five feet high from the bottom of the cage, and said doors must be closed when lowering or hoisting the men: *Provided*, That when such cage is used for sinking only, it need not be equipped with such doors as are hereinbefore provided for. The safety apparatus, whether consisting of eccentrics, springs or other device, must be securely fastened to the cage, and must be of sufficient strength to hold the cage loaded at any depth to which the shaft may be sunk. The iron bonnet of the aforesaid cage must be made of boiler sheet iron, of good quality, of at least three-sixteenths of an inch in thickness, and must cover the top of such cage in such manner as to afford the greatest protection to life and limb from anything falling down said shaft. It shall be the duty of the mining inspector and his assistant to see that all cages are kept in compliance with this section and to also see that the safety dogs are kept in good order.

Every person or corporation failing to comply with any of the provisions of this section is punishable by a fine of not less than three hundred dollars, nor more than one thousand dollars.

Approved March 4, 1903.

CHAPTER 80.—*Employment of labor—Fraudulent representations, etc.*

SECTION 1. It shall be unlawful for any person or persons, society, company, association, corporation, or organization of any kind, doing business in this State, to

induce, influence, persuade or engage workmen to change from one place to another in this State, through or by means of deception, misrepresentation and false advertising concerning the kind or character of the work, or the sanitary or other conditions of employment, or as to the existence of a strike or other trouble pending between the employer and the employee, at the time of, or immediately prior to such engagement. Failure to state in any advertisement, proposal or contract for the employment of workmen that there is a strike, lockout, or other labor trouble at the place of the proposed employment, when in fact such strike, lockout or other trouble then actually exists at such place, shall be deemed a false advertisement and misrepresentation for the purpose of this act.

SEC. 2. Every person, company, corporation, society, association, or organization of any kind, doing business in this State, violating any of the provisions of this act, is punishable by a fine of not less than one hundred (\$100) dollars, not [nor] more than two thousand (\$2,000) dollars.

SEC. 3. Any workman of this State, or any workman of any State, who has been, or shall be, influenced, induced or persuaded to engage with any person mentioned in section 1 of this act, through or by means of any of the things prohibited by this act, shall have a right of action for recovery of all damages that he has sustained in consequence of the deception. Misrepresentation and false advertising used to induce him to change his place of employment, against any person, corporation, company, or association, directly or indirectly procuring such change, and in addition thereto, he shall recover reasonable attorney's fees to be fixed by the court and taxed as costs in any judgment recovered.

Approved March 5, 1903.

CHAPTER 82.—*Mine regulations.*

SECTION 1. It is unlawful for any corporation or person operating any mine in this State worked through a vertical or incline shaft, to stoep within a less distance than twenty-five (25) feet of the said shaft, when other work is being carried on below said stoeping.

SEC. 2. It is unlawful for any person or corporation operating any mine in this State worked through a vertical or incline shaft, where a cage or other device is used for the purpose of hoisting or lowering men to run such cage when men are upon the same at a greater rate of speed than eight hundred (800) feet per minute.

SEC. 3. It is unlawful for any person, company or corporation, to erect or maintain any building, or inclosure used for a blacksmith shop or drying room within a distance of fifty (50) feet of the mouth of any tunnel or shaft, unless the same shall be fireproof in its construction.

SEC. 4. The penalty for violating the provisions of any of the preceding sections is the same as provided in section 705 of the Penal Code: *Provided*, That when it shall appear that any engineer has violated the express order of his employer in running his engine at a greater speed than 800 feet per minute the engineer alone shall be subject to prosecution, and to the fine imposed by the provisions of this act.

Approved March 5, 1903.

CHAPTER 83.—*Liability of employers for injuries to employees.*

SECTION 1. Every railway corporation including electric railway corporations, doing business in this State shall be liable for all damages sustained by an employee thereof, within this State, without contributing negligence on his part, when such damage is caused by the negligence of any train dispatcher, telegraph operator, superintendent, master mechanic, yardmaster, conductor, engineer, motorman, or of any other employee who has superintendence of any stationary or hand signal.

