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EDITOR,
CHAS. P. NEILL,
COMMISSIONER.

ASSOCIATE EDITORS,
G. W. W. HANGER,
CHAS. H. VERRILL, G. A. WEBER.

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COURSE OF WHOLESALE PRICES, 1890 TO 1904.

In Bulletin No. 39, the issue for March, 1902, data relating to wholesale prices for the period from 1890 to 1901 were presented; in Bulletin No. 45, the issue for March, 1903, this compilation was continued for the year 1902, and in Bulletin No. 51, the issue for March, 1904, this compilation was continued for the year 1903. In this Bulletin are presented the actual prices for 1904, and the relative prices for the fifteen years from 1890 to 1904.

As was explained in Bulletin No. 45, changes in the actual prices of single commodities may readily be seen by the inspection of a series of quotations covering a number of years, but in order to ascertain the changes in the general price level from year to year, the quotations for a number of commodities of a more or less dissimilar character must be examined and in some manner combined. The method quite generally adopted for this purpose by statisticians and economists is the use of what is commonly known as the index number or relative price.

Before proceeding to the discussion of the data which enter into the present compilation, it seems desirable to define the index number or relative price, and explain the various methods adopted in securing the same.

Briefly, an index number or relative price of any given article at any given date is the percentage which the price of that article at that date is of the price of the same article at a date or a period which has been selected as a base or standard. This base or standard varies in the different series of index numbers which have been presented to the public. In the London Economist's index numbers the average price for the years 1845 to 1850, inclusive, is taken as the base; in those calculated by Mr. Sauerbeck, and published in the Journal of the Royal

Statistical Society, the average for the eleven years 1867 to 1877 is taken; in Doctor Soetbeer's index numbers the average for the four years 1847 to 1850 is used, while in the United States Senate Finance Committee's statement of relative prices (Senate Report No. 1394, Fifty-second Congress, second session) the price for the year 1860 is taken as the base or standard. In order to secure the index number or relative price for any article at any date in the period covered, the price of the article for that date is divided by the price at the date or by the average price for the period selected as the base. The quotient thus obtained multiplied by 100 is the per cent that the price at that date is of the base or standard price, and is called the index number or relative price. For example, the percentage for flour in 1885 in Mr. Sauerbeck's series of index numbers is 63, meaning that the average price of flour in 1885 was 63 per cent of the average price of the same article during the base period (1867 to 1877). This base being always 100, a fall of 37 per cent is indicated.

These percentages having been made in the case of each separate article included in the particular scheme under consideration, and for each year of the period covered, a series of total index numbers or relative prices for each of the years covered is usually constructed by adding together the index numbers of all the articles for each year and dividing the result by the number of articles considered, thus securing an average of the same. This course has been followed by Sauerbeck, Soetbeer, the United States Senate Finance Committee, and some others. In the case of the London Economist index numbers, however, simply the sum of the index numbers of the individual articles is used. For example, the total of the index numbers for the base period (1845 to 1850) is 2,200, or the sum of the base figures (100) for the 22 articles considered, and the total of the percentages for 1873 is 2,947. These sums, however, may be readily reduced to the average form given in other series of index numbers by dividing each by 22, the number of articles considered. It will be seen, then, that the index numbers or relative prices for all the commodities combined do not represent averages of the actual prices of such dissimilar commodities as a loaf of bread, a pound of meat, a ton of pig iron, etc., but are averages of the index numbers or relative prices of the articles.

In the Bulletin for March, 1902 (No. 39), a history of the principal price indexes—those published by the London Economist, Palgrave, Sauerbeck, Soetbeer, the United States Senate Finance Committee, Commons, and Dun—was presented and need not be repeated here.

In the record of prices for the fifteen years, from 1890 to 1904, published by the Bureau of Labor, 249 series of quotations were secured for the entire period and an additional 12 for some portion of the period. No quotations are shown for imported tin plate since 1898, and no quotations are shown for Ashton's salt during 1904, which leaves

260 series of quotations for the years 1899 to 1903, and 259 series of quotations for the year 1904.

Although in the case of commodities of great importance more than one series of quotations have been used, in no case has an article of a particular description been represented by more than one series of quotations. For this reason the term "series of quotations" and "commodities" have been used interchangeably in the pages which follow. The actual prices from which the index numbers or relative prices, 1890 to 1901, were computed were shown in Table I, Bulletin 39, in detail; those from which the relative prices for 1902 were computed were shown in detail in Table I, Bulletin 45; those from which the the relative prices for 1903 were computed were shown in detail in Table I, Bulletin 51; and those from which the relative prices for 1904 were computed are shown in detail in Table I in this Bulletin. In securing these prices the effort has been made to include staple commodities only. In a number of instances it was found possible to secure prices for the same commodities that were included in the Report on Wholesale Prices, Wages, and Transportation, submitted by Mr. Aldrich from the Senate Committee on Finance, March 3, 1893. Many articles which were included in that report are no longer manufactured, or, if still manufactured, have ceased to be important factors in the market. On the other hand, a number of articles not shown in that report have become of such importance as to render necessary their inclusion in any study of the course of prices.

The commodities covered in 1904 by the 259 series of quotations have been classified under 9 general groups, as follows:

- Farm products, 16 series of quotations.
- Food, etc., 53 series of quotations.
- Cloths and clothing, 76 series of quotations.
- Fuel and lighting, 13 series of quotations.
- Metals and implements, 38 series of quotations.
- Lumber and building materials, 27 series of quotations.
- Drugs and chemicals, 9 series of quotations.
- House furnishing goods, 14 series of quotations.
- Miscellaneous, 13 series of quotations.

The further description of the kind of prices quoted, the source of these quotations, the market for which they were secured, their frequency, etc., will be taken up in connection with the discussion of Table I, which follows:

Table I.—Wholesale prices of commodities in 1904, pages 437 to 487. This table shows in detail the actual prices from which the subsequent tables of index numbers are calculated. As stated previously, the 259 series of quotations have been classified under 9 groups of commodities, and this grouping has been uniformly adhered to in the several tables which are given.

The prices quoted in every instance are wholesale prices. Whole-

sale prices have invariably been used in compilations which have been made for the purpose of showing changes in the general price level of all commodities. They are more sensitive than retail prices and more quickly reflect changes in conditions. Retail prices usually follow the wholesale, but not generally in the same proportion. The margin between them in the case of some commodities is so great that slight changes in the wholesale price do not affect the retail. Changes in the wholesale price which last for a short time only do not usually result in corresponding changes in the retail price.

The net cash prices are shown for textiles and all articles whose list prices are subject to large and varying discounts. In the case of a number of articles, such as white pine, nails, etc., however, whose prices are subject to a small discount for cash, no deduction has been made.

The prices have been collected from the best available sources, such as standard trade journals, officials of boards of trade, chambers of commerce, and produce exchanges, and leading manufacturers or their selling agents.

The prices quoted are usually the prices in the New York market, except for such articles as have their primary market in some other locality. For grains, live stock, etc., for example, Chicago prices are quoted; for fish, except salmon, Boston prices; for tar, Wilmington, N. C., prices; for white pine, Buffalo prices; for Elgin creamery butter, Elgin, Ill., prices, etc. The prices for textiles are the prices in the general distributing markets, such as New York, Boston, and Philadelphia; and where no market is mentioned in the prefatory note to Table I, it should be understood that the prices are for the general market.

The following table shows the different markets and the number of articles quoted for each market:

NUMBER OF COMMODITIES OR SERIES OF QUOTATIONS IN 1904, CLASSIFIED BY MARKETS FOR WHICH SECURED.

Market.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and imple-ments.	Lum-ber and build-ing materials.	Drugs and chem-icals.	House fur-nishing goods.	Mis-cella-neous.	Total.
New York.....	2	43	2	9	21	21	9	6	12	125
Chicago.....	14	5			1					20
Factory, mine, wells, etc..				3	1	1		3		8
Pittsburg.....					7					7
Buffalo.....						4				4
Philadelphia.....					4					4
Boston.....		3								3
Trenton, N. J.....								3		3
Cincinnati.....				1	1					2
Eastern markets (Balt., Boston, N. Y., Phila.)...			2							2
Elgin, Ill.....		1								1
Lasalle, Ill.....					1					1
Peoria, Ill.....									1	1
Washington, D. C.....		1								1
Wilmington, N. C.....						1				1
General market.....			72		2			2		76
Total.....	16	53	76	13	38	27	9	14	13	259

As regards the description of the commodity, it should be stated that the greatest care has been taken to secure prices throughout the period from 1890 to 1904 for a commodity of precisely the same description. Changes in quality are, of course, reflected in prices, and for this reason note has been made of any important changes which have occurred. In the case of certain commodities, such as butter, eggs, etc., prices for the best quality have invariably been taken in order to avoid frequent changes in grade. It should also be stated in this connection that in the case of commodities for which prices were secured from the Oil, Paint, and Drug Reporter the lowest quotations were invariably taken where a range of prices was found because of the fact that these represent the prices of large lots, while the high quotations represent the prices of smaller lots.

Weekly quotations have been secured in the case of all articles which are subject to frequent fluctuations in price, such as butter, cheese, eggs, grain, live stock, meats, etc. In the case of articles whose prices are more stable, monthly or annual quotations have been taken. The following table shows the number of series of weekly, monthly, and annual price quotations:

NUMBER OF COMMODITIES OR SERIES OF QUOTATIONS, CLASSIFIED AS TO THEIR FREQUENCY OF QUOTATION IN 1904.

Frequency of quotation.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and implements.	Lumber and building materials.	Drugs and chemicals.	House furnishing goods.	Miscellaneous.	Total
Weekly	13	22	1	1	.....	.....	.....	.....	1	38
Monthly	3	31	64	12	38	27	9	14	12	210
Annually .....	.....	.....	11	.....	.....	.....	.....	.....	.....	11
Total	16	53	76	13	38	27	9	14	13	259

The character of each series of quotations as regards frequency is shown in all cases in Table I in a prefatory note which states fully the date of the quotations and, if weekly, whether the quotations are for some particular day of the week, the average for the week, or the range for the week. The majority of the weekly quotations show the price on Tuesday, and if for any reason Tuesday's price was not obtainable, the first price in the week has been taken. The quotations from trade and other journals, when credited to the first of each month, are not in all instances the price for the exact day stated, as it is a common practice of the daily papers which make a specialty of market reports to devote certain days to the review of the market of certain articles. For example, the Boston Herald quotes fish on Saturday only. The prices are, however, the earliest prices quoted in the journal to which the article is credited. It should also be stated that the monthly prices credited to weekly publications are the earliest quotations shown in such publications for each month.

The weight of a loaf of bread is, in some localities, regulated by

statute, while in many others the price per loaf is not affected by changes in the price of flour, yet the weight of the loaf is changed from time to time. During 1904, with the advance in the price of flour, the weight of the loaf has in some cities been decreased. For this reason the relative prices of bread are computed on the price per pound and not per loaf. Table I shows the price per loaf, the price per pound, and the weight each month during 1904.

The average price for the year was obtained by dividing the sum of the quotations for a given commodity by the number of quotations shown. For example, the sum of the Tuesdays' prices of cotton for 1904 (shown in Table I) was \$6.2920, and the number of quotations 52. The former figure divided by the latter gives \$0.1210 as the average price for the year. Where a range was shown the mean price for each date was found, and this was used in computing the yearly average. The average yearly price of all articles was computed as above described. The reader will understand that, in order to secure for any commodity a strictly scientific average price for the year, one must know the quantity marketed and the price for which each unit of quantity was sold. It is manifestly impossible to secure such detail, and even were it possible the work of compilation would be much greater than the results would justify. It is believed that the method adopted here, which is also that used in the construction of other index numbers, secures results which are quite as valuable for all practical purposes.

An examination of Table I in the present Bulletin, in connection with Table I in Bulletin Nos. 39, 45, and 51, shows that the prices of some of the commodities included in these index numbers were subject to frequent and decided fluctuations, while the prices of others were almost, and in two cases altogether, uniform throughout the period. The following table shows the lowest and highest quotations and the dates of the same for each of the commodities during the fifteen-year period. Only the commodities for which the quotations throughout the period have been for practically the same description of article are included in this table:

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904.

[For a more detailed description of the articles see Table I, page 437 et seq.]

FARM PRODUCTS.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Barley: by sample.....	3d week Aug 1896	\$0.18½ - \$0.35	4th week Oct 1890	\$0.58 - \$0.81	Bushel
Cattle: steers, choice to extra.	4th week Apr 1896.	3.85 - 4.25	3d, 4th Tues Aug, 1st Tues Sept 1902.	7.60 - 9.00	100 lbs
Cattle: steers, good to choice.	2d Tues Jan 1890	3.00 - 3.90	2d, 3d, 4th Tues Aug, 1st, 2d Tues Sept 1902.	6.70 - 7.60	100 lbs

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

FARM PRODUCTS—Concluded.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Corn: No. 2, cash.....	2d Tues Sept 1896	\$0.19½ - \$0.20	5th Tues May 1892.	\$0.48½ - \$1.00	Bushel
Cotton: upland, middling..	1st Tues Feb, 1st, 2d Tues Nov 1898.	.05½	1st Tues Feb 1904.	.16½	Pound
Flaxseed: No. 1.....	Sept 1896.....	.63½ - .64	July 1901.....	1.88	Bushel
Hay: timothy, No. 1.....	3d, 4th Tues July 1898.	6.50 - 8.00	3d Tues Apr 1891	15.50 - 16.50	Ton
Hides: green, salted, packers, heavy native steers.	June 1894.....	.0500 - .0513	Sept 1902.....	.1491	Pound
Hogs: heavy.....	4th Tues July 1896.	2.50 - 3.15	2d Tues Feb 1893	8.10 - 8.65	100 lbs
Hogs: light.....	3d Tues Sept 1896	2.80 - 3.35	2d Tues Feb 1893	7.90 - 8.25	100 lbs
Hops: N. Y. State, choice...	Sept 1896.....	.06 - .07	Nov 1890.....	.45 - .47	Pound
Oats: cash.....	2d Tues Sept 1896	.14½	4th Tues July 1902	.63½ - .64	Bushel
Rye: No. 2, cash.....	5th Tues June 1896.	.28½	3d Tues Aug 1891	.97 - 1.00	Bushel
Sheep: native.....	5th Tues Oct 1894	.75 - 3.25	4th Tues Mar 1903.	4.50 - 7.00	100 lbs
Sheep: Western.....	5th Tues Aug 1893.	1.00 - 3.00	5th Tues Mar 1903.	3.50 - 7.00	100 lbs
Wheat: contract grades, cash.	5th Tues Jan 1895	.48½ - .49½	2d Tues May 1893	1.73 - 1.85	Bushel

FOOD, ETC.

Beans: medium, choice.....	Apr 1897.....	\$0.85	Sept 1901.....	\$2.75	Bushel
Bread: crackers, Boston X.	May, June 1897.	.05	June 1893, July 1900 to July 1903, Apr to Dec 1904.	.08	Pound
Bread: crackers, soda.....	May to Dec 1897.	.05½	June 1893.....	.06½	Pound
Bread: loaf (Wash. market).	May to July 1895	.0267	Aug 1896, Nov 1904.	.0444	Pound
Bread: loaf, homemade (N. Y. market).	Jan to May 1896.	.0240	Oct to Dec 1904.	.0376	Pound
Bread: loaf, Vienna (N. Y. market).	Jan to May 1896.	.0267	Oct to Dec 1904.	.0400	Pound
Butter: creamery, Elgin (Elgin market).	1st Mon June 1890.	\$0.13½ - .14	1st Mon Mar 1891.	\$0.34 - .35½	Pound
Butter: creamery, extra (N. Y. market).	2d Tues June 1890.	.13½ - .14	2d Tues Mar 1891.	.35 - .36½	Pound
Butter: dairy, N. Y. State..	3d Tues Apr 1896	.13 - .13½	2d Tues Mar 1891.	.38	Pound
Cheese: N. Y. State, full cream.	3d Tues May 1895	.06 - .06½	4th Tues Mar to 4th Tues Apr 1903.	.14½ - .14½	Pound
Coffee: Rio No. 7.....	May, June, Aug, Sept 1903.	.05½ - .05½	Oct 1890.....	.18½ - .19	Pound
Eggs: new-laid, fancy, near-by.	1st Tues Apr 1897	.10½ - .10½	1st Tues Jan 1904.	.38 - .47	Dozen
Fish: cod, dry, bank, large.	Mar to Sept 1896, Aug 1897.	4.00 - 4.25	Feb, Mar 1892, Mar 1904.	7.75 - 8.00	Quintal
Fish: herring, shore, round.	May to Aug 1892.	2.00 - 2.25	Oct to Dec 1904.	6.00	Barrel
Fish: mackerel, salt, large No. 3s.	June 1897.....	8.00 - 9.00	Sept, Oct 1890...	20.00	Barrel
Fish: salmon, canned.....	Apr 1898.....	1.10 - 1.30	Mar 1890.....	1.75 - 2.00	12 cans
Flour: buckwheat.....	Apr 1897.....	1.00 - 1.15	Sept 1891.....	3.50 - 3.65	100 lbs
Flour: rye.....	July 1897.....	2.00 - 2.40	Nov 1891.....	5.15 - 5.90	Barrel
Flour: wheat, spring patents.	1st Tues Nov 1894	3.15 - 3.40	2d Tues May 1898.	7.00 - 7.75	Barrel
Flour: wheat, winter straights.	2d Tues Oct to 1st Tues Nov 1894.	2.40 - 2.65	2d Tues May 1898.	6.25 - 6.75	Barrel
Fruit: apples, evaporated, choice.	Apr 1897.....	.03½ - .03½	Feb 1891.....	.14½ - .15½	Pound
Fruit: apples, sun-dried, Southern, sliced.	May 1897.....	.01½ - .02½	May 1891.....	.11 - .13	Pound
Fruit: currants, in barrels..	Apr, May 1894..	.01½ - .01½	Oct 1900.....	.12 - .12½	Pound
Fruit: prunes, California, in boxes.	June 1897.....	.04 - .04½	Oct 1890.....	.12½ - .13	Pound
Fruit: raisins, California, London layer.	Apr 1896.....	.80 - .90	Jan 1890.....	2.25 - 2.75	Box

a Before baking.

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

FOOD, ETC.—Concluded.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Glucose: 41° and 42° mixing.	June 1897.....	\$0.92½	June 1902.....	\$2.32	100 lbs
Lard: prime contract	4th Tues July 1896.	.0340	3d Tues Feb 1893.	.1815	Pound
Meal: corn, fine white	Sept 1896	\$0.63 - .65	May 1891	1.69	100 lbs
Meal: corn, fine yellow	Sept 1896	.62 - .63	May 1891	\$1.67 - 1.68	100 lbs
Meat: bacon, short clear sides.	4th Tues July, 1st Tues Aug 1896.	.04 - .04½	3d, 4th Tues Oct 1902.	.12½ - .12½	Pound
Meat: bacon, short rib sides.	4th Tues July, 1st Tues Aug, all Sept 1896.	.03½ - .04	4th Tues May 1893, 3d, 4th Tues Oct 1902.	.12 - .12½	Pound
Meat: beef, fresh, native sides.	4th Tues Mar 1894.	.05 - .07	2d, 3d, 4th, 5th Tues July 1902.	.09 - .12½	Pound
Meat: beef, salt, extra mess.	2d, 3d, 4th weeks Aug 1892.	6.00 - 6.50	3d week May to 2d week June 1902.	14.00	Barrel
Meat: beef, salt, hams, Western.	4th Tues Oct 1890, 2d Tues Nov 1891, 3d Tues Oct 1892.	12.00 - 12.50	1st Tues Aug 1899.	27.50 - 29.00	Barrel
Meat: hams, smoked.....	3d, 4th Tues Sept, 1st Tues Oct 1898.	.07½ - .07½	4th, 5th Tues Jan 1893.	.15 - .16	Pound
Meat: mutton, dressed.....	5th Tues Oct 1895.	.03 - .06	1st, 2d Tues May 1891, 4th Tues May 1892.	.10½ - .12	Pound
Meat: pork, salt, mess, old to new.	4th Tues July, 3d Tues Sept 1896.	7.50 - 8.00	5th Tues May 1893.	21.50 - 22.50	Barrel
Milk: fresh.....	June 1897, June 1898.	.0175	Dec 1902, Dec 1904.	.0375	Quart
Molasses: New Orleans, open kettle, prime.	June, July 1897.	.23 - .24	Jan to July 1900.	.44 - .55	Gallon
Rice: domestic, choice.....	Sept to Dec 1904.	.03½ - .04	Aug to Nov 1891.	.03½ - .07	Pound
Salt: American.....	3d week Aug 1896 to 3d week Feb 1897, 1st, 2d, 3d weeks Oct 1898, 1st week May to 5th week Sept 1899, 1st week June to 2d week July 1903.	.55	1st week Nov 1900 to 1st week Apr 1901.	1.15	Barrel
Soda: bicarbonate of, American.	Oct, Nov 1901, June to Aug 1902.	.0095	Apr 1890, Mar to June 1891.	.0300	Pound
Spices: nutmegs.....	Aug to Oct 1902.	.18½ - .19½	Mar 1890.....	.64 - .65	Pound
Spices: pepper, Singapore.	Feb 1895, Jan, Feb 1896.	.04½ - .04½	Nov 1900.....	.13½ - .13½	Pound
Starch: pure corn	July 1901	.04	Nov, Dec 1890...	.06½	Pound
Sugar: 89° fair refining.....	4th Thurs Apr, 1st Thurs May 1894.	.02310	1st, 2d Thurs Sept, 2d, 3d, 4th Thurs Oct 1890.	.05311	Pound
Sugar: 96° centrifugal.....	1st Thurs Jan, 3d Thurs Apr, 4th Thurs May 1894.	.02750	1st, 2d Thurs Sept 1890.	.05921	Pound
Sugar: granulated.....	1st, 2d Thurs Feb 1895.	.06680	1st Thurs June 1890.	.06615 - .06676	Pound
Tallow	4th Tues May 1897.	.02½ - .03	3d Tues Feb 1893	.08½	Pound
Tea: Formosa, fine.....	Oct 1903	.20 - .21	Sept 1890	.33 - .35	Pound
Vegetables, fresh: onions.	May 1896	.50 - 1.00	Feb 1890	5.00 - 10.00	Barrel
Vegetables, fresh: potatoes, Burbank.	3d week May, 3d, 4th weeks June 1896.	.10 - .15	2d week June 1891.	1.10 - 1.35	Bushel
Vinegar: cider, Monarch...	Oct 1895 to Sept 1898, July 1900 to Sept 1901, Nov 1902 to Sept 1904.	.13	Nov 1890 to May 1892.	.18	Gallon

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

CLOTHS AND CLOTHING.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Bags: 2-bushel, Amoskeag..	Jan to Mar 1895.	\$0.10 $\frac{1}{4}$	Apr to July 1904.	\$0.18 $\frac{1}{4}$	Bag
Blankets: 11-4, 5 lbs. to the pair, all wool.	1895 to 1897	.75	1903, 1904.....	.92 $\frac{1}{4}$	Pound
Blankets: 11-4, 5 lbs. to the pair, cotton warp, all wool filling.	1895.....	.54	1900.....	.75	Pound
Blankets: 11-4, 5 lbs. to the pair, cotton warp, cotton and wool filling.	1895, 1896.....	.40	1900, 1904.....	.52 $\frac{1}{4}$	Pound
Boots and shoes: men's brogans, split.	Jan to June 1898.	.90	Jan 1890 to June 1892, July to Sept 1895.	1.05	Pair
Boots and shoes: men's calf bal. shoes, Goodyear welt, dongola top.	July 1898 to Dec 1900.	2.24	Jan 1890 to June 1898.	2.40	Pair
Boots and shoes: men's split boots, kip top, 16-in., $\frac{1}{4}$ double sole. (a)	Jan to Dec 1895.	15.00	Oct to Dec 1901, Nov, Dec 1904.	19.00	12 pairs
Boots and shoes: men's vici kid shoes, Goodyear welt.	Jan 1897 to Oct 1904.	2.00	Jan 1890 to Dec 1894.	2.50	Pair
Boots and shoes: women's solid grain shoes, leather, polish or polka.	Jan 1898 to Dec 1894.	.75	Oct to Dec 1904..	.95	Pair
Broadcloths: first quality, black, 54-in., made from XXX wool.	Jan 1895 to Dec 1896.	1.38	Jan 1890 to Dec 1893.	1.97	Yard
Calico: Cochecho prints	Jan 1898 to June 1899.	.045	Jan to Dec 1890, Jan 1892 to June 1893.	.065	Yard
Carpets: Brussels, 5-frame, Bigelow.	Jan 1894 to June 1897.	.986	Jan 1891 to Mar 1892.	1.128	Yard
Carpets: ingrain, 2-ply, Lowell.	July 1895 to June 1897.	.408	Jan to Dec 1891.	.552	Yard
Carpets: Wilton, 5-frame, Bigelow.	Jan 1895 to June 1897.	1.68	May 1903 to Dec 1904.	2.04	Yard
Cotton flannels: 2 $\frac{1}{4}$ yds. to the pound.	Jan 1897 to Dec 1898.	.05 $\frac{1}{4}$	Jan to Apr 1904.	.09 $\frac{1}{4}$	Yard
Cotton flannels: 3 $\frac{1}{4}$ yds. to the pound.	Jan to Dec 1898	.04 $\frac{1}{4}$	Jan to Apr 1904.	.07 $\frac{1}{4}$	Yard
Cotton thread: 6-cord, 200-yd. spools, J. & P. Coats.	July 1896 to Dec 1899.	.030508	Jan 1900 to Dec 1904.	.037240	Spool
Cotton yarns: carded, white, mule-spun, Northern, cones, 10/l.	Dec 1898 to June 1899.	.13 $\frac{1}{4}$	Feb 1904	.24 $\frac{1}{4}$	Pound
Cotton yarns: carded, white, mule-spun, Northern, cones, 22/l.	Dec 1898 to Mar 1899.	.16 $\frac{1}{4}$	Feb 1904	.27	Pound
Denims: Amoskeag	Jan to Mar 1899.	.08 $\frac{1}{4}$	Feb to June, 1904.	.13	Yard
Drillings: brown, Pepperell.	Nov 1898 to Jan 1899.	.04 $\frac{1}{4}$	Mar, Apr 1904....	.08	Yard
Drillings: 30-in., Stark A...	Feb 1898	.0410	Feb 1904	.0726	Yard
Flannels: white, 4-4, Ballard Vale No. 3.	Aug, Sept 1896..	.29	July 1903 to Dec 1904.	.44 $\frac{1}{4}$	Yard
Ginghams: Amoskeag	Apr to June 1895, July to Sept 1896, Apr to Sept 1897, Jan to Mar, July to Dec 1898.	.0425	Jan 1891 to Mar 1893.	.0650	Yard
Ginghams: Lancaster	Feb to May 1895, June to Aug 1896.	.04 $\frac{1}{4}$	May 1890 to Mar 1893.	.07	Yard
Horse blankets: 6lbs. each, all wool.	1896.....	.52	1904.....	.70	Pound
Hosiery: men's cotton half hose, seamless, standard quality, 84 needles.	1899.....	.62 $\frac{1}{4}$	1890, 1891.....	.97 $\frac{1}{4}$	12 pairs
Hosiery: women's combed Egyptian cotton hose, high spliced heel, double sole, full-fashioned.	1899.....	1.75	1901.....	2.00	12 pairs
Hosiery: women's cotton hose, seamless, fast black, 26 to 28 oz., 160 to 176 needles.	1901.....	.6615	1890	1.2250	12 pairs

(a) In 1903 and 1904, russet bound top, 17-inch, $\frac{1}{4}$ double sole.

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

CLOTHS AND CLOTHING—Continued.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Leather: sole, hemlock, nonacid, Buenos Ayres, middle weights, 1st quality.	May 1892	\$0. 16	Apr, May 1900....	\$0.26 - \$0. 27	Pound
Leather: sole, oak.....	Sept to Nov 1896, June 1897.	\$0.28 - .29	Mar 1903.....	.39 - .40	Pound
Leather: wax calf, 30 to 40 lbs. to the doz., B grade.	Jan to June 1890, Feb, June 1891, Aug 1894 to Jan 1895, Sept, Oct 1896, Apr, June 1897.	.55 - .60	July to Nov 1895.	.80 - .85	Sq foot
Linen shoe thread: 10s, Barbour.	Jan 1903 to Nov 1904.	.8460	Nov 1893 to Sept 1894.	.9405	Pound
Linen thread: 3-cord, 200-yard spools, Barbour.	Apr to Dec 1891.	.7623	Jan 1890 to Mar 1891, Aug 1897 to Dec 1902.	.8910	12 spools
Overcoatings: beaver, Moscow, all wool, black.	1895 to 1897	1.7670	1900.....	2.4994	Yard
Overcoatings: chinchilla, B-rough, all wool.	1895 to 1897	1.8774	1900.....	2.4994	Yard
Overcoatings: chinchilla, cotton warp, C. C. grade.	Nov 1896.....	.41	Oct 1892, June, Sept 1893.	.55	Yard
Overcoatings: covert cloth, light weight, staple goods.	1897.....	1.9458	1890 to 1893	2.4616	Yard
Overcoatings: kersey, standard, 27 to 28 oz.	Jan to May 1897.	1.00	Sept to Dec 1904.	1.70	Yard
Print cloths: 28-in., 64x64 ..	2d week May 1898.	.01875	2d week Dec 1892.	.04063	Yard
Shawls: standard, all wool, 72x144 in., 42-oz., made of high-grade wool.	Jan 1896 to Nov 1897, Apr 1898 to Dec 1899.	4.08	Jan 1890 to Dec 1895, Jan 1900 to Dec 1904.	4.90	Each
Sheetings: bleached, 10-4, Atlantic.	Nov 1893.....	.1402	Feb 1904	.2910	Yard
Sheetings: bleached, 10-4, Pepperell.	Apr, May 1895 ..	.154	Feb to June 1904.	.26	Yard
Sheetings: bleached, 10-4, Wamsutta S. T.	Apr 1894 to Nov 1895, May to Dec 1904.	.270	Oct 1890 to Jan 1891.	.329	Yard
Sheetings: brown, 4-4, Atlantic A.	Dec 1898	.0421	Apr to June 1904.	.0783	Yard
Sheetings: brown, 4-4, Indian Head.	June 1898, Jan 1899.	.05	Mar to June 1904.	.08½	Yard
Sheetings: brown, 4-4, Pepperell R.	Apr, Nov, Dec 1898.	.0450	Mar to June 1904.	.0725	Yard
Shirtings: bleached, 4-4, Fruit of the Loom.	Dec 1898	.0538	Feb to June 1904.	.0863	Yard
Shirtings: bleached, 4-4, Hope.	Dec 1898	.0475	June 1890 to Jan 1891, Feb to June 1904.	.0736	Yard
Shirtings: bleached, 4-4, Lonsdale.	Dec 1898	.0523	June 1890 to Jan 1891, Dec 1892 to June 1893.	.0855	Yard
Shirtings: bleached, 4-4, N. Y. Mills.	Mar to Nov 1899.	.0711	May 1890 to June 1891.	.0976	Yard
Shirtings: bleached, 4-4, Wamsutta & Co.	Dec 1897 to Jan 1899.	.0807	June 1890 to June 1891, Apr to July 1893.	.1021	Yard
Silk: raw, Italian, classical.	June 1894	3.4328-3.4825	Apr, May 1893 ..	5.7213-5.8456	Pound
Silk: raw, Japan, flatures.	Aug 1896.....	2.9100-3.3950	Feb 1890, Dec 1899.	5.3350-5.5775	Pound
Suitings: clay worsted diagonal, 12-oz., Washington Mills.	Feb to Apr 1897.	.6370	Nov 1899.....	1.2012	Yard
Suitings: clay worsted diagonal, 16-oz., Washington Mills.	Feb to Apr 1897.	.7963	Jan 1900	1.4625	Yard
Suitings: indigo blue, all wool, 54-inch, 14-oz., Middlesex standard.	Jan to Dec 1897.	1.0465	Jan 1890 to June 1893.	1.5470	Yard
Suitings: indigo blue, all wool, 16-oz.	1895.....	1.5903	1900.....	2.2061	Yard
Suitings: serge, Washington Mills 6700.	Jan 1896 to Aug 1897.	.6143	Oct, Nov 1899...	.9328	Yard
Tickings: Amoskeag A. C. A.	Oct to Dec 1898 ..	.08½	Apr to June 1904.	.13½	Yard

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

CLOTHS AND CLOTHING—Concluded.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Underwear: shirts and drawers, white, all wool, full-fashioned, 13-gauge.	Jan 1894 to Dec 1898.	\$21.60	Jan 1891 to Dec 1893.	\$25.65	12 garments
Women's dress goods: alpaca, cotton warp, 22-in., Hamilton.	Jan 1895 to July 1899.	.0637	Sept to Dec 1904.	.0633	Yard
Women's dress goods: cashmere, all wool, 10-11 twill, 38-in., Atlantic Mills J.	Jan to Dec 1896	.1960	Apr 1891 to Dec 1892, June to Aug 1900.	.3724	Yard
Women's dress goods: cashmere, cotton warp, 9-twill, 4-4, Atlantic Mills F.	Oct 1895 to May 1896.	.1127	Jan 1890 to Dec 1891, July to Dec 1892, Nov, Dec 1904.	.1813	Yard
Women's dress goods: cashmere, cotton warp, 22-in., Hamilton.	July 1896 to July 1899.	.0686	Oct to Dec 1904..	.0882	Yard
Women's dress goods: cashmere, cotton warp, 27-in., Hamilton.	Oct 1896 to Mar 1899.	.0784	Sept to Dec 1904	.1029	Yard
Women's dress goods: Franklin sackings, 6-4.	July 1896 to July 1897.	.40‡	June to Sept 1900.	.66‡	Yard
Wool: Ohio, fine fleece (X and XX grade), scoured.	June 1895.....	.3478	Dec 1899 to Feb. 1900.	.7609	Pound
Wool: Ohio, medium fleece (‡ and § grade), scoured.	June 1895, June to Sept 1896.	.2903	June, July, Aug, Nov 1890.	.6210	Pound
Worsted yarns: 2-40s, Australian fine.	Nov 1895 to Mar 1896, Oct to Dec 1896.	.72	Nov 1889 to Apr 1900.	1.90	Pound
Worsted yarns: 2-40s, XXX or its equivalent in quality, white, in skeins. (a)	Oct 1896 to Feb 1897.	.70	Jan, Feb 1900...	1.35	Pound

FUEL AND LIGHTING.

Candles: adamantine, 6s, 14-oz.	June 1897 to Jan 1900.	\$0.06‡	Feb 1900 to June 1903.	\$0.11	Pound
Coal: anthracite, broken...	June 1899 to Aug 1899.	3.111	Aug 1903.....	4.4744	Ton
Coal: anthracite, chestnut.	Sept 1895.....	2.701	Jan 1904.....	4.958	Ton
Coal: anthracite, egg.....	Sept 1895.....	2.827	Jan 1904.....	4.9725	Ton
Coal: anthracite, stove.....	Aug 1895.....	2.891	Jan 1904.....	4.9614	Ton
Coal: bituminous, Georges Creek (at mine).	Apr to July 1894, Jan to June 1895, Jan to Mar 1896.	.75	Oct 1902.....	5.00	Ton
Coal: bituminous, Georges Creek (f. o. b. N. Y. Harbor).	Apr 1898 to Mar 1899.	2.10	Oct 1902.....	8.25	Ton
Coal: bituminous, Pittsburg (Youghiogheny).	2d Tues Mar to 1st Tues Apr 1899.	\$0.04‡-.04‡	3d, 4th Tues Nov 1891.	.11	[Bushel
Coke: Connellsville, furnace.	Apr, May 1894..	.92	Mar, Apr 1900...	\$3.25-4.25	Ton
Matches: parlor, domestic..	Sept 1894 to Mar 1895, May 1902 to Dec 1904.	1.50	Jan to Oct 1890..	2.00	144 boxes.
Petroleum: crude.....	Oct 1892.....	.51‡	Dec 1903.....	1.88‡	Barrel
Petroleum: refined, for export.	May 1893.....	.051	Jan to Mar 1900.	.099	Gallon
Petroleum: refined, 150° fire test, water white.	Feb, Mar 1893...	.07‡	Nov 1903 to Feb 1904.	.15	Gallon

METALS AND IMPLEMENTS.

Augers: extra, 4-in.....	Oct 1894 to Apr 1896, Feb 1899.	\$0.1333	Jan to Dec 1904..	\$0.24	Each
Axes: M. C. O., Yankee.....	Oct 1897 to Dec 1898.	.375	Apr to Dec 1904.	.605	Each
Bariron: best refined, from mill (Pittsburg market):	July 1897.....	.0095	Oct 1899.....	.0260	Pound

a From 1902 to 1904 designated as XXXX.