SEC. 2. That every company, corporation, or individual operating any mine, smelter or mill for the refining of ores shall be liable for all damages sustained by an employee thereof within this State, without contributing negligence on his part, when such damage is caused by the negligence of any superintendent, foreman, shift-boss, hoisting or other engineer, or crane-men.

SEC. 3. No contract of insurance, relief, benefit, or indemnity in case of injury or death, nor any other contract entered into either before or after the injury, between the person injured and any of the employers named in this act shall constitute any bar or defense to any cause of action brought under the provisions of this act.

Approved March 5, 1903.

CHAPTER 98.—*Mine regulations—Inspection.*

SECTION 1. Section 582 of the Political Code [shall] be amended so as to read as follows:

Section 582. It is the duty of the inspector of mines by himself or deputy to visit every mine in the State, once every year and inspect its workings, timbering, ventilation, means of ingress and egress, and the means adopted and in use for the preservation of the lives and safety of the miners employed therein. For this purpose the inspector and his deputy at all times shall have access to any mine and all parts thereof. All mine owners, lessees, operators or superintendents, must render such assistance as may be necessary to enable the inspector or his deputy to make the examination.

When upon such inspection any mine or portion thereof is found to be in an unsafe condition, the inspector shall at once serve a notice in writing upon the owner, lessor, lessee, agent, manager or superintendent thereof, setting forth the nature of the defects which render such mine unsafe and the point or place in such mine where such defects exist, and requiring the repairs necessary to remedy such defects to be made within a specified time, and, if in his judgment the circumstances so require, he shall forbid the operation of such mine or portion thereof as has been declared unsafe, save and except for the purpose of making the repairs necessary for the purpose of remedying such defects and making such mine safe for the laborers employed therein.

SEC. 2. Section 583 of the Political Code [shall] be amended so as to read as follows:

Section 583. Whenever the inspector of mines receives a complaint in writing signed by one or more parties setting forth that the mine in which he or they are working is dangerous in any respect, he or the deputy inspector must in person visit and examine such mine. Every complaint must set forth the nature of the danger existing at the mine and the time the cause of such danger was first observed.

SEC. 3. Section 584 of the Political Code [shall] be amended so as to read as follows:

Section 584. After such complaint has been received by the inspector of mines, he must, as soon as possible, visit such mine; and if from such examination he ascertains that the mine is from any cause in a dangerous condition, he must at once notify the owner, lessor or agent thereof, such notice to be in writing, and to be served by copy on such owner, lessor, lessee, or agent, in the same manner as provided by law for the serving of legal process, and the notice must state fully and in detail in what particular manner such mine is dangerous or insecure, and requires [require] all necessary changes to be made without delay, for the purpose of making such mine safe for the laborers employed therein; and in any criminal or civil procedure at law against the party or parties so notified, on account of loss of life or bodily injury sustained by an employee subsequent to such notice and in consequence of a neglect to obey the inspectors' requirements, a certified copy of the notice served by the inspector is prima facie evidence of the gross negligence of the party or parties so complained of. If the owner, lessor, lessee, or agent of any such mine shall neglect or refuse to obey or comply with the instructions of the inspector as contained in such notice, or shall neglect or refuse to cause the repairs necessary to remedy such defects to be made within a reasonable time, or shall refuse to cause work to be stopped when so ordered, such party or parties so refusing may be prosecuted criminally by the inspector.

SEC. 4. Section 585 of the Political Code [shall] be amended so as to read as follows:

Section 585. It is the duty of the inspector of mines, at least once in each year, either in person or by deputy inspector, to visit each mining county in the State and examine as many of the mines in the different counties as practicable, and make such recommendations as in his judgment are necessary to insure the safety of the workmen employed therein; and whenever from his examination, he finds any mine to be in an unsafe condition, he shall at once serve a notice upon the owner, lessor, lessee, or agent [if the person so notified] fails to comply with such notice, he may prosecute them or any of them as provided in the next preceding section.