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

METALS AND IMPLEMENTS—Concluded.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Bar iron: best refined, from store (Philadelphia market).	Nov 1894, Jan, Feb 1895.	\$0.012	Sept 1899 to Jan 1900.	\$0.025	Pound
Barb wire: galvanized.....	Aug 1897.....	1.65	Dec 1899 to Mar 1900.	4.13	100 lbs
Butts: loose joint, cast, 3x3 inch.	Feb to July 1895, June 1897 to Jan 1900.	.0292	Feb to May 1900.	.0430	Pair
Chisels: extra, socket firmer, 1-inch.	Apr 1894 to Dec 1895, Dec 1896 to Nov 1898.	.171	Jan to Dec 1904..	.300	Each
Copper: ingot, lake.....	June 1894.....	\$0.0890-.0900	May 1899.....	.1925	Pound
Copper: sheet, hot-rolled (base sizes).	Jan, Apr 1896...	.13½	July 1890.....	.25	Pound
Copper wire: bare.....	July 1894.....	.11	July, Oct 1890, Apr 1899.	.20	Pound
Doorknobs: steel, bronze plated.	Jan 1890 to Apr 1895, Mar 1896 to June 1900.	.1660	Feb to Nov 1904.	.25	Pair
Files: 8-inch mill bastard..	July 1896 to June 1897.	.77.	Nov 1899 to Aug 1900.	1.10	Dozen
Hammers: Maydole No. 1½.	Jan 1890 to Nov 1895.	.350	Jan 1903, Dec 1904.	.466	Each
Lead: pig.....	Sept 1896.....	.0273-.0275	Oct 1890.....	\$0.0538-.0540	Pound
Lead pipe.....	Nov 1896 to Jan 1897.	3.60	Oct to Dec 1890..	6.40	100 lbs
Locks: common mortise....	Jan 1898 to Apr 1902.	.075	Feb to Nov 1904.	.105	Each
Nails: cut, 8d., fence and common.	July to Sept 1898	1.15	May to Nov 1896.	2.90	100 lbs
Nails: wire, 8d., fence and common.	Dec 1896, Aug 1897, Aug, Dec 1898.	1.35	Jan, Feb 1890 ...	3.35- 3.40	100 lbs
Pig iron: Bessemer.....	July 1897.....	9.39	Dec 1899, Feb 1900.	25.00	Ton
Pig iron: foundry No. 1 ...	July 1898.....	11.25	Nov 1899 to Jan 1900.	25.00	Ton
Pig iron: foundry No. 2 ...	June 1897.....	9.40 - 9.50	Nov 1902.....	24.00-25.00	Ton
Pig iron: gray forge, Southern, coke.	May 1897.....	8.00	Jan 1903.....	20.75-21.25	Ton
Planes: Bailey No. 5.....	Mar 1895 to Dec 1899.	1.23	Jan 1903 to Dec 1901.	1.53	Each
Quicksilver.....	Jan to Mar 1894.	.45	Oct, Nov 1890 ...	.79	Pound
Saws: crosscut, Disston.....	Uniform during period.	1.6038	Uniform during period.	1.6038	Each
Saws: hand, Disston No. 7...	Jan 1891 to Dec 1904.	12.60	Jan to Dec 1890.	14.40	Dozen
Shovels: Ames No. 2.....	Jan 1894 to Mar 1896.	7.45	Apr to Nov 1902.	9.61	Dozen
Silver: bar, fine.....	Jan 1903.....	.48213	Aug 1890.....	1.16995	Ounce
Spelter: Western.....	Feb 1895.....	.0315-.0325	May 1899.....	.0695-.0700	Pound
Steel billets.....	May 1897.....	18.96	Sept, Oct 1899...	41.50	Ton
Steel rails.....	July, Nov 1898..	17.00	Jan 1890.....	35.25	Ton
Steel sheets: black, No. 27..	May 1897.....	.0180-.0185	Sept 1901.....	.0375	Pound
Tin: pig.....	Oct 1896.....	.1270	Mar 1900.....	.3425	Pound
Tin plates: domestic, Bessemer, coke, 14x20 inch.	Apr 1898.....	2.72½ - 2.77½	Dec 1899 to Sept 1900.	4.84	100 lbs
Trowels: M. C. O., brick, 10½-inch.	Uniform during period.	.34	Uniform during period.	.34	Each
Vises: solid box, 50-lb.....	July 1897 to Feb 1899.	3.28	Apr, May, Aug, Sept 1903.	5.75	Each
Wood screws: 1-in., No. 10, flat head.	Apr to Dec 1897.	.08	Jan 1892 to Mar 1894.	.21	Gross
Zinc: sheet.....	May 1894.....	3.56	June 1899.....	7.59	100 lbs

LUMBER AND BUILDING MATERIALS.

Brick: common domestic ..	Sept 1894, Sept 1900.	\$4.25	Jan, Feb 1904...	\$3.00-\$3.50	M
Carbonate of lead: American, in oil.	Feb 1894.....	.0483	Nov 1890 to Jan 1891	.0683	Pound
Cement: Portland, domestic.	Oct, Nov 1904...	\$1.25- 1.35	Apr 1900.....	2.20- 2.35	Barrel

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

LUMBER AND BUILDING MATERIALS—Concluded.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Cement: Rosendale	Nov 1898.....	\$0.60	Apr 1892	\$1.20-\$1.25	Barrel
Doors: pine	Last qr 1896, 1st 3 qrs 1897.	.80	Aug to Dec 1902..	2.25	Door
Hemlock	Nov 1894 to Jan 1895.	\$10.75-11.25	Mar to May 1900.	18.00	M feet
Lime: common.....	Sept to Dec 1896, July to Sept 1900.	.60	Jan to July, Oct to Nov 1890, Sept 1891, Sept 1892 to Apr 1893, May 1898.	1.00	Barrel
Linseed oil: raw	Feb, July 1897 ..	.29	July, Aug 1901..	.82	Gallon
Maple: hard.....	June to Sept 1901	24.00-27.00	June to Dec 1903.	32.00-34.00	M feet
Oak: white, plain	June to Aug 1901	32.00-34.00	June 1903 to Dec 1904.	45.00-48.00	M feet
Oak: white, quartered	Jan, Feb 1890...	47.00-48.00	Dec 1903 to July 1904.	80.00-85.00	M feet
Oxide of zinc.....	Jan to June 1895.	.0325	Jan to June 1900.	.0475	Pound
Pine: white, boards, No. 2 barn.	May 1897 to Jan 1899.	15.00-16.00	Apr 1902 to Dec 1903.	24.00	M feet
Pine: white, boards, uppers.	Jan to Nov 1890.	43.00-45.00	Jan to June 1904.	82.00	M feet
Pine: yellow	Jan to Apr 1896, June to Nov 1897.	15.50-16.00	Nov 1899 to May 1900.	21.00-23.00	M feet
Plate glass: polished, unsil- vered, area 3 to 5 sq. feet.	1897.....	.20	1890.....	.53	Sq. foot
Plate glass: polished, unsil- vered, area 5 to 10 sq. feet.	1897.....	.32	1890.....	.70	Sq. foot
Poplar.....	Sept 1897 to Jan 1899.	29.00-31.00	June 1903 to June 1904.	51.00-52.50	M feet
Putty.....	Oct, Nov 1904...	.0100	May 1902 to Mar 1903.	.0225	Pound
Resin: good, strained	Sept 1893.	1.00	June 1904.....	3.05	Barrel
Shingles: cypress.....	Jan to Dec 1897..	2.35	Jan to Dec 1890..	3.35	M
Spruce.....	July to Oct 1894.	11.50-12.50	Sept 1903 to Dec 1904.	19.50-21.50	M feet
Tar.....	Sept 1893, Dec 1893 to May 1894, Jan to Apr, June 1896, Apr 1898.	.90	Sept 1891, May 1904.	2.00	Barrel
Turpentine: spirits of	Aug, Sept 1896..	.24	Apr 1903	.67-.67½	Gallon
Window glass: American, single, firsts, 6x8 to 10x15 inch.	May to July 1895.	1.3894	Apr 1901	4.80	50sq.ft.
Window glass: American, single, thirds, 6x8 to 10x 15 inch.	July, Aug 1892..	1.2113	Apr 1901	3.8250	50sq.ft.

DRUGS AND CHEMICALS.

Alcohol: grain, 94%	Jan to May 1890.	\$1.98	Dec 1901	\$2.53	Gallon
Alcohol: wood, refined, 95%.	Sept to Dec 1903.	.50	Feb to Sept 1893.	1.40	Gallon
Alum: lump.....	Dec 1891 to Feb 1892.	.0145	Jan to June 1890.	.0188	Pound
Brimstone: crude, seconds..	Sept, Dec 1895, Feb, Mar 1896.	15.00	Apr 1891, May 1898.	35.00	Ton
Glycerin: refined.....	Aug 1894.....	.11½	Jan to Apr, June to Aug 1890.	.18	Pound
Muriatic acid: 20°	July 1895 to Dec 1896.	.0075	Nov 1901 to Apr 1902.	.0185	Pound
Opium: natural, in cases...	Aug 1892.....	1.50	Aug 1898.....	3.75	Pound
Quinine: American	Feb to July 1897..	.15	Apr 1899	.40	Ounce
Sulphuric acid: 66°	Nov 1890 to Mar 1891, Apr to Aug, Oct, Nov 1894, Jan 1895 to Nov 1896.	.007	Nov 1901 to Jan 1902.	.014	Pound

LOWEST AND HIGHEST QUOTATIONS, 1890 TO 1904—Concluded.

[For a more detailed description of the articles see Table I, page 437 et seq.]

HOUSE FURNISHING GOODS.

Article.	Lowest.		Highest.		Unit.
	Date.	Price.	Date.	Price.	
Earthenware: plates, cream-colored.	July 1895 to Dec 1897.	\$0.3807	Jan to Dec 1903.	\$0.4775	Dozen
Earthenware: plates, white granite.	July 1895 to Dec 1897.	.3991	Jan 1901 to Dec 1902.	.5096	Dozen
Earthenware: teacups and saucers, white granite.	July 1895 to Dec 1897.	3.0907	Jan 1901 to Dec 1902.	3.7632	Gross
Furniture: bedroom sets, ash	Jan 1896 to Dec 1897.	8.75	Mar 1903 to Dec 1904.	12.25	Set
Furniture: chairs, bedroom, maple.	Jan 1897 to Sept 1898.	5.00	Jan to Dec 1900, Mar 1903 to Dec 1904.	8.00	Dozen
Furniture: chairs, kitchen.	Jan to Sept 1898.	2.25	Jan to Nov 1900.	5.25	Dozen
Furniture: tables, kitchen.	Jan 1896 to June 1899.	13.80	Dec 1899 to Dec 1904.	15.60	Dozen
Glassware: nappies, 4-in ...	Jan 1896 to Dec 1900.	.10	Jan 1901 to Dec 1904.	.14	Dozen
Glassware: pitchers, $\frac{1}{2}$ -gallon, common.	Jan 1897 to Dec 1900.	1.00	Jan 1901 to Dec 1903.	1.30	Dozen
Glassware: tumblers, $\frac{1}{2}$ -pint, common.	Jan to Dec 1899.	.13	Jan to Dec 1891.	.20	Dozen
Table cutlery: carvers, stag handles.	1897 to 1901, Jan 1902 to Dec 1904.	.75	1893.....	.95	Pair
Table cutlery: knives and forks, cocobolo handles.	1897.....	5.00	1890, 1891.....	7.75	Gross
Wooden ware: pails, oak-grained.	Apr 1895 to Jan 1896, Feb to May 1898.	1.10	Oct 1903 to Dec 1904.	1.70	Dozen
Wooden ware: tubs, oak-grained.	Oct 1894 to Nov 1899.	1.25	Jan 1890 to Aug 1891.	1.65	Nest of 8

MISCELLANEOUS.

Cotton-seed meal.....	Feb 1895.....	\$16.00-\$17.00	Jan 1902.....	\$33.60	2,000 lbs
Cotton-seed oil: summer yellow, prime.	Nov, Dec 1897....	.21 $\frac{1}{2}$	Feb 1893.....	.61	Gallon
Jute: raw.....	Dec 1894, Mar, Apr, May 1896.	.02 $\frac{1}{2}$ - .03 $\frac{1}{2}$	Mar 1892.....	\$0.04 $\frac{1}{2}$ - .05 $\frac{1}{2}$	Pound
Malt: Western made.....	July 1897.....	.50 - .53	Apr to Aug 1891.	.95 -1.00	Bushel
Paper: news.....	Oct 1899.....	.0175 - .0200	Jan 1890.....	.0375 - .0450	Pound
Paper: wrapping, manila	Apr 1898.....	.0375 - .0400	Sept 1893.....	.0600 - .0675	Pound
Proof spirits.....	1st wk Jan to 3d wk May 1890.	1.03	1st wk Dec 1901 to 4th wk Jan 1902, 1st wk Sept to 3d wk Dec 1902.	1.32	Gallon
Rope: manila, $\frac{1}{2}$ -in (a).....	Aug, Sept 1896, Sept, Oct 1897.	.0591	Dec 1899.....	.1576	Pound
Rubber: Para Island.....	Sept 1891.....	.60 - .63	Dec 1904.....	1.26 -1.27	Pound
Soap: castile, mottled, pure.	May 1895 to Nov 1896, Mar 1897.	.06	Oct 1904.....	.07 $\frac{1}{2}$	Pound
Starch: laundry.....	Aug, Sept, Oct 1896.	.0275	Aug, Sept, Dec 1902, Jan 1903.	.0500	Pound
Tobacco: plug, Horseshoe..	July, Aug 1892, Oct 1896 to May 1897.	.36	July to Dec 1904.	.49	Pound
Tobacco: smoking, granulated, Seal of N. C.	Jan 1890 to June 1898.	.50	Aug to Dec 1904.	.60	Pound

a In 1903 and 1904, $\frac{1}{16}$ -inch.

In a number of instances the lowest or highest price, as shown in the foregoing table, lasted for only a short time, in some cases but a few days or even a part of a day. The groups of farm products and food, etc., show the widest variations. Good to choice steers varied from \$3.00-\$3.90 on the second Tuesday of January, 1890, to \$6.70-\$7.60 on the last three Tuesdays of August and the first two Tuesdays

of September, 1902. Corn ranged from 19½–20 cents the second Tuesday of September, 1896, to \$.48½–\$1.00 the fifth Tuesday of May, 1892, the high price being due to an attempt to corner corn in the Chicago market. The failure of those interested in the corner to take all corn offered at the high price, however, and the rumor that they had failed, resulted in a drop from \$1.00 to 48½ cents within a few hours. Cotton varied from 5½¢ cents on the first Tuesday of February and the first and second Tuesdays of November, 1898, to 16½ cents on the first Tuesday of February, 1904. Heavy hogs on the fourth Tuesday of July, 1896, were \$2.50–\$3.15 and on the second Tuesday of February, 1893, \$8.10–\$8.65. Hops ranged from 6–7 cents in September, 1895, to 45–47 cents in November, 1890. Oats ranged from 14½ cents on the second Tuesday of September, 1896, to 63½–64 cents on the fourth Tuesday of July, 1902. Native sheep ranged from \$.75–\$3.25 on the fifth Tuesday of October, 1894, to \$4.50–\$7.00 on the fourth Tuesday of March, 1903. Western sheep show a similar range. Wheat ranged from 48½–49½ cents the fifth Tuesday of January, 1895, to \$1.73–\$1.85 the second Tuesday of May, 1898. The high price is said to have been due to an attempt to control the price of that commodity and also, to some extent, to the war with Spain and the fear of other foreign complications. The most marked variations in the food group are in fresh vegetables, onions having varied from \$.50–\$1 in May, 1896, to \$5–\$10 in February, 1890, and potatoes from 10–15 cents the third week of May and the third and fourth weeks of June, 1896, to \$1.10–\$1.35 the second week of June, 1891. Currants and dried apples show wide variations. Eggs varied from 10½–10½ cents the first Tuesday of April, 1897, to 38–47 cents the first Tuesday of January, 1904. Lard also shows a wide variation. Almost all the articles in the food group show wide variations, which may be seen by referring to the foregoing table. In the cloths and clothing group the variations are not so marked, as the price of many of the articles in this group depends more largely upon the cost of labor in producing them. Print cloths varied from 1.875 cents the second week of May, 1898, to 4.063 cents the second week of December, 1892. Of the raw materials in this group wool, medium fleece, scoured, varied from 29.03 cents in June, 1895, and June to September, 1896, to 62.10 cents in June, July, August, and November, 1890. In the fuel and lighting group Youghiogheny coal varied from 4½–4½ cents (per bushel) in March and April, 1899, to 11 cents in November, 1891; coke from 92 cents in April and May, 1894, to \$3.25–\$4.25 in March and April, 1900; and petroleum, crude, from 51½ cents in October, 1892, to \$1.88½ in December, 1903. In the group of metals and implements best refined bar iron from mill varied from 0.95 cent (per pound) in July, 1897, to 2.60 cents in October, 1899; barb wire from \$1.65 in August, 1897, to \$4.13 in December, 1899, to

March, 1900; pig iron, foundry No. 2, from \$9.40-\$9.50 (per ton) in June, 1897, to \$24-\$25 in November, 1902; while bar silver varied from 48.213 cents in January, 1903, to \$1.16995 in August, 1890. In lumber and building materials, cement, doors, linseed oil, plate glass, resin, tar, turpentine, and window glass varied widely. In drugs and chemicals, wood alcohol shows the greatest variation—from 50 cents in September to December, 1903, to \$1.40 in February to September, 1893. In house furnishing goods, kitchen chairs were \$3.25 (per dozen) from January to September, 1898, and \$5.25 from January to November, 1900. In the miscellaneous group, cotton-seed meal, cotton-seed oil, newspaper, rope, and rubber show wide variations.

Owing to the unusual method of fixing the scale of prices of cut and wire nails and the difficulties encountered in securing satisfactory quotations of prices, it was thought best to enter into a somewhat lengthy explanation in Bulletin No. 39, and the reader is referred to pages 226 to 231 of that number.

The base prices of nails are the prices quoted by the trade, and while they could not be used, for reasons explained in Bulletin No. 39, in computing relative prices, they form the basis from which are calculated the actual prices for eight-penny nails as given in Table I, and therefore the base prices of both cut and wire nails during 1904 are given in the following table:

NAILS: CUT, BASE SIZES.

[Price per 100-pound keg, f. o. b. Pittsburg, on the first of each month; quotations from the Iron Age.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
January	\$1.90	April	\$1.75	July	\$1.75	October	\$1.60-\$1.65
February	1.70	May	1.75	August	1.75	November ..	1.60-1.65
March	1.70	June	1.75	September...	1.60-1.65	December...	1.70
						Average.	1.7188

NAILS: WIRE, BASE SIZES.

[Price per 100-pound keg, f. o. b. Pittsburg, on the first of each month; quotations from the Iron Age.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
January	\$1.85	April	\$1.90	July	\$1.90	October	\$1.60
February	1.90	May	1.90	August	1.90	November ..	1.60
March	1.90	June	1.90	September...	1.60	December...	1.70-1.75
						Average.	1.8063

In previous Bulletins quotations have been published for two descriptions of scoured wool, but in view of the fact that such a large proportion of the wool is now being marketed unwashed, monthly price quotations for a standard grade of unwashed wool have been secured.

For comparative purposes the quotations on the scoured basis are

continued in Table I. No relative prices were computed from the quotations of unwashed wool. It may be necessary at some future time to use these quotations in the index number, and it was considered advisable to secure them from year to year.

The quotations of actual prices of unwashed wool on the first of each month from 1890 to 1903 were shown in Bulletin 51 (page 237). The prices for 1904 follow:

WHOLESALE PRICES OF UNWASHED, OHIO, MEDIUM FLEECE WOOL (ONE-FOURTH AND THREE-EIGHTHS GRADE), 1904.

[Price per pound in the eastern markets (Baltimore, Boston, New York, and Philadelphia) on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
January	\$0.25	April	\$0.25½	July	\$0.27½	October	\$0.28½
February	.25	May	.25½	August	.27½	November	.30½
March	.25½	June	.26	September	.28	December	.32
						Average	.2721

Table II. Base prices (average for 1890-1899), and monthly actual and relative prices of commodities in 1904, pages 488 to 506.—This table shows for each commodity the base price (average price for the 10-year period, 1890-1899), either the average price or the price on some one day of each month, and the relative price for each month of 1904. In addition this table shows for each commodity the average price and the relative price for the year 1904. The monthly prices for such articles as are quoted weekly in Table I were found by dividing the sum of the quotations in each month as shown in Table I by the number of quotations in each month. In Table I single quotations for 1904 are shown for 11 articles. The price of one of these is maintained throughout the year, the prices of four represent the bulk of the sales and are maintained generally, and the prices of four are averages for the year; for each of these nine articles the annual price has been shown in Table II as the price during each month. The other two articles for which single quotations for 1904 are shown in Table I have a September price which represents the bulk of the sales for the year, and the relative price for 1904 was, therefore, computed from that price, but the price at which sales were made from January to March was the price of September, 1903; from April to August the price of April, 1904, and from September to December the price of September, 1904; consequently these prices were used in this table presenting monthly prices.

It was impossible to secure quotations during all of the months of the year for 5 of the 259 articles, viz: Herring; buckwheat flour; onions; potatoes; and sheetings, bleached, 10-4, Atlantic.

The average price for 1904 was obtained, as has already been explained, by dividing the sum of the quotations for the year as shown in Table I by the number of quotations for the year. The average price for the 10-year period, 1890 to 1899, was obtained by dividing

the sum of the average prices of the 10 years by 10. This average price for 10 years has been adopted as the base for all relative prices. For the ten articles which do not show prices for the entire period of 10 years, 1890 to 1899, the base in each case is the average of the years prior to and including 1899. In explanation of the term base or standard as used in connection with relative prices or index numbers, it may be stated that in reducing a series of actual prices to relative prices a base must first be chosen, and this may be either a single quotation, the average price for 1 year, or the average for 2 or more years. If the price for a single year is chosen, it is essential that that year be a normal one, for if prices are high in the year chosen for the base any subsequent fall will be unduly emphasized, while, on the other hand, if prices are low any subsequent rise will be emphasized. Upon examination of the prices since 1890 it was found that all the commodities did not present a normal condition as regards prices in any one year. For this reason it was decided that an average price for a number of years would better reflect average or approximately normal conditions and form a more satisfactory base than would the price for any single year. The period chosen as this base was that from 1890 to 1899—a period of ten years. The average price for the base period was found, as previously stated, by adding together the average prices for all of the 10 years and dividing by 10.

The relative prices as shown in this and succeeding tables have been calculated in the usual manner and represent simply the percentage which each monthly or yearly price is of the base price. The average price for the first 10 years of the period, or the base, always represents 100, and the percentages for each month or year enable the reader to measure readily the rise and fall from month to month or from year to year of the prices of each single commodity, of any group of commodities, or of all the 259 commodities involved. These commodities are arranged in alphabetical order under each of the nine general groups, as in Table I.

In order that the method pursued may be more readily understood, the reader is referred to the table itself, as given on pages 488 to 506. Taking up the first commodity shown, barley, we find that the average price per bushel for the base period, 1890 to 1899, inclusive, was 45.34 cents; the average price for January, 1904, was 56.90 cents; that for February was 56.75 cents; that for March 55.38 cents, etc. The relative price for the base period, as heretofore explained, is always placed at 100 and is so given in the table. The relative price for January, 1904, is shown to be 125.5, or 25.5 per cent higher than the base or average for the 10 years. In February the relative price was 125.2, or 25.2 per cent above the base; in March the relative price was 122.1, or 22.1 per cent above the base; in April it was 122.4, or 22.4 per cent above the base; in May it rose to 124.1, or 24.1 per cent above the

base; in June it was 124.9, or 24.9 per cent above the base; in July it dropped to 112.0, or 12.0 per cent above the base, and again in August to 111.7, or 11.7 per cent above the base; in September it was 113.6, or 13.6 per cent above the base; it declined in October, advanced again in November, and declined in December to 105.0, the lowest price for any month of the year. The relative price for the year 1904 was 116.9, or 16.9 per cent above the base. The figures in each case were secured according to the method already explained, that for January, 1904, being expressed as follows:

Average price for base period	\$0.4534
Average price for January, 1904	.5690
Relative price for base period	100.0
Relative price for January, 1904	125.5

The remainder of the table may be analyzed in a similar manner.

The value of prices given in this relative form, it will readily be seen, consists in the means afforded for tracing and measuring the changes from month to month, from year to year, or from period to period, and in the combination of prices of a sufficient number of commodities to show the general price level. It must not be assumed that a system of relative prices of representative commodities will enable one to trace the causes of changes in the general price level or to determine the effect of such changes on any class of consumers or on all consumers. The use of such a system is to show the general course of prices from time to time of one commodity, of a group of commodities, or of all commodities.

No attempt has been made in any way to go into the causes of the rise and fall of prices. The aim has been to give the prices as they actually prevailed in the market. The relative prices or index numbers must be accepted merely as showing the course of prices both of the individual articles and the market in general. The causes are too complex, the relative influence of each too uncertain, in some cases involving too many economic questions, to permit their discussion in connection with the present article. It will be sufficient to enumerate some of the influences that cause changes in prices. Such influences include variations in harvest, which not only restrict or increase the supply and consequently tend to increase or decrease the price of a commodity, but also restrict or increase, to a greater or less degree, the purchasing power of such communities as are dependent in whole or in part upon such commodity; changes in demand due to changes in fashions, seasons, etc.; legislation altering internal-revenue taxes, import duties, or bounties; use of substitutes—as, for instance, an advance in the price of beef will cause an increased consumption of pork and mutton and, it may be added, a probable increase in the price of both pork and mutton; improvements in methods of production which will tend either to give a better article for the same price

or an equal article for a lower price; cheapening of transportation or handling; speculative manipulation of the supply or of the raw product; commercial panic or depression; overproduction; unusual demand owing to steady employment of consumers; short supply owing to disputes between labor and capital in industries of limited producing capacity, as in the anthracite coal industry in 1902; organization or combination of mills or producers, thus enabling, on the one hand, a greater or less control of prices or, on the other hand, economies in production or in transportation charges through the ability to supply the article from the point of production or manufacture nearest the purchaser. So far as individual commodities are concerned, no conclusion can safely be formed as to causes without an examination of the possible influence of several—in some cases perhaps all—of these causes. For example, the various internal-revenue and tariff acts have, in a marked degree, no doubt affected the prices of proof spirits, of tobacco, and of sugar. But, on the other hand, they have not been alone in their influences, and it probably would not in all cases be accurate to give the change of tax or duty as representing the measure of a certain and definite influence on the prices of those commodities.

It is important that the greatest care be exercised in the choice of commodities in order that a simple average of their relative prices shall show a general price level. In the present compilation 259 commodities are shown, and it has been the aim of the Bureau to select only important and representative articles in each group. The number of articles included is larger than has heretofore been used in similar compilations, but the use of a large number of articles, carefully selected, minimizes the effect on the general price level of an unusual change in the price of any one article or of a few articles. It will be seen that more than one series of prices have been given in the case of articles of great importance. This has been done for the purpose of giving due weight to these important commodities, no other method of accomplishing this having been found satisfactory in this country. The same means have been employed by Mr. Sauerbeck in his English prices, as explained in Bulletin No. 39, and the approximate accuracy of the same, as an indication of the variation of prices, has been proved by various tests based on the amount of production, etc.

Various methods of weighting have been attempted in connection with previous compilations of relative prices. One method employed by European statisticians is to measure the importance of each commodity by its annual consumption by the entire nation, the annual consumption being found by adding to the home production the amount imported and subtracting the amount exported. The impossibility of securing even approximately accurate figures for annual consumption in the United States of the commodities included in this compilation renders this method unavailable here. The method

employed in the Aldrich report consisted in giving to the various commodities or groups of commodities an importance based upon their consumption in normal families. There are, of course, many commodities whose importance can not be measured by this method. It has been thought best in the present series of index numbers, after a careful consideration of all methods of weighting, simply to use a large number of representative staple articles, selecting them in such a manner as to make them, to a large extent, weight themselves. Upon a casual examination it may seem that by this method a comparatively unimportant commodity—such, for instance, as cotton-seed meal—has been given the same weight or importance as one of the more important commodities, such as wheat. A closer examination, however, shows that cotton-seed meal enters into no other commodity under consideration, while wheat is not only quoted as the raw material, but enters into the two descriptions of wheat flour, the two descriptions of crackers, and the three descriptions of loaf bread.

Material changes in the description of three articles were made in 1902, of two articles in 1903, and of one article in 1904.

For two of these articles the trade journals no longer supply regular quotations, the manufacture of the particular grades of three previously quoted has been discontinued by the establishments heretofore furnishing quotations, and for one article the substituted description more nearly represents the present demands of the trade.

The articles in which changes occur are—"Hosiery: men's cotton half hose, seamless, fast black, 20 to 22 ounce, two-thread goods," for which has been substituted "Hosiery: men's cotton half hose, seamless, fast black, 20 to 22 ounce, single-thread goods;" "Leather: harness, oak, country middles, 14 pounds and up (except overweights, 20 pounds and up)," for which has been substituted "Leather: harness, oak, packers' hides, heavy No. 1;" "Sheetings: brown, 4-4, Stark, A. A.," for which has been substituted "Sheetings: brown, 4-4, Massachusetts Mills, Flying Horse brand;" "Trouserings: fancy worsted, 22 to 23 ounce, worsted filling, wool and worsted backs," for which has been substituted "Trouserings: fancy worsted, 21 to 22 ounce, all worsted warp and filling, wool and worsted back;" "Underwear: shirts and drawers, white, merino, full-fashioned, 52 per cent wool, 48 per cent cotton, 24 gauge," for which has been substituted "Underwear: shirts and drawers, white, merino, full-fashioned, 60 per cent wool, 40 per cent cotton, 24 gauge;" and "Shingles: white pine, 18 inches long, XXXX," for which has been substituted "Shingles: Michigan white pine, 16 inches long, XXXX."

In making these substitutions articles were supplied corresponding as closely as possible to those which had been previously used.

Some explanation of the method of computing the relative price of these articles is necessary, and shingles will be used as an illustration:

It must be understood that during the years when 18-inch shingles were quoted they were assumed to represent the several lengths and grades of white pine shingles; that is, that the course of prices of a standard grade of white pine shingles in an index number of prices fairly represents the course of prices of the various grades of white pine shingles. Therefore when it became necessary to substitute, in 1902, the 16-inch shingles for the 18-inch, prices were secured for 16-inch shingles for both 1901 and 1902, and it was found that the average price for the year 1902 was 9.96 per cent above the average price for the year 1901. The relative price of 18-inch shingles in 1901, as shown in Table IV, was 111.9 (average price for the 10 years, 1890 to 1899, equals 100), and if 18-inch shingles represented white pine shingles at that time and 16-inch shingles now represent the class, shingles (shown by the increase in price of 16-inch shingles) advanced, in 1902, 9.96 per cent above the price in 1901, and the relative price in 1902 was therefore 109.96 per cent of 111.9, the relative price in 1901, which gives 123 as the relative price in 1902. The same method was followed in computing relative prices for each of the months of 1902. The average price in 1904 was 2.05 per cent below the price in 1903; therefore the relative price in 1904 was 97.95 per cent of 125.1, the relative price in 1903, which gives 122.5 as the relative price in 1904. The same method was followed for hosiery, leather, and sheetings. For trouserings and underwear the exact grade quoted for 1903 was not manufactured in 1902. The manufacturer of trouserings, however, estimates that one-half the advance in price over the price for the grade quoted for previous years was due to the fact that it was a better article and the other half to the advance in price of material and cost of manufacture. The advance was \$0.1125 per yard over the price in 1902; one-half of this, \$0.05625, was added to the 1902 price of the 22 to 23 ounce trouserings to secure a theoretical 1902 price for the 21 to 22 ounce trouserings, and the 1903 relative price was then computed as above. Underwear was arbitrarily given the same relative price in 1903 as in 1902, as the all-wool underwear manufactured by the same firm showed no change in price. The 1904 relative prices of trouserings and underwear were found in the same way as was explained above for shingles.

Table III.—Relative prices of commodities in 1904, pages 507 to 518.—This table is taken from Table II and shows the relative prices of each of the commodities included there. In this table similar commodities have been grouped, and the average of the relative prices shown for the commodities in each subgroup and in each of the nine general groups. The averages in all cases were found by dividing the sum of the relative prices by the number of commodities in the group under consideration. It should be borne constantly in mind that the term commodity is used here and elsewhere in a specific sense, “native”

and "Western" sheep, for example, being 'considered different commodities. The method of securing average relative prices in this and other tables was as follows: The average relative price of cattle was found by adding the relative prices of the two grades of cattle and dividing the sum by 2. The average for hogs was found in the same manner, and also the average for sheep. The average for live stock was found by dividing the sum of the relative prices of the two grades of cattle, the two grades of hogs, and the two grades of sheep by 6, the total number of different descriptions of commodities or series of quotations in the live-stock group. The average relative price of each of the nine general groups was found by dividing the sum of the relative prices of the different descriptions of commodities for each month by the number of these commodities or series of quotations considered. The sum of the relative prices in January, 1904, of the commodities shown under the general group, "food, etc.," for example, is 5,635.8, which amount divided by 53, the number of different descriptions of commodities or series of quotations considered in that group, gives 106.3 the average for the group "food, etc.," for January, 1904. As explained in the discussion of Table II, it was impossible to secure quotations during all of the months of the year for 5 of the 259 articles. In order of arrangement these are herring, buckwheat flour, onions, potatoes, and sheetings—bleached, 10-4, Atlantic. In presenting monthly relative prices for these articles a nominal relative price (which is the same as the relative price for the month in which the article was last quoted) has been entered in this table for the months for which no price quotation is shown in Table I. This nominal price enters into the average for the subgroup, the general group, and "all commodities" for that month.

The average relative price of each of the nine general groups for each month of 1904 and for the year 1904, and the average relative price of all commodities for each month and for the year, are shown in the following summary:

SUMMARY OF RELATIVE PRICES OF COMMODITIES IN 1904, BY GROUPS.

[Average price for 1890-1899=100.]

Month.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and implements.	Lumber and building materials.	Drugs and chemicals.	House-furnishing goods.	Miscellaneous.	All commodities.
January.....	120.8	106.3	110.4	143.6	108.9	123.6	111.7	111.9	110.2	113.2
February.....	127.2	103.8	112.1	141.9	109.0	124.4	110.4	111.5	111.2	114.4
March.....	130.3	108.7	111.9	138.7	109.6	123.5	110.6	111.5	112.9	114.6
April.....	129.2	107.4	111.7	130.6	111.0	123.6	111.8	111.5	112.6	114.0
May.....	127.6	105.2	110.9	129.1	110.6	123.9	112.3	111.8	112.7	113.2
June.....	126.8	105.1	110.5	129.4	109.3	125.5	110.6	111.8	111.6	112.9
July.....	125.2	105.2	108.8	127.8	108.6	124.4	109.9	111.8	112.9	112.0
August.....	125.3	106.3	108.6	128.2	108.3	123.6	109.6	111.8	111.6	112.0
September.....	126.0	108.5	108.4	128.8	107.6	120.4	108.5	111.8	111.2	112.0
October.....	125.4	107.8	108.4	129.1	107.7	119.5	108.2	111.8	111.6	111.8
November.....	126.4	110.2	108.3	130.8	110.7	119.4	107.7	111.8	109.7	112.7
December.....	122.2	111.4	108.6	133.9	113.4	120.1	109.1	111.8	111.5	113.5
1904.....	126.2	107.2	109.8	132.6	109.6	122.7	110.0	111.7	111.7	113.0

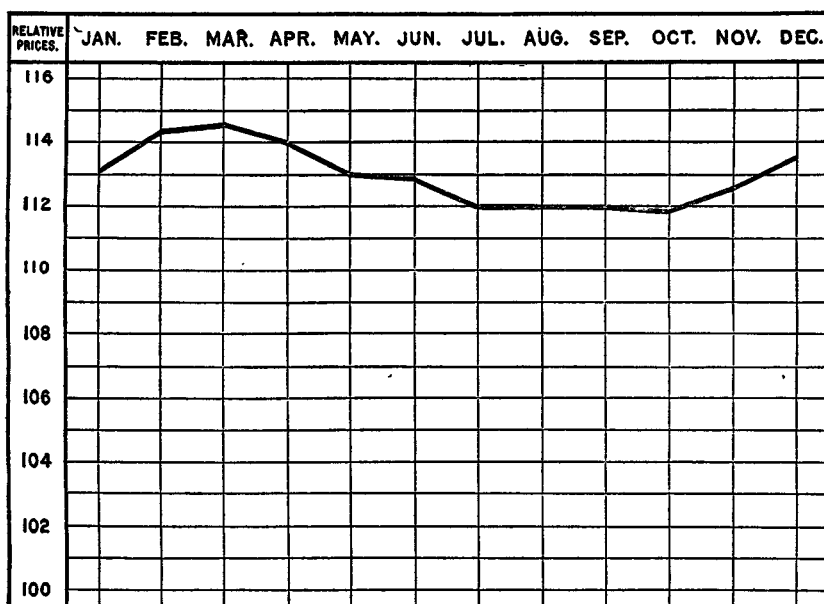
In this table the average relative prices of farm products are based on 16 articles; of food, etc., on 53 articles; of cloths and clothing, on 76 articles; of fuel and lighting, on 13 articles; of metals and implements, on 38 articles; of lumber and building materials, on 27 articles; of drugs and chemicals, on 9 articles; of house furnishing goods, on 14 articles; and of miscellaneous, on 13 articles. The average relative prices of all commodities are based on 259 articles.

The table shows that the group of farm products reached the lowest average in January and the highest in March; that of food, etc., the lowest in June and the highest in December; that of cloths and clothing, the lowest in November and the highest in February; that of fuel and lighting, the lowest in July and the highest in January; that of metals and implements, the lowest in September and the highest in December; that of lumber and building materials, the lowest in November and the highest in June; that of drugs and chemicals, the lowest in November and the highest in May; that of house furnishing goods, the lowest in February, March, and April, and the highest in January; while in the miscellaneous group the lowest average was reached in November and the highest in March and July. All commodities combined reached the lowest average of the year in October and the highest in March.

The course of prices during the months of 1904 as represented by the 259 commodities is clearly shown in the graphic table which follows:

RELATIVE PRICES OF ALL COMMODITIES IN 1904.

[Average price for 1890 to 1899=100.]



Many students of price statistics desire to distinguish between raw commodities and manufactured commodities, or those which have been prepared for consumption by the application of manufacturing processes and in which manufacturing labor forms a considerable part of the cost. To meet the wishes of this class of readers, therefore, the commodities included in this price series have been divided into the two classes, raw and manufactured, and simple averages made for each class. Of course, hard and fast definitions of these classes can not be made, but the commodities here designated as raw may be said to be such as are marketed in their natural state and such as have been subjected to only a preliminary manufacturing process, thus converting them into a marketable condition, but not to a suitable form for final consumption, while the commodities here designated as manufactured are such as have been subjected to more than a preliminary factory manipulation and in which the manufacturing labor cost constitutes an important element in the price. In the group designated as raw are included all farm products, beans, coffee, eggs, milk, rice, nutmegs, pepper, tea, vegetables, raw silk, wool, coal, crude petroleum, copper ingots, pig lead, pig iron, bar silver, spelter, pig tin, brimstone, jute, and rubber—a total of 50 articles.

All the other articles are classed as manufactured commodities.

The table follows:

RELATIVE PRICES OF RAW COMMODITIES, MANUFACTURED COMMODITIES, AND ALL COMMODITIES, IN 1904.

[Average price for 1890-1899=100.]

Month.	Raw commodities.	Manufactured commodities.	All commodities.
January.....	121.8	111.1	113.2
February.....	123.6	112.2	114.4
March.....	123.2	112.5	114.6
April.....	121.1	112.3	114.0
May.....	119.7	111.6	113.2
June.....	118.5	111.5	112.9
July.....	117.5	110.7	112.0
August.....	118.7	110.4	112.0
September.....	119.1	110.3	112.0
October.....	117.3	110.5	111.8
November.....	120.7	110.8	112.7
December.....	122.1	111.5	113.5
1904.....	119.7	111.3	113.0

The raw commodities reached the lowest average of the year in October and the highest in February; manufactured commodities reached the lowest in September and the highest in March. The average for raw commodities ranged from 17.3 per cent to 23.6 per cent above the base price, while the average for manufactured commodities ranged from 10.3 per cent to 12.5 per cent above the base price.

The course of prices of raw and manufactured commodities during 1904 is shown in the graphic table which follows:

RELATIVE PRICES OF RAW AND MANUFACTURED COMMODITIES IN 1904.
[Average price for 1890 to 1899=100.]

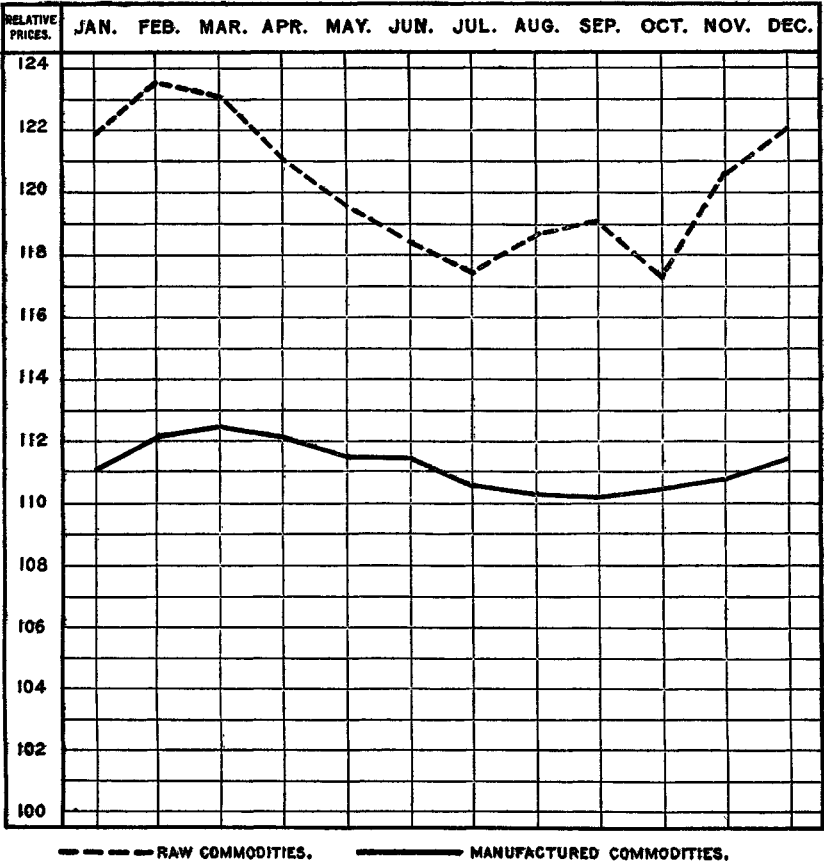


Table IV.—Base prices (average for 1890–1899), and average yearly actual and relative prices of commodities, 1890 to 1904, pages 519 to 537.— This table shows for each commodity the base price (average price for the 10-year period 1890–1899), the average price for each of the 15 years from 1890 to 1904, and the relative price for each year. The average price for each year was obtained, as has been explained, by dividing the sum of the quotations for each year as shown in Table I by the number of quotations for each year. The average price for the 10-year period 1890 to 1899 was obtained by dividing the sum of the average prices of the 10 years by 10. The relative prices for each year were computed in the same way as for each month, as explained in the discussion of Table II.

Table V.—Relative prices of commodities, 1890 to 1904, pages 537 to 549.—This table is taken from Table IV and shows the relative prices

of each of the commodities included there. In this table similar commodities have been grouped and the average of the relative prices shown for the commodities in each subgroup and in each of the nine general groups. The averages in all cases were found by dividing the sum of the relative prices by the number of commodities in the group under consideration, as explained in the discussion of Table III.

The average relative price of each of the nine general groups was found by dividing the sum of the relative prices of the different descriptions of commodities for each year by the number of these commodities or series of quotations considered in that year. The sum of the relative prices in 1890 of the commodities shown under the general group, "food, etc.," for example, is 5,958.2, which amount, divided by 53, the number of different descriptions of commodities or series of quotations considered that year, gives 112.4, the average for the group "food, etc.," for 1890. For 1893 to 1903, 54 commodities are quoted in this group, and that number is accordingly the divisor for each of those years. For 1904, 53 commodities are included in this group.

The average relative price of each of the nine general groups for each year of the period, and the average relative price of all commodities for each year, are shown in the summary following:

SUMMARY OF RELATIVE PRICES OF COMMODITIES, 1890 TO 1904, BY GROUPS.

[Average price for 1890-1899=100.]

Year.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and implements.	Lumber and building materials.	Drugs and chemicals.	House furnishing goods.	Miscellaneous.	All commodities.
1890	110.0	112.4	113.5	104.7	119.2	111.8	110.2	111.1	110.3	112.9
1891	121.5	115.7	111.3	102.7	111.7	108.4	103.6	110.2	109.4	111.7
1892	111.7	108.6	109.0	101.1	106.0	102.8	102.9	106.5	106.2	106.1
1893	107.9	110.2	107.2	100.0	100.7	101.9	100.5	104.9	105.9	105.6
1894	95.9	99.8	96.1	92.4	90.7	96.3	89.8	100.1	99.8	96.1
1895	93.3	94.6	92.7	98.1	92.0	94.1	87.9	96.5	94.5	93.6
1896	78.3	83.8	91.3	104.3	93.7	93.4	92.6	94.0	91.4	90.4
1897	85.2	87.7	91.1	96.4	86.6	90.4	94.4	89.8	92.1	89.7
1898	96.1	94.4	93.4	95.4	86.4	95.8	106.6	92.0	92.4	93.4
1899	100.0	98.3	96.7	105.0	114.7	105.8	111.3	95.1	97.7	101.7
1900	109.5	104.2	103.8	120.9	120.5	115.7	115.7	106.1	109.8	110.5
1901	116.9	105.9	101.0	119.5	111.9	116.7	115.2	110.9	107.4	108.5
1902	130.5	111.3	102.0	134.3	117.2	118.8	114.2	112.2	114.1	112.9
1903	113.8	107.1	106.6	149.3	117.6	121.4	112.6	113.0	113.6	113.6
1904	126.2	107.2	109.8	132.6	109.6	122.7	110.0	111.7	111.7	113.0

In this table the average relative prices of farm products are based on 16 articles; of food, etc., on 53 articles from 1890 to 1892 and 1904, and 54 from 1893 to 1903; of cloths and clothing, on 70 articles in 1890 and 1891, 72 in 1892, 73 in 1893 and 1894, 75 in 1895 and 1896, and 76 from 1897 to 1904; of fuel and lighting, on 13 articles; of metals and implements, on 37 articles from 1890 to 1893, 38 in 1894 and 1895 and from 1899 to 1904, and 39 from 1896 to 1898; of lumber and building materials, on 26 articles from 1890 to 1894, and 27 from 1895 to 1904; of drugs and chemicals, on 9 articles; of house furnishing goods, on 14 articles; and of miscellaneous, on 13 articles. The average relative prices of all commodities are based on 251 articles in 1890 and 1891,

on 253 in 1892, on 255 in 1893, on 256 in 1894, on 259 in 1895 and 1904, on 260 in 1896 and from 1899 to 1903, and on 261 in 1897 and 1898.

A study of the table shows that the group of farm products reached the lowest average in 1896 and the highest in 1902; that of food, etc., the lowest in 1896 and the highest in 1891; that of cloths and clothing, the lowest in 1897 and the highest in 1890; that of fuel and lighting, the lowest in 1894 and the highest in 1903; that of metals and implements, the lowest in 1898 and the highest in 1900; that of lumber and building materials, the lowest in 1897 and the highest in 1904; that of drugs and chemicals, the lowest in 1895 and the highest in 1900; that of house furnishing goods, the lowest in 1897 and the highest in 1903, while in the miscellaneous group the lowest average was reached in 1896 and the highest in 1902. The average for all commodities combined was the lowest in 1897 and the highest in 1903. Of the nine groups it is seen that one reached its lowest point in 1894, one in 1895, three in 1896, three in 1897, and one in 1898. The highest point was reached by one group in 1890, by one in 1891, by two in 1900, by two in 1902, by two in 1903, and by one in 1904.

The average relative prices of the 249 commodities for which quotations were secured for the entire period involved do not differ materially from the average relative prices of all commodities shown in the above table. Eliminating the commodities for which quotations could be secured for only a portion of the period, we find that the average relative prices of the 249 commodities remaining was 112.9 in 1890, 111.7 in 1891, 106.0 in 1892, 105.4 in 1893, 95.9 in 1894, 93.5 in 1895, 90.3 in 1896, 89.5 in 1897, 93.2 in 1898, 101.5 in 1899, 110.2 in 1900, 108.3 in 1901, 112.8 in 1902, 113.7 in 1903, and 113.2 in 1904.

In the table which follows, all commodities under consideration have been divided into two classes or groups. The 50 articles which are included in the group of raw commodities are shown on page 413. All the other articles are classed as manufactured commodities.

RELATIVE PRICES OF RAW COMMODITIES, MANUFACTURED COMMODITIES, AND ALL COMMODITIES, 1890 TO 1904.

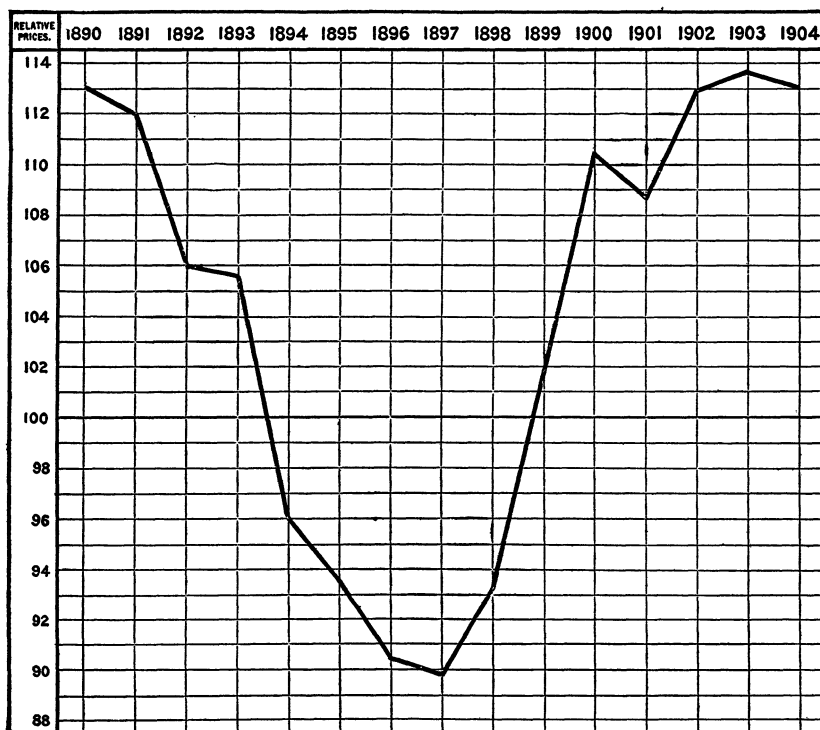
[Average price for 1890-1899=100.]

Year.	Raw commodities.	Manufactured commodities.	All commodities.
1890.....	115.0	112.3	112.9
1891.....	116.3	110.6	111.7
1892.....	107.9	105.6	106.1
1893.....	104.4	105.9	105.6
1894.....	93.2	96.8	96.1
1895.....	91.7	94.0	93.6
1896.....	84.0	91.9	90.4
1897.....	87.6	90.1	89.7
1898.....	94.0	93.3	93.4
1899.....	105.9	100.7	101.7
1900.....	111.9	110.2	110.5
1901.....	111.4	107.8	108.5
1902.....	122.4	110.6	112.9
1903.....	122.7	111.5	113.6
1904.....	119.7	111.3	113.0

The course of wholesale prices during the 15 years 1890 to 1904, as represented by all commodities considered, is shown in the graphic table which follows:

RELATIVE PRICES OF ALL COMMODITIES, 1890 TO 1904.

[Average price for 1890 to 1899=100.]



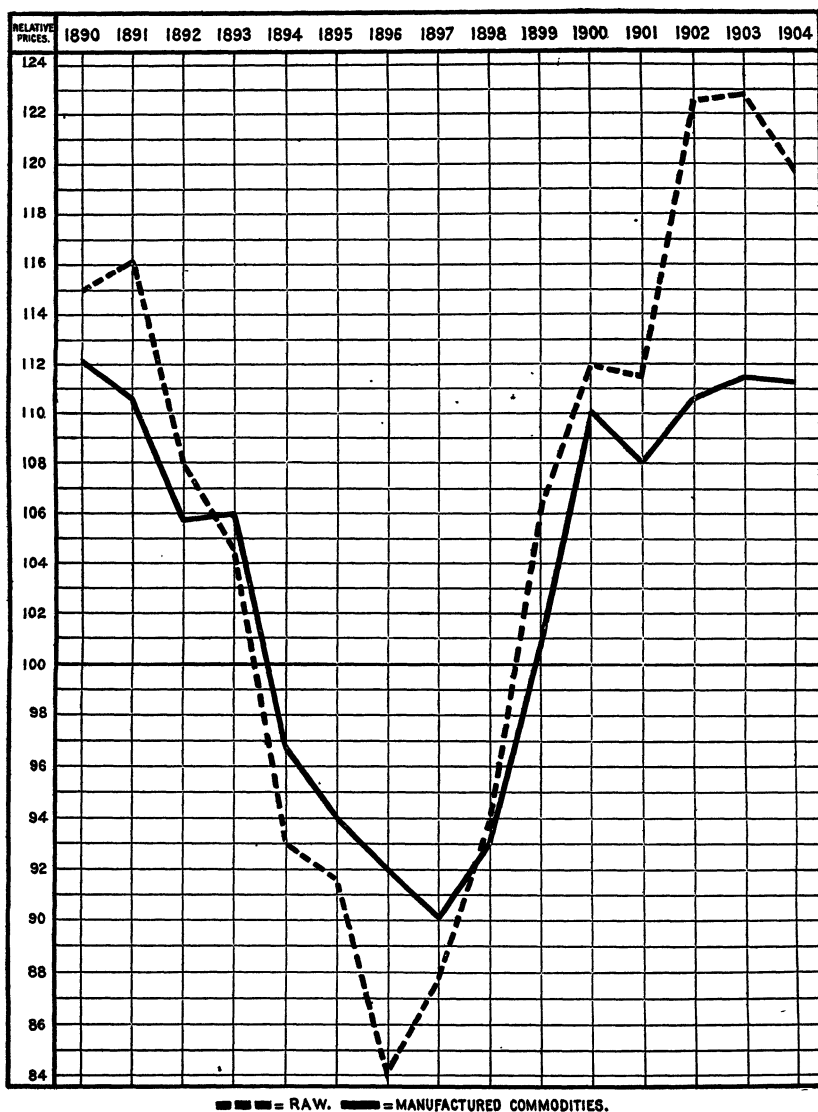
In 1890 and 1891, when prices in general were high, the raw commodities were higher than the manufactured, and remained so until 1893, when prices of raw commodities declined and manufactured commodities were slightly above the prices of 1892. From 1894 to 1896 there was a marked decline in both groups, the raw being lower than the manufactured in each of these years. In 1897 raw advanced and manufactured declined. From 1898 to 1900 there was a decided advance in both groups each year, raw advancing to a higher point than manufactured. In 1901 there was a very slight decline in raw and a more marked decline in manufactured. In 1902 both raw and manufactured commodities made a decided advance. In 1903 raw commodities advanced to the highest point reached in the 15 years under consideration, and manufactured commodities were at the highest point.

in 1890. In 1904 both raw and manufactured commodities declined slightly.

For the 15 years included in this table, with the single exception of 1893, it will be seen that during the years of high prices raw commodities were higher than manufactured, and during the years of low prices, with the exception of 1898, raw were lower than manufactured. This is clearly shown in the graphic table which follows:

RELATIVE PRICES OF RAW AND MANUFACTURED COMMODITIES,
1890 TO 1904.

[Average price for 1890 to 1899=100.]



The following table shows for each of the nine general groups the relative prices of 1904 compared with the average for 1890 to 1899. Only the 249 commodities for which quotations were secured for the whole period of 15 years have been included. The average price for 1890 to 1899 is in every case the base or 100 per cent. It should be kept in mind in using this table that the comparison is between the prices for 1904 and the average prices for the base period.

RELATIVE PRICES, 1904 COMPARED WITH AVERAGE PRICE FOR 1890-1899.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Farm products, 16 articles.

Article.	Relative price, 1904.	Article.	Relative price, 1904.
PRICE INCREASED.		PRICE INCREASED—concluded.	
Sheep: Western.....	107.8	Rye: No. 2, cash.....	133.4
Cattle: steers, good to choice.....	109.7	Oats: cash.....	135.8
Sheep: native.....	110.3	Wheat: contract grades, cash.....	138.3
Cattle: steers, choice to extra.....	112.0	Cotton: upland, middling.....	155.9
Hay: timothy, No. 1.....	112.5	Hops: New York State, choice.....	196.2
Hogs: light.....	116.5		
Hogs: heavy.....	116.8	PRICE DECREASED.	
Barley: by sample.....	116.9	Flaxseed: No. 1.....	99.6
Hides: green, salted, packers, heavy native steers.....	124.4		
Corn: No. 2, cash.....	132.6	Average, farm products.....	126.2

Food, etc., 52 articles.

PRICE INCREASED.		PRICE INCREASED—concluded.	
Butter: creamery, Elgin (Elgin market)...	100.4	Meal: corn, fine white.....	127.8
Sugar: granulated.....	101.0	Fruit: currants, in barrels.....	130.1
Sugar: 89° fair refining.....	102.1	Fish: cod, dry, bank, large.....	130.4
Bread: loaf (Washington market).....	102.5	Flour: rye.....	131.1
Fish: mackerel, salt, large No. 3s.....	102.6	Meal: corn, fine yellow.....	131.1
Sugar: 96° centrifugal.....	102.7	Eggs: new-laid, fancy, near-by.....	135.0
Cheese: New York State, full cream.....	103.2	Fish: herring, shore, round.....	144.4
Meat: mutton, dressed.....	103.2	Vegetables, fresh: potatoes, Burbank.....	146.3
Vegetables, fresh: onions.....	104.6	Spices: pepper, Singapore.....	164.1
Bread: loaf, Vienna (New York market).....	105.1		
Tallow.....	106.5	PRICE DECREASED.	
Meat: beef, fresh, native sides.....	106.1	Fruit: raisins, California, London layer..	98.2
Milk: fresh.....	107.8	Butter: creamery, extra (New York market).....	97.6
Molasses: New Orleans, open kettle, prime.....	107.8	Butter: dairy, New York State.....	97.3
Meat: hams, smoked.....	108.9	Tea: Formosa, fine.....	97.1
Meat: beef, salt, extra mess.....	109.4	Starch: pure corn.....	95.8
Salt: American.....	109.4	Bread: crackers, soda.....	91.6
Bread: loaf, homemade (New York market).....	110.4	Vinegar: cider, Monarch.....	89.6
Lard: prime contract.....	111.8	Rice: domestic, choice.....	78.6
Meat: bacon, short clear sides.....	114.8	Fruit: apples, evaporated, choice.....	71.2
Bread: crackers, Boston X.....	115.2	Fruit: apples, sun-dried, Southern, sliced.....	64.7
Meat: bacon, short rib sides.....	115.4	Soda: bicarbonate of, American.....	62.2
Fish: salmon, canned.....	117.1	Coffee: Rio No. 7.....	59.6
Flour: buckwheat.....	120.1	Fruit: pines, California, in boxes.....	59.6
Beans: medium, choice.....	120.4	Spices: nutmegs.....	50.3
Meat: pork, salt, mess, old to new.....	120.6		
Meat: beef, salt, hams, Western.....	123.5	Average, food, etc.....	106.8
Flour: wheat, spring patents.....	125.2		
Flour: wheat, winter straights.....	125.5		

RELATIVE PRICES, 1904 COMPARED WITH AVERAGE PRICE FOR 1890-1899—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Cloths and clothing, 70 articles.

Article.	Relative price, 1904.	Article.	Relative price, 1904.
PRICE INCREASED.		PRICE INCREASED—concluded.	
Underwear: shirts and drawers, white, all wool, full-fashioned, 18-gauge.....	100.4	Women's dress goods: cashmere, all wool, 10-11 twill, 38-inch, Atlantic Mills J....	117.7
Leather: sole, oak.....	102.6	Blankets: 11-4, 5 pounds to the pair, cotton warp, all wool filling.....	118.3
Ginghams: Amoskeag.....	102.8	Cottonthread: 6-cord, 200-yardspools, J. & P. Coats.....	120.1
Overcoatings: chinchilla, B-rough, all wool.....	103.1	Sheetings: brown, 4-4, Pepperell R.....	121.4
Linen thread: 8-cord, 200-yard spools, Barbour.....	103.7	Horse blankets: 6 pounds each, all wool, cotton yarns: carded, white, mule-spun, Northern, cones, 10/1.....	122.2
Leather: wax calf, 30 to 40 pounds to the dozen, B grade.....	105.0	Blankets: 11-4, 5 pounds to the pair, cotton warp, cotton and wool filling.....	123.2
Women's dress goods: cashmere, cotton warp, 22-inch, Hamilton.....	106.7	Wool: Ohio, medium fleece (1 and 1/2 grade), scoured.....	123.8
Wool: Ohio, medium fleece (1 and 1/2 grade), scoured.....	106.7	Cotton flannels: 2 1/2 yards to the pound.....	124.2
Shawls: standard, all wool, 72 by 144 inch, 42-ounce, made of high-grade wool.....	107.0	Cotton flannels: 3 1/2 yards to the pound.....	125.4
Carpets: ingrain, 2-ply, Lowell.....	107.1	Drillings: 80-inch, Stark A.....	125.7
Suitings: indigo blue, all wool, 64-inch, 14-ounce, Middlesex standard.....	109.1	Drillings: brown, Pepperell.....	126.3
Shirtings: bleached, 4-4, Lonsdale.....	109.1	Sheetings: brown, 4-4, Indian Head.....	127.1
Leather: harness, oak.....	109.5	Sheetings: bleached, 10-4, Atlantic.....	127.1
Blankets: 11-4, 5 pounds to the pair, all wool.....	110.0	Bags: 2-bushel, Amoskeag.....	128.3
Shirtings: bleached, 4-4, Fruit of the Loom.....	110.1	Sheetings: bleached, 10-4, Pepperell.....	128.7
Carpets: Brussels, 5-frame, Bigelow.....	110.2	Sheetings: brown, 4-4, Atlantic A.....	129.8
Broadoths: first quality, black, 64-inch, made from XXX wool.....	110.3	PRICE DECREASED.	
Women's dress goods: cashmere, cotton warp, 27-inch, Hamilton.....	110.5	Boots and shoes: men's calf bal. shoes, Goodyear welt, dongola top.....	98.9
Carpets: Wilton, 5-frame, Bigelow.....	110.5	Linen shoe thread: 10s, Barbour.....	97.2
Overcoatings: beaver, Moscow, all wool, black.....	110.7	Shirtings: bleached, 4-4, Wamsutta 	97.2
Shirtings: bleached, 4-4, Hope.....	111.7	Ginghams: Lancaster.....	97.0
Boots and shoes: women's solid grain shoes, leather, polish or polka.....	111.9	Hosiery: men's cotton half hose, seamless, standard quality, 84 needles.....	95.9
Women's dress goods: alpaca, cotton warp, 22-inch, Hamilton.....	112.3	Calico: Cochecho prints.....	95.7
Women's dress goods: Franklin sackings, 6-4.....	112.4	Underwear: shirts and drawers, white merino, full-fashioned, 52 per cent wool, 48 per cent cotton, 24-gauge (d).....	95.4
Boots and shoes: men's split boots, kip top, 16-inch, 1 double sole (c).....	113.4	Shirtings: bleached, 4-4, New York Mills.....	94.7
Suitings: indigo blue, all wool, 16-ounce.....	113.7	Sheetings: bleached, 10-4, Wamsutta S. T.....	94.1
Tickings: Amoskeag A. C. A.....	114.1	Overcoatings: covert cloth, light weight, staple goods.....	94.0
Women's dress goods: cashmere, cotton warp, 9-twill, 4-4, Atlantic Mills F.....	114.3	Boots and shoes: men's brogans, split.....	93.5
Cotton yarns: carded, white, mule-spun, Northern, cones, 22/1.....	114.5	Overcoatings: chinchilla, cotton warp, C. C. grade.....	93.3
Worsted yarns: 2-40s, XXX or its equivalent in quality, white, in skeins (b).....	115.7	Silk: raw, Italian, classical.....	90.8
Leather: sole, hemlock, nonacid, Buenos Ayres, middle weights, first quality.....	116.3	Silk: raw, Japan, filatures.....	90.6
Denims: Amoskeag.....	116.5	Boots and shoes: men's vici kid shoes, Goodyear welt.....	87.3
Worsted yarns: 2-40s, Australian fine.....	116.6	Hosiery: men's cotton half hose, seamless, fast black, 20 to 22 ounce, 160 needles, two-thread goods (e).....	82.1
Sheetings: brown, 4-4, Stark A. A. (c).....	117.0	Hosiery: women's cotton hose, seamless, fast black, 26 to 28 ounce, 160 to 17 1/2 needles.....	81.6
Print cloths: 28-inch, 64 by 64.....	117.3	Average, cloths and clothing.....	
Flannels: white, 4-4, Ballard Vale No. 3.....	117.6		109.8

a In 1903 and 1904, russet bound top, 17-inch, 1 double sole.

b From 1902 to 1904, designated as XXXX.

c From 1902 to 1904, quotations are for Massachusetts Mills, Flying Horse brand.

d In 1903 and 1904, 60 per cent wool, 40 per cent cotton.

e In 1904, single-thread goods.

RELATIVE PRICES, 1904 COMPARED WITH AVERAGE PRICE FOR 1890-1899—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Fuel and lighting, 13 articles.

Article.	Relative price, 1904.	Article.	Relative price, 1904.
PRICE INCREASED.		PRICE INCREASED—concluded.	
Candles: adamantine, 63, 14-ounce	115.1	Petroleum: refined, 150° fire test, w. w.	153.6
Coal: bituminous, Georges Creek (f. o. b. New York Harbor)	116.5	Petroleum: crude	173.8
Coal: anthracite, broken	126.1	Coal: bituminous, Georges Creek (at mine)	196.9
Coal: anthracite, stove	127.1	PRICE DECREASED.	
Petroleum: refined, for export	127.3	Coke: Connellsville, furnace	96.4
Coal: bituminous, Pittsburg (Youghiogheny)	132.5	Matches: parlor, domestic	85.4
Coal: anthracite, chestnut	134.2	Average, fuel and lighting	
Coal: anthracite, egg	134.2		132.6

Metals and implements, 36 articles.

PRICE SAME AS BASE.		PRICE INCREASED—concluded.	
Saws: crosscut, Disston	100.0	Axes: M. C. O., Yankee	123.3
Trowels: M. C. O., brick, 10½-inch	100.0	Locks: common mortise	125.5
PRICE INCREASED.		Butts: loose joint, cast, 3x3 inch	126.6
Bar iron: best refined, from mill (Pittsburg market)	102.1	Hammers: Maydole No. 1½	129.0
Steel billets	103.0	Doorknobs: steel, bronze plated	144.8
Pig iron: foundry No. 2	104.4	Augers: extra, ½-inch	149.3
Bar iron: best refined, from store (Philadelphia market)	104.9	Tin: pig	152.5
Pig iron: foundry No. 1	105.2	Chisels: extra, socket firmer, 1-inch	153.4
Pig iron: gray forge, Southern, coke	103.3	PRICE DECREASED.	
Quicksilver	105.5	Pig iron: Bessemer	99.8
Zinc: sheet	105.6	Lead pipe	99.5
Copper: ingot, lake	106.2	Nails: cut, 8-penny, fence and common	99.5
Steel rails	107.4	Barb wire: galvanized	99.3
Copper: sheet, hot rolled (base sizes)	108.5	Saws: hand, Disston No. 7	83.6
Vises: solid box, 50-lb.	109.1	Copper wire: bare	98.2
Spelter: Western	113.9	Shovels: Ames No. 2	97.3
Planers: Bailey No. 5	115.7	Nails: wire, 8-penny, fence and common	88.2
Lead: pig	116.3	Silver: bar, fine	77.2
Files: 8-inch mill bastard	122.0	Wood screws: 1-inch, No. 10, flat head	62.6
		Average, metals and implements ..	
			110.1

Lumber and building materials, 26 articles.

PRICE INCREASED.		PRICE INCREASED—concluded.	
Carbonate of lead: American, in oil	103.6	Turpentine: spirits of	172.2
Oxide of zinc	115.8	Pine: white, boards, uppers	174.0
Pine: yellow	116.0	Resin: good, strained	196.8
Maple: hard	117.0	PRICE DECREASED.	
Shingles: white pine	122.5	Lime: common	99.0
Oak: white, plain	124.2	Shingles: cypress	92.2
Window glass: American, single, thirds, 6x8 to 10x15 inch	128.0	Linseed oil: raw	91.7
Window glass: American, single, firsts, 6x8 to 10x15 inch	134.2	Cement: Rosendale	90.4
Pine: white, boards, No. 2 barn	134.4	Plate glass: polished, unsilvered, area 5 to 10 square feet	70.3
Brick: common domestic	134.7	Putty	69.6
Tar	139.4	Plate glass: polished, unsilvered, area 3 to 5 square feet	62.7
Hemlock	142.1	Average, lumber and building materials	
Spruce	142.9		124.6
Oak: white, quartered	150.4		
Doors: pine	154.6		
Poplar	160.5		

RELATIVE PRICES, 1904 COMPARED WITH AVERAGE PRICE FOR 1890-1899—Concluded.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Drugs and chemicals, 9 articles.

Article.	Relative price, 1904.	Article.	Relative price, 1904.
PRICE INCREASED.		PRICE DECREASED.	
Alum: lump	104.8	Glycerin: refined	99.8
Brimstone: crude, seconds	105.2	Quinine: American	94.8
Alcohol: grain, 94 per cent	108.6	Alcohol: wood, refined, 95 per cent	61.6
Opium: natural, in cases	116.5	Average, drugs and chemicals	110.0
Sulphuric acid: 66°	144.9		
Muriatic acid: 20°	153.8		

House furnishing goods, 14 articles.

PRICE INCREASED.		PRICE INCREASED—concluded.	
Earthenware: teacups and saucers, white granite	106.4	Furniture: chairs, bedroom, maple	129.1
Wooden ware: tubs, oak-grained	107.6	Wooden ware: pails, oak-grained	130.9
Furniture: tables, kitchen	108.1	PRICE DECREASED.	
Table cutlery: knives and forks, cocobolo handles	110.0	Glassware: pitchers, 4-gallon, common ..	97.9
Earthenware: plates, white granite	110.4	Table cutlery: carvers, stag handles	93.8
Earthenware: plates, cream-colored	113.8	Glassware: tumblers, 4-pint, common ...	90.1
Furniture: bedroom sets, ash	116.1	Average, house furnishing goods ..	111.7
Furniture: chairs, kitchen	124.7		
Glassware: nappies, 4-inch	125.0		

Miscellaneous, 13 articles.

PRICE INCREASED.		PRICE INCREASED—concluded.	
Cotton-seed oil: summer yellow, prime...	103.0	Rubber: Para Island	135.8
Starch: laundry	106.0	PRICE DECREASED.	
Proof spirits	110.4	Malt: Western made	96.1
Soap: castile, mottled, pure	113.7	Paper: wrapping, manila	95.8
Tobacco: smoking, granulated, Seal of North Carolina	114.4	Paper: news	89.3
Tobacco: plug, Horseshoe	118.6	Average, miscellaneous	111.7
Cotton-seed meal	119.3		
Jute: raw	123.7		
Rope: manila	125.4		

The farm-products group was 26.2 per cent higher in 1904 than the average price for the ten years, 1890 to 1899, only one of the 16 articles being lower in 1904 than the average price for 1890 to 1899.

The 1904 price, compared with the average price for 1890 to 1899, shows hops to be 96.2 per cent above; cotton, 55.9 per cent above; wheat, 38.3 per cent above; oats, 35.8 per cent above; corn, 32.6 per cent above; hides, 24.4 per cent above; barley, 16.9 per cent above; heavy hogs, 16.8 per cent above; light hogs, 16.5 per cent above, etc.

Considering the articles shown in this table, it is seen that the food group was 6.8 per cent higher in 1904 than the average price for 1890 to 1899. Thirty-eight of the 52 articles considered in this table were higher, and 14 lower, than the average price for 1890 to 1899.

In 1904 potatoes were 46.3 per cent above the average price for 1890 to 1899; herring, 44.4 per cent above; eggs, 35 per cent above;

yellow meal, 31.1 per cent above; rye flour, 31.1 per cent above; codfish, 30.4 per cent above; currants, 30.1 per cent above; white meal, 27.8 per cent above; winter wheat flour, 25.5 per cent above; spring wheat flour, 25.2 per cent above, etc.

Coffee was 40.4 per cent below the average price for 1890 to 1899; rice, 21.4 per cent below; dairy butter, 2.7 per cent below; creamery butter (New York market), 2.4 per cent below, etc.

Of the 70 articles considered in the cloths and clothing group, 53 were in 1904 above, and 17 below, the average price for 1890 to 1899.

In 1904 brown sheetings, Atlantic A, were 29.8 per cent above the average price for 1890 to 1899; bleached sheetings, Pepperell, were 28.7 per cent above; bags, 28.4 per cent above, etc.

Women's cotton hosiery, 160 to 176 needles, were 18.4 per cent below the average price for 1890 to 1899; men's cotton hosiery, 160 needles, 17.9 per cent below; men's vici kid shoes, 12.7 per cent below, etc.

Of the 13 articles included in the fuel and lighting group in 1904 two articles were below the average price for 1890 to 1899. The average price for the group was 32.6 per cent above the average for 1890 to 1899.

Georges Creek coal at the mine was 96.9 per cent above the average price for 1890 to 1899. Crude petroleum was 78.8 per cent above the average price for 1890 to 1899; 150° refined petroleum, 53.6 per cent above; anthracite coal, egg size, 34.2 per cent above; chestnut size, 34.2 per cent above, etc.

Thirty-six articles are considered in the metals and implements group. Two were the same price in 1904, 24 were above, and 10 were below the average price for 1890 to 1899. Chisels were 58.4 per cent above the average for 1890 to 1899; pig tin, 52.5 per cent above; pig iron, gray forge, 5.3 per cent above; pig iron, foundry No. 1, 5.2 per cent above, etc.

Wood screws were 37.4 per cent below the average for 1890 to 1899; bar silver was 22.8 per cent below; wire nails were 11.8 per cent below, etc.

Of the 26 articles considered in the lumber and building materials group, 19 were above and 7 were below the average price for 1890 to 1899. White pine boards, uppers, were 74.0 per cent above the average price for 1890 to 1899; spirits of turpentine, 72.2 per cent above; poplar, 60.5 per cent above; pine doors, 54.6 per cent above, etc. Plate glass, area 3 to 5 square feet, was 37.3 per cent below the average price for 1890 to 1899; putty, 30.4 per cent below; plate glass, area 5 to 10 square feet, 29.7 per cent below, etc.

Of the 9 articles included in the group of drugs and chemicals, 6 were above and 3 were below the average price for 1890 to 1899.

Of the 14 articles in the group of house furnishing goods, the 1904

prices of 11 articles were above the average price for 1890 to 1899, and the prices of 3 articles were below that average.

Of the 13 articles included in the miscellaneous group, the 1904 prices of 10 were above and the prices of 3 were below the average price for 1890 to 1899.

The facts presented in the foregoing table are summarized in the following, which shows the changes in prices of articles in each group, classified by per cent of change:

CHANGES IN PRICES OF ARTICLES IN EACH GROUP, CLASSIFIED BY PER CENT OF CHANGE, 1904 COMPARED WITH AVERAGE PRICE FOR 1890-1899.

Groups.	Number of articles.	Price increased.				Price same as base.	Price decreased.		
		50 to 100 per cent.	25 to 50 per cent.	10 to 25 per cent.	Less than 10 per cent.		Less than 10 per cent.	10 to 25 per cent.	25 to 50 per cent.
Farm products	16	2	4	7	2	.....	1	.....	.....
Food, etc.	52	1	10	10	17	.....	6	2	6
Cloths and clothing	70	.....	9	32	12	.....	14	3	.....
Fuel and lighting	13	3	6	2	.....	.....	1	1	.....
Metals and implements	36	2	5	5	12	2	7	2	1
Lumber and building materials	26	6	7	5	1	.....	4	.....	3
Drugs and chemicals	9	1	1	1	3	.....	2	.....	1
House furnishing goods	14	.....	3	5	3	.....	3	.....	.....
Miscellaneous	13	.....	2	6	2	.....	.....	1	.....
Total	249	15	47	73	52	2	40	9	11

It is seen in the above comparison of the prices of 1904 with the average for 1890 to 1899 that of the 16 articles in the farm products group, 15 show an increase and only 1 a decrease; of the 52 in the food, etc., group, 38 show an increase and 14 a decrease; of the 70 in the cloths and clothing group, 53 show an increase and 17 show a decrease; of the 13 in the fuel and lighting group, 11 show an increase and 2 a decrease; of the 36 in the metals and implements group, 24 show an increase, 2 show the same price as the average for the base period, and 10 show a decrease; of the 26 in the lumber and building materials group, 19 show an increase and 7 a decrease; of the 9 in the drugs and chemicals group, 6 show an increase and 3 a decrease; of the 14 in the house furnishing goods group, 11 show an increase and 3 a decrease; of the 13 in the miscellaneous group, 10 show an increase and 3 a decrease. Of the 249 commodities, for which prices were secured for the whole period from 1890 to 1904, 187 show an increase, 2 show the same price as the average for the base period, and 60 show a decrease.

The number of articles according to classified per cents of increase and decrease is also shown in this table. Of the 187 commodities that showed an increase in 1904 over the average for 1890 to 1899, 52 advanced less than 10 per cent, 73 advanced from 10 to 25 per cent, 47 advanced from 25 to 50 per cent, and 15 advanced from 50 to 100 per cent. Of the 60 commodities which showed a decrease, 40 decreased less than 10 per cent, 9 decreased from 10 to 25 per cent, and 11 decreased from 25 to 50 per cent.

The number and per cent of articles which showed each specified increase or decrease are given in the following table:

NUMBER AND PER CENT OF ARTICLES, BY CLASSIFIED PER CENT OF INCREASE OR DECREASE, 1904 COMPARED WITH AVERAGE PRICE FOR 1890-1899.