SEC. 5. Section 586 of the Political Code [shall] be amended so as to read as follows:

Section 586. Whenever a serious or fatal accident occurs in any mine it is the duty of the person in charge thereof to immediately notify the inspector of mines or the deputy inspector, and upon receiving such notice the inspector in person or the deputy inspector must at once repair to the place of accident, and investigate fully the cause of such accident, and whenever possible to do so, the inspector or deputy inspector shall be present at the coroner's inquest held over the remains of the person or persons killed by such accident, and testify as to the cause thereof, and state whether, in his opinion, the accident was due to the negligence or mismanagement of the owner or person in charge.

If the inspector or deputy inspector can not be immediately present in case of a fatal or serious accident occurring, it is the duty of the owner or person in charge of the mine to have written statements made by those witnessing the same, and duly sworn to. In case no person was present at the time of the accident, then the verified statement of those first present after the accident must be taken, and such statement must be given to the inspector or the deputy inspector.

If after making such investigation the inspector deems the facts warrant it, he may prosecute criminally the owner, lessor, lessee, or agent of the mine in which such accident occurred.

SEC. 6. Section 589 of the Political Code [shall] be amended, so as to read as follows:

Section 589. The provisions of the article do not apply to mines in which less than five men are employed. But all owners, lessors, lessees, agents, or managers operating any metalliferous mine in this State in which five or more men are employed, shall report the same to the inspector of mines, state the name of the mine, the location of the same, the name of the company, person or persons owning or operating the same, post office address and number of men employed.

Approved March 6, 1903.

CHAPTER 102.—*Coercion of employees in choice of boarding houses.*

SECTION 1. It shall be unlawful for any person, firm company or corporation now operating, or who shall hereafter operate a boarding house in connection with their general business, either directly or through others, to compel an employee to board in such boarding house against his will.

SEC. 2. Any person, firm, company or corporation violating any of the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than one hundred dollars.

Approved, March 6, 1903.

CHAPTER 114.—*Hours of labor, etc., on irrigation works.*

SECTION 13. * * * In all contracts let under this act, eight hours shall constitute a day's work, and no Mongolian shall be employed thereon.

Approved, March 7, 1903.

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Employer and employee under the common law, by V. H. Olmsted and S. D. Fessenden.
- No. 2. The poor colonies of Holland, by J. Howard Gore, Ph. D.
The industrial revolution in Japan, by William Eleroy Curtis.
Notes concerning the money of the U. S. and other countries, by W. C. Hunt.
The wealth and receipts and expenses of the U. S., by W. M. Steuart.
- No. 3. Industrial communities: Coal Mining Co. of Anzin, by W. F. Willoughby.
- No. 4. Industrial communities: Coal Mining Co. of Blanz, by W. F. Willoughby.
The sweating system, by Henry White.
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- No. 6. Industrial communities: Familistère Society of Guise, by W. F. Willoughby.
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- No. 8. Conciliation and arbitration in the boot and shoe industry, by T. A. Carroll.
Railway relief departments, by Emory R. Johnson, Ph. D.
- No. 9. The padrone system and padrone banks, by John Koren.
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- No. 11. Workers at gainful occupations at censuses of 1870, 1880, and 1890, by W. C. Hunt.
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- No. 12. The inspection of factories and workshops in the U. S., by W. F. Willoughby.
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- No. 13. The anthracite mine laborers, by G. O. Virtue, Ph. D.
- No. 14. The Negroes of Farmville, Va.: A social study, by W. E. B. Du Bois, Ph. D.
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- No. 16. Alaskan gold fields and opportunities for capital and labor, by S. C. Dunham.
- No. 17. Brotherhood relief and insurance of railway employees, by E. R. Johnson.
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- No. 19. Alaskan gold fields and opportunities for capital and labor, by S. C. Dunham.
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- No. 20. Condition of railway labor in Europe, by Walter E. Weyl, Ph. D.
- No. 21. Pawnbroking in Europe and the United States, by W. R. Patterson, Ph. D.
- No. 22. Benefit features of American trade unions, by Edward W. Bemis, Ph. D.
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