	Number of articles.	Per cent of articles.		Number of articles.	Per cent of articles.
Price increased:			Price decreased:		
50 to 100 per cent	15	6.0	Less than 10 per cent	40	16.1
25 to 50 per cent	47	18.9	10 to 25 per cent	9	3.6
10 to 25 per cent	73	29.3	25 to 50 per cent	11	4.4
Less than 10 per cent.....	52	20.9			
Total	187	75.1	Total.....	60	24.1
Price same as base	2	0.8	Grand total	249	100.0

Of the 249 articles for which prices were secured for the whole period from 1890 to 1904, it is seen that 187, or 75.1 per cent, show an increase in price; 2 articles, or 0.8 per cent, show the same price as the average for the base period, and 60 articles, or 24.1 per cent, show a decrease in price in 1904, as compared with the average price for the base period.

Of the 259 commodities considered in this compilation of prices, the average price of 123 commodities was higher in 1904 than in 1903, the average price of 27 was the same in 1904 as in 1903, and the average price of 109 was lower in 1904 than in 1903.

To assist in making easy a comparison of 1904 prices of the general groups and of all commodities with prices of the other years, the following table has been prepared, showing the per cent of increase of 1904 prices over the prices of each year from 1890 to 1903.

PER CENT OF INCREASE IN WHOLESALE PRICES OF THE GENERAL GROUPS OF COMMODITIES IN 1904 OVER PRICES IN PREVIOUS YEARS.

Groups.	Per cent of increase in 1904 over—													
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Farm products.....	14.7	8.9	13.0	17.0	31.6	35.3	61.2	48.1	31.3	26.2	15.3	8.0	3.8	6.2
Food, etc.....	4.6	7.3	3.5	2.7	7.4	13.3	27.9	22.2	13.6	9.1	2.9	1.2	3.7	.1
Cloths and clothing.....	3.8	1.3	.7	2.4	14.3	18.4	20.3	20.5	17.6	13.5	2.8	8.7	7.6	3.0
Fuel and lighting.....	26.6	29.1	31.2	32.6	43.5	85.2	27.1	37.6	39.0	26.3	9.7	11.0	1.3	11.2
Metals and implements.....	8.1	1.9	3.4	8.8	20.8	19.1	17.0	26.6	26.9	4.4	9.0	2.1	6.5	6.8
Lumber and building materials.....	9.7	13.2	19.4	20.4	27.4	30.4	31.4	35.7	28.1	16.0	6.1	5.1	3.3	1.1
Drugs and chemicals.....	2	6.2	6.9	9.5	22.5	25.1	13.8	16.5	3.2	1.2	4.9	4.5	3.7	2.3
House furnishing goods.....	.5	1.4	4.9	6.5	11.6	15.8	13.8	24.4	21.4	17.5	5.3	.7	4.4	1.2
Miscellaneous.....	1.3	2.1	5.2	5.5	11.9	18.2	22.2	21.3	20.9	14.3	1.7	4.0	2.1	1.7
All commodities	.1	1.2	6.5	7.0	17.6	20.7	25.0	26.0	21.0	11.1	2.3	4.1	.1	4.5

α Decrease.

From this table it is seen that the group farm products in 1904 was 14.7 per cent higher than in 1890, 3.9 per cent higher than in 1891, 13.0 per cent higher than in 1892, 17.0 per cent higher than in 1893, 31.6 per cent higher than in 1894, 35.3 per cent higher than in 1895, 61.2 per cent higher than in 1896, 48.1 per cent higher than in 1897, 31.3 per cent higher than in 1898, 26.2 per cent higher than in

1899, 15.3 per cent higher than in 1900, 8.0 per cent higher than in 1901, 3.3 per cent lower than in 1902, and 6.2 per cent higher than in 1903.

The average for all commodities combined in 1904 was 0.1 per cent higher than in 1890, 1.2 per cent higher than in 1891, 6.5 per cent higher than in 1892, 7.0 per cent higher than in 1893, 17.6 per cent higher than in 1894, 20.7 per cent higher than in 1895, 25.0 per cent higher than in 1896, 26.0 per cent higher than in 1897, 21.0 per cent higher than in 1898, 11.1 per cent higher than in 1899, 2.3 per cent higher than in 1900, 4.1 per cent higher than in 1901, 0.1 per cent higher than in 1902, and 0.5 per cent lower than in 1903.

In the following table the December, 1904, relative price is compared with the average for 1890 to 1899. The average price for 1890 to 1899 is in every case the base, or 100 per cent. Only the 249 commodities for which quotations were secured for the whole period of 15 years have been included. In using this table it must be borne in mind that the comparison is between the prices for December, 1904, and the average prices for the base period.

RELATIVE PRICES, DECEMBER, 1904, COMPARED WITH AVERAGE PRICE FOR 1890-1899.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Farm products, 16 articles.

Article.	Relative price, Dec., 1904.	Article.	Relative price, Dec., 1904.
PRICE SAME AS BASE.		PRICE INCREASED—concluded.	
Cotton: upland, middling	100.0	Sheep: native	114.9
PRICE INCREASED.		Cattle: steers, good to choice	116.9
Hogs: light	101.1	Corn: No. 2, cash	122.1
Flaxseed: No. 1	102.9	Cattle: steers, choice to extra	126.2
Hogs: heavy	103.3	Rye: No. 2, cash	139.5
Hay: timothy, No. 1	104.9	Hides: green, salted, packers, heavy native steers	148.9
Barley: by sample	105.0	Wheat: contract grades, cash	154.9
Oats: cash	109.3	Hops: New York State, choice	194.8
Sheep: Western	111.1	Average, farm products	122.2

Food, etc., 52 articles.

PRICE INCREASED.		PRICE INCREASED—concluded.	
Starch: pure corn	100.4	Cheese: New York State, full cream.	119.0
Bread: loaf (Washington market)	100.6	Butter: creamery, extra (N. Y. market) ..	120.4
Meat: mutton, dressed	101.2	Butter: dairy, New York State	122.3
Meat: bacon, short clear sides	106.1	Butter: creamery, Elgin (Elgin market) ..	124.0
Fish: mackerel, salt, large No. 3s	106.2	Sugar: 96° centrifugal	124.7
Molasses: New Orleans, open kettle, prime ..	106.3	Vegetables, fresh: onions	125.0
Tallow	107.1	Meat: beef, salt, hams, Western	125.8
Meat: bacon, short rib sides	107.2	Sugar: 89° fair refining	127.3
Meat: beef, fresh, native sides	107.8	Fish: cod, dry, bank, large	129.8
Lard: prime contract	110.7	Fruit: currants, in barrels	130.1
Bread: loaf, Vienna (N. Y. market)	113.6	Flour: wheat, winter straights	136.5
Flour: buckwheat	114.5	Flour: wheat, spring patents	137.6
Salt: American	115.0	Meal: corn, fine white	138.3
Beans: medium, choice	115.3	Flour: rye	138.7
Meat: beef, salt, extra mess	115.4	Meal: corn, fine yellow	142.6
Meat: pork, salt, mess, old to new	115.5	Milk: fresh	147.1
Sugar: granulated	115.5	Fish: herring, shore, round	153.9
Fish: salmon, canned	117.1	Spices: pepper, Singapore	165.3
Bread: loaf, homemade (N. Y. market) ..	118.6	Eggs: new-laid, fancy, near-by	179.6
Bread: crackers, Boston X	118.9		

RELATIVE PRICES, DECEMBER, 1904, COMPARED WITH AVERAGE PRICE FOR 1890-1899—Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Food, etc., 52 articles—Concluded.

Article.	Relative price, Dec., 1904.	Article.	Relative price, Dec., 1904.
PRICE DECREASED.		PRICE DECREASED—concluded.	
Meat: hams, smoked	99.1	Coffee: Rio No. 7.....	65.2
Tea: Formosa, fine	96.9	Soda: bicarbonate of, American	62.2
Vinegar: cider, monarch.....	94.7	Fruit: apples, evaporated, choice.....	62.0
Bread: crackers, soda	90.5	Fruit: prunes, California, in boxes.....	56.6
Fruit: raisins, California, London layer.....	90.0	Spices: nutmegs	45.7
Rice: domestic, choice	70.2		
Vegetables, fresh: potatoes, Burbank	68.5	Average, food, etc	111.1
Fruit: apples, sun-dried, Southern, sliced.....	68.0		

Cloths and clothing, 70 articles.

Article.	Relative price, Dec., 1904.	Article.	Relative price, Dec., 1904.
PRICE INCREASED.		PRICE INCREASED—concluded.	
Underwear: shirts and drawers, white, all wool, full-fashioned, 18-gauge.....	100.4	Women's dress goods: cashmere, cotton warp, 9-twll, 4-4, Atlantic Mills F.....	119.3
Linen shoe thread: 10s, Barbour	102.1	Women's dress goods: cashmere, all wool, 10-11 twll, 38-inch, Atlantic Mills J.....	119.8
Shirtings: bleached, 4-4, Fruit of the Loom	103.0	Cotton thread: 6-cord, 200-yard spools, J. & P. Coats	120.1
Overcoatings: chinchilla, B-rough, all wool	103.1	Worsted yarns: 2-40s, XXX or its equivalent in quality, white, in skeins (e).....	120.1
Print cloths: 28-inch, 64 x 64	103.1	Horse blankets: 6 pounds each, all wool.....	122.2
Shirtings: bleached, 4-4, Lonsdale.....	103.2	Drillings: brown, Pepperell.....	122.4
Linen thread: 8-cord, 200-yard spools, Barbour	103.7	Women's dress goods: alpaca, cotton warp, 22-inch, Hamilton	122.5
Cotton yarns: carded, white, mule-spun, Northern, cones, 22/1	104.1	Drillings: 30-inch, Stark A	122.8
Leather: sole, oak	104.1	Worsted yarns: 2-40s, Australian fine	122.8
Cotton flannels: 3/4 yards to the pound	104.3	Blankets: 11-4, 5 pounds to the pair, cotton warp, cotton and wool filling.....	123.8
Leather: wax calf, 30 to 40 pounds to the dozen, B grade	105.0	Sheetings: brown, 4-4, Indian Head	123.8
Denims: Amoskeag	105.4	Women's dress goods: Franklinsackings, 6-4	124.5
Shawls: standard, all wool, 72 by 144 inch, 42-ounce, made of high-grade wool.....	107.0	Bags: 2-bushel, Amoskeag	128.7
Shirtings: bleached, 4-4, Hope	107.5	Wool: Ohio, fine fleece (X and XX grade), scoured	128.9
Carpets: ingrain, 2-ply, Lowell	109.1		
Sheetings: bleached, 10-4, Atlantic.....	109.5	PRICE DECREASED.	
Blankets: 11-4, 5 pounds to the pair, all wool	110.1	Tickings: Amoskeag A. C. A.....	99.0
Carpets: Brussels, 5-frame, Bigelow	110.3	Boots and shoes: men's calf bal. shoes, Goodyear welt, dongola top	98.9
Leather: harness, oak	110.4	Shirtings: bleached, 4-4, New York Mills.....	95.9
Carpets: Wilton, 5-frame, Bigelow	110.7	Underwear: shirts and drawers, white merino, full-fashioned, 52 per cent wool, 48 per cent cotton, 22-gauge (c).....	95.4
Overcoatings: beaver, Moscow, all wool, black	111.7	Shirtings: bleached, 4-4, Wamsutta $\times \times$	94.9
Cotton yarns: carded, white, mule-spun, Northern, cones, 10/1	111.9	Overcoatings: chinchilla, cotton warp, C. C. grade	94.2
Suitings: indigo blue, all wool, 54-inch, 14-ounce, Middlesex standard	112.2	Overcoatings: covert cloth, light weight, staple goods	94.0
Broadcloths: first quality, black, 54-inch, made from XXX wool	112.9	Ginghams: Amoskeag	93.8
Cotton flannels: 2/3 yards to the pound	113.3	Boots and shoes: men's brogans, split	93.5
Sheetings: brown, 4-4, Pepperell R.....	113.4	Silk: raw, Japan, filatures	92.9
Suitings: indigo blue, all wool, 16-ounce	114.1	Hosiery: men's cotton half hose, seamless, standard quality, 84 needles.....	92.4
Sheetings: brown, 4-4, Stark A. A. (a).....	114.5	Sheetings: bleached, 10-4, Wamsutta S. T.....	91.6
Sheetings: brown, 4-4, Atlantic A.....	115.2	Calico: Cocheo prints	90.4
Boots and shoes: men's split boots, kip top, 16-inch, 1/2 double sole (b).....	116.2	Boots and shoes: men's vici kid shoes, Goodyear welt	89.1
Boots and shoes: women's solid grain shoes, leather, polish or polka	116.2	Ginghams: Lancaster	87.8
Women's dress goods: cashmere, cotton warp, 22-inch, Hamilton	116.4	Silk: raw, Italian, classical	87.2
Women's dress goods: cashmere, cotton warp, 27-inch, Hamilton	116.5	Hosiery: men's cotton half hose, seamless, fast black, 20 to 22 ounce, 160 needles, two-thread goods (c).....	82.1
Sheetings: bleached, 10-4, Pepperell.....	116.8	Hosiery: women's cotton hose, seamless, fast black, 26 to 28 ounce, 160 to 176 needles.....	81.6
Leather: sole, hemlock, nonacid, Buenos Ayres, middle weights, 1st quality.....	117.3	Average, cloths and clothing	108.1
Flannels: white, 4-4, Ballard Vale No. 3.....	117.6		
Wool: Ohio, medium fleece (1/2 and 1/3 grade), scoured	117.7		
Blankets: 11-4, 5 pounds to the pair, cotton warp, all wool filling	118.3		

a From 1902 to 1904, quotations are for Massachusetts Mills, Flying Horse brand.

b In 1903 and 1904, russet bound top, 17-inch, 1/2 double sole.

c From 1902 to 1904, designated as XXXX.

d In 1903 and 1904, 60 per cent wool, 40 per cent cotton.

e In 1904, single-thread goods.

RELATIVE PRICES, DECEMBER, 1904, COMPARED WITH AVERAGE PRICE FOR 1890-1899—
Continued.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Fuel and lighting, 13 articles.

Article.	Relative price, Dec., 1904.	Article.	Relative price, Dec., 1904.
PRICE INCREASED.		PRICE INCREASED—concluded.	
Coal: bituminous, Georges Creek (f. o. b. New York Harbor).....	114.8	Petroleum: refined, 150° fire test, w. w ...	146.1
Candles: adamantine, 6s, 14-ounce.....	115.1	Petroleum: crude.....	172.5
Petroleum: refined, for export.....	122.5	Coal: bituminous, Georges Creek (at mine)	180.0
Coal: anthracite, broken.....	125.6	PRICE DECREASED.	
Coal: anthracite, stove.....	130.5	Matches: parlor, domestic.....	85.4
Coke: Connellsville, furnace.....	132.5	Average, fuel and lighting.....	133.9
Coal: anthracite, chestnut.....	137.7		
Coal: anthracite, egg.....	137.8		
Coal: bituminous, Pittsburg (Youghiogheny).....	140.0		

Metals and implements, 36 articles.

PRICE SAME AS BASE.		PRICE INCREASED—concluded.	
Saws: crosscut, Disston.....	100.0	Spelter: Western.....	128.5
Trowels: M. C. O., brick, 10½-inch.....	100.0	Axes: M. C. O., Yankee.....	128.9
PRICE INCREASED.		Hammers: Maydole No. 1½.....	129.0
Vises: solid box, 50-lb.....	106.1	Pig iron: foundry No. 2.....	129.1
Steel rails.....	107.4	Doorknobs: steel, bronze plated.....	132.6
Lead pipe.....	107.9	Pig iron: gray forge, Southern, coke.....	133.0
Copper: sheet, hot-rolled (base sizes).....	108.5	Augers: extra, ½-inch.....	149.3
Locks: common mortise.....	110.2	Chisels: extra, socket firmer, 1-inch.....	153.4
Bar iron: best refined, from store (Philadelphia market).....	110.4	Tin: pig.....	159.0
Copper wire: bare.....	111.0	PRICE DECREASED.	
Planes: Bailey No. 5.....	115.7	Saws: hand, Disston No. 7.....	98.6
Pig iron: foundry No. 1.....	119.0	Nails: cut, 8-penny, fence and common..	98.5
Files: 8-inch mill bastard.....	120.8	Quicksilver.....	98.3
Zinc: sheet.....	121.3	Steel billets.....	97.6
Bar iron: best refined, from mill (Pittsburg market).....	121.4	Shovels: Ames No. 2.....	96.9
Pig iron: Bessemer.....	121.4	Barb wire: galvanized.....	92.2
Copper: ingot, lake.....	121.6	Nails: wire, 8-penny, fence and common..	84.4
Lead: pig.....	122.0	Silver: bar, fine.....	81.7
Butts: loose joint, cast, 3x3 inch.....	126.6	Wood screws: 1-inch, No. 10, flat head..	62.6
		Average, metals and implements ..	114.2

Lumber and building materials, 26 articles.

PRICE INCREASED.		PRICE INCREASED—concluded.	
Lime: common.....	104.4	Oak: white, quartered.....	151.8
Carbonate of lead: American, in oil.....	106.2	Poplar.....	154.6
Oxide of zinc.....	115.8	Pine: white, boards, uppers.....	171.8
Window glass: American, single, thirds, 6x8 to 10x15 inch.....	116.8	Resin: good, strained.....	204.9
Maple: hard.....	117.0	PRICE DECREASED.	
Pine: yellow.....	119.1	Shingles: cypress.....	92.2
Shingles: white pine.....	120.0	Linseed oil: raw.....	90.4
Oak: white, plain.....	124.2	Cement: Rosendale.....	78.9
Window glass: American, single, firsts, 6x8 to 10x15 inch.....	126.4	Putty.....	66.5
Pine: white, boards, No. 2 barn.....	134.4	Plate glass: polished, unsilvered, area 5 to 10 square feet.....	65.5
Brick: common domestic.....	137.1	Plate glass: polished, unsilvered, area 3 to 5 square feet.....	59.2
Tar.....	141.1	Average, lumber and building materials.....	122.1
Hemlock.....	142.1		
Doors: pine.....	142.7		
Spruce.....	142.9		
Turpentine: spirits of.....	149.6		

RELATIVE PRICES, DECEMBER, 1904, COMPARED WITH AVERAGE PRICE FOR 1890-1899—
Concluded.

[For a more detailed description of the articles see Table I, page 437 et seq.]

Drugs and chemicals, 9 articles.

Article.	Relative price, Dec., 1904.	Article.	Relative price, Dec., 1904.
PRICE INCREASED.		PRICE DECREASED.	
Brimstone: crude, seconds.....	103.9	Glycerin: refined.....	94.7
Alum: lump.....	104.8	Quinine: American.....	93.5
Alcohol: grain, 94 per cent.....	107.1	Alcohol: wood, refined, 95 per cent.....	62.9
Opium: natural, in cases.....	115.5		
Sulphuric acid: 66°.....	146.1	Average, drugs and chemicals.....	109.1
Muriatic acid: 20°.....	153.8		

House furnishing goods, 14 articles.

PRICE INCREASED.		PRICE INCREASED—concluded.	
Earthenware: teacups and saucers, white granite.....	106.4	Furniture: chairs, bedroom, maple.....	129.1
Woodenware: tubs, oak-grained.....	107.6	Woodenware: pails, oak-grained.....	130.9
Furniture: tables, kitchen.....	108.1		
Earthenware: plates, white granite.....	110.4	PRICE DECREASED.	
Table cutlery: knives and forks, cocobolo handles.....	111.4	Glassware: pitchers, 4-gallon, common...	97.9
Earthenware: plates, cream-colored.....	113.8	Table cutlery: carvers, stag handles.....	93.8
Furniture: bedroom sets, ash.....	116.1	Glassware: tumblers, 4-pint, common....	90.1
Furniture: chairs, kitchen.....	124.2		
Glassware: nappies, 4-inch.....	125.0	Average, house furnishing goods...	111.8

Miscellaneous, 13 articles.

PRICE INCREASED.		PRICE DECREASED.	
Proof spirits.....	107.8	Paper: wrapping, manila.....	94.9
Soap: castile, mottled, pure.....	114.2	Starch: laundry.....	93.4
Tobacco: smoking, granulated, Seal of North Carolina.....	117.9	Paper: news.....	92.0
Cotton-seed meal.....	118.4	Malt: Western made.....	83.9
Tobacco: plug, Horseshoe.....	123.7	Cotton-seed oil: summer yellow, prime..	81.3
Jute: raw.....	125.3		
Rope: manila.....	133.8	Average, miscellaneous.....	111.5
Rubber: Para Island.....	158.0		

The farm products group was 22.2 per cent higher in December, 1904, than the average price for the ten years 1890 to 1899, 15 of the 16 articles being higher in that month than the average price for 1890 to 1899, and the remaining article, cotton, being the same price in December, 1904, as the average for 1890 to 1899.

The December, 1904, price, compared with the average price for 1890 to 1899, shows hops 94.8 per cent above; wheat, 54.9 per cent above; hides, 48.9 per cent above; rye, 39.5 per cent above; choice to extra steers, 26.2 per cent above; corn, 22.1 per cent above, etc.

In December, 1904, the food group was 11.1 per cent higher than the average price for the ten years, 1890 to 1899. Eggs were 79.6 per cent above the average price for 1890 to 1899; herring, 58.9 per cent above; milk, 47.1 per cent above; yellow corn meal, 42.6 per cent above; spring wheat flour, 37.6 per cent above, etc.

For the other groups of articles the reader is referred to the table.

The facts presented in the foregoing table are summarized in the following, which shows the changes in prices of articles in each group, classified by per cent of change:

CHANGES IN PRICES OF ARTICLES IN EACH GROUP, CLASSIFIED BY PER CENT OF CHANGE, DECEMBER, 1904, COMPARED WITH AVERAGE PRICE FOR 1890-1899.

Group.	Number of articles.	Price increased.					Price same as base.	Price decreased.			
		100 per cent or more.	50 to 100 per cent.	25 to 50 per cent.	10 to 25 per cent.	Less than 10 per cent.		Less than 10 per cent.	10 to 25 per cent.	25 to 50 per cent.	50 per cent or more.
Farm products	16	.....	2	3	4	6	1	.....	.....	.....	.....
Food, etc	52	.....	3	11	16	9	.....	4	1	7	1
Cloths and clothing	70	.....	.....	2	34	16	.....	13	5	.....	.....
Fuel and lighting	13	.....	2	7	3	.....	.....	.....	1	.....	.....
Metals and implements	36	.....	2	8	11	4	2	6	2	1	.....
Lumber and building materials	26	1	3	3	6	2	.....	2	1	3	.....
Drugs and chemicals	9	.....	1	1	1	3	.....	2	.....	1	.....
House furnishing goods	14	.....	.....	3	5	3	.....	3	.....	.....	.....
Miscellaneous	13	.....	1	2	4	1	.....	3	2	.....	.....
Total	249	1	14	45	84	44	3	33	12	12	1

It is seen in the above comparison of the prices of December, 1904, with the average for 1890 to 1899, that of the 16 articles in the farm products group, 15 show an increase and 1 shows the same price as the average for the base period; of the 52 in the food, etc., group, 39 show an increase and 13 a decrease; of the 70 in the cloths and clothing group, 52 show an increase and 18 a decrease; of the 13 in the fuel and lighting group, 12 show an increase and 1 shows a decrease; of the 36 in the metals and implements group, 25 show an increase, 2 show the same price as the average for the base period, and 9 show a decrease; of the 26 in the lumber and building materials group, 20 show an increase and 6 a decrease; of the 9 in the drugs and chemicals group, 6 show an increase and 3 a decrease; of the 14 in the house furnishing goods group, 11 show an increase and 3 a decrease; of the 13 in the miscellaneous group, 8 show an increase and 5 a decrease. Of the 249 commodities, for which prices were secured for the whole period from 1890 to 1904, 188 show an increase, 3 show the same price as the average for the base period, and 58 show a decrease.

The number of articles according to classified per cents of increase and decrease is also shown in this table. Of the 188 commodities that showed an increase in December, 1904, over the average for 1890 to 1899, 44 advanced less than 10 per cent, 84 advanced from 10 to 25 per cent, 45 advanced from 25 to 50 per cent, 14 advanced from 50 to 100 per cent, and 1 advanced 100 per cent or more. Of the 58 commodities which showed a decrease, 33 decreased less than 10 per cent, 12 decreased from 10 to 25 per cent, 12 decreased from 25 to 50 per cent, and 1 decreased 50 per cent or more.

The number and per cent of articles which showed each specified increase or decrease are given in the following table:

NUMBER AND PER CENT OF ARTICLES, BY CLASSIFIED PER CENT OF INCREASE OR DECREASE, DECEMBER, 1904, COMPARED WITH AVERAGE PRICE FOR 1890-1899.

	Number of arti- cles.	Per cent of arti- cles.		Number of arti- cles.	Per cent of arti- cles.
Price increased:			Price decreased:		
100 per cent or more.....	1	0.4	Less than 10 per cent....	33	13.3
50 to 100 per cent.....	14	5.6	10 to 25 per cent.....	12	4.8
25 to 50 per cent.....	45	18.1	25 to 50 per cent.....	12	4.8
10 to 25 per cent.....	84	33.7	50 per cent or more.....	1	.4
Less than 10 per cent.....	44	17.7			
Total.....	188	75.5	Total.....	58	23.3
Price same as base.....	3	1.2	Grand total.....	249	100.0

Of the 249 articles for which prices were secured for the whole period from 1890 to 1904, it is seen that 188, or 75.5 per cent, show an increase in price; 3 articles, or 1.2 per cent, show the same price as the average for the base period, and 58 articles, or 23.3 per cent, show a decrease in price in December, 1904, as compared with the average price for the base period.

Of the 259 commodities considered in this compilation of prices, the average price of 110 commodities was higher in December, 1904, than in December, 1903; the average price of 51 was the same in December, 1904, as in December, 1903, and the average price of 98 was lower in December, 1904, than in December, 1903.

The following table shows the relative prices of certain related articles, so grouped as to render easy a comparison of the course of their prices during the year 1904:

RELATIVE PRICES OF CERTAIN GROUPS OF RELATED ARTICLES IN 1904.

[Average price for 1890-1899=100.]

Month.	Cattle and cattle products.						Dairy products.		
	Cattle.	Beef, fresh.	Beef, hams.	Beef, mess.	Tallow.	Hides.	Milk.	Butter.	Cheese.
Jan....	106.0	108.0	117.5	102.9	117.9	117.4	122.4	100.9	121.6
Feb....	103.4	102.6	117.5	110.7	116.6	114.7	117.6	108.2	121.6
Mar....	105.5	98.3	117.5	115.4	115.6	112.3	117.6	108.3	121.6
Apr....	103.7	97.3	117.5	106.7	107.6	114.3	107.3	105.3	117.3
May....	104.6	97.9	114.7	102.9	98.6	116.3	92.9	91.6	97.3
June....	113.5	113.9	116.8	102.9	97.0	119.3	78.4	81.9	81.8
July....	116.1	123.2	123.0	109.1	99.3	120.7	82.0	80.6	77.3
Aug....	109.7	112.8	131.1	109.1	102.3	126.6	88.2	82.7	82.9
Sept....	110.6	103.8	136.8	109.9	102.3	125.4	98.0	89.1	91.2
Oct....	117.1	105.4	134.7	112.3	104.6	131.4	112.5	96.0	98.8
Nov....	119.2	108.9	129.1	115.4	99.8	146.1	130.2	113.4	108.4
Dec....	121.6	107.8	125.8	115.4	107.1	143.9	147.1	122.2	119.0
1904....	110.9	106.1	123.6	109.4	105.5	124.4	107.3	98.4	103.2

RELATIVE PRICES OF CERTAIN GROUPS OF RELATED ARTICLES IN 1904—Continued.

[Average price for 1890-1899=100.]

Month.	Hogs and hog products.					Sheep and sheep products.		
	Hogs.	Bacon.	Hams, smoked.	Mess pork.	Lard.	Sheep.	Mutton.	Wool.
Jan.....	110.2	110.4	110.6	126.0	111.9	99.3	99.5	112.3
Feb.....	116.6	114.8	113.1	137.0	119.3	103.9	105.3	112.3
Mar.....	123.6	115.9	110.8	135.4	113.1	113.7	94.8	112.3
Apr.....	114.7	108.1	106.1	122.0	107.2	130.3	106.9	112.3
May.....	106.3	102.8	104.2	112.8	104.4	124.6	124.0	113.1
June.....	115.2	116.1	108.6	122.0	108.0	119.4	112.7	113.9
July.....	124.4	117.9	111.8	123.8	109.5	103.5	111.9	114.8
Aug.....	122.0	120.5	116.9	119.1	110.1	97.6	111.4	116.4
Sept.....	132.9	127.8	114.9	111.5	115.7	95.7	88.7	117.4
Oct.....	125.2	127.8	110.3	112.3	120.3	96.4	88.7	117.4
Nov.....	108.3	114.8	102.1	110.9	113.6	109.3	91.5	119.8
Dec.....	102.2	106.7	99.1	115.5	110.7	113.0	101.2	123.3
1904.....	116.7	115.1	103.9	120.6	111.8	109.1	103.2	115.5

Month.	Corn, etc.			Flaxseed, etc.		Rye and rye flour.		Wheat and wheat flour.		Flour, etc.		
	Corn.	Glue, cose, a	Meal.	Flaxseed.	Linseed oil.	Rye.	Rye flour.	Wheat.	Wheat flour.	Wheat flour.	Crackers.	Loaf bread.
Jan.....	118.2	119.9	117.5	90.3	81.6	101.5	101.0	114.6	106.8	106.8	97.3	102.7
Feb.....	131.9	130.4	125.9	101.1	92.6	122.9	105.5	128.6	114.6	114.6	97.3	102.7
Mar.....	137.2	137.5	130.8	102.2	92.6	134.5	140.2	123.3	123.0	123.0	97.3	102.7
Apr.....	134.3	144.5	128.5	101.1	92.6	128.6	135.7	123.8	120.8	120.8	108.2	102.7
May.....	127.1	137.5	123.5	94.1	92.6	138.8	133.4	131.1	119.5	119.5	108.2	102.7
June.....	128.3	130.4	133.2	92.8	88.2	122.9	132.6	130.7	118.6	118.6	104.7	102.7
July.....	129.2	130.4	136.8	94.1	86.0	130.3	131.9	134.7	116.5	116.5	104.7	102.7
Aug.....	142.1	113.5	129.4	107.8	99.2	137.0	133.4	144.2	127.8	127.8	104.7	106.6
Sept.....	140.5	120.6	132.1	109.6	99.2	137.9	138.7	153.4	138.1	138.1	104.7	106.6
Oct.....	137.3	113.5	124.7	99.3	94.8	146.6	140.2	155.2	139.6	139.6	104.7	110.9
Nov.....	139.8	110.0	135.6	100.2	90.4	149.9	141.7	154.6	139.7	139.7	104.7	119.2
Dec.....	122.1	127.6	140.5	102.9	90.4	139.5	138.7	154.9	137.1	137.1	104.7	110.9
1904.....	132.6	126.3	129.5	99.6	91.7	133.4	131.1	138.3	125.4	125.4	103.4	106.0

Cotton and cotton goods.										
Month.	Cotton: upland, mid-ling.	Bags: 2-bushel, Amos-keag.	Calico: Cochecho prints.	Cotton flannels.	Cotton thread.	Cotton yarns.	Denims.	Drillings.	Ginghams.	Hosiery.
Jan.....	185.7	110.8	99.5	134.7	120.1	126.3	119.7	130.4	101.8	90.5
Feb.....	191.0	128.7	99.5	134.7	120.1	144.0	124.5	135.2	104.1	90.5
Mar.....	198.9	128.7	99.5	134.7	120.1	134.0	124.5	139.0	104.1	90.5
Apr.....	185.5	132.2	99.5	134.7	120.1	134.7	124.5	132.6	104.1	91.3
May.....	172.8	132.2	99.5	125.0	120.1	126.3	124.5	130.1	104.1	91.3
June.....	148.6	132.2	99.5	125.0	120.1	118.1	124.5	123.8	104.1	91.3
July.....	139.8	132.2	99.5	125.0	120.1	110.9	114.9	120.7	104.1	91.3
Aug.....	140.8	128.7	90.4	125.0	120.1	104.9	110.2	121.5	97.1	89.2
Sept.....	141.7	128.7	90.4	125.0	120.1	106.5	110.2	124.0	90.6	89.2
Oct.....	132.9	128.7	90.4	117.2	120.1	111.8	110.2	120.7	90.6	88.4
Nov.....	128.6	128.7	90.4	117.2	120.1	108.6	105.4	120.7	90.6	88.4
Dec.....	100.0	128.7	90.4	108.8	120.1	108.0	105.4	122.6	90.6	88.4
1904.....	155.9	128.4	95.7	125.6	120.1	119.5	116.6	126.7	99.9	89.2

Month.	Cotton and cotton goods.				Wool and woolen goods.				
	Print cloths.	Sheetings.	Shirtings.	Tickings.	Wool.	Blankets (all wool).	Broadcloths.	Carpets.	Horse blankets.
Jan.....	130.4	121.0	107.0	122.5	112.3	110.1	110.3	110.0	117.6
Feb.....	140.9	127.6	108.6	122.5	112.3	110.1	110.3	110.0	117.6
Mar.....	140.9	128.2	108.8	122.5	112.3	110.1	110.3	110.0	117.6
Apr.....	132.6	128.5	108.6	127.2	112.3	110.1	110.3	110.0	117.6
May.....	120.0	126.8	108.8	127.2	113.1	110.1	110.3	110.0	117.6
June.....	111.2	126.8	109.6	127.2	113.9	110.1	110.3	110.0	117.6
July.....	107.5	119.6	101.6	108.4	114.8	110.1	110.3	110.0	117.6
Aug.....	105.7	119.6	101.2	108.4	116.4	110.1	110.3	110.0	117.6
Sept.....	105.7	115.9	100.5	108.4	117.4	110.1	110.3	110.0	117.6
Oct.....	105.7	113.9	100.4	99.0	117.4	110.1	110.3	110.0	117.6
Nov.....	105.7	111.9	100.0	99.0	119.1	110.1	110.3	110.0	117.6
Dec.....	103.1	112.1	100.9	99.0	123.3	110.1	112.9	110.6	117.6
1904.....	117.3	121.1	104.7	114.3	115.5	110.1	110.5	110.0	117.6

a Average for 1893-1899=100.

RELATIVE PRICES OF CERTAIN GROUPS OF RELATED ARTICLES IN 1904—Concluded.

[Average price for 1890-1899=100.]

Month.	Wool and woolen goods.						Hides, leather, and boots and shoes.			Petroleum.	
	Overcoat-ings (all wool).	Shawls.	Suit-ings.	Under-wear (all wool).	Women's dress goods (all wool).	Worst-ed yarns.	Hides.	Leather.	Boots and shoes.	Crude.	Re-fined.
Jan....	109.8	107.0	108.0	100.4	114.0	115.8	117.4	109.9	100.5	203.3	154.4
Feb....	109.8	107.0	107.0	100.4	114.0	115.8	114.7	108.8	100.5	200.0	154.4
Mar...	109.8	107.0	107.0	100.4	114.0	115.8	112.3	108.8	100.5	189.0	146.1
Apr....	109.8	107.0	107.0	100.4	114.0	115.8	114.3	109.5	100.5	181.7	144.2
May....	109.8	107.0	107.0	100.4	114.0	114.8	116.3	109.9	100.5	178.0	141.5
June...	109.8	107.0	107.7	100.4	114.0	114.8	119.3	108.2	100.5	174.3	141.5
July...	109.8	107.0	107.7	100.4	114.0	114.8	120.7	106.4	101.1	167.0	134.3
Aug....	109.8	107.0	109.4	100.4	114.0	114.8	126.6	107.1	101.1	164.8	132.4
Sept...	111.3	107.0	109.4	100.4	116.3	114.8	125.4	106.7	101.1	168.8	133.6
Oct....	111.3	107.0	112.2	100.4	116.3	119.0	131.4	108.8	101.7	171.4	134.4
Nov....	111.3	107.0	112.2	100.4	119.9	120.2	146.1	108.8	102.8	174.4	134.4
Dec....	111.3	107.0	114.1	100.4	122.2	121.5	148.9	109.2	102.8	172.5	134.4
1904....	110.3	107.0	109.0	100.4	115.6	116.5	124.4	108.5	101.1	178.8	140.5

A study of this table shows that of the 6 articles grouped under cattle and cattle products, cattle, fresh beef, tallow, and hides were lower in February than in January, beef hams the same price, and mess beef higher; March compared with February shows fresh beef, tallow, and hides lower, hams the same price, and cattle and mess beef higher; April compared with March shows cattle, fresh beef, mess beef, and tallow lower, hams the same price, and hides higher; May compared with April shows hams, mess beef, and tallow lower, cattle, fresh beef, and hides higher; June compared with May shows tallow lower, mess beef the same price, and all others higher; July compared with June shows all the articles higher; August compared with July shows cattle and fresh beef lower, mess beef the same price, hams, tallow, and hides higher; September compared with August shows fresh beef and hides lower and all the other articles higher; October compared with September shows hams lower and all the other articles higher; November compared with October shows hams and tallow lower and all the other articles higher; December compared with November shows fresh beef and hams lower, mess beef the same price, and cattle, tallow, and hides higher.

The lowest monthly relative price during 1904 for cattle was 103.4 in February, the highest 121.6 in December; the lowest for fresh beef was 97.3 in April, the highest 123.2 in July; the lowest for beef hams was 114.7 in May, the highest 136.8 in September; the lowest for mess beef was 102.9 in January, May, and June, the highest 115.4 in March, November, and December; the lowest for tallow was 97.0 in June, the highest 117.9 in January; the lowest for hides was 112.3 in March, the highest 148.9 in December. The facts for the other groups may be seen by reference to the table.

In the following table a similar comparison of the course of prices for the 15 year period, 1890 to 1904, is shown by years:

RELATIVE PRICES OF CERTAIN GROUPS OF RELATED ARTICLES, 1890 TO 1904.

[Average price for 1890-1899=100.]

Year.	Cattle and cattle products.						Dairy products.		
	Cattle.	Beef, fresh.	Beef, hams.	Beef, mess.	Tallow.	Hides.	Milk.	Butter.	Cheese.
1890.....	89.5	89.2	80.4	86.8	105.7	99.6	103.1	100.4	97.1
1891.....	109.2	106.2	85.8	104.4	111.0	101.5	104.7	116.1	102.4
1892.....	96.4	98.8	80.5	84.8	106.4	92.8	105.1	116.4	107.2
1893.....	103.0	105.4	98.6	102.2	125.1	79.9	109.4	121.3	109.0
1894.....	96.3	97.0	101.5	101.0	110.3	68.4	103.1	102.2	107.4
1895.....	103.7	102.7	95.9	101.4	99.8	109.7	99.2	94.5	94.1
1896.....	88.3	90.5	88.1	93.7	78.9	86.6	91.8	82.3	92.0
1897.....	99.5	99.7	125.1	95.7	76.3	106.3	92.2	84.1	98.1
1898.....	102.2	101.3	118.8	114.2	81.8	122.8	93.7	86.8	83.3
1899.....	113.2	108.3	125.6	115.9	104.1	131.8	99.2	95.8	108.9
1900.....	111.3	104.3	114.2	121.7	111.5	127.4	107.5	101.7	114.3
1901.....	116.6	102.1	112.6	116.3	119.1	132.0	102.7	97.7	102.4
1902.....	139.5	125.9	118.0	147.1	144.6	142.8	112.9	112.1	114.1
1903.....	105.8	101.7	117.2	113.1	117.2	124.8	112.9	105.7	123.3
1904.....	110.9	106.1	123.5	109.4	105.6	124.4	107.8	98.4	103.2

Year.	Hogs and hog products.					Sheep and sheep products.		
	Hogs.	Bacon.	Hams, smoked.	Mess pork.	Lard.	Sheep.	Mutton.	Wool.
1890.....	89.2	89.3	101.1	104.4	96.8	119.3	123.7	132.1
1891.....	99.2	103.7	99.8	97.2	100.9	117.8	114.9	125.8
1892.....	115.7	116.6	109.3	99.1	117.9	125.2	121.2	113.2
1893.....	148.6	154.7	126.9	157.6	157.5	103.8	106.5	101.6
1894.....	112.2	111.8	103.6	121.4	118.2	73.6	80.2	79.1
1895.....	96.6	96.3	96.2	101.7	99.8	78.4	82.2	70.1
1896.....	78.3	73.1	95.8	76.8	71.7	78.7	82.9	70.6
1897.....	82.8	79.9	90.9	76.6	67.4	94.2	96.6	88.7
1898.....	85.6	89.4	82.0	84.8	84.4	104.9	98.0	108.3
1899.....	91.8	85.8	93.8	80.3	85.0	104.3	94.3	110.8
1900.....	115.5	111.5	104.2	107.5	105.5	112.0	96.4	117.7
1901.....	134.5	132.3	109.2	134.2	135.3	92.0	89.5	96.6
1902.....	155.2	159.3	123.1	154.2	161.9	103.2	97.9	100.8
1903.....	137.2	142.6	129.2	143.1	134.1	98.4	98.7	110.3
1904.....	116.7	115.1	108.9	120.6	111.8	109.1	103.2	115.5

Year.	Corn, etc.			Flaxseed, etc.		Rye and rye flour.		Wheat and wheat flour.		Flour, etc.		
	Corn.	Glu- cose. ^a	Meal.	Flax- seed.	Linseed oil.	Rye.	Rye flour.	Wheat.	Wheat flour.	Wheat flour.	Crack- ers.	Loaf bread.
1890.....	103.8	.....	100.8	125.5	135.8	103.0	101.4	118.9	120.9	120.9	107.7	100.9
1891.....	151.0	.....	142.0	97.1	106.8	157.6	148.3	123.1	125.6	125.6	107.7	100.9
1892.....	118.3	.....	114.0	91.4	90.0	127.7	121.1	104.9	104.2	104.2	104.3	100.9
1893.....	104.2	124.3	105.8	97.7	102.2	92.6	93.0	90.1	89.3	89.3	100.6	100.9
1894.....	113.7	111.4	105.6	121.6	115.6	88.1	83.8	74.4	77.6	77.6	98.8	100.9
1895.....	104.0	109.2	103.3	111.8	115.6	91.2	94.5	79.9	84.4	84.4	95.6	98.7
1896.....	67.8	81.7	77.4	72.9	81.2	66.5	80.9	85.4	91.2	91.2	94.1	94.5
1897.....	66.9	86.0	76.5	78.1	72.2	74.9	84.6	105.8	110.1	110.1	85.3	100.9
1898.....	82.6	91.8	83.7	99.8	86.5	93.8	92.9	117.8	109.0	109.0	107.3	100.9
1899.....	87.6	95.6	91.2	104.0	94.1	104.4	99.4	94.7	87.9	87.9	99.1	100.9
1900.....	100.2	104.9	97.0	145.7	138.7	97.9	103.3	93.7	88.3	88.3	102.7	100.9
1901.....	130.6	116.0	115.5	145.8	140.0	100.8	100.1	95.7	87.4	87.4	108.2	100.9
1902.....	156.9	153.6	148.2	135.0	130.8	102.5	103.8	98.7	89.7	89.7	108.2	100.9
1903.....	121.1	129.7	124.7	94.1	91.9	97.5	94.9	105.1	97.1	97.1	101.3	100.9
1904.....	132.6	126.3	129.5	99.6	91.7	133.4	131.1	138.3	125.4	125.4	103.4	106.0

^a Average for 1893-1899=100.

RELATIVE PRICES OF CERTAIN GROUPS OF RELATED ARTICLES, 1890 TO 1904—Concluded.

[Average price for 1890-1899=100.]

Year.	Cotton and cotton goods.									
	Cotton: upland, mid- dling.	Bags: 2-bushel, Amos- keag.	Calico: Cocheco prints.	Cotton flannels.	Cotton thread.	Cotton yarns.	Denims.	Drill- ings.	Ging- hams.	Hosi- ery.
1890....	142.9	113.9	117.5	121.8	101.6	111.7	112.5	121.1	119.1	129.7
1891....	110.8	111.7	104.0	121.8	100.7	112.8	109.6	114.6	122.1	122.8
1892....	99.0	110.8	117.5	115.9	100.7	117.0	109.6	102.2	122.1	117.4
1893....	107.2	106.8	113.0	101.4	100.7	110.5	112.5	105.6	114.9	109.4
1894....	90.2	91.1	99.5	95.7	100.7	93.0	105.4	97.1	89.5	100.8
1895....	94.0	82.2	94.9	91.7	100.7	92.1	94.6	93.2	87.0	94.4
1896....	102.0	91.6	94.9	93.9	99.6	93.0	94.6	100.2	88.0	90.5
1897....	92.2	92.9	90.4	88.6	98.4	90.6	89.2	90.4	84.2	86.7
1898....	76.9	95.6	81.4	81.0	98.4	90.8	85.9	86.8	83.1	83.4
1899....	84.7	103.4	87.3	88.0	98.4	88.5	85.8	88.5	89.7	82.5
1900....	123.8	112.6	94.9	101.6	120.1	115.5	102.8	105.0	96.3	87.3
1901....	111.1	101.0	90.4	95.4	120.1	98.3	100.2	102.2	92.3	85.9
1902....	115.1	102.4	90.4	96.1	120.1	94.0	100.6	102.0	99.2	85.2
1903....	144.7	104.2	91.1	106.8	120.1	112.9	108.0	109.9	101.8	90.1
1904....	155.9	128.4	95.7	125.6	120.1	119.5	116.6	126.7	99.9	89.2

Year.	Cotton and cotton goods.				Wool and woolen goods.					
	Print cloths.	Sheet- ings.	Shirt- ings.	Tick- ings.	Wool.	Blan- kets(all wool).	Broad- cloths.	Carpets.	Flan- nels.	Horse blan- kets.
1890....	117.7	117.6	112.9	113.1	132.1	108.3	113.7	105.3	116.8	109.1
1891....	103.5	112.3	110.2	110.7	125.8	106.0	113.7	112.8	116.8	104.7
1892....	119.3	103.8	107.4	108.4	113.2	107.1	113.7	104.5	115.9	109.1
1893....	114.6	107.7	110.2	111.3	101.6	107.1	113.7	104.5	109.5	104.7
1894....	96.8	95.9	99.9	102.2	79.1	101.2	91.2	98.7	94.1	96.0
1895....	100.9	94.6	97.6	94.8	70.1	89.3	79.7	91.0	81.7	92.5
1896....	90.9	97.4	97.9	96.0	70.6	89.3	79.7	90.2	85.4	90.8
1897....	87.6	91.8	92.0	91.9	88.7	89.3	98.2	93.5	82.6	99.5
1898....	72.6	86.7	83.8	84.3	108.3	107.1	98.2	100.2	97.8	99.5
1899....	96.3	92.2	87.8	87.0	110.8	95.2	98.2	99.4	99.5	94.2
1900....	108.6	105.9	100.4	102.2	117.7	107.1	108.0	102.7	108.7	118.7
1901....	99.3	101.8	98.9	95.5	96.6	101.2	110.3	101.9	100.8	109.9
1902....	108.9	101.4	98.8	99.0	100.8	101.2	110.3	102.5	105.8	109.9
1903....	113.3	110.6	103.2	104.1	110.3	110.1	110.3	108.6	114.3	117.8
1904....	117.3	121.1	104.7	114.8	118.5	110.1	110.5	110.0	117.6	122.2

Year.	Wool and woolen goods.						Hides, leather, and boots and shoes.			Petroleum.	
	Over- coat- ings(all wool).	Shawls.	Suit- ings.	Under- wear (all wool).	Wom- en's dress goods (all wool).	Worst- ed yarns.	Hides.	Leath- er.	Boots and shoes.	Crude.	Re- fined.
1890....	111.9	107.0	113.1	106.2	117.6	122.3	99.6	100.6	104.8	95.4	112.4
1891....	111.9	107.0	113.1	110.0	123.0	123.4	101.5	100.9	103.5	73.6	102.2
1892....	111.9	107.0	113.4	110.0	124.1	117.2	92.8	97.0	102.7	61.1	91.5
1893....	108.6	107.0	112.7	110.0	114.7	109.5	79.9	96.9	100.9	70.3	81.0
1894....	97.5	107.0	98.3	92.7	90.6	91.3	68.4	91.5	99.4	92.2	80.5
1895....	90.8	107.0	89.2	92.7	82.7	74.0	109.7	108.0	98.7	149.2	106.6
1896....	86.7	89.1	87.8	92.7	74.1	72.9	86.6	95.2	99.6	129.5	112.5
1897....	87.8	89.5	88.7	92.7	82.2	82.5	106.3	96.1	97.2	86.5	96.6
1898....	97.1	90.2	103.4	92.7	88.5	100.5	122.8	104.4	96.3	100.2	99.5
1899....	100.6	89.1	106.1	100.4	102.7	106.7	131.8	109.3	96.8	142.1	118.0
1900....	116.1	107.0	115.8	100.4	118.7	118.4	127.4	113.2	99.4	148.5	132.6
1901....	105.3	107.0	104.9	100.4	107.9	102.2	132.0	110.8	99.2	132.9	119.3
1902....	105.3	107.0	105.3	100.4	109.8	111.7	142.8	112.7	98.9	135.9	118.8
1903....	110.2	107.0	109.0	100.4	114.4	118.0	124.8	112.0	100.2	174.5	142.3
1904....	110.3	107.0	109.0	100.4	115.6	116.5	124.4	108.5	101.1	178.8	140.5

This table shows for all of the 6 articles grouped under cattle and cattle products (cattle, fresh beef, beef hams, mess beef, tallow, and

hides) an advance in price in 1891, but not in the same degree; in 1892, a decline in all of the articles in this group; in 1893, an increase, except for hides, for which there was a further decline; in 1894, a decline, except for beef hams, which increased; in 1895, an increase, except for beef hams and tallow; in 1896, a decline in all of the articles; in 1897, an increase, except for tallow; in 1898, an increase for all of the articles, except beef hams; in 1899, an increase for all; in 1900, a decline, except for mess beef and tallow; in 1901, an increase for cattle, tallow, and hides, and a decline for fresh beef, beef hams, and mess beef; in 1902, an increase for all; in 1903, a decrease for all, and in 1904 an increase for cattle, fresh beef, and hams, and a decrease for mess beef, tallow, and hides.

For the 15 years from 1890 to 1904 the lowest relative price for cattle was 88.3 in 1896, the highest 139.5 in 1902; the lowest for fresh beef 89.2 in 1890, the highest 125.9 in 1902; the lowest for beef hams 80.4 in 1890, the highest 125.6 in 1899; the lowest for mess beef 84.8 in 1892, the highest 147.1 in 1902; the lowest for tallow 76.3 in 1897, the highest 144.6 in 1902; the lowest for hides 68.4 in 1894, the highest 142.8 in 1902. The facts for the other groups may be seen by reference to the table.

General Tables I, II, III, IV, and V follow.

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904.

FARM PRODUCTS.

BARLEY: Choice to fancy malting, by sample.

[Price per bushel in Chicago, weekly range; quotations furnished by the secretary of the Chicago Board of Trade.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.51-\$0.60 .53-.60 .54-.61 .56-.61 .53-.60 .52-.60 .53-.58 .55-.60 .55-.61 .53-.60 .52-.60 .52-.58 .52-.56	Apr....	\$0.52-\$0.56 .53-.57 .53-.60 .53-.58 .55-.58 .55-.58 .52-.58 .55-.58 .55-.59 .57-.59 .55-.59 .55-.59 .53-.56	July...	\$0.50-\$0.55 .49-.54 .48-.52 .48-.52 .48-.52 .46-.50 .47-.52 .50-.55 .50-.55 .49-.55 .49-.55 .49-.54 .47-.52	Oct....	\$0.45-\$0.52 .45-.50 .45-.52 .45-.54......48-.52 .48-.53 .48-.52 .48-.53 .47-.52 .45-.51 .45-.50 .45-.48 .45-.48
Feb.....		May...		Aug...		Nov....	
Mar....		June..		Sept...		Dec....	
						Average	\$0.5300

CATTLE: Steers, choice to extra.

[Price per hundred pounds in Chicago, on Tuesday of each week; quotations from the Daily Trade Bulletin. Beginning in October the two descriptions here quoted were subdivided by the Daily Trade Bulletin into three descriptions, as follows: Extra well finished, choice to extra, and good to choice.]

Jan.....	\$5.50-\$6.00 5.40-5.80 5.40-5.90 5.40-5.90 5.20-5.75 5.20-5.75 5.20-5.70 5.25-6.00	Apr....	\$5.25-\$5.85 5.25-5.85 5.15-5.70 5.15-5.70 5.15-5.70 5.30-5.70 5.30-5.75 5.40-5.85 5.40-5.85 5.60-6.40 5.70-6.65 5.70-6.65 5.90-6.75	July...	\$5.90-\$6.60 5.90-6.60 5.90-6.65 5.90-6.60 5.65-6.40 5.65-6.40 5.60-6.10 5.60-5.90 5.60-6.15 5.60-6.10 5.60-6.30 5.60-6.25 5.60-6.45	Oct.....	\$5.67-\$6.40 5.87-6.60 5.97-6.80 6.07-7.00 5.85-7.00 6.05-7.00 5.95-6.85 5.92-7.00 6.12-7.30 6.12-7.50 6.12-7.60 6.12-7.60 5.87-6.75
Feb.....		May...		Aug...		Nov....	
Mar....		June..		Sept...		Dec....	
						Average	\$5.9562

CATTLE: Steers, good to choice.

[Price per hundred pounds in Chicago on Tuesday of each week; quotations from the Daily Trade Bulletin. Beginning in October the two descriptions here quoted were subdivided by the Daily Trade Bulletin into three descriptions as follows: Extra well finished, choice to extra, and good to choice.]

Jan.....	\$4.70-\$5.40 4.70-5.20 4.70-5.30 4.70-5.30 4.50-5.20 4.50-5.20 4.50-5.20 4.60-5.40	Apr....	\$4.60-\$5.40 4.60-5.40 4.50-5.25 4.50-5.25 4.50-5.25 4.65-5.25 4.65-5.25 4.80-5.30 4.80-5.30 4.80-5.60 4.80-5.65 4.80-5.60 5.00-5.80	July...	\$5.00-\$5.80 5.00-5.80 5.10-5.80 5.10-5.80 4.85-5.50 4.85-5.50 4.85-5.50 4.75-5.35 4.75-5.60 4.75-5.60 4.75-5.75 4.75-5.70 4.90-5.65	Oct....	\$4.90-\$5.67 4.97-5.87 5.10-5.97 5.25-6.07 4.95-5.85 5.15-6.05 5.00-5.95 4.80-5.92 5.05-6.12 5.05-6.12 5.05-6.12 5.05-6.12 4.87-5.87
Feb.....		May...		Aug...		Nov....	
Mar....		June...		Sept...		Dec....	
						Average	\$5.1923

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FARM PRODUCTS—Continued.

CORN: No. 2, cash.

[Price per bushel in Chicago on Tuesday of each week; quotations furnished by the secretary of the Chicago Board of Trade.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.42½ .44½ .46½	Apr....	\$0.54½-\$0.54½ .52½-.52½ .49-.53	July...	\$0.48½ .48½ .49½	Oct....	\$0.52½-\$0.53 .50½-.51 .52½
Feb.....	\$0.46½-.46½ .47½ .50 .51 .52	May...	.46½ .47½ .48½ .49 .48½ .48½	Aug...	.49½ .53½ .53½ .54½ .55½ .52½	Nov...	.52- .54 .54½ .55 .50½-.53 .50
Mar....	.51½ .51½ .51½ .55	June..	.49½-.50 .49½ .47½-.48½ .48½	Sept...	.53½ .54½ .54½ .52½	Dec....	.46½ .45½-.46½ .46- .46½-.47
						Average	\$0.5046

COTTON: Upland, middling.

[Price per pound in New York on Tuesday of each week; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.1890 .1400 .1450 .1525	Apr....	\$0.1500 .1475 .1410 .1375	July...	\$0.1060 .1115 .1095 .1070	Oct....	\$0.1030 .1055 .1035 .1005
Feb.....	.1675 .1425 .1350 .1490	May...	.1355 .1375 .1365 .1335 .1275	Aug...	.1050 .1065 .1065 .1120 .1155	Nov....	.1000 .1025 .1025 .0990 .0950
Mar....	.1530 .1625 .1645 .1400 .1490	June..	.1130 .1240 .1110 .1085	Sept...	.1110 .1090 .1110 .1090	Dec....	.0800 .0800 .0770 .0735
						Average	\$0.1210

FLAXSEED: No. 1.

[Price per bushel in Chicago on the first of each month; quotations furnished by the secretary of the Chicago Board of Trade.]

Jan.....	\$0.97½-\$1.08½	Apr....	\$1.09-\$1.16	July...	\$1.02-\$1.07½	Oct....	\$1.10½
Feb.....	1.09-1.16	May...	1.01-1.08½	Aug...	1.16-1.24	Nov....	\$1.08-1.15
Mar....	1.11-1.16½	June..	1.00-1.06½	Sept...	1.18½-1.25½	Dec....	1.11-1.18
						Average	\$1.1088

HAY: Timothy, No. 1.

[Price per ton in Chicago on Tuesday of each week; quotations from the Daily Inter Ocean.]

Jan.....	\$10.00-\$11.00 11.00-11.50 11.00-11.50 11.00-11.50	Apr....	\$11.00-\$12.00 11.00-12.00 12.00-13.00 12.50-13.00	July...	\$12.00-\$12.50 12.00-12.50 12.00-13.00 12.00-13.00	Oct.....	\$10.50-\$11.00 11.50-12.50 11.50-12.50 11.00-11.50
Feb.....	11.00-11.50 11.00-11.50 11.00-11.50 10.50-11.00	May...	12.50-13.00 12.50-13.00 12.50-13.00 12.50-13.00 12.50-13.00	Aug...	12.00-13.00 12.50-13.50 12.50-13.50 12.50-13.50 11.50-12.50	Nov....	11.00-11.50 11.00-11.50 11.00-11.50 11.00-11.50 11.00-11.50
Mar....	10.50-11.00 10.50-11.00 10.50-11.00 11.00-12.00 11.00-12.00	June...	12.00-13.00 12.00-13.00 12.00-13.00 12.00-13.00	Sept...	11.50-12.00 11.00-11.50 11.00-11.50 10.50-11.00	Dec....	11.00-11.50 10.50-11.50 10.50-11.00 10.50-11.00
						Average	\$11.7308

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FARM PRODUCTS—Continued.

HIDES: Green, salted, packers, heavy native steers.

[Average monthly price per pound in Chicago; quotations from the Shoe and Leather Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.1100	Apr....	\$0.1071	July...	\$0.1131	Oct.....	\$0.1231
Feb.....	.1075	May...	.1094	Aug...	.1186	Nov.....	.1369
Mar.....	.1052	June..	.1118	Sept...	.1175	Dec.....	.1395
						Average	\$0.1166

HOGS: Heavy.

[Price per hundred pounds in Chicago on Tuesday of each week; quotations from the Daily Inter Ocean.]

Jan.....	\$4.65-\$5.07½ 4.70- 5.00 4.80- 5.05 4.95- 5.20	Apr....	\$5.20-\$5.45 5.00- 5.37½ 4.80- 5.20 4.70- 5.15	July...	\$5.40-\$5.62½ 5.15- 5.40 5.40- 5.90 5.15- 5.65	Oct.....	\$5.70-\$6.20 5.50- 6.05 4.80- 5.35 5.00- 5.50
Feb.....	4.80- 5.05 5.10- 5.35 5.20- 5.45 5.45- 5.65	May...	4.50- 4.85 4.65- 4.95 4.65- 4.92½ 4.45- 4.67½	Aug...	5.00- 5.47½ 5.20- 5.70 4.95- 5.40 4.85- 5.45	Nov....	4.70- 5.17½ 4.90- 5.20 4.65- 4.90 4.45- 4.70
Mar....	5.40- 5.70 5.45- 5.72½ 5.45- 5.70 5.15- 5.45 5.50- 5.67½	June...	4.55- 4.80 4.70- 4.90 4.90- 5.10 5.20- 5.40 5.20- 5.45	Sept...	5.00- 5.70 5.05- 5.60 5.40- 6.00 5.70- 6.25 5.65- 6.25	Dec....	4.50- 4.70 4.50- 4.62½ 4.40- 4.62½ 4.55- 4.65 4.45- 4.65
						Average	\$5.1550

HOGS: Light.

[Price per hundred pounds in Chicago on Tuesday of each week; quotations from the Daily Inter Ocean.]

Jan.....	\$4.50-\$4.95 4.50- 5.00 4.55- 5.00 4.80- 5.15	Apr....	\$5.10-\$5.40 4.85- 5.30 4.65- 5.10 4.65- 5.10	July...	\$5.45-\$5.60 5.20- 5.25 5.65- 5.90 5.45- 5.70	Oct.....	\$5.75-\$6.20 5.60- 6.00 4.90- 5.35 5.10- 5.50
Feb.....	4.45- 4.90 4.90- 5.25 4.80- 5.40 5.05- 5.60	May...	4.60- 4.75 4.65- 4.90 4.70- 4.87½ 4.45- 4.65 4.55- 4.75	Aug...	5.30- 5.45 5.50- 5.70 5.35- 5.55 5.35- 5.60 5.55- 5.80	Nov....	4.70- 5.10 4.95- 5.20 4.70- 4.87½ 4.40- 4.65 4.50- 4.65
Mar....	5.10- 5.55 5.15- 5.67½ 5.30- 5.65 5.05- 5.40 5.40- 5.65	June..	4.70- 4.87½ 4.80- 5.05 5.15- 5.35 5.20- 5.40	Sept...	5.55- 5.80 5.85- 6.05 6.05- 6.32½ 6.00- 6.37½	Dec....	4.40- 4.60 4.30- 4.60 4.40- 4.65 4.25- 4.55
						Average	\$5.1481

HOPS: New York State, choice.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.34-\$0.37	Apr....	\$0.34-\$0.36	July...	\$0.32-\$0.34	Oct.....	\$0.34-\$0.36
Feb.....	.36- .38	May...	.33- .35	Aug...	.32- .34	Nov.....	.34- .36
Mar....	.36- .38	June...	.33- .35	Sept...	.33- .35	Dec.....	.34- .35
						Average	\$0.3475

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FARM PRODUCTS—Continued.

OATS: Contract grades, cash.

[Price per bushel in Chicago on Tuesday of each week; quotations furnished by the secretary of the Chicago Board of Trade.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.36½-\$0.36¾	Apr....	\$0.39½-\$0.39¾	July...	\$0.38½-\$0.39½	Oct....	\$0.30½-\$0.31½
	.36½-.37½		.37-.37½		.39½-.40½		.29-.31½
	.39-.41½		.37½-.38½		.41½		.28½-.30½
Feb.....	.39½-.39¾		.36½-.40		.40½		.29½-.29¾
	.41½-.44	May...	.39½-.40	Aug...	.34½-.40	Nov....	.29-.29½
	.41-.41½		.40½-.41½		.38½-.34½		.29½-.31½
	.40½-.44		.41½-.42½		.34½-.35½		(a)
	.42½-.42¾		.40½-.40½		.38½-.35		.32
Mar....	.39½-.40	June..	.40½-.40½	Sept...	.31½-.32½	Dec....	.30½
	.40½-.41½		.41½-.42½		.31½-.32½		.28½-.28½
	.39½-.40½		.41½-.41½		.31½-.33½		.29-.30½
	.38-.38½		.40½-.41		.81½		.30½
	.39½-.40½		.40½		.29½		.29½
						Average	\$0.3649

RYE: No. 2, cash.

[Price per bushel in Chicago on Tuesday of each week; quotations furnished by the secretary of the Chicago Board of Trade.]

Jan.....	\$0.51-\$0.51½	Apr....	\$0.70	July...	\$0.65-\$0.64	Oct....	\$0.76
	.59½		.68		.66		.78
	.55		.68		.74		\$0.77½-.78
	.55		.68		.72		.78-.78½
Feb.....	.58½-.60	May...	\$0.72-.73	Aug...	(a)	Nov....	.79½
	.62		.73		.71-.73½		.81
	.65		.73		.72		.81
	.73½-.76		.75		.74		.78
Mar....	.73½	June...	(a)	Sept...	.69½-.70	Dec....	.74
	.69		(a)		.73-.75		.75
	.72½		.65		.75		.78
	.69-.70		.65		.78½		.73
	.71					Average	\$0.7056

SHEEP: Native.

[Price per hundred pounds in Chicago on Tuesday of each week; quotations from the Daily Inter Ocean.]

Jan.....	\$3.25-\$4.50	Apr....	\$4.65-\$5.25	July...	\$3.75-\$4.25	Oct....	\$3.50-\$4.10
	3.50-4.40		4.00-5.25		3.00-3.75		3.15-3.80
	3.25-4.00		4.00-5.25		4.00-4.25		3.25-4.15
	3.00-4.25		4.50-5.25		3.75-4.25		2.25-4.75
Feb.....	3.25-3.75	May...	4.50-5.50	Aug...	3.85-4.25	Nov....	4.00-4.75
	3.50-3.75		4.50-5.50		3.50-4.00		3.50-4.75
	3.60-4.10		3.50-5.40		3.50-4.00		3.75-4.75
	4.00-4.75		2.75-5.65		3.50-3.75		3.75-4.85
Mar....	3.75-4.55	June..	5.00-5.40	Sept...	3.25-4.00	Dec....	4.35-4.75
	4.40-4.80		4.50-5.50		3.00-4.00		3.75-4.75
	2.50-5.00		4.25-4.75		2.50-4.00		4.25-4.80
	4.00-5.00		4.25-4.60		3.35-4.00		3.75-5.00
	4.50-5.80		3.75-5.25		3.40-4.25		3.00-5.25
						Average	\$4.1457

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a No quotation for week.

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FARM PRODUCTS—Concluded.

SHEEP: Western.

[Price per hundred pounds in Chicago on Tuesday of each week; quotations from the Daily Inter Ocean.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$3.50-\$4.25 3.50-4.40 3.25-4.00 4.00-4.15	Apr....	\$4.65-\$5.50 5.00-5.60 5.20-5.60 5.30-5.40	July...	\$3.90-\$4.10 4.00-4.50 3.85-4.50 3.50-4.50	Oct....	\$3.65-\$4.00 3.75-4.00 3.50-4.37½ 2.65-4.60
Feb.....	3.70-3.85 3.50-4.50 4.10-4.55 4.00-4.75	May...	4.50-5.50 5.00-5.35 3.00-5.50 4.00-5.60 4.50-5.35	Aug...	3.50-4.00 3.60-3.80 3.60-3.90 3.60-3.65 3.60-4.25	Nov...	4.10-4.35 4.00-4.50 4.10-4.25 3.75-4.40 3.25-4.25
Mar.....	3.75-4.55 4.40-4.80 2.50-5.00 4.00-5.00 4.50-5.30	June...	4.50-5.50 4.50-5.25 4.25-4.85 3.50-4.40	Sept...	3.50-3.90 3.50-4.10 3.50-4.00 3.85-4.20	Dec....	3.50-4.85 3.75 4.65-5.15 4.25-5.25
						Average	\$4.2608

WHEAT: Regular grade, cash.

[Price per bushel in Chicago on Tuesday of each week; quotations furnished by the secretary of the Chicago Board of Trade.]

Jan.....	\$0.81½-\$0.86½ .82½-.87½ .85-.90 .83½-.91	Apr....	\$0.93½-\$1.00½ .95½-.99½ .95½-.97 .95½-.96½	July...	\$0.95½-\$1.00 .98½-1.05 1.03-1.04½ .99½-1.02½	Oct....	\$1.12½-\$1.20 1.09½-1.17 1.15½-1.20 1.17½-1.20
Feb.....	.87½-.94 .91½-.97½ .93-1.00 1.00½-1.10	May...	.87½-1.02 .91½-1.04 .93½-1.06 .93½-1.06 .93½-1.06	Aug...	.95-1.08 1.02½-1.10 1.04½-1.18 1.09-1.18 1.07½-1.16	Nov....	1.14½-1.19 1.15½-1.19 1.14½-1.20 1.11½-1.18 1.10-1.18
Mar....	.95½-1.02 .89½-.96½ .94½-.99½ .91½-.95½ .95½-1.02½	June...	.96½-1.06 .92½-1.02 .94½-.99 .94½-1.00	Sept...	1.05½-1.18 1.15½-1.20 1.11-1.20 1.11½-1.20	Dec....	1.14½-1.22 1.10½-1.18½ 1.12-1.18 1.14½-1.20
						Average	\$1.0390

FOOD, ETC.

BEANS: Medium, choice.

[Price per bushel in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$2.10	Apr....	\$2.00-\$2.05	July...	\$1.95-\$2.00	Oct....	\$1.90-\$1.95
Feb.....	2.00-2.05	May...	2.05	Aug...	1.95	Nov....	2.00
Mar....	2.20	June...	2.05	Sept...	1.90	Dec....	1.90-1.95
						Average	\$2.0104

BREAD: Crackers, Boston, in boxes.

[Price per pound in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$0.07	Apr....	\$0.08	July...	\$0.08	Oct.....	\$0.08
Feb.....	.07	May...	.08	Aug...	.08	Nov....	.08
Mar....	.07	June...	.08	Sept...	.08	Dec....	.08
						Average	\$0.0775

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

BREAD: Crackers, soda, N. B. C., in boxes.

[Price per pound in New York on the first of each month; quotations from the Merchants' Review.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.06½	Apr....	\$0.07	July...	\$0.06½	Oct.....	\$0.06½
Feb.....	.06½	May...	.07	Aug...	.06½	Nov.....	.06½
Mar.....	.06½	June...	.06½	Sept...	.06½	Dec.....	.06½
						Average	\$0.0558

BREAD: Loaf, 1 pound after baking.

[Price per loaf in Washington, D. C., on the first of each month. Weight before baking, 18 ounces. Price per pound (before baking), January to October and December, \$0.0356; November, \$0.0444; average for the year, \$0.0363.]

Jan.....	\$0.04	Apr....	\$0.04	July...	\$0.04	Oct.....	\$0.04
Feb.....	.04	May...	.04	Aug...	.04	Nov.....	.05
Mar.....	.04	June...	.04	Sept...	.04	Dec.....	.04
						Average	\$0.0408

BREAD: Loaf, homemade.

[Price per loaf in New York on the first of each month. Weight before baking, January to July, 19 ounces; August and September, 18 ounces; October to December, 17 ounces. Price per pound (before baking), January to July, \$0.0337; August and September, \$0.0356; October to December, \$0.0376; average for the year, \$0.0350. Standard weight and standard prices charged by the Bakers' Association, which includes leading large bread manufacturers in New York, Brooklyn, and one or two in New Jersey who deliver their bread in Manhattan.]

Jan.....	\$0.04	Apr....	\$0.04	July...	\$0.04	Oct.....	\$0.04
Feb.....	.04	May...	.04	Aug...	.04	Nov.....	.04
Mar.....	.04	June...	.04	Sept...	.04	Dec.....	.04
						Average	\$0.04

BREAD: Loaf, Vienna.

[Price per loaf in New York on the first of each month. Weight before baking, January to July, 18 ounces; August and September, 17 ounces; October to December, 16 ounces. Price per pound (before baking), January to July, \$0.0356; August and September, \$0.0376; October to December, \$0.04; average for the year, \$0.0370. Standard weight and standard prices charged by the Bakers' Association, which includes leading large bread manufacturers in New York, Brooklyn, and one or two in New Jersey who deliver their bread in Manhattan.]

Jan.....	\$0.04	Apr....	\$0.04	July...	\$0.04	Oct.....	\$0.04
Feb.....	.04	May...	.04	Aug...	.04	Nov.....	.04
Mar.....	.04	June...	.04	Sept...	.04	Dec.....	.04
						Average	\$0.04

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

BUTTER: Creamery, Elgin.

[Price per pound in Elgin, Ill., on Monday of each week; quotations furnished by D. W. Willson, editor of the Elgin Dairy Report.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.24 .24 .22 .22	Apr....	\$0.24½ .24½ .23 .23	July...	\$0.17½ .17 .17 .17	Oct.....	\$0.20 .20 .21 .21½ .23
Feb.....	.23 .24½ .26 .26 .26	May...	.23 .20 .19½ .18½ .17½	Aug..	.17 .17 .18 .18½ .19	Nov....	.25 .25 .25 .25
Mar....	.24½ .24½ .24½ .24½	June...	.17½ .17½ .17½ .17½	Sept...	.19 .19 .19½ .20	Dec....	.26½ .26½ .26½ .27 .28
						Average	\$0.2178

BUTTER: Creamery, extra.

[Price per pound in New York on Tuesday of each week; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.24 - \$0.24½ .23 - .23½ .22 - .22½ .22 - .22½	Apr....	\$0.23½ - \$0.23½ .22 - .22½ .23½ - .24	July...	\$0.18 - \$0.18½ .17½ - .17½ .17½ - .17½	Oct.....	\$0.20½ - \$0.21 .20 - .20½ .21 - .21½ .21½ - .21½
Feb.....	.23 - .23½ .24½ - .25 .26 - .26½ .26 - .26½	May...	.24 - .24½ .20 - .20½ .20 - .20½ .18 - .18½ .18 - .18½	Aug...	.17½ - .17½ .17½ - .17½ .18 - .18½ .18 - .18½ .19 - .19½	Nov....	.23 - .23½ .25 - .25½ .25 - .25½ .25 - .25½ .26 - .26½
Mar....	.26 - .26½ .24 - .24½ .24 - .24½ .24 - .24½ .25 - .25½	June..	.18 - .18½ .18 - .18½ .17½ - .18 .18 - .18½	Sept...	.19 - .19½ .19 - .19½ .19½ - .19½ .20 - .21	Dec....	.27 - .27½ .27 - .27½ .26 - .26½ .27 - .27½
						Average	\$0.2189

BUTTER: Dairy, New York State, tubs and half tubs, fancy.

[Price per pound in New York on Tuesday of each week; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.19 - \$0.21 .19 - .20 .18 - .19 .18 - .19	Apr....	\$0.19 - \$0.21 .21 .21 .22 - .22½	July...	\$0.17 .17 .17 .17	Oct....	\$0.19 - \$0.19½ .19 .20 .20 - .20½
Feb.....	.18 - .19 .18 - .20 .19 - .21 .20 - .22	May...	.22 - .23 .19 .19½ .17 - .17½ .17 - .17½	Aug...	.17 .17 .17 .17	Nov....	.21 - .22 .23 .23 .23
Mar....	.20 - .22 .20 - .21 .19 - .21 .19 - .21 .20 - .22	June..	.17 - .17½ .17 - .17½ .17 .17	Sept...	\$0.17½ - .18 .17½ - .18 .17½ - .18 .18 - .18½ .19 - .19½	Dec....	.24 .25 .25 .24 .25
						Average	\$0.1970

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

CHEESE: New York, full cream, large, colored, best grades.

[Price per pound in New York on Tuesday of each week; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.12 .12 .12 .12 .12 .12 .12	Apr....	\$0.12 .12 \$0.11 - .11½ .11 - .11½ May ....10½ - .11 .10½ - .11 .10½ - .11 .07½ .08 .08 .07½ .08½	July...	\$0.07½ .07½ .07½ .07½ .07½ .08½ .08½ .08½ .09 .09½	Oct.....	\$0.10 .10 .09½ .09½ .09½ .10½ .10½ .11½ .11½ .11½ .17½ .11½
Feb.....		June ..	.08 .07½ .08½ .08½	Aug ..	.07½ .07½ .07½ .08½ .08½ .08½ .09 .09½	Nov....	.09½ .09½ .10½ .10½ .11½ .11½ .17½ .11½
Mar	.12 .12 .12 .12 .12			Sept...	.08½ .08½ .08½ .09 .09½	Dec	.11½ .11½ .17½ .11½
						Average	\$0.1019

COFFEE: Rio No. 7, Brazil grades.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.07½ - \$0.07½	Apr....	\$0.06½ - \$0.07	July ...	\$0.07½ - \$0.07½	Oct.....	\$0.08½ - \$0.08½
Feb.....	.09½ - .09½	May ...	.07½ - .07½	Aug ...	.07½ - .07½	Nov....	.08½ - .08½
Mar	.06½ - .07	June ..	.06½ - .07½	Sept ...	.08½ - .08½	Dec	.08½ - .08½
						Average	\$0.0782

EGGS: New-laid, fancy, near-by.

[Price per dozen in New York on Tuesday of each week; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.38 - \$0.47 .31 - .35 .31 - .35 .36 - .40	Apr....	\$0.18½ - \$0.21 .18½ - .19½ .18½ - .20 .19 - .20	July ...	\$0.19½ - \$0.21 .21 - .23 .22 - .24 .22 - .24	Oct.....	\$0.25 - \$0.30 .26 - .30 .27 - .30 .27 - .30
Feb.....	.33 - .35 .33 - .38 .35 - .38 .32 - .35	May ...	.19 - .20 .19 - .20 .19 - .21 .18 - .20 .18 - .21	Aug ...	.21 - .24 .21 - .26 .23 - .26 .23 - .26 .23 - .26	Nov....	.27 - .32 .29 - .35 .30 - .38 .32 - .38 .32 - .38
Mar	.21½ - .24½ .22 - .25 .20 - .23 .17 - .19 .19½ - .21	June...	.19 - .21 .19 - .21 .19 - .21 .19 - .21	Sept...	.23 - .27 .25 - .28 .25 - .28 .25 - .28	Dec	.35 - .40 .33 - .40 .32 - .36 .31 - .35
						Average	\$0.2650

FISH: Cod, dry, bank, large.

[Price per quintal in Boston on the first of each month; quotations from the Boston Herald.]

Jan.....	\$6.50 - \$6.75	Apr....	\$6.62½ - \$6.87½	July ...	\$7.50 - \$8.00	Oct....	\$7.00 - \$7.50
Feb.....	6.50 - 6.75	May ...	7.50 - 8.00	Aug ...	7.00 - 7.50	Nov....	7.00 - 7.50
Mar	7.75 - 8.00	June ..	7.50 - 8.00	Sept...	7.00 - 7.50	Dec....	7.00 - 7.50
						Average	\$7.2813

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

FISH: Herring, shore, round, large.

[Price per barrel in Boston on the first of each month; quotations from the Boston Herald.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$4.50-\$5.50	Apr.....	\$5.00-\$5.50	July...	(a)	Oct.....	\$6.00
Feb.....	5.00- 5.25	May....	14.00- 15.00	Aug....	(a)	Nov....	6.00
Mar.....	6.00- 6.50	June..	(a)	Sept...	(a)	Dec....	6.00
						Average	\$5.4531

FISH: Mackerel, salt, large No. 3s.

[Price per barrel in Boston on the first of each month; quotations from the Boston Herald.]

Jan.....	\$15.50	Apr.....	\$15.00- \$16.00	July...	\$12.00- \$13.00	Oct.....	\$14.50- \$15.50
Feb.....	15.50	May....	14.00- 15.00	Aug....	13.00- 14.00	Nov....	14.50- 15.50
Mar....	\$15.00- 16.00	June...	12.00- 13.00	Sept...	14.00	Dec....	14.50- 15.50
						Average	\$14.50

FISH: Salmon, canned, Columbia River, 1-pound talls.

[Price per dozen cans in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$1.70-\$1.75	Apr.....	\$1.70-\$1.75	July...	\$1.70-\$1.75	Oct.....	\$1.70-\$1.75
Feb.....	1.70- 1.75	May....	1.70- 1.75	Aug....	1.70- 1.75	Nov....	1.70- 1.75
Mar....	1.70- 1.75	June...	1.70- 1.75	Sept...	1.70- 1.75	Dec....	1.70- 1.75
						Average	\$1.7250

FLOUR: Buckwheat.

[Price per hundred pounds in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$2.30-\$2.35	Apr.....	(a)	July...	(a)	Oct.....	\$2.50-\$2.65
Feb.....	2.00	May....	(a)	Aug....	(a)	Nov....	2.20- 2.25
Mar....	(a)	June..	(a)	Sept...	^b \$2.65	Dec....	2.20- 2.25
						Average	\$2.3333

FLOUR: Rye.

[Price per barrel in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$3.20-\$3.50	Apr.....	\$4.25-\$4.75	July...	\$4.00-\$4.75	Oct.....	\$4.50-\$4.80
Feb.....	3.40- 3.60	May....	4.20- 4.65	Aug....	4.15- 4.70	Nov....	4.50- 4.90
Mar....	4.50- 4.80	June..	4.20- 4.60	Sept...	4.30- 4.90	Dec....	4.40- 4.80
						Average	\$4.3479

^a No quotation for month.^b Quotation from the New York Commercial.

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

FLOUR: Wheat, spring patents.

[Price per barrel in New York on Tuesday of each week; quotations furnished by the statistician of the New York Produce Exchange.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$4.30-\$4.90 4.30-4.90 4.35-4.95 4.45-5.00	Apr....	\$4.75-\$5.35 4.75-5.35 4.75-5.35 4.75-5.20	July...	\$4.50-\$5.15 4.50-5.15 4.60-5.25 4.60-5.25	Oct.....	\$5.75-\$6.40 5.75-6.40 5.80-6.50 5.80-6.50
Feb.....	4.45-5.00 4.60-5.10 4.70-5.20 5.00-5.50	May...	4.75-5.20 4.75-5.25 4.70-5.30 4.70-5.30 4.70-5.30	Aug...	5.00-5.65 5.10-5.80 5.30-5.90 5.50-6.35 5.75-6.35	Nov....	5.80-6.50 5.80-6.50 5.75-6.50 5.60-6.25 5.60-6.25
Mar....	5.00-5.60 4.80-5.40 4.75-5.40 4.75-5.35 4.75-5.35	June...	4.70-5.30 4.65-5.30 4.60-5.25 4.60-5.25	Sept...	5.75-6.40 5.90-6.60 5.90-6.50 5.75-6.40	Dec....	5.70-6.10 5.70-6.10 5.70-6.10 5.65-6.10
			-----		-----	Average	\$5.3784

FLOUR: Wheat, winter straights.

[Price per barrel in New York on Tuesday of each week; quotations furnished by the statistician of the New York Produce Exchange.]

Jan.....	\$3.80-\$4.20 3.85-4.20 3.90-4.25 3.95-4.30	Apr....	\$4.60-\$5.00 4.60-5.00 4.60-5.00 4.60-4.90	July...	\$4.40-\$4.80 4.40-4.80 4.40-4.80 4.35-4.80	Oct....	\$5.00-\$5.40 5.00-5.40 5.10-5.50 5.20-5.55
Feb.....	3.90-4.30 4.00-4.40 4.20-4.70 4.60-5.00	May...	4.60-4.90 4.50-4.90 4.50-4.95 4.50-4.95	Aug...	4.35-4.65 4.45-4.80 4.60-4.95 4.80-5.10	Nov....	5.20-5.55 5.20-5.55 5.20-5.55 5.10-5.40
Mar.....	4.75-5.25 4.65-5.10 4.60-5.10 4.60-5.10	June...	4.50-4.90 4.50-4.90 4.50-4.90 4.40-4.85	Sept...	4.75-5.10 4.80-5.15 5.00-5.35 5.00-5.30 5.00-5.30	Dec....	5.10-5.40 5.15-5.40 5.15-5.35 5.15-5.35 5.10-5.35
			-----		-----	Average	\$4.8264

FRUIT: Apples, evaporated, choice.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.05½-\$0.06½	Apr....	\$0.06½-\$0.06½	July...	\$0.06½-\$0.06½	Oct....	\$0.05½-\$0.06
Feb.....	.05½-.06	May...	.06½-.06½	Aug...	.06½-.06½	Nov....	.05½-.05½
Mar....	.05½-.06	June..	.06-.06½	Sept...	.06½-.06½	Dec....	.05-.05½
						Average	\$0.0603

FRUIT: Apples, sun-dried, Southern, sliced.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.03½-\$0.04	Apr....	\$0.03½-\$0.04	July...	\$0.02-\$0.03	Oct....	\$0.03-\$0.04
Feb.....	.03½-.04	May...	.03-.04	Aug...	.02-.03	Nov....	.03-.04
Mar....	.03½-.04	June..	.03-.04	Sept...	.02-.03	Dec....	.03-.04
						Average	\$0.0333

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

FRUIT: Currants, amallas, in barrels.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.04½-\$0.05	Apr.....	\$0.04½-\$0.05	July...	\$0.04½-\$0.05	Oct.....	\$0.04½-\$0.05
Feb.....	.04½-.05	May...	.04½-.05	Aug...	.04½-.05	Nov.....	.04½-.04½
Mar.....	.04½-.05	June..	.04½	Sept...	.04½-.05	Dec.....	.04½-.05
						Average	\$0.0488

FRUIT: Prunes, California, Santa Clara, 60s to 70s, in 25-pound boxes.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.05½-\$0.05½	Apr.....	\$0.04½-\$0.05	July...	\$0.04½-\$0.04½	Oct.....	\$0.04½-\$0.04½
Feb.....	.04½-.05½	May...	.04½-.04½	Aug...	.04½-.04½	Nov.....	.04½-.04½
Mar.....	.04½-.05½	June..	.04½-.04½	Sept...	.04½-.04½	Dec.....	.04½-.04½
						Average	\$0.0461

FRUIT: Raisins, California, London layer.

[Price per box in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$1.55	Apr.....	\$1.50-\$1.55	July...	\$1.40-\$1.55	Oct.....	\$1.30-\$1.40
Feb.....	1.60	May...	1.40- 1.45	Aug...	1.50- 1.55	Nov.....	1.30- 1.40
Mar.....	\$1.50-1.55	June...	1.40- 1.55	Sept...	1.50- 1.55	Dec.....	1.30- 1.40
						Average	\$1.4729

GLUCOSE: 41° and 42° mixing.

[Price per hundred pounds in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$1.70	Apr.....	\$2.05	July...	\$1.55	Oct.....	\$1.61
Feb.....	1.85	May...	1.95	Aug...	1.61	Nov.....	1.56
Mar.....	1.95	June...	1.85	Sept...	1.71	Dec.....	1.81
						Average	\$1.7917

LARD: Prime contract.

[Price per pound in New York on Tuesday of each week; quotations furnished by the statistician of the New York Produce Exchange.]

Jan.....	\$0.0715	Apr.....	\$0.0730	July...	\$0.0715-\$0.0740	Oct....	\$0.0812½-\$0.0825
	.0712½		.0685		.0710-.0725		.0800-.0805
	.0730		.0687½		.0700-.0720		.0765
	.0770		.0715		.0695-.0720		.0760
Feb.....	\$0.0760-.0770	May...	.0675-.0700	Aug...	.0710-.0730	Nov....	.0745
	.0735-.0790		.0680-.0700		.0690-.0715		.0750
	.0750-.0775		.0675-.0680		.0720		.0750
	.0800-.0810		.0670		.0730		.0725-.0740
	.....		.0690		.0715-.0735		.0735
Mar....	.0775	June..	.0695	Sept...	.0725-.0750	Dec....	.0730
	.0737½-.0760		.0675-.0705		.0730-.0755		.0730
	.0730-.0750		.0712½-.0735		.0755		.0715-.0725
	.0710		.0700-.0730		.0790		.0710-.0720
	.0715-.0735		.....		.....		.....
						Average	\$0.0731

a Quotation from the New York Commercial.

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

MEAL: Corn, fine white.

[Price per bag of 100 pounds in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$1.20	Apr....	\$1.20-\$1.35	July ...	\$1.45	Oct	\$1.25-\$1.30
Feb.....	1.30	May ...	1.25- 1.30	Aug....	\$1.40- 1.45	Nov ...	1.35- 1.45
Mar	1.35	June ..	1.37- 1.38	Sept ...	1.15- 1.45	Dec....	1.40- 1.50
						Average	. \$1.3396

MEAL: Corn, fine yellow.

[Price per bag of 100 pounds in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$1.20-\$1.25	Apr....	\$1.20-\$1.35	July...	\$1.35-\$1.40	Oct.....	\$1.30
Feb.....	1.30	May ...	1.25- 1.30	Aug....	1.15- 1.35	Nov ...	\$1.35- 1.45
Mar	1.35	June...	1.37- 1.38	Sept ...	1.40- 1.45	Dec....	1.40- 1.50
						Average	\$1.3333

MEAT: Bacon, short clear sides, smoked, loose.

[Prices per pound in Chicago on Tuesday of each week; quotations from the Daily Trade Bulletin.]

Jan.....	\$0.07½-\$0.07¾	Apr....	\$0.07½-\$0.07¾	July...	\$0.07½-\$0.08	Oct.....	\$0.09½-\$0.09¾
	.07½ - .07¾		.07½ - .07¾		.07½ - .08		.08½ - .08¾
	.07½ - .07¾		.07½ - .07¾		.07½ - .08		.08½ - .08¾
	.07½ - .07¾		.06½ - .07		.07½ - .07¾		.08 - .08½
Feb.....	.07½ - .07¾	May ...	.06½ - .07	Aug ...	.07½ - .07¾	Nov....	.07½ - .07¾
	.07½ - .07¾		.06½ - .06¾		.08 - .08½		.07½ - .07¾
	.07½ - .07¾		.06½ - .07		.08½ - .08¾		.07½ - .07¾
	.07½ - .07¾		.06½ - .07		.08½ - .08¾		.07½ - .07¾
	.08 - .08½		.07 - .07½		.08½ - .08¾		.07½ - .07¾
Mar.....	.08½ - .08¾	June...	.07½ - .07¾	Sept ...	.08½ - .08¾	Dec	.07½ - .07¾
	.07½ - .07¾		.07½ - .07¾		.08½ - .08¾		.07½ - .07¾
	.07½ - .08		.08 - .08½		.08½ - .08¾		.07 - .07½
	.07½ - .07¾		.08 - .08½		.09 - .09½		.06½ - .07
	.07½ - .07¾		.....		.....		.....
						Average	\$0.0775

MEAT: Bacon, short rib sides, smoked, loose.

[Price per pound in Chicago on Tuesday of each week; quotations from the Daily Trade Bulletin.]

Jan.....	\$0.07½-\$0.07¾	Apr....	\$0.07½-\$0.07¾	July...	\$0.07½-\$0.07¾	Oct.....	\$0.08½-\$0.09
	.07 - .07½		.07½ - .07¾		.07½ - .07¾		.08½ - .08¾
	.07 - .07½		.06½ - .07		.07½ - .07¾		.08½ - .08¾
	.07½ - .07¾		.06½ - .06¾		.07½ - .07¾		.07½ - .07¾
Feb.....	.07 - .07½	May ...	.06½ - .06¾	Aug ...	.07½ - .07¾	Nov....	.07½ - .07¾
	.07½ - .07¾		.06½ - .06¾		.07½ - .08		.07½ - .07¾
	.07½ - .07¾		.06½ - .06¾		.07½ - .08		.07½ - .07¾
	.07½ - .08		.06½ - .06¾		.08 - .08½		.07½ - .07¾
	.....		.06½ - .07		.08 - .08½		.07½ - .07¾
Mar	.08 - .08½	June...	.07 - .07½	Sept ...	.07½ - .08	Dec	.07½ - .07¾
	.07½ - .07¾		.07½ - .07¾		.08½ - .08¾		.07 - .07½
	.07½ - .07¾		.07½ - .08		.08½ - .08¾		.06½ - .07
	.07½ - .07¾		.07½ - .08		.08½ - .09		.06½ - .06¾
	.07½ - .07¾		.....		.....		.....
						Average	\$0.0757

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

MEAT: Beef, fresh, native sides.

[Price per pound in New York on Tuesday of each week; quotations from the New York Daily Tribune.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.06-\$0.08½ .07½-.09½ .07-.09	Apr....	\$0.06½-\$0.08½ .06½-.08½ .06½-.08½	July...	\$0.07½-\$0.10½ .07½-.10½ .09-.11½	Oct.....	\$0.06½-\$0.09½ .06½-.09½ .06½-.10
Feb.....	.07-.09 .07-.08½ .08-.08½ .07-.08½ .07-.08½	May...	.06½-.08½ .06½-.08½ .06½-.08½ .07-.08½ .07-.08½	Aug...	.08-.10½ .07½-.10 .07-.09½ .07-.09 .06½-.09½	Nov....	.06½-.10 .07-.10 .07-.10 .07-.09½ .07-.09½
Mar....	.07-.08½ .06½-.08½ .06½-.08½ .06½-.08½ .06½-.08½	June..	.07½-.08½ .08½-.10 .08-.10 .07½-.10½	Sept...	.06½-.09½ .06½-.09½ .06½-.09½	Dec....	.07-.09½ .07-.09½ .07-.10 .07-.09½
						Average	\$0.0813

MEAT: Beef, salt, extra mess.

[Average weekly price per barrel in New York: quotations furnished by the statistician of the New York Produce Exchange.]

Jan.....	\$8.00-\$8.50 8.00-8.50 8.00-8.50 8.00-8.50 8.00-8.50	Apr....	\$8.50-\$9.00 8.50-9.00 8.50 8.50 8.50	July...	\$8.50-\$9.00 8.50-9.00 8.50-9.00 8.50-9.00 8.50-9.00	Oct.....	\$8.50-\$9.50 8.50-9.50 8.50-9.50 8.50-9.50 8.50-9.50
Feb.....	8.50 9.00-9.50 9.00-9.50 9.00-9.50 9.00-9.50	May...	8.00-8.50 8.00-8.50 8.00-8.50 8.00-8.50 8.00-8.50	Aug...	8.50-9.00 8.50-9.00 8.50-9.00 8.50-9.00 8.50-9.00	Nov....	9.00-9.50 9.00-9.50 9.00-9.50 9.00-9.50 9.00-9.50
Mar....	9.00-9.50 9.00-9.50 9.00-9.50 9.00-9.50 9.00-9.50	June...	8.00-8.50 8.00-8.50 8.00-8.50 8.00-8.50 8.00-8.50	Sept...	8.50-9.00 8.50-9.00 8.50-9.00 8.50-9.00 8.50-9.50	Dec....	9.00-9.50 9.00-9.50 9.00-9.50 9.00-9.50 9.00-9.50
						Average	\$8.7689

MEAT: Beef, salt, hams, western.

[Price per barrel in New York on Tuesday of each week; quotations furnished by the statistician of the New York Produce Exchange.]

Jan.....	\$20.50-\$22.00 20.50-22.00 20.50-22.00 20.50-22.00	Apr....	\$20.50-\$22.00 20.50-22.00 20.50-22.00 20.50-22.00	July...	\$21.50-\$23.00 21.50-23.00 21.50-23.00 21.50-23.00	Oct.....	\$24.00-\$25.50 24.00-25.50 23.50-25.00 23.00-24.50
Feb.....	20.50-22.00 20.50-22.00 20.50-22.00 20.50-22.00 20.50-22.00	May...	20.00-21.50 20.00-21.50 20.00-21.50 20.00-21.50 20.00-21.50	Aug...	22.00-24.00 22.00-24.00 22.25-24.00 24.00-25.50 24.00-25.50	Nov....	23.00-24.50 22.50-24.00 22.50-24.00 22.50-24.00 22.50-24.00
Mar....	20.50-22.00 20.50-22.00 20.50-22.00 20.50-22.00 20.50-22.00	June...	20.00-21.50 20.50-22.00 20.50-22.00 20.50-22.00 20.50-22.00	Sept...	24.00-25.50 24.00-25.50 24.00-25.50 24.00-25.50 24.00-25.50	Dec....	22.00-23.50 22.00-23.50 22.00-23.50 22.00-23.50 22.00-23.50
						Average	\$22.3341

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

MEAT: Hams, smoked, loose.

[Price per pound in Chicago on Tuesday of each week; quotations from the Daily Trade Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.09½-\$0.11½ .10½-.11½ .10½-.11½ .10½-.11½	Apr....	\$0.10½-\$0.10½ .10½-.10½ .10½-.10½ .10-.10½	July ...	\$0.10½-\$0.11½ .10½-.11½ .10½-.11½ .10½-.11½	Oct.....	\$0.11½-\$0.11½ .10½-.11½ .10½-.11 .10½-.10½
Feb.....	.10½-.11½ .10½-.11½ .10½-.11½ .10½-.11½	May ...	.10-.10½ .10-.10½ .10-.10½ .10-.10½	Aug ...	.11½-.11½ .11½-.11½ .11½-.11½ .11½-.11½	Nov....	.09½-.10½ .09½-.10½ .09½-.10½ .09½-.10½
Mar	.10½-.11½ .10½-.11½ .10½-.11½ .10½-.11 .10½-.10½	June...	.10-.10½ .10½-.10½ .10½-.11½ .10½-.11½	Sept ...	.11½-.11½ .11½-.11½ .11-.11½ .11-.11½ .11-.11½	Dec	.09½-.10½ .09½-.10½ .09½-.10½ .09½-.10½ .09-.10
						Average	\$0.1072

MEAT: Mutton, dressed.

[Price per pound in New York on Tuesday of each week; quotations from the New York Daily Tribune.]

Jan.....	\$0.06-\$0.07½ .07-.08 .07-.08½ .07-.09	Apr....	\$0.06-\$0.08½ .06-.09 .07-.09 .08½-.10½	July ...	\$0.06-\$0.08 .06½-.09 .09-.11 .08-.10	Oct.....	\$0.05-\$0.08 .05-.08½ .05-.08½ .05-.08½
Feb.....	.07-.08½ .07-.09 .07-.09 .07-.09	May ...	.08-.10½ .08-.10½ .08½-.10½ .08½-.11	Aug ...	.08-.11 .07-.10 .07-.10 .07-.10	Nov ...	.05-.08½ .05½-.08½ .05½-.08½ .05½-.08½
Mar	.07-.08½ .06-.08 .06-.08 .06-.08 .06-.08	June ..	.08-.10 .08-.10 .07½-.10 .07-.10 .06½-.09	Sept ...	.06-.08 .05-.08 .05-.08½ .05-.08½ .05-.08½	Dec....	.05½-.08 .07-.08 .07-.09 .06½-.08½ .06½-.08½
						Average	\$0.0778

MEAT: Pork, salt, mess, old to new.

[Price per barrel in New York on Tuesday of each week; quotations furnished by the statistician of the New York Produce Exchange.]

Jan.....	\$14.25-\$15.00 14.25-15.00 14.25-15.00 14.50-15.00	Apr....	\$14.75-\$15.25 14.00-14.50 13.50-14.00 13.50-14.00	July ...	\$14.25-\$14.75 14.00-14.75 14.25-14.75 14.00-14.50	Oct	\$13.25-\$13.75 13.25-13.75 12.50-13.00 12.00-13.00
Feb.....	14.75-15.25 15.25-16.00 15.75-16.50 16.75-17.25	May ...	13.00-13.75 13.00-13.50 12.75-13.25 12.50-13.00	Aug ...	14.25-14.75 14.00-14.50 13.25-13.75 13.25-13.75	Nov....	12.50-13.00 12.50-13.00 12.50-13.00 13.25-13.75
Mar	16.50-17.00 15.50-16.00 15.50-16.00 15.00-15.50 15.00-15.50	June ..	13.25-13.75 14.00-14.50 14.25-14.75 14.25-14.75	Sept ...	12.75-13.00 12.50-13.00 12.75-13.25 13.00-13.50	Dec	13.25-13.75 13.25-13.75 13.25-13.75 13.00-13.50
						Average	\$14.0288

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

MILK: Fresh.

[Average monthly exchange price per quart; net price at shipping stations subject to a freight rate to New York of 26 cents per can of 40 quarts; quotations from the Milk Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.0312	Apr....	\$0.0275	July...	\$0.0209	Oct.....	\$0.0287
Feb.....	.0300	May....	.0237	Aug....	.0225	Nov....	.0332
Mar....	.0300	June..	.0200	Sept...	.0250	Dec....	.0375
						Average	\$0.0275

MOLASSES: New Orleans, open Kettle.

[Price per gallon in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.31-\$0.37	Apr....	\$0.31-\$0.37	July...	\$0.31-\$0.37	Oct.....	\$0.31-\$0.37
Feb.....	.31- .37	May....	.31- .37	Aug....	.31- .37	Nov....	.32- .36
Mar....	.31- .37	June..	.31- .37	Sept...	.31- .37	Dec....	.30- .37
						Average	\$0.3396

RICE: Domestic, choice.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.04½-\$0.05	Apr....	\$0.04½-\$0.04½	July...	\$0.04½-\$0.04½	Oct.....	\$0.03½-\$0.04
Feb.....	.04½- .04½	May....	.04½- .04½	Aug....	.04½- .04½	Nov....	.03½- .04
Mar....	.04½- .04½	June..	.04½- .04½	Sept....	.03½- .04	Dec....	.03½- .04
						Average	\$0.0441

SALT: American, medium.

[Price per barrel in Chicago, each week; quotations furnished by the Secretary of the Chicago Board of Trade.]

Jan.....	\$0.75	Apr....	\$0.75	July...	\$0.75	Oct....	\$0.81
	.75		.75		.75		.81
	.75		.75		.75		.81
	.75		.75		.75		.81
	.75		.75		.75		.81
Feb.....	.75	May....	.75	Aug....	.75	Nov....	.81
	.75		.75		.75		.81
	.75		.75		.75		.81
	.75		.75		.75		.81
	.75		.75		.75		.81
Mar....	.75	June..	.75	Sept....	.81	Dec....	.81
	.75		.75		.81		.81
	.75		.75		.81		.81
	.75		.75		.81		.81
	.75		.75		.81		.81
	.....		.....		.81		.81
						Average	\$0.7704

SALT: Ashton's No. 224.

[Price per bag of 224 pounds in New York on the first of each month; quotations supplied by the New York Journal of Commerce and Commercial Bulletin. Beginning with 1904 this article does not enter into the relative figures in Tables II to V. For the years 1890 to 1903 the price was erroneously quoted per bushel instead of per bag of 224 pounds.]

Jan.....	\$2.00	Apr....	\$2.00	July...	\$2.00	Oct....	\$2.00
Feb.....	2.00	May....	2.00	Aug....	2.00	Nov....	2.00
Mar....	2.00	June..	2.00	Sept...	2.00	Dec....	2.00
						Average	\$2.00

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

SODA: Bicarbonate of, American.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.0130	Apr....	\$0.0130	July...	\$0.0130	Oct....	\$0.0130
Feb.....	.0130	May....	.0130	Aug...	.0130	Nov....	.0130
Mar.....	.0130	June..	.0130	Sept...	.0130	Dec....	.0130
						Average	\$0.0130

SPICES: Nutmegs, 105s to 110s.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.27-\$0.28	Apr....	\$0.21-\$0.23	July...	\$0.19-\$0.19½	Oct....	\$0.20½-\$0.21
Feb.....	.26- .27	May....	.20- .21	Aug...	.19- .19½	Nov....	.20- .20½
Mar.....	.25- .25½	June...	.19- .20	Sept...	.20- .21	Dec....	.19½- .20
						Average	\$0.2175

SPICES: Pepper, Singapore.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.12½-\$0.12½	Apr....	\$0.12½-\$0.12½	July...	\$0.11½-\$0.11½	Oct.....	\$0.12½-\$0.13
Feb.....	.12½- .12½	May....	.12- .12½	Aug...	.11½- .12	Nov....	.12½- .13
Mar.....	.12½- .12½	June...	.11½- .12	Sept...	.11½- .12	Dec....	.12½- .12½
						Average	\$0.1229

STARCH: Pure corn, for culinary purposes.

[Price per pound in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$0.05½	Apr....	\$0.05½	July...	\$0.05½	Oct....	\$0.05½
Feb.....	.05½	May....	.05½	Aug...	.05½	Nov....	.05½
Mar.....	.05½	June..	.05½	Sept...	.05½	Dec....	.05½
						Average	\$0.0525

SUGAR: 89° fair refining.

[Price per pound in New York on Thursday of each week, including import duty of 1.44 cents per pound; quotations from Willett & Gray's Weekly Statistical Sugar Trade Journal.]

Jan.....	\$0.0300 .0300 .0287½ .0281 .0287½	Apr....	\$0.0316 .0313 .0304 .0319	July...	\$0.0344 .0350 .0350 .0350	Oct....	\$0.0375 .0375 .0375 .0375
Feb.....	.0284 .0284 .0284 .0287½	May...	.0322 .0325 .0338 .0344	Aug...	.0356 .0362½ .0369 .0369	Nov....	.0375 .0387½ .0412½ .0425
Mar.....	.0294 .0297 .0300 .0309 .0316	June..	.0350 .0337½ .0337½ .0344 .0344	Sept...	.0375 .0375 .0375 .0375 .0375	Dec....	.0425 .0425 .0437½ .0437½ .0437½
						Average	\$0.03470

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Continued.

SUGAR: 96° centrifugal.

[Price per pound in New York on Thursday of each week, including import duty of 1.68½ cents per pound; quotations from Willett & Gray's Weekly Statistical Sugar Trade Journal.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.0347 .0347 .0335 .0331 .0331	Apr....	\$0.0367 .0361 .0354 .0370	July...	\$0.0394 .0394 .0394 .0394	Oct....	\$0.0429 .0425 .0425 .0422
Feb.....	.0335 .0335 .0335 .0337½ .0344	May...	.0373 .0375 .0388 .0395 .0395	Aug...	.0406 .0412½ .0425 .0425	Nov....	.0441 .0441 .0462½ .0475
Mar.....	.0344 .0350 .0360 .0367	June..	.0384 .0387½ .0384 .0394 .0394	Sept...	.0431 .0431 .0431 .0425 .0431	Dec....	.0475 .0475 .0487½ .0487½ .0487½
						Average	\$0.03974

SUGAR: Granulated, in barrels.

[Price per pound in New York on Thursday of each week, including import duty of 1.95 cents per pound; quotations from Willett & Gray's Weekly Statistical Sugar Trade Journal.]

Jan.....	\$0.0436 .0436 .0436 .0436 .0426	Apr....	\$0.0440 .0440 .0440 .0445	July...	\$0.0480 .0485 .0485 .0495	Oct.....	\$0.0490 .0490 .0480 .0480
Feb.....	.0426 .0426 .0426 .0426 .0441	May...	.0455 .0455 .0475 .0480	Aug...	.0500 .0500 .0495 .0495	Nov....	.0500 .0520 .0580 .0580
Mar.....	.0431 .0441 .0450 .0450 .0450	June...	.0480 .0475 .0475 .0475 .0475	Sept...	.0500 .0500 .0495 .0495 .0500	Dec....	.0580 .0540 .0550 .0550 .0560
						Average	\$0.04772

TALLOW.

[Price per pound in New York on Tuesday of each week; quotations furnished by the statistician of the New York Produce Exchange.]

Jan.....	\$0.05½-\$0.05½ .05½ .05 .05	Apr....	\$0.04½ .04½ .04½ .04½	July...	\$0.04½ .04½ \$0.04½ .04½	Oct....	\$0.04½ .04½ \$0.04½ .04½
Feb.....	.05 .05 .05½ .05½ .05½	May...	.04½ .04½ .04½ .04½ .04½	Aug...	.04½ .04½ .04½ .04½ .04½	Nov....	.04½ .04½ .04½ .04½ .04½
Mar.....	.05½ .05½ .04½ .04½ .04½	June..	.04½ .04½ .04½ .04½ .04½	Sept...	.04½ .04½ .04½ .04½ .04½	Dec....	.04½ .04½ .04½ .04½ .04½
						Average	\$0.0459

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FOOD, ETC.—Concluded.

TEA: Formosa, fine.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.25-\$0.27	Apr....	\$0.27-\$0.29	July...	\$0.27-\$0.29	Oct....	\$0.27-\$0.29
Feb.....	.25-.27	May....	.27-.29	Aug....	.27-.29	Nov....	.26-.29
Mar.....	.27-.29	June..	.27-.29	Sept...	.27-.29	Dec....	.26-.29
						Average	\$0.2758

VEGETABLES, FRESH: Onions.

[Price per barrel in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$2.00-\$5.00	Apr.....	\$2.50-\$5.00	July...	\$3.25	Oct.....	\$2.00-\$5.00
Feb.....	2.00-5.00	May....	(a)	Aug....	\$3.00-3.25	Nov....	2.00-6.00
Mar.....	2.50-5.50	June..	3.00-4.00	Sept...	2.00-3.00	Dec....	2.00-6.50
						Average	\$3.5568

VEGETABLES, FRESH: Potatoes, Hurbank.

[Price per bushel in Chicago, weekly range; quotations furnished by the secretary of the Chicago Board of Trade.]

Jan.....	\$0.62-\$0.70	Apr....	\$0.89-\$1.00	July...	(b)	Oct.....	(b)
	.68-.71		.96-1.12		(b)		\$0.35-\$0.38
	.68-.73		1.04-1.16		(b)		.33-.37
	.70-.85		1.10-1.22		(b)		.31-.37
	.90-.95		1.10-1.18		(b)		.34-.40
Feb.....	.85-.91	May....	.95-1.16	Aug....	(b)	Nov....	.35-.38
	.86-.89		.95-1.08		(b)		.35-.39
	.87-.90		1.02-1.10		(b)		.37-.42
	.87-.90		1.04-1.10		(b)		.32-.38
Mar.....	.86-1.02	June..	1.15-1.18	Sept...	(b)	Dec....	.32-.38
	.88-.91		(b)		(b)		.32-.37
	.89-.91		(b)		(b)		.32-.36
	.87-.93		(b)		(b)		.32-.35
			-----		-----		.32-.36
						Average	\$0.7301

VINEGAR: Cider, Monarch, in barrels.

[Price per gallon in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$0.13	Apr....	\$0.13	July...	\$0.13	Oct....	\$0.14
Feb.....	.13	May....	.13	Aug....	.13	Nov....	.14
Mar.....	.13	June..	.13	Sept...	.13	Dec....	.14
						Average	\$0.1325

CLOTHS AND CLOTHING.

BAGS: 2-bushel, Amoskeag.

[Price per bag on the first of each month.]

Jan.....	\$0.15½	Apr....	\$0.18½	July...	\$0.18½	Oct....	\$0.18
Feb.....	.18	May....	.18½	Aug....	.18	Nov....	.18
Mar.....	.18	June..	.18½	Sept...	.18	Dec....	.18
						Average	\$0.1796

a No quotation for month.

b No quotation for week.

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.**BLANKETS: 11-4, 5 pounds to the pair, all wool.**

[Average price per pound.]

Year.	Price.
1904.....	\$0.92½

BLANKETS: 11-4, 5 pounds to the pair, cotton warp, all wool filling.

[Average price per pound.]

Year.	Price.
1904.....	\$0.72½

BLANKETS: 11-4, 5 pounds to the pair, cotton warp, cotton and wool filling.

[Average price per pound.]

Year.	Price.
1904.....	\$0.52½

BOOTS AND SHOES: Men's brogans, split.

[Price per pair on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.92½	Apr....	\$0.92½	July ...	\$0.92½	Oct	\$0.92½
Feb.....	.92½	May ...	.92½	Aug ...	.92½	Nov....	.92½
Mar	.92½	June ..	.92½	Sept ...	.92½	Dec	.92½
						Average	\$0.9250

BOOTS AND SHOES: Men's calf bal. shoes, Goodyear welt, dongola top.

[Price per pair on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$2.35	Apr ...	\$2.35	July ...	\$2.35	Oct	\$2.35
Feb.....	2.35	May ...	2.35	Aug ...	2.35	Nov....	2.35
Mar	2.35	June ..	2.35	Sept ...	2.35	Dec	2.35
						Average	\$2.35

BOOTS AND SHOES: Men's split boots, russet bound top, 17-inch, one-half double sole.

[Price per dozen pairs on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$18.50	Apr....	\$18.50	July ...	\$18.50	Oct.....	\$18.50
Feb.....	18.50	May ...	18.50	Aug ...	18.50	Nov....	19.00
Mar	18.50	June...	18.50	Sept ...	18.50	Dec	19.00
						Average	\$18.588

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.**BOOTS AND SHOES: Men's vicl kid shoes, Goodyear welt.**

[Price per pair on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$2.00	Apr....	\$2.00	July...	\$2.00	Oct.....	\$2.00
Feb.....	2.00	May....	2.00	Aug....	2.00	Nov.....	2.05
Mar.....	2.00	June...	2.00	Sept...	2.00	Dec.....	2.05
						Average	\$2.0083

BOOTS AND SHOES: Women's solid grain shoes, leather, polish or polka.

[Price per pair on the first of each month.]

Jan.....	\$0.90	Apr....	\$0.90	July...	\$0.92½	Oct.....	\$0.95
Feb.....	.90	May....	.90	Aug....	.92½	Nov.....	.95
Mar.....	.90	June...	.90	Sept...	.92½	Dec.....	.95
						Average	\$0.9183

BROADCLOTHS: First quality, black, 54-inch, made from XXX wool.

[Price per yard on the first of each month.]

Jan.....	\$1.91	Apr....	\$1.91	July...	\$1.91	Oct.....	\$1.91
Feb.....	1.91	May....	1.91	Aug....	1.91	Nov.....	1.91
Mar.....	1.91	June...	1.91	Sept...	1.91	Dec.....	1.95½
						Average	\$1.914

CALICO: Cochecho prints.

[Price per yard on the first of each month.]

Jan.....	\$0.055	Apr....	\$0.055	July...	\$0.055	Oct.....	\$0.050
Feb.....	.055	May....	.055	Aug....	.050	Nov.....	.050
Mar.....	.055	June...	.055	Sept...	.050	Dec.....	.050
						Average	\$0.0529

CARPETS: Brussels, 5-frame, Bigelow.

[Price per yard on the first of each month.]

Jan.....	\$1.101	Apr....	\$1.104	July...	\$1.104	Oct.....	\$1.104
Feb.....	1.104	May....	1.104	Aug....	1.104	Nov.....	1.104
Mar.....	1.104	June...	1.104	Sept...	1.104	Dec.....	1.104
						Average	\$1.1040

CARPETS: Ingrain, 2-ply, Lowell.

[Price per yard on the first of each month.]

Jan.....	\$0.5184	Apr....	\$0.5184	July...	\$0.5184	Oct.....	\$0.5184
Feb.....	.5184	May....	.5184	Aug....	.5184	Nov.....	.5184
Mar.....	.5184	June...	.5184	Sept...	.5184	Dec.....	.5184
						Average	\$0.5184

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.

CARPETS: Wilton, 5-frame, Bigelow.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$2.04	Apr....	\$2.04	July...	\$2.04	Oct.....	\$2.04
Feb.....	2.04	May....	2.04	Aug....	2.04	Nov.....	2.04
Mar.....	2.04	June..	2.04	Sept...	2.04	Dec.....	2.04
						Average	\$2.04

COTTON FLANNELS: 2½ yards to the pound.

[Price per yard on the first of each month.]

Jan.....	\$0.09½	Apr....	\$0.09½	July...	\$0.08½	Oct.....	\$0.08½
Feb.....	.09½	May....	.08½	Aug....	.08½	Nov.....	.08½
Mar.....	.09½	June..	.08½	Sept...	.08½	Dec.....	.08
						Average	\$0.0885

COTTON FLANNELS: 3½ yards to the pound.

[Price per yard on the first of each month.]

Jan.....	\$0.07½	Apr....	\$0.07½	July...	\$0.07½	Oct.....	\$0.06½
Feb.....	.07½	May....	.07½	Aug....	.07½	Nov.....	.06½
Mar.....	.07½	June..	.07½	Sept...	.07½	Dec.....	.06
						Average	\$0.0723

COTTON THREAD: 6-cord, 200-yard spools, J. & P. Coats.

[Price per spool, freight paid, on the first of each month.]

Jan.....	\$0.03724	Apr....	\$0.03724	July...	\$0.03724	Oct.....	\$0.03724
Feb.....	.03724	May....	.03724	Aug....	.03724	Nov.....	.03724
Mar.....	.03724	June..	.03724	Sept...	.03724	Dec.....	.03724
						Average	\$0.03724

COTTON YARNS: Carded, white, mule-spun, Northern, cones, 10/1.

[Price per pound on the first of each month.]

Jan.....	\$0.21	Apr....	\$0.22½	July...	\$0.18½	Oct.....	\$0.18
Feb.....	.24½	May....	.21	Aug....	.17	Nov.....	.17½
Mar.....	.22½	June..	.20	Sept...	.17½	Dec.....	.18
						Average	\$0.1981

COTTON YARNS: Carded, white, mule-spun, Northern, cones, 22/1.

[Price per pound on the first of each month.]

Jan.....	\$0.24	Apr....	\$0.25½	July...	\$0.21	Oct.....	\$0.22
Feb.....	.27	May....	.24	Aug....	.20½	Nov.....	.21
Mar.....	.25½	June..	.22	Sept...	.20½	Dec.....	.20½
						Average	\$0.2279

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.

DENIMS: Amoskeag.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.12½	Apr....	\$0.13	July...	\$0.12	Oct.....	\$0.11½
Feb.....	.13	May...	.13	Aug...	.11½	Nov.....	.11
Mar.....	.13	June...	.13	Sept...	.11½	Dec.....	.11
						Average	\$0.1217

DRILLINGS: Brown, Pepperell.

[Price per yard on the first of each month.]

Jan.....	\$0.07½	Apr....	\$0.08	July...	\$0.07	Oct.....	\$0.07
Feb.....	.07½	May...	.07½	Aug...	.07	Nov.....	.07
Mar.....	.08	June..	.07	Sept...	.07	Dec.....	.07
						Average	\$0.0727

DRILLINGS: 30-inch, Stark A.

[Average monthly price per yard.]

Jan.....	\$0.0698	Apr....	\$0.0653	July...	\$0.0620	Oct.....	\$0.0654
Feb.....	.0726	May...	.0672	Aug...	.0613	Nov.....	.0620
Mar.....	.0719	June..	.0652	Sept...	.0628	Dec.....	.0640
						Average	\$0.0658

FLANNELS: White, 4-4, Ballard Vale No. 3.

[Price per yard on the first of each month.]

Jan.....	\$0.44½	Apr....	\$0.44½	July...	\$0.44½	Oct.....	\$0.44½
Feb.....	.44½	May...	.44½	Aug...	.44½	Nov.....	.44½
Mar.....	.44½	June..	.44½	Sept...	.44½	Dec.....	.44½
						Average	\$0.4433

GINGHAMS: Amoskeag.

[Price per yard on the first of each month.]

Jan.....	\$0.05½	Apr....	\$0.05½	July...	\$0.05½	Oct.....	\$0.05
Feb.....	.05½	May...	.05½	Aug...	.05½	Nov.....	.05
Mar.....	.05½	June..	.05½	Sept...	.05	Dec.....	.05
						Average	\$0.0548

GINGHAMS: Lancaster.

[Price per yard on the first of each month.]

Jan.....	\$0.05½	Apr....	\$0.05½	July...	\$0.05½	Oct.....	\$0.05
Feb.....	.05½	May...	.05½	Aug...	.05½	Nov.....	.05
Mar.....	.05½	June...	.05½	Sept...	.05½	Dec.....	.05
						Average	\$0.0556

TABLE K.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.**HORSE BLANKETS: 6 pounds each, all wool.**

[Average price per pound.]

Year.	Price.
1904.....	\$0.70

HOSIERY: Men's cotton half hose, seamless, fast black, 20 to 22 ounce, 160 needles, single thread.

[Price per dozen pairs in September. Represents bulk of sales.]

Month.	Price.
September.....	\$0.637

HOSIERY: Men's cotton half hose, seamless, standard quality, 84 needles.

[Price per dozen pairs on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.75	Apr....	\$0.77	July...	\$0.77	Oct.....	\$0.75
Feb.....	.75	May...	.77	Aug...	.75	Nov.....	.72½
Mar....	.75	June...	.77	Sept...	.75	Dec.....	.72½
						Average	\$0.7525

HOSIERY: Women's combed Egyptian cotton hose, high spliced heel, double sole, full-fashioned.

[Price per dozen pairs maintained throughout the year.]

Year.	Price.
1904.....	\$1.8900

HOSIERY: Women's cotton hose, seamless, fast black, 26 to 28 ounce, 160 to 176 needles.

[Price per dozen pairs in September. Represents bulk of sales.]

Month.	Price.
September.....	\$0.7595

LEATHER: Harness, oak, packers' hides, heavy, No. 1.

[Price per pound on the first of each month in the general market; quotations from the Shoe and Leather Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.31-\$0.33	Apr....	\$0.31-\$0.33	July...	\$0.31-\$0.33	Oct.....	\$0.31-\$0.32
Feb.....	.31- .33	May...	.31- .33	Aug...	.31- .33	Nov.....	.31- .32
Mar....	.31- .33	June...	.31- .33	Sept...	.31- .32	Dec.....	.31- .33
						Average	\$0.3188

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.

LEATHER: Sole, hemlock, Buenos Ayres and Montana, middle weights, first quality.

[Price per pound on the first of each month in the general market; quotations from the Shoe and Leather Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.23	Apr....	\$0.23	July...	\$0.22	Oct.....	\$0.22 - \$0.23
Feb.....	.23	May....	.23	Aug....	.22	Nov.....	.22 - .23
Mar.....	.23	June..	\$0.22-\$0.22½	Sept...	.22	Dec.....	.22½ - .23
						Average	\$0.2258

LEATHER: Sole, oak, scoured backs, heavy, No. 1.

[Price per pound on the first of each month in the general market; quotations from the Shoe and Leather Reporter.]

Jan.....	\$0.35-\$0.36	Apr....	\$0.35	July...	\$0.32-\$0.33	Oct.....	\$0.35-\$0.36
Feb.....	.34	May....	\$0.35- .36	Aug....	.33- .34	Nov.....	.35- .36
Mar.....	.34	June...	.34- .35	Sept...	.33- .34	Dec.....	.35- .35
						Average	\$0.3450

LEATHER: Wax calf, 30 to 40 pounds to the dozen, B grade.

[Price per square foot on the first of each month in the general market; quotations from the Shoe and Leather Reporter.]

Jan.....	\$0.67½-\$0.70	Apr....	\$0.67½-\$0.70	July...	\$0.67½-\$0.70	Oct.....	\$0.67½-\$0.70
Feb.....	.67½- .70	May....	.67½- .70	Aug....	.67½- .70	Nov.....	.67½- .70
Mar....	.67½- .70	June...	.67½- .70	Sept...	.67½- .70	Dec.....	.67½- .70
						Average	\$0.6875

LINEN SHOE THREAD: 10s, Barbour.

[Price per pound on the first of each month.]

Jan.....	\$0.846	Apr....	\$0.846	July...	\$0.846	Oct.....	\$0.846
Feb.....	.846	May....	.846	Aug....	.846	Nov.....	.846
Mar....	.846	June...	.846	Sept...	.846	Dec.....	.893
						Average	\$0.8499

LINEN THREAD: 3-cord, 200-yard spools, Barbour.

[Price per dozen spools on the first of each month.]

Jan.....	\$0.8835	Apr....	\$0.8835	July...	\$0.8835	Oct.....	\$0.8835
Feb.....	.8835	May....	.8835	Aug....	.8835	Nov.....	.8835
Mar....	.8835	June...	.8835	Sept...	.8835	Dec.....	.8835
						Average	\$0.8835

OVERCOATINGS: Beaver, Moscow, all wool, black.

[Price per yard maintained, generally, throughout the year. Represents bulk of sales.]

Year.	Price.
1904.....	\$2.3250

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.**OVERCOATINGS: Chinchilla, B-rough, all wool.**

[Price per yard maintained, generally, throughout the year. Represents bulk of sales.]

Year.	Price.
1904.....	\$2.2088

OVERCOATINGS: Chinchilla, cotton warp, C. C. grade.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.45	Apr....	\$0.45	July...	\$0.45½	Oct.....	\$0.46
Feb.....	.45	May....	.46	Aug...	.45½	Nov.....	.46
Mar.....	.45½	June...	.45½	Sept...	.46	Dec.....	.46
						Average	\$0.4558

OVERCOATINGS: Covert cloth, light weight, staple goods.

[Price per yard maintained until December 10.]

Year.	Price.
1904.....	\$2.1899

OVERCOATINGS: Kersey, standard, 27 to 28 ounce.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan....	\$1.62½	Apr....	\$1.62½	July...	\$1.62½	Oct.....	\$1.70
Feb.....	1.62½	May....	1.62½	Aug...	1.62½	Nov.....	1.70
Mar.....	1.62½	June..	1.62½	Sept...	1.70	Dec.....	1.70
						Average	\$1.6500

PRINT CLOTHS: 28-inch, 64 by 64.

[Average weekly price per yard.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.0350	Apr....	\$0.0400	July...	\$0.0325	Oct.....	\$0.0300
	.0362½		.0400		.0300		.0300
	.0362½		.0368½		.0300		.0300
	.0375		.0362½		.0300		.0300
	.0400		.0350		.0300		.0300
Feb.....	.0400	May...	.0350	Aug...	.0300	Nov....	.0300
	.0400		.0337½		.0300		.0300
	.0400		.0337½		.0300		.0300
	.0400		.0337½		.0300		.0300
Mar.....	.0400	June...	.0325	Sept...	.0300	Dec....	.0300
	.0400		.0325		.0300		.0300
	.0400		.0312½		.0300		.0287½
	.0400		.0300		.0300		.0287½
						Average	\$0.033290

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.

SHAWLS: Standard, all wool, 72 by 144 inch, 42-ounce, made of high-grade wool.

[Price per shawl on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$4.90	Apr....	\$4.90	July...	\$4.90	Oct.....	\$4.90
Feb.....	4.90	May...	4.90	Aug...	4.90	Nov.....	4.90
Mar.....	4.90	June...	4.90	Sept...	4.90	Dec.....	4.90
						Average	\$4.90

SHEETINGS: Bleached, 10-4, Atlantic.

[Average monthly price per yard.]

Jan.....	\$0.2514	Apr.....	\$0.2400	July...	(a)	Oct.....	(a)
Feb.....	.2910	May...	.2400	Aug...	(a)	Nov.....	\$0.1980
Mar.....	.2415	June...	.2400	Sept...	\$0.2218	Dec.....	.2010
						Average	\$0.2355

SHEETINGS: Bleached, 10-4, Pepperell.

[Price per yard on the first of each month.]

Jan.....	\$0.25	Apr.....	\$0.26	July...	\$0.24	Oct.....	\$0.22
Feb.....	.26	May...	.26	Aug...	.24	Nov.....	.22
Mar.....	.26	June...	.26	Sept...	.22	Dec.....	.22
						Average	\$0.2425

SHEETINGS: Bleached, 10-4, Wamsutta S. T.

[Price per yard on the first of each month.]

Jan.....	\$0.2925	Apr.....	\$0.2925	July...	\$0.2700	Oct.....	\$0.2700
Feb.....	.2925	May...	.2700	Aug...	.2700	Nov.....	.2700
Mar.....	.2925	June...	.2700	Sept...	.2700	Dec.....	.2700
						Average	\$0.2775

SHEETINGS: Brown, 4-4, Atlantic A.

[Average monthly price per yard.]

Jan.....	\$0.0671	Apr.....	\$0.0783	July...	\$0.0730	Oct.....	\$0.0643
Feb.....	.0710	May...	.0783	Aug...	.0730	Nov.....	.0653
Mar.....	.0767	June...	.0783	Sept...	.0721	Dec.....	.0637
						Average	\$0.0718

SHEETINGS: Brown, 4-4, Indian Head.

[Price per yard on the first of each month.]

Jan.....	\$0.07½	Apr.....	\$0.08½	July...	\$0.08	Oct.....	\$0.07½
Feb.....	.07½	May...	.08½	Aug...	.08	Nov...	.07½
Mar.....	.08½	June...	.08½	Sept...	.07½	Dec.....	.07½
						Average	\$0.0802

a No sales during month.

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.

SHEETINGS: Brown, 4-4, Massachusetts Mills, Flying Horse brand, 2 $\frac{1}{16}$ yards to the pound.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.07	Apr....	\$0.07 $\frac{1}{2}$	July...	\$0.07	Oct....	\$0.07
Feb.....	.07 $\frac{1}{2}$	May....	.07 $\frac{1}{2}$	Aug...	.07	Nov....	.07
Mar....	.07 $\frac{1}{2}$	June...	.07 $\frac{1}{2}$	Sept...	.07	Dec....	.07
						Average	\$0.0715

SHEETINGS: Brown, 4-4, Pepperell R.

[Price per yard on the first of each month.]

Jan.....	\$0.06 $\frac{1}{2}$	Apr....	\$0.07 $\frac{1}{2}$	July...	\$0.06 $\frac{1}{2}$	Oct.....	\$0.06 $\frac{1}{2}$
Feb.....	.07	May....	.07 $\frac{1}{2}$	Aug...	.06 $\frac{1}{2}$	Nov....	.06 $\frac{1}{2}$
Mar....	.07 $\frac{1}{2}$	June...	.07 $\frac{1}{2}$	Sept...	.06 $\frac{1}{2}$	Dec....	.06 $\frac{1}{2}$
						Average	\$0.0669

SHIRTINGS: Bleached, 4-4, Fruit of the Loom.

[Price per yard on the first of each month.]

Jan.....	\$0.08 $\frac{1}{2}$	Apr....	\$0.08 $\frac{1}{2}$	July...	\$0.07 $\frac{1}{2}$	Oct.....	\$0.07 $\frac{1}{2}$
Feb.....	.08 $\frac{1}{2}$	May....	.08 $\frac{1}{2}$	Aug...	.07 $\frac{1}{2}$	Nov....	.07 $\frac{1}{2}$
Mar....	.08 $\frac{1}{2}$	June...	.08 $\frac{1}{2}$	Sept...	.07 $\frac{1}{2}$	Dec....	.07 $\frac{1}{2}$
						Average	\$0.0802

SHIRTINGS: Bleached, 4-4, Hope.

[Price per yard on the first of each month.]

Jan.....	\$0.0713	Apr....	\$0.0736	July...	\$0.0677	Oct....	\$0.0677
Feb.....	.0736	May....	.0736	Aug...	.0677	Nov....	.0677
Mar....	.0736	June...	.0736	Sept...	.0677	Dec....	.0677
						Average	\$0.0705

SHIRTINGS: Bleached, 4-4, Lonsdale.

[Price per yard on the first of each month.]

Jan.....	\$0.08	Apr....	\$0.08 $\frac{1}{2}$	July...	\$0.07 $\frac{1}{2}$	Oct.....	\$0.07 $\frac{1}{2}$
Feb.....	.08 $\frac{1}{2}$	May....	.08 $\frac{1}{2}$	Aug...	.07 $\frac{1}{2}$	Nov....	.07 $\frac{1}{2}$
Mar....	.08 $\frac{1}{2}$	June...	.08 $\frac{1}{2}$	Sept...	.07 $\frac{1}{2}$	Dec....	.07 $\frac{1}{2}$
						Average	\$0.0796

SHIRTINGS: Bleached, 4-4, New York Mills.

[Price per yard on the first of each month.]

Jan.....	\$0.0877	Apr....	\$0.0795	July...	\$0.0857	Oct.....	\$0.0816
Feb.....	.0795	May....	.0801	Aug...	.0839	Nov....	.0800
Mar....	.0802	June...	.0865	Sept...	.0854	Dec....	.0840
						Average	\$0.0830

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.

SHIRTINGS: Bleached, 4-4, Wamsutta $\begin{smallmatrix} <0> \\ \times \times \end{smallmatrix}$.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.0950	Apr....	\$0.0950	July...	\$0.0900	Oct.....	\$0.0900
Feb.....	.0950	May....	.0950	Aug....	.0900	Nov.....	.0900
Mar.....	.0950	June...	.0900	Sept...	.0900	Dec.....	.0900
						Average	\$0.0921

SILK: Raw, Italian, classical.

[Net cash price per pound in New York on the first of each month; quotations from the American Silk Journal.]

Jan.....	\$4.2570-\$4.3560	Apr....	\$3.8610-\$3.9600	July...	\$3.6135-\$3.6630	Oct....	\$3.6630-\$3.7620
Feb.....	4.2570- 4.3560	May....	3.7620- 3.9105	Aug....	3.7125- 3.8115	Nov....	3.6630- 3.7620
Mar.....	4.1085- 4.2075	June..	3.5888- 3.6630	Sept...	3.6630- 3.7373	Dec....	3.6630- 3.7620
						Average	\$3.8651

SILK: Raw, Japan, flatures, No. 1.

[Net cash price per pound in New York on the first of each month; quotations from the American Silk Journal.]

Jan.....	\$3.7345-\$3.8315	Apr....	\$3.4920-\$3.5890	July...	\$3.4920	Oct.....	\$3.5405-\$3.6618
Feb.....	3.7345- 3.8300	May....	3.4920- 3.6375	Aug....	\$3.5890- 3.6360	Nov....	3.6360- 3.7330
Mar....	3.5890- 3.6375	June..	3.4920- 3.5890	Sept...	3.6133- 3.6360	Dec....	3.6360- 3.7330
						Average	\$3.6416

SUITINGS: Clay worsted diagonal, 12-ounce, Washington Mills.

[Price per yard on the first of each month.]

Jan.....	\$0.9225	Apr....	\$0.9000	July...	\$0.9000	Oct....	\$0.9675
Feb.....	.9000	May....	.9000	Aug....	.9225	Nov....	.9675
Mar....	.9000	June..	.9000	Sept...	.9225	Dec....	.9900
						Average	\$0.9244

SUITINGS: Clay worsted diagonal, 16-ounce, Washington Mills.

[Price per yard on the first of each month.]

Jan.....	\$1.1025	Apr....	\$1.0800	July...	\$1.0800	Oct.....	\$1.1475
Feb.....	1.0800	May....	1.0800	Aug....	1.0980	Nov....	1.1475
Mar....	1.0800	June..	1.0800	Sept...	1.0980	Dec....	1.1700
						Average	\$1.1036

SUITINGS: Indigo blue, all wool, 54-inch, 14-ounce, Middlesex standard.

[Price per yard on the first of each month.]

Jan.....	\$1.44	Apr....	\$1.44	July...	\$1.44	Oct.....	\$1.44
Feb.....	1.44	May....	1.44	Aug....	1.44	Nov....	1.44
Mar....	1.44	June..	1.44	Sept...	1.44	Dec....	1.48½
						Average	\$1.4438

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.**SUITINGS: Indigo blue, all wool, 16-ounce.**

[Price per yard maintained, generally, throughout the year. Represents bulk of sales.]

Year.	Price.
1904.....	\$2.1855

SUITINGS: Serge, Washington Mills 6700.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.7425	Apr....	\$0.7425	July...	\$0.7425	Oct....	\$0.8325
Feb.....	.7425	May....	.7425	Aug....	.7875	Nov....	.8325
Mar.....	.7425	June...	.7425	Sept...	.7875	Dec....	.8550
						Average	\$0.7744

TICKINGS: Amoskeag A. C. A.

[Price per yard on the first of each month.]

Jan.....	\$0.13	Apr....	\$0.13½	July...	\$0.11½	Oct.....	\$0.10½
Feb.....	.13	May....	.13½	Aug....	.11½	Nov....	.10½
Mar.....	.13	June...	.13½	Sept...	.11½	Dec....	.10½
						Average	\$0.121½

TROUSERINGS: Fancy worsted, 21 to 22 ounce, all worsted warp and filling, wool and worsted back.

[Price per yard on the first of each month.]

Jan.....	\$2.09½	Apr....	\$2.07	July...	\$2.16	Oct.....	\$2.16
Feb.....	2.07	May....	2.07	Aug....	2.16	Nov....	2.16
Mar.....	2.07	June...	2.16	Sept...	2.16	Dec....	2.16
						Average	\$2.1244

UNDERWEAR: Shirts and drawers, white, all wool, full-fashioned, 18-gauge.

[Price per dozen garments on the first of each month.]

Jan.....	\$23.40	Apr....	\$23.40	July...	\$23.40	Oct.....	\$23.40
Feb.....	23.40	May....	23.40	Aug....	23.40	Nov....	23.40
Mar.....	23.40	June...	23.40	Sept...	23.40	Dec....	23.40
						Average	\$23.40

UNDERWEAR: Shirts and drawers, white, merino, full-fashioned, 60 per cent wool, 40 per cent cotton, 24-gauge.

[Price per dozen garments on the first of each month.]

Jan.....	\$16.20	Apr....	\$16.20	July...	\$16.20	Oct.....	\$16.20
Feb.....	16.20	May....	16.20	Aug....	16.20	Nov....	16.20
Mar.....	16.20	June...	16.20	Sept...	16.20	Dec....	16.20
						Average	\$16.20

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Continued.

WOMEN'S DRESS GOODS: Alpaca, cotton warp, 22-inch, Hamilton.

[Price per yard on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.0711	Apr.....	\$0.0711	July...	\$0.0760	Oct.....	\$0.0833
Feb.....	.0711	May...	.0711	Aug...	.0760	Nov.....	.0833
Mar.....	.0711	June..	.0760	Sept...	.0833	Dec.....	.0833
						Average	\$0.0764

WOMEN'S DRESS GOODS: Cashmere, all wool, 10-11 twill, 38-inch, Atlantic Mills J.

[Price per yard on the first of each month.]

Jan.....	\$0.3406	Apr.....	\$0.3406	July...	\$0.3406	Oct.....	\$0.3406
Feb.....	.3406	May...	.3406	Aug...	.3406	Nov...	.3479
Mar.....	.3406	June...	.3406	Sept...	.3406	Dec.....	.3479
						Average	\$0.3418

WOMEN'S DRESS GOODS: Cashmere, cotton warp, 9-twill, 4-4, Atlantic Mills F.

[Price per yard on the first of each month.]

Jan.....	\$0.1715	Apr.....	\$0.1715	July...	\$0.1740	Oct.....	\$0.1740
Feb.....	.1715	May...	.1715	Aug...	.1740	Nov...	.1813
Mar.....	.1715	June...	.1715	Sept...	.1740	Dec.....	.1813
						Average	\$0.1740

WOMEN'S DRESS GOODS: Cashmere, cotton warp, 22-inch, Hamilton.

[Price per yard on the first of each month.]

Jan.....	\$0.0760	Apr.....	\$0.0760	July...	\$0.0833	Oct.....	\$0.0882
Feb.....	.0760	May...	.0760	Aug...	.0833	Nov.....	.0882
Mar.....	.0760	June..	.0760	Sept...	.0833	Dec.....	.0882
						Average	\$0.0809

WOMEN'S DRESS GOODS: Cashmere, cotton warp, 27-inch, Hamilton.

[Price per yard on the first of each month.]

Jan.....	\$0.0931	Apr.....	\$0.0931	July...	\$0.0980	Oct.....	\$0.1029
Feb.....	.0931	May...	.0931	Aug...	.0980	Nov.....	.1029
Mar.....	.0931	June..	.0980	Sept...	.1029	Dec.....	.1029
						Average	\$0.0976

WOMEN'S DRESS GOODS: Franklin Sackings, 6-4.

[Price per yard on the first of each month.]

Jan.....	\$0.57	Apr.....	\$0.57	July...	\$0.57	Oct.....	\$0.59½
Feb.....	.57	May...	.57	Aug...	.57	Nov.....	.61½
Mar.....	.57	June...	.57	Sept...	.59½	Dec.....	.64½
						Average	\$0.5839

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

CLOTHS AND CLOTHING—Concluded.

WOOL: Ohio, fine fleece (X and XX grade), scoured.

[Price per pound in the Eastern markets (Baltimore, Boston, New York, and Philadelphia) on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.6809	Apr....	\$0.6809	July...	\$0.6809	Oct.....	\$0.6915
Feb.....	.6809	May....	.6809	Aug....	.6809	Nov.....	.6915
Mar.....	.6809	June...	.6809	Sept...	.6915	Dec.....	.7128
						Average	\$0.6862

WOOL: Ohio, medium fleece (one-fourth and three-eighths grade), scoured.

[Price per pound in the eastern markets (Baltimore, Boston, New York, and Philadelphia) on the first of each month.]

Jan.....	\$0.4627	Apr....	\$0.4627	July...	\$0.4851	Oct....	\$0.5000
Feb.....	.4627	May....	.4701	Aug....	.5000	Nov....	.5224
Mar.....	.4627	June...	.4776	Sept...	.5000	Dec....	.5873
						Average	\$0.4869

WORSTED YARNS: 2-40s, Australian fine.

[Price per pound on the first of each month.]

Jan.....	\$1.17½	Apr....	\$1.17½	July...	\$1.17½	Oct.....	\$1.20
Feb.....	1.17½	May....	1.17½	Aug....	1.17½	Nov....	1.22½
Mar.....	1.17½	June...	1.17½	Sept...	1.17½	Dec....	1.25
						Average	\$1.1875

WORSTED YARNS: 2-40s, XXXX or its equivalent in quality, white, in skeins.

[Price per pound on the first of each month.]

Jan.....	\$1.17	Apr....	\$1.17	July...	\$1.15	Oct....	\$1.21
Feb.....	1.17	May....	1.15	Aug....	1.15	Nov....	1.21
Mar.....	1.17	June...	1.15	Sept...	1.15	Dec....	1.21
						Average	\$1.1717

FUEL AND LIGHTING.

CANDLES: Adamantine, 6s, 14-ounce.

[Price per pound in New York on the first of each month. Quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.09	Apr....	\$0.09	July...	\$0.09	Oct....	\$0.09
Feb.....	.09	May....	.09	Aug....	.09	Nov....	.09
Mar.....	.09	June...	.09	Sept...	.09	Dec....	.09
						Average	\$0.09

COAL: Anthracite, broken.

[Average monthly selling price per ton, at tide water, New York Harbor.]

Jan.....	\$4.2995	Apr....	\$4.2000	July...	\$4.2283	Oct....	\$4.2518
Feb.....	4.3553	May....	4.2460	Aug....	4.2226	Nov....	4.2450
Mar.....	4.2663	June...	4.2193	Sept...	4.2047	Dec....	4.2285
						Average	\$4.2473

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FUEL AND LIGHTING—Continued.

COAL: Anthracite, chestnut.

[Average monthly selling price per ton, at tide water, New York Harbor.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan	\$4.9580	Apr....	\$4.4500	July ...	\$4.7500	Oct	\$4.9549
Feb	4.9587	May ...	4.5441	Aug ...	4.8500	Nov	4.9505
Mar	4.9516	June...	4.6375	Sept ...	4.9495	Dec	4.9506
						Average	\$4.8250

COAL: Anthracite, egg.

[Average monthly selling price per ton, at tide water, New York Harbor.]

Jan	\$4.9725	Apr....	\$4.4500	July ...	\$4.7338	Oct	\$4.9509
Feb	4.9521	May ...	4.5410	Aug ...	4.8476	Nov	4.9503
Mar	4.9539	June ..	4.6318	Sept ...	4.9326	Dec	4.9517
						Average	\$4.8227

COAL: Anthracite, stove.

[Average monthly selling price per ton, at tide water, New York Harbor.]

Jan	\$4.9614	Apr....	\$4.4505	July ...	\$4.7483	Oct	\$4.9509
Feb	4.9576	May ...	4.5437	Aug ...	4.8478	Nov	4.9507
Mar	4.9540	June ..	4.6368	Sept ...	4.9423	Dec	4.9510
						Average	\$4.8246

COAL: Bituminous, Georges Creek.

[Price per ton at the mine on the first of each month.]

Jan	\$2.25	Apr....	\$1.70	July ...	\$1.60	Oct	\$1.60
Feb	2.15	May ...	1.60	Aug ...	1.60	Nov	1.60
Mar	2.10	June ..	1.60	Sept ...	1.60	Dec	1.60
						Average	\$1.7500

COAL: Bituminous, Georges Creek.

[Price per ton, f. o. b. New York Harbor, on the first of each month.]

Jan	\$3.45	Apr....	\$3.15	July ...	\$3.15	Oct	\$3.15
Feb	3.35	May ...	3.15	Aug ...	3.15	Nov	3.15
Mar	3.20	June ..	3.15	Sept ...	3.15	Dec	3.15
						Average	\$3.1953

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FUEL AND LIGHTING—Continued.**COAL: Bituminous, Pittsburg (Youghiogheny), lump.**

[Price per bushel on Tuesday of each week, Cincinnati, afloat; quotations furnished by the superintendent of the Cincinnati Chamber of Commerce.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.09 .09 .09 .03	Apr....	\$0.09 .08½ .08½ .08½	July ...	\$0.08½ .08½ .08½ .08½	Oct.....	\$0.08 .08 .08 .08
Feb.....	.09 .09 .09 .09	May ...	.08½ .08½ .08½ .08½	Aug ...	.08½ .08½ .08½ .08½	Nov....	.08 .08 .08 .08
Mar	09 .09 .09 .09	June ..	.08½ .08½ .08½ .08½	Sept ...	.08 .08 .08 .08	Dec	.09 (a) (a) (a)
						Average	\$0.0852

COKE: Connellsville, furnace.

[Contract price per ton, f. o. b. at the ovens, on the first of each month; quotations from the Iron Age.]

Jan.....	\$1.65-\$1.75	Apr....	\$1.65	July ...	\$1.40-\$1.45	Oct.....	\$1.45-\$1.50
Feb.....	1.60- 1.65	May ...	\$1.50- 1.60	Aug ...	1.45- 1.50	Nov....	1.75- 1.85
Mar	1.60- 1.65	June ..	1.50- 1.65	Sept ...	1.50	Dec	2.15- 2.35
						Average	\$1.6375

MATCHES: Parlor, domestic.

[Price per gross of boxes (200s) in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$1.50	Apr....	\$1.50	July ...	\$1.50	Oct.....	\$1.50
Feb.....	1.50	May ...	1.50	Aug ...	1.50	Nov....	1.50
Mar	1.50	June...	1.50	Sept ...	1.50	Dec	1.50
						Average	\$1.50

PETROLEUM: Crude, Pennsylvania.

[Average monthly price per barrel at wells; quotations from the Oil City Derrick.]

Jan.....	\$1.85	Apr....	\$1.65½	July ...	\$1.52	Oct.....	\$1.56
Feb.....	1.82	May ...	1.62	Aug ...	1.50	Nov....	1.58½
Mar	1.72	June...	1.58½	Sept ...	1.58½	Dec	1.57
						Average	\$1.6270

PETROLEUM: Refined, in barrels, cargo lots, for export.

[Price per gallon, New York loading, on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.0910	Apr....	\$0.0850	July ...	\$0.0795	Oct.....	\$0.0795
Feb.....	.0910	May ...	.0815	Aug ...	.0770	Nov....	.0795
Mar	.0875	June...	.0815	Sept ...	.0785	Dec	.0795
						Average	\$0.0826

a No quotation for week.

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

FUEL AND LIGHTING—Concluded.**PETROLEUM: Refined, 150° fire test, water white, in barrels, packages included (jobbing lots).**

[Price per gallon in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.15	Apr.....	\$0.14	July...	\$0.13	Oct.....	\$0.13
Feb.....	.15	May....	.14	Aug....	.13	Nov.....	.13
Mar....	.14	June..	.14	Sept...	.13	Dec.....	.13
						Average	\$0.1367

METALS AND IMPLEMENTS.**AUGERS: Extra, $\frac{1}{4}$ -inch.**

[Price per auger in New York on the first of each month.]

Jan.....	\$0.24	Apr.....	\$0.24	July...	\$0.24	Oct.....	\$0.24
Feb.....	.24	May....	.24	Aug....	.24	Nov.....	.24
Mar....	.24	June..	.24	Sept...	.24	Dec.....	.24
						Average	\$0.24

AXES: M. C. O., Yankee.

[Price per ax in New York on the first of each month.]

Jan.....	\$0.500	Apr.....	\$0.605	July...	\$0.605	Oct.....	\$0.605
Feb.....	.500	May....	.605	Aug....	.605	Nov.....	.605
Mar....	.500	June..	.605	Sept...	.605	Dec.....	.605
						Average	\$0.5788

BAR IRON: Best refined, from mill.

[Average monthly price per pound in Pittsburg; quotations from the Bulletin of the American Iron and Steel Association.]

Jan.....	\$0.0130	Apr.....	\$0.0150	July...	\$0.0150	Oct....	\$0.0150
Feb.....	.0131	May....	.0150	Aug....	.0150	Nov....	.0152
Mar....	.0138	June..	.0150	Sept...	.0150	Dec....	.0176
						Average	\$0.0148

BAR IRON: Best refined, from store.

[Average monthly price per pound in Philadelphia; quotations from the Bulletin of the American Iron and Steel Association.]

Jan.....	\$0.0171	Apr.....	\$0.0171	July...	\$0.0171	Oct....	\$0.0171
Feb.....	.0171	May....	.0171	Aug....	.0171	Nov....	.0171
Mar....	.0171	June..	.0171	Sept...	.0171	Dec....	.0181
						Average	\$0.0172

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

METALS AND IMPLEMENTS—Continued.

BARB WIRE: Galvanized.

[Average monthly price per hundred pounds in Chicago; quotations from the Iron Age.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$2.64	Apr....	\$2.70	July...	\$2.65	Oct.....	\$2.20
Feb.....	2.65	May....	2.70	Aug...	2.42½	Nov.....	2.22½
Mar.....	2.69	June..	2.68	Sept...	2.20	Dec.....	2.33
						Average	\$2.5075

BUTTS: Loose joint, cast, 3 by 3 inch.

[Price per pair in New York on the first of each month.]

Jan.....	\$0.04	Apr....	\$0.04	July...	\$0.04	Oct.....	\$0.04
Feb.....	.04	May....	.04	Aug...	.04	Nov.....	.04
Mar.....	.04	June...	.04	Sept...	.04	Dec.....	.04
						Average	\$0.04

CHISELS: Extra, socket firmer, 1-inch.

[Price per chisel in New York on the first of each month.]

Jan.....	\$0.30	Apr....	\$0.30	July...	\$0.30	Oct.....	\$0.30
Feb.....	.30	May....	.30	Aug...	.30	Nov.....	.30
Mar.....	.30	June...	.30	Sept...	.30	Dec.....	.30
						Average	\$0.30

COPPER: Ingot, lake.

[Price per pound in New York on the first of each month; quotations from the Iron Age.]

Jan.....	\$0.12½-\$0.12½	Apr....	\$0.13½-\$0.13½	July...	\$0.12½-\$0.12½	Oct.....	\$0.12½-\$0.13
Feb.....	.12½-.12½	May....	.13½-.13½	Aug...	.12½-.12½	Nov.....	.13½-.14
Mar.....	.12½-.12½	June...	.13-.13½	Sept...	.12½-.12½	Dec.....	.14½-.15½
						Average	\$0.1311

COPPER: Sheet, hot-rolled (base sizes).

[Price per pound in New York on the first of each month.]

Jan.....	\$0.18	Apr....	\$0.18	July...	\$0.18	Oct.....	\$0.18
Feb.....	.18	May....	.18	Aug...	.18	Nov.....	.18
Mar.....	.18	June...	.18	Sept...	.18	Dec.....	.18
						Average	\$0.18

COPPER WIRE: Bare, No. 8, B. and S. gauge, and heavier (base sizes).

[Price per pound, f. o. b. New York, on the first of each month.]

Jan.....	\$0.13½	Apr....	\$0.14½	July...	\$0.13½	Oct.....	\$0.14½
Feb.....	.13½	May....	.14½	Aug...	.13½	Nov.....	.16
Mar.....	.13½	June...	.13½	Sept...	.13½	Dec.....	.16½
						Average	\$0.1438

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

METALS AND IMPLEMENTS—Continued.

DOORKNOBS: Steel, bronze plated.

[Price per pair in New York on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.225	Apr.....	\$0.250	July...	\$0.250	Oct.....	\$0.250
Feb.....	.250	May...	.250	Aug...	.250	Nov.....	.250
Mar.....	.250	June...	.250	Sept...	.250	Dec.....	.225
						Average	\$0.2458

FILES: 8-inch mill bastard, Nicholson.

[Price per dozen on the first of each month.]

Jan.....	\$1.05	Apr.....	\$1.05	July...	\$1.04	Oct.....	\$1.03
Feb.....	1.05	May...	1.04	Aug...	1.04	Nov.....	1.03
Mar.....	1.05	June...	1.04	Sept...	1.04	Dec.....	1.03
						Average	\$1.0400

HAMMERS: Maydole No. 1½.

[Price per hammer in New York on the first of each month.]

Jan.....	\$0.466	Apr.....	\$0.466	July...	\$0.466	Oct.....	\$0.466
Feb.....	.466	May...	.466	Aug...	.466	Nov.....	.466
Mar.....	.466	June...	.466	Sept...	.466	Dec.....	.466
						Average	\$0.466

LEAD: Pig, desilverized.

[Price per pound in New York, from store, on the first of each month; quotations from the Iron Age.]

Jan.....	\$0.0435	Apr.....	\$0.0460-\$0.0465	July...	\$0.0425-\$0.0435	Oct.....	\$0.0420-\$0.0430
Feb.....	.0440	May...	.0460- .0465	Aug...	.0420- .0425	Nov.....	.0440- .0445
Mar.....	\$0.0460- .0465	June...	.0435- .0440	Sept...	.0420- .0430	Dec.....	.0460- .0470
						Average	\$0.0443

LEAD PIPE.

[Price per hundred pounds, f. o. b. New York, on the first of each month.]

Jan.....	\$4.67	Apr.....	\$4.82	July...	\$4.64	Oct.....	\$4.60
Feb.....	4.74	May...	4.86	Aug...	4.56	Nov.....	5.20
Mar.....	4.77	June...	4.75	Sept...	4.73	Dec.....	5.20
						Average	\$4.7950

LOCKS: Common mortise.

[Price per lock in New York on the first of each month.]

Jan.....	\$0.090	Apr.....	\$0.105	July...	\$0.105	Oct.....	\$0.105
Feb.....	.105	May...	.105	Aug...	.105	Nov.....	.105
Mar.....	.105	June...	.105	Sept...	.105	Dec.....	.090
						Average	\$0.1025

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

METALS AND IMPLEMENTS—Continued.**NAILS: Cut, 8-penny, fence and common.**

[Price per 100-pound keg, f. o. b. Pittsburg, on the first of each month; quotations computed from base prices published in the Iron Age. See explanation on page 404.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$2.00	Apr....	\$1.85	July...	\$1.85	Oct.....	\$1.70-\$1.75
Feb.....	1.80	May....	1.85	Aug....	1.85	Nov.....	1.70-1.75
Mar.....	1.80	June...	1.85	Sept...	\$1.70-1.75	Dec.....	1.80
						Average	\$1.8188

NAILS: Wire, 8-penny, fence and common.

[Price per 100-pound keg, f. o. b. Pittsburg, on the first of each month; quotations computed from base prices published in the Iron Age. See explanation on page 404.]

Jan.....	\$1.95	Apr....	\$2.00	July...	\$2.00	Oct.....	\$1.70
Feb.....	2.00	May....	2.00	Aug....	2.00	Nov.....	1.70
Mar.....	2.00	June...	2.00	Sept...	1.70	Dec.....	\$1.80-1.85
						Average	\$1.9068

PIG IRON: Bessemer.

[Average monthly price per ton in Pittsburg; quotations from the Bulletin of the American Iron and Steel Association.]

Jan.....	\$13.90	Apr....	\$14.19	July...	\$12.46	Oct.....	\$13.10
Feb.....	13.66	May....	13.60	Aug....	12.76	Nov.....	15.15
Mar.....	14.03	June...	12.81	Sept...	12.69	Dec.....	16.72
						Average	\$13.7558

PIG IRON: Foundry No. 1.

[Average monthly price per ton in Philadelphia; quotations from the Bulletin of the American Iron and Steel Association.]

Jan.....	\$15.50	Apr....	\$15.75	July...	\$14.94	Oct.....	\$15.12
Feb.....	15.50	May....	15.40	Aug....	15.00	Nov.....	16.40
Mar.....	15.45	June...	15.19	Sept...	15.00	Dec.....	17.62
						Average	\$15.5725

PIG IRON: Foundry No. 2, Northern.

[Price per ton, f. o. b. Pittsburg, on the first of each month; quotations from the Iron Age.]

Jan.....	\$13.85	Apr....	\$14.10	July...	\$12.60	Oct....	\$12.85
Feb.....	13.35	May....	\$13.25-13.35	Aug....	12.85	Nov....	\$14.60-14.85
Mar.....	13.25	June..	13.00-13.10	Sept...	\$12.60-12.85	Dec....	16.85
						Average	\$13.6250

PIG IRON: Gray forge, Southern, coke.

[Price per ton, f. o. b. Cincinnati, on the first of each month; quotations from the Iron Age.]

Jan.....	\$10.75-\$11.25	Apr....	\$11.50-\$11.75	July...	\$10.75-\$11.00	Oct....	\$11.00-\$11.25
Feb....	11.00-11.50	May....	11.50-11.75	Aug....	11.00-11.25	Nov....	13.75-14.00
Mar....	10.75-11.00	June..	10.75-11.00	Sept...	11.00-11.25	Dec....	14.50-15.00
						Average	\$11.6771

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

METALS AND IMPLEMENTS—Continued.

PLANES: Bailey No. 5.

[Price per plane in New York on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$1.53	Apr....	\$1.53	July...	\$1.53	Oct....	\$1.53
Feb.....	1.53	May....	1.53	Aug....	1.53	Nov....	1.53
Mar....	1.53	June..	1.53	Sept...	1.53	Dec....	1.53
						Average	\$1.53

QUICKSILVER.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.62	Apr....	\$0.62	July...	\$0.61	Oct....	\$0.55
Feb.....	.61½	May....	.62	Aug....	.56½	Nov....	.54
Mar....	.62	June..	.61	Sept...	.56	Dec....	.55
						Average	\$0.5900

SAWS: Crosscut, Disston No. 2, 6-foot.

[Price per saw to small jobbers, f. o. b. Philadelphia, on the first of each month.]

Jan.....	\$1.6033	Apr....	\$1.6033	July...	\$1.6033	Oct....	\$1.6033
Feb.....	1.6033	May....	1.6033	Aug....	1.6033	Nov....	1.6033
Mar....	1.6033	June..	1.6033	Sept...	1.6033	Dec....	1.6033
						Average	\$1.6033

SAWS: Hand, Disston No. 7, 26-inch.

[Price per dozen to small jobbers, f. o. b. Philadelphia, on the first of each month.]

Jan.....	\$12.60	Apr....	\$12.60	July...	\$12.60	Oct....	\$12.60
Feb.....	12.60	May....	12.60	Aug....	12.60	Nov....	12.60
Mar....	12.60	June..	12.60	Sept...	12.60	Dec....	12.60
						Average	\$12.60

SHOVELS: Ames No. 2, cast steel, D handle, square point, back strap, black.

[Price per dozen on the first of each month.]

Jan.....	\$8.02	Apr....	\$7.62	July...	\$7.62	Oct....	\$7.62
Feb.....	7.62	May....	7.62	Aug....	7.62	Nov....	7.62
Mar....	7.62	June...	7.62	Sept...	7.62	Dec....	7.62
						Average	\$7.6533

SILVER: Bar, fine.

[Average monthly price per ounce in New York; quotations furnished by the Director of the Mint.]

Jan.....	\$0.57634	Apr....	\$0.54775	July...	\$0.53697	Oct....	\$0.53572
Feb.....	.53335	May....	.56045	Aug....	.53486	Nov....	.59091
Mar....	.57347	June...	.56269	Sept...	.57692	Dec....	.61182
						Average	\$0.57844

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

METALS AND IMPLEMENTS—Continued.

SPELTER: Western.

[Price per pound in New York on the first of each month; quotations from the Iron Age.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.0500-\$0.0520	Apr.....	\$0.0525-\$0.0530	July....	\$0.0485-\$0.0495	Oct.....	\$0.0510-\$0.0520
Feb.....	.0490-.0500	May....	.0520-.0525	Aug....	.0485-.0495	Nov.....	.0535-.0540
Mar.....	.0505-.0515	June....	.0487½-.0500	Sept....	.0500-.0512½	Dec.....	.0575-.0587½
						Average	\$0.0515

STEEL BILLETS.

[Average monthly price per ton at mills at Pittsburg; quotations from the Bulletin of the American Iron and Steel Association.]

Jan.....	\$23.00	Apr....	\$23.00	July....	\$23.00	Oct.....	\$19.50
Feb.....	23.00	May....	23.00	Aug....	23.00	Nov.....	20.40
Mar.....	23.00	June..	23.00	Sept....	21.25	Dec.....	21.00
						Average	\$22.1792

STEEL RAILS.

[Average monthly price per ton at mills in Pennsylvania; quotations from the Bulletin of the American Iron and Steel Association.]

Jan.....	\$28.00	Apr....	\$28.00	July....	\$28.00	Oct.....	\$28.00
Feb.....	28.00	May....	28.00	Aug....	28.00	Nov.....	28.40
Mar.....	28.00	June..	28.00	Sept....	28.00	Dec.....	28.00
						Average	\$28.00

STEEL SHEETS: Black, No. 27, box annealed, one pass through cold rolls.

[Price per pound in Pittsburg on the first of each month; quotations from the Iron Age.]

Jan.....	\$0.0220-\$0.0225	Apr....	\$0.0215-\$0.0220	July....	\$0.0200-\$0.0205	Oct.....	\$0.0200
Feb.....	.0215-.0220	May....	.0210-.0215	Aug....	.0200	Nov.....	.0200
Mar.....	.0220	June..	.0210-.0215	Sept....	.0200	Dec.....	.0210
						Average	\$0.0210

TIN: Pig.

[Price per pound in New York on the first of each month; quotations from the Iron Age.]

Jan.....	\$0.2900	Apr....	\$0.2835-\$0.2865	July....	\$0.2560-\$0.2580	Oct.....	\$0.2825-\$0.2850
Feb.....	\$0.2750-.2800	May....	.2795-.2810	Aug....	.2700-.2720	Nov.....	.2900-.2970½
Mar.....	.2800-.2840	June..	.2680-.2720	Sept....	.2750-.2775	Dec.....	.2912½-.2927½
						Average	\$0.2790

TIN PLATES: Domestic, Bessemer, coke, 14 by 20 inch.

[Price per 100 pounds in New York on the first of each month; quotations from the Iron Age.]

Jan.....	\$3.79	Apr....	\$3.64	July....	\$3.64	Oct.....	\$3.49
Feb.....	3.64	May....	3.64	Aug....	3.49	Nov.....	3.49
Mar.....	3.64	June..	3.64	Sept....	3.49	Dec.....	3.64
						Average	\$3.6025

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

METALS AND IMPLEMENTS—Concluded.**TROWELS: M. C. O., brick, 10½-inch.**

[Price per trowel in New York on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.34	Apr....	\$0.34	July...	\$0.34	Oct.....	\$0.34
Feb.....	.34	May....	.34	Aug...	.34	Nov.....	.34
Mar.....	.34	June...	.34	Sept...	.34	Dec.....	.34
							Average
							\$0.34

VICES: Solid box, 50-pound.

[Price per vise in New York on the first of each month.]

Jan.....	\$4.60	Apr....	\$4.14	July...	\$4.14	Oct.....	\$4.14
Feb.....	4.60	May....	4.14	Aug...	4.14	Nov.....	4.14
Mar.....	4.60	June...	4.14	Sept...	4.14	Dec.....	4.14
							Average
							\$4.2550

WOOD SCREWS: 1-inch, No. 10, flat head.

[Price per gross in New York on the first of each month.]

Jan.....	\$0.0945	Apr....	\$0.0945	July...	\$0.0945	Oct.....	\$0.0945
Feb.....	.0945	May....	.0945	Aug...	.0945	Nov...	.0945
Mar.....	.0945	June...	.0945	Sept...	.0945	Dec.....	.0945
							Average
							\$0.0945

ZINC: Sheet, ordinary numbers and sizes, packed in 600-pound casks.

[Price per hundred pounds, f. o. b. Lasalle, Ill., on the first of each month.]

Jan.....	\$5.17	Apr....	\$5.61	July...	\$5.43	Oct.....	\$5.70
Feb.....	5.29	May....	5.70	Aug...	5.52	Nov...	5.89
Mar.....	5.43	June...	5.52	Sept...	5.61	Dec.....	6.44
							Average
							\$5.6092

LUMBER AND BUILDING MATERIALS.**BRICK: Common domestic building.**

[Price per thousand on dock in New York on the first of each month.]

Jan.....	\$8.00-\$8.50	Apr....	\$5.75-\$7.00	July...	\$7.25-\$7.50	Oct.....	\$7.50-\$7.75
Feb.....	8.00- 8.50	May....	5.75- 7.25	Aug...	7.50- 7.75	Nov.....	7.50- 7.75
Mar.....	7.50- 8.00	June...	7.25- 7.37½	Sept...	7.50- 7.75	Dec.....	7.50- 7.75
							Average
							\$7.4948

CARBONATE OF LEAD: American, in oil.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.0588	Apr....	\$0.0588	July...	\$0.0613	Oct.....	\$0.0588
Feb.....	.0588	May....	.0588	Aug...	.0613	Nov.....	.0588
Mar.....	.0588	June...	.0613	Sept...	.0613	Dec.....	.0613
							Average
							\$0.0598

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

LUMBER AND BUILDING MATERIALS—Continued.

CEMENT: Portland, domestic.

[Price per barrel in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$1.60-\$1.90	Apr....	\$1.45-\$1.60	July...	\$1.50	Oct.....	\$1.25-\$1.35
Feb.....	1.45- 1.60	May....	1.40- 1.60	Aug...	\$1.40- 1.50	Nov.....	1.25- 1.35
Mar....	1.45- 1.60	June...	1.50	Sept...	1.30- 1.35	Dec....	1.30- 1.35
						Average	\$1.4604

CEMENT: Rosendale.

[Price per barrel in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.85	Apr....	\$0.85-\$0.90	July...	\$0.80-\$0.85	Oct.....	\$0.70-\$0.75
Feb.....	\$0.80- .85	May....	.85	Aug...	.80	Nov.....	.70
Mar....	.85- .90	June...	.80- .90	Sept...	.75	Dec....	.70
						Average	\$0.8021

DOORS: Pine, unmolded, 2 feet 4 inches by 6 feet 8 inches, 1½ inches thick.

[Price per door in Buffalo on the first of each month.]

Jan.....	\$1.62	Apr....	\$1.62	July...	\$1.98	Oct.....	\$1.56
Feb.....	1.62	May....	1.62	Aug...	1.98	Nov.....	1.56
Mar....	1.62	June...	1.98	Sept...	1.56	Dec....	1.56
						Average	\$1.6900

HEMLOCK: 2 by 4 inch, 12 to 14 feet long, Pennsylvania stock.

[Price per M feet in New York on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$17.00	Apr....	\$17.00	July...	\$17.00	Oct.....	\$17.00
Feb.....	17.00	May....	17.00	Aug...	17.00	Nov.....	17.00
Mar....	17.00	June...	17.00	Sept...	17.00	Dec....	17.00
						Average	\$17.00

LIME: Eastern, common.

[Price per barrel in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.80-\$0.82	Apr....	\$0.80-\$0.82	July...	\$0.80-\$0.82	Oct.....	\$0.80-\$0.85
Feb.....	.80- .82	May....	.80- .82	Aug...	.85- .87	Nov.....	.80- .82
Mar....	.80- .82	June...	.80- .82	Sept...	.85- .87	Dec....	.87
						Average	\$0.8246

LINSEED OIL: Raw, city, in barrels.

[Price per gallon in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.37	Apr....	\$0.42	July...	\$0.39	Oct.....	\$0.43
Feb.....	.42	May....	.42	Aug...	.45	Nov.....	.41
Mar....	.42	June...	.40	Sept...	.45	Dec....	.41
						Average	\$0.4158

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

LUMBER AND BUILDING MATERIALS—Continued.

MAPLE: Hard, 1-inch, firsts and seconds, 6 inches and up wide.

[Price per M feet in New York on the first of each month; quotations from the New York Lumber Trade Journal.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$30.00-\$32.00	Apr....	\$30.00-\$32.00	July...	\$30.00-\$32.00	Oct.....	\$30.00-\$32.00
Feb.....	30.00- 32.00	May...	30.00- 32.00	Aug...	30.00- 32.00	Nov.....	30.00- 32.00
Mar.....	30.00- 32.00	June..	30.00- 32.00	Sept...	30.00- 32.00	Dec.....	30.00- 32.00
						Average	\$31.0000

OAK: White, plain, 1-inch, 6 inches and up wide.

[Price per M feet in New York on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$45.00-\$48.00	Apr....	\$45.00-\$48.00	July...	\$45.00-\$48.00	Oct.....	\$45.00-\$48.00
Feb.....	45.00- 48.00	May...	45.00- 48.00	Aug...	45.00- 48.00	Nov.....	45.00- 48.00
Mar.....	45.00- 48.00	June..	45.00- 48.00	Sept...	45.00- 48.00	Dec.....	45.00- 48.00
						Average	\$46.5000

OAK: White, quartered, clear and good seconds, 1-inch, 6 inches and up wide, 12 to 16 feet long.

[Price per M feet in New York on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$80.00-\$85.00	Apr....	\$80.00-\$85.00	July...	\$80.00-\$85.00	Oct.....	\$75.00-\$80.00
Feb.....	80.00- 85.00	May...	80.00- 85.00	Aug...	75.00- 80.00	Nov.....	75.00- 80.00
Mar.....	80.00- 85.00	June..	80.00- 85.00	Sept...	75.00- 80.00	Dec.....	80.00- 83.00
						Average	\$80.7500

OXIDE OF ZINC: American, extra dry.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.04½	Apr....	\$0.04½	July...	\$0.04½	Oct.....	\$0.04½
Feb.....	.04½	May...	.04½	Aug...	.04½	Nov.....	.04½
Mar.....	.04½	June..	.04½	Sept...	.04½	Dec.....	.04½
						Average	\$0.0463

PINE: White, beards, No. 2 barn, 1 inch by 10 inches wide, rough.

[Price per M feet in Buffalo on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$23.00	Apr....	\$23.00	July...	\$23.00	Oct.....	\$23.00
Feb.....	23.00	May...	23.00	Aug...	23.00	Nov.....	23.00
Mar.....	23.00	June..	23.00	Sept...	23.00	Dec.....	23.00
						Average	\$23.0000

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

LUMBER AND BUILDING MATERIALS—Continued.**PINE: White, boards, uppers, 1-inch, 8 inches and up wide, rough.**

[Price per M feet in Buffalo on the first of each month; quotations from the New York Lumber Trade Journal.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$82.00	Apr....	\$82.00	July ...	\$80.00	Oct	\$80.00
Feb.....	82.00	May ...	82.00	Aug ...	80.00	Nov.....	80.00
Mar.....	82.00	June ..	82.00	Sept ...	80.00	Dec	80.00
						Average	\$81.0000

PINE: Yellow, long leaf, boards, heart-face sidings, 1-inch and 1½-inch.

[Price per M feet in New York on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$20.50-\$21.50	Apr....	\$20.50-\$21.50	July ...	\$20.50-\$21.50	Oct	\$21.50-\$22.50
Feb.....	20.50- 21.50	May ...	20.50- 21.50	Aug ...	21.50- 22.50	Nov.....	21.50- 22.50
Mar.....	20.50- 21.50	June ..	20.50- 21.50	Sept ...	21.50- 22.50	Dec	21.50- 22.50
						Average	\$21.4167

PLATE GLASS: Polished, unsilvered, area 3 to 5 square feet.

[Price per square foot, f. o. b. New York, on the first of each month.]

Jan.....	\$0.24	Apr....	\$0.23	July ...	\$0.22½	Oct	\$0.21½
Feb.....	.24	May ...	.23	Aug ...	.22½	Nov.....	.21½
Mar.....	.24	June...	.23	Sept ...	.22½	Dec	.21½
						Average	\$0.2275

PLATE GLASS: Polished, unsilvered, area 5 to 10 square feet.

[Price per square foot, f. o. b. New York, on the first of each month.]

Jan.....	\$0.39	Apr....	\$0.37	July ...	\$0.36	Oct	\$0.34
Feb.....	.39	May ...	.37	Aug ...	.36	Nov.....	.34
Mar.....	.39	June ..	.37	Sept ...	.36	Dec	.34
						Average	\$0.3650

POPLAR: Yellow, 1-inch, 8 inches and up wide, firsts and seconds, rough.

[Price per M feet in New York on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$51.00-\$52.50	Apr....	\$51.00-\$52.50	July ...	\$49.00-\$50.50	Oct	\$47.00-\$50.00
Feb.....	51.00- 52.50	May ...	51.00- 52.50	Aug ...	47.00- 50.00	Nov.....	47.00- 50.00
Mar.....	51.00- 52.50	June ..	51.00- 52.50	Sept ...	47.00- 50.00	Dec	47.00- 50.00
						Average	\$50.3292

PUTTY: Bulk.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint and Drug Reporter.]

Jan.....	\$0.01½	Apr....	\$0.01½	July ...	\$0.01½	Oct	\$0.0100
Feb.....	.01½	May ...	.01½	Aug ...	.01½	Nov.....	.0100
Mar.....	.01½	June ..	.01½	Sept ...	.01½	Dec	.0105
						Average	\$0.0110

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

LUMBER AND BUILDING MATERIALS—Continued.**RESIN: Common to good, strained.**

[Price per barrel in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$2.55-\$2.60	Apr....	\$2.80	July...	\$3.00	Oct....	\$2.80
Feb.....	2.95- 3.00	May...	2.85	Aug...	2.65	Nov....	2.95
Mar.....	2.70	June..	3.05	Sept...	2.70	Dec....	2.95
						Average	\$2.8333

SHINGLES: Cypress, all heart, 5 and 6 inches wide, 16 inches long.

[Price per M, f. o. b. mills, on the first of each month.]

Jan.....	\$2.60	Apr....	\$2.60	July...	\$2.60	Oct....	\$2.60
Feb.....	2.60	May...	2.60	Aug...	2.60	Nov....	2.60
Mar.....	2.60	June..	2.60	Sept...	2.60	Dec....	2.60
						Average	\$2.60

SHINGLES: Michigan white pine, 16 inches long, XXXX.

[Price per M in Buffalo on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$3.65	Apr....	\$3.65	July...	\$3.50	Oct....	\$3.50
Feb.....	3.65	May...	3.65	Aug...	3.50	Nov....	3.50
Mar.....	3.65	June..	3.65	Sept...	3.50	Dec....	3.50
						Average	\$3.5750

SPRUCE: 6 to 9 inch, cargoes.

[Price per M feet in New York on the first of each month; quotations from the New York Lumber Trade Journal.]

Jan.....	\$19.50-\$21.50	Apr....	\$19.50-\$21.50	July...	\$19.50-\$21.50	Oct....	\$19.50-\$21.50
Feb.....	19.50- 21.50	May...	19.50- 21.50	Aug...	19.50- 21.50	Nov....	19.50- 21.50
Mar.....	19.50- 21.50	June..	19.50- 21.50	Sept...	19.50- 21.50	Dec....	19.50- 21.50
						Average	\$20.5000

TAR.

[Price per barrel in Wilmington, N. C., on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$1.60	Apr....	\$1.90	July...	\$1.80	Oct....	\$1.60
Feb.....	1.40	May...	2.00	Aug...	1.70	Nov....	1.60
Mar.....	1.45	June..	1.80	Sept...	1.60	Dec....	1.70
						Average	\$1.6792

TURPENTINE: Spirits of, in machine barrels.

[Price per gallon in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.59½	Apr....	\$0.59	July...	\$0.56½	Oct.....	\$0.56
Feb.....	.64½	May...	.58	Aug...	.56½	Nov....	.54½
Mar.....	.62½	June...	\$0.57½- 0.57½	Sept...	.56	Dec....	.50
						Average	\$0.5757

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

LUMBER AND BUILDING MATERIALS—Concluded.

WINDOW GLASS: American, single, firsts, 25-inch bracket (6 by 8 to 10 by 15 inch).

[Price per 50 square feet in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$2.97	Apr....	\$2.97	July...	\$2.97	Oct.....	\$2.72
Feb.....	2.97	May...	2.97	Aug...	2.97	Nov.....	2.72
Mar.....	2.97	June...	2.97	Sept...	2.72	Dec.....	2.72
						Average	\$2.8867

WINDOW GLASS: American, single, thirds, 25-inch bracket (6 by 8 to 10 by 15 inch).

[Price per 50 square feet in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$2.430	Apr....	\$2.430	July...	\$2.430	Oct.....	\$2.125
Feb.....	2.430	May...	2.430	Aug...	2.430	Nov.....	2.125
Mar.....	2.430	June...	2.430	Sept...	2.125	Dec.....	2.125
						Average	\$2.3283

DRUGS AND CHEMICALS.

ALCOHOL: Grain, 94 per cent.

[Price per gallon, rebate deducted, in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$2.44	Apr....	\$2.45	July...	\$2.45	Oct.....	\$2.40
Feb.....	2.44	May...	2.45	Aug...	2.45	Nov.....	2.40
Mar.....	2.46	June...	2.45	Sept...	2.40	Dec.....	2.40
						Average	\$2.4325

ALCOHOL: Wood, refined, 95 per cent.

[Price per gallon in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.55	Apr....	\$0.60	July...	\$0.60	Oct.....	\$0.60
Feb.....	.55	May...	.60	Aug...	.60	Nov.....	.60
Mar.....	.55	June...	.60	Sept...	.60	Dec.....	.60
						Average	\$0.5875

ALUM: Lump.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.0175	Apr....	\$0.0175	July...	\$0.0175	Oct.....	\$0.0175
Feb.....	.0175	May...	.0175	Aug...	.0175	Nov.....	.0175
Mar.....	.0175	June...	.0175	Sept...	.0175	Dec.....	.0175
						Average	\$0.0175

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

DRUGS AND CHEMICALS—Concluded.**BRIMSTONE: Crude, seconds.**

[Price per ton in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$22.00	Apr.....	\$22.00	July...	\$21.75	Oct.....	\$21.40
Feb.....	22.25	May....	22.00	Aug...	21.65	Nov.....	20.90
Mar.....	22.00	June....	22.25	Sept...	21.60	Dec.....	21.50
							Average
							\$21.7750

GLYCERIN: Refined, chemically pure, in bulk.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.14½	Apr.....	\$0.14½	July...	\$0.14½	Oct.....	\$0.13½
Feb.....	.14½	May....	.14½	Aug...	.13½	Nov.....	.13½
Mar.....	.14½	June....	.14½	Sept...	.13½	Dec.....	.13½
							verage
							\$0.1396

MURIATIC ACID: 20°.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.0160	Apr.....	\$0.0160	July...	\$0.0160	Oct.....	\$0.0160
Feb.....	.0160	May....	.0160	Aug...	.0160	Nov.....	.0160
Mar.....	.0160	June....	.0160	Sept...	.0160	Dec.....	.0160
							Average
							\$0.0160

OPIUM: Natural, in cases.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$2.92½	Apr.....	\$2.82½	July...	\$2.62½	Oct.....	\$2.65
Feb.....	2.92½	May....	2.72½	Aug...	2.67½	Nov.....	2.75
Mar.....	2.87½	June....	2.62½	Sept...	2.67½	Dec.....	2.72½
							Average
							\$2.75

QUININE: American, in 100-ounce tins.

[Price per ounce in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.25	Apr.....	\$0.25	July...	\$0.23	Oct.....	\$0.21
Feb.....	.22	May....	.27	Aug...	.23	Nov.....	.23
Mar.....	.23	June....	.24	Sept...	.21	Dec.....	.23
							Average
							\$0.2333

SULPHURIC ACID: 66°.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.0130	Apr.....	\$0.0130	July...	\$0.0130	Oct.....	\$0.0130
Feb.....	.0130	May....	.0130	Aug...	.0130	Nov.....	.0120
Mar.....	.0130	June....	.0130	Sept...	.0130	Dec.....	.0130
							Average
							\$0.0129

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

HOUSE FURNISHING GOODS.

EARTHENWARE: Plates, cream-colored, 7-inch.

[Price per dozen, to purchasers of bills amounting to \$8,000, f. o. b. Trenton, N. J., on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.4705	Apr....	\$0.4705	July...	\$0.4705	Oct.....	\$0.4705
Feb.....	.4705	May...	.4705	Aug...	.4705	Nov.....	.4705
Mar.....	.4705	June..	.4705	Sept...	.4705	Dec.....	.4705
						Average	\$0.4705

EARTHENWARE: Plates, white granite, 7-inch.

[Price per dozen, to purchasers of bills amounting to \$8,000, f. o. b. Trenton, N. J., on the first of each month.]

Jan.....	\$0.4943	Apr....	\$0.4943	July...	\$0.4943	Oct.....	\$0.4943
Feb.....	.4943	May...	.4943	Aug...	.4943	Nov.....	.4943
Mar.....	.4943	June..	.4943	Sept...	.4943	Dec.....	.4943
						Average	\$0.4943

EARTHENWARE: Teacups and saucers, white granite, with handles.

[Price per gross (6 dozen cups and 6 dozen saucers), to purchasers of bills amounting to \$8,000, f. o. b. Trenton, N. J., on the first of each month.]

Jan.....	\$3.6503	Apr....	\$3.6503	July...	\$3.6503	Oct.....	\$3.6503
Feb.....	3.6503	May...	3.6503	Aug...	3.6503	Nov.....	3.6503
Mar.....	3.6503	June..	3.6503	Sept...	3.6503	Dec.....	3.6503
						Average	\$3.6503

FURNITURE: Bedroom sets, ash, 3 pieces, bedstead, bureau, and washstand.

[Price per set in New York on the first of each month.]

Jan.....	\$12.25	Apr....	\$12.25	July...	\$12.25	Oct.....	\$12.25
Feb.....	12.25	May...	12.25	Aug...	12.25	Nov.....	12.25
Mar.....	12.25	June..	12.25	Sept...	12.25	Dec.....	12.25
						Average	\$12.25

FURNITURE: Chairs, bedroom, maple, cane seat.

[Price per dozen in New York on the first of each month.]

Jan.....	\$8.00	Apr....	\$8.00	July...	\$8.00	Oct.....	\$8.00
Feb.....	8.00	May...	8.00	Aug...	8.00	Nov.....	8.00
Mar.....	8.00	June..	8.00	Sept...	8.00	Dec.....	8.00
						Average	\$8.00

FURNITURE: Chairs, kitchen, common spindle.

[Price per dozen in New York on the first of each month.]

Jan.....	\$5.00	Apr....	\$4.75	July...	\$4.75	Oct.....	\$4.75
Feb.....	4.75	May...	4.75	Aug...	4.75	Nov.....	4.75
Mar.....	4.75	June..	4.75	Sept...	4.75	Dec.....	4.75
						Average	\$4.7708

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

HOUSE FURNISHING GOODS—Continued.**FURNITURE: Tables, kitchen, 3½-foot.**

[Price per dozen in New York on the first of each month.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$15.60	Apr....	\$15.60	July...	\$15.60	Oct.....	\$15.60
Feb.....	15.60	May...	15.60	Aug...	15.60	Nov.....	15.60
Mar.....	15.60	June...	15.60	Sept...	15.60	Dec.....	15.60
							Average
							\$15.60

GLASSWARE: Nappies, 4-inch.

[Price per dozen, f. o. b. factory, on the first of each month.]

Jan.....	\$0.14	Apr....	\$0.14	July...	\$0.14	Oct.....	\$0.14
Feb.....	.14	May...	.14	Aug...	.14	Nov.....	.14
Mar.....	.14	June...	.14	Sept...	.14	Dec.....	.14
							Average
							\$0.14

GLASSWARE: Pitchers, one-half gallon, common.

[Price per dozen, f. o. b. factory, on the first of each month.]

Jan.....	\$1.15	Apr....	\$1.15	July...	\$1.15	Oct.....	\$1.15
Feb.....	1.15	May...	1.15	Aug...	1.15	Nov.....	1.15
Mar.....	1.15	June...	1.15	Sept...	1.15	Dec.....	1.15
							Average
							\$1.15

GLASSWARE: Tumblers, table, one-third pint, common.

[Price per dozen, f. o. b. factory, on the first of each month.]

Jan.....	\$0.16	Apr....	\$0.16	July...	\$0.16	Oct.....	\$0.16
Feb.....	.16	May...	.16	Aug...	.16	Nov.....	.16
Mar.....	.16	June...	.16	Sept...	.16	Dec.....	.16
							Average
							\$0.16

TABLE CUTLERY: Carvers, stag handles.

[Price per pair on the first of each month.]

Jan.....	\$0.75	Apr....	\$0.75	July...	\$0.75	Oct.....	\$0.75
Feb.....	.75	May...	.75	Aug...	.75	Nov.....	.75
Mar.....	.75	June...	.75	Sept...	.75	Dec.....	.75
							Average
							\$0.75

TABLE CUTLERY: Knives and forks, cocobolo handles, metal bolsters.

[Price per gross on the first of each month.]

Jan.....	\$6.50	Apr....	\$6.50	July...	\$6.75	Oct.....	\$6.75
Feb.....	6.50	May...	6.75	Aug...	6.75	Nov.....	6.75
Mar.....	6.50	June...	6.75	Sept...	6.75	Dec.....	6.75
							Average
							\$6.6667

TABLE I.—WHOLESALE PRICES OF COMMODITIES in 1904—Continued.

HOUSE FURNISHING GOODS—Concluded.**WOODEN WARE: Pails, oak-grained, 3-hoop, wire ear.**

[Price per dozen in New York on the first of each month; quotations from the Merchants' Review.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$1.70	Apr....	\$1.70	July...	\$1.70	Oct.....	\$1.70
Feb.....	1.70	May....	1.70	Aug....	1.70	Nov.....	1.70
Mar....	1.70	June...	1.70	Sept...	1.70	Dec.....	1.70
						Average	\$1.70

WOODEN WARE: Tubs, oak-grained, 3 in nest.

[Price per nest of 3 in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$1.45	Apr....	\$1.45	July...	\$1.45	Oct.....	\$1.45
Feb.....	1.45	May....	1.45	Aug....	1.45	Nov.....	1.45
Mar....	1.45	June...	1.45	Sept...	1.45	Dec.....	1.45
						Average	\$1.45

MISCELLANEOUS.**COTTON-SEED MEAL.**

[Price per ton of 2,000 pounds in New York on the first of each month.]

Jan.....	\$27.10	Apr....	\$26.60	July...	\$25.35	Oct.....	\$26.10
Feb.....	26.60	May....	26.00	Aug....	26.10	Nov.....	26.10
Mar....	27.00	June...	25.35	Sept...	26.10	Dec.....	26.00
						Average	\$26.2000

COTTON-SEED OIL: Summer yellow, prime.

[Price per gallon in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Jan.....	\$0.36	Apr....	\$0.35½	July...	\$0.31	Oct....	\$0.29½
Feb.....	.38	May....	.29½	Aug....	.28	Nov.....	.27½
Mar....	.38½	June..	.28½	Sept...	.29½	Dec.....	.24½
						Average	\$0.3135

JUTE: Raw.

[Price per pound in New York on the first of each month. From January to November the prices are for R. B. No. 2, and December for R. F. D. Block; quotations from the New York Commercial.]

Jan.....	\$0.04½	Apr....	\$0.04½	July...	\$0.04½	Oct....	\$0.04½
Feb.....	.04½	May....	.04½	Aug....	.04½	Nov.....	.04½
Mar....	.04½	June..	.04½	Sept...	.04½	Dec.....	.04½
						Average	\$0.0444

MALT: Western made.

[Price per bushel in New York on the last of each month; quotations from the Brewers' Journal.]

Jan.....	\$0.68-\$0.73	Apr....	\$0.68-\$0.73	July...	\$0.66-\$0.71	Oct.....	\$0.61-\$0.66
Feb.....	.68- .73	May....	.68- .73	Aug....	.68- .68	Nov.....	.59- .66
Mar....	.68- .73	June..	.68- .73	Sept...	.68- .68	Dec.....	.59- .66
						Average	\$0.6758

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Continued.

MISCELLANEOUS—Continued.

PAPER: News, wood.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.02½	Apr....	\$0.02½	July...	\$0.02½-\$0.03	Oct.....	\$0.02½-\$0.03
Feb.....	.02½	May...	\$0.02½-.03	Aug...	.02½-.03	Nov.....	.02½-.03
Mar.....	.02½	June...	.02½-.03	Sept...	.02½-.03	Dec.....	.02½-.03
						Average	\$0.0267

PAPER: Wrapping, manila, No. 1, jute.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.05-\$0.05½	Apr....	\$0.05-\$0.05½	July...	\$0.05-\$0.05½	Oct.....	\$0.05-\$0.05½
Feb.....	.05-.05½	May...	.05-.05½	Aug...	.05-.05½	Nov.....	.05-.05½
Mar.....	.05-.05½	June...	.05-.05½	Sept...	.05-.05½	Dec.....	.05-.05½
						Average	\$0.0530

PROOF SPIRITS.

[Price per gallon, including tax, in Peoria, Ill., on Tuesday of each week; quotations from the Peoria Herald-Transcript.]

Jan.....	\$1.27	Apr....	\$1.28	July...	\$1.28	Oct.....	\$1.26½
	1.27		1.28		1.28		1.26½
	1.27		1.28		1.28		1.26½
	1.27		1.28		1.28		1.24
Feb.....	1.27	May...	1.28	Aug...	1.28	Nov....	1.24
	1.27		1.28		1.28		1.24
	1.27		1.28		1.28		1.24
	1.27		1.28		1.28		1.24
	1.27		1.28		1.28		1.24
Mar.....	1.27	June...	1.28	Sept...	1.28	Dec....	1.24
	1.27		1.28		1.28		1.24
	1.28		1.28		1.28		1.24
	1.28		1.28		1.28		1.24
	1.28		1.28		1.26½		1.24
						Average	\$1.2692

ROPE: Manila, 7/8-inch and larger.

[Price per pound, f. o. b. New York or factory, on the first of each month; quotations from the Iron Age.]

Jan.....	\$0.11½	Apr....	\$0.12	July...	\$0.11½	Oct.....	\$0.11½
Feb.....	.11½	May...	.12	Aug...	.11½	Nov.....	\$0.11½-.12
Mar.....	.12	June...	\$0.11-.11½	Sept...	.11½	Dec.....	.12
						Average	\$0.1171

RUBBER: Para Island, new.

[Price per pound in New York on the first of each month; quotations from the New York Journal of Commerce and Commercial Bulletin.]

Jan.....	\$0.90-\$0.92	Apr....	\$1.08-\$1.10	July...	\$1.08-\$1.09	Oct.....	\$1.09-\$1.10
Feb.....	.98-.99	May...	1.08-1.09	Aug...	1.15-1.16	Nov.....	1.12-1.13
Mar.....	1.02-1.03	June...	1.09-1.10	Sept...	1.13-1.14	Dec.....	1.26-1.27
						Average	\$1.0875

TABLE I.—WHOLESALE PRICES OF COMMODITIES IN 1904—Concluded.

MISCELLANEOUS—Concluded.

SOAP: Castile, mottled, pure.

[Price per pound in New York on the first of each month; quotations from the Oil, Paint, and Drug Reporter.]

Month.	Price.	Month.	Price.	Month.	Price.	Month.	Price.
Jan.....	\$0.06½	Apr....	\$0.06½	July...	\$0.06½	Oct.....	\$0.07½
Feb.....	.06½	May...	.06½	Aug...	.06½	Nov....	.06½
Mar.....	.06½	June...	.06½	Sept...	.06½	Dec....	.06½
						Average	\$0.0647

STARCH: Laundry, Austin, Nichols & Co., 40-pound boxes, in bulk.

[Price per pound in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$0.03½	Apr....	\$0.03½	July...	\$0.04½	Oct.....	\$0.03½
Feb.....	.03½	May...	.04½	Aug...	.03½	Nov....	.03½
Mar.....	.03½	June...	.04½	Sept...	.03½	Dec....	.03½
						Average	\$0.0369

TOBACCO: Plug, Horseshoe.

[Price per pound in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$0.45	Apr....	\$0.45	July...	\$0.49	Oct.....	\$0.49
Feb.....	.45	May...	.45	Aug...	.49	Nov....	.49
Mar.....	.45	June...	.45	Sept...	.49	Dec....	.49
						Average	\$0.4700

TOBACCO: Smoking, granulated, Seal of North Carolina.

[Price per pound in New York on the first of each month; quotations from the Merchants' Review.]

Jan.....	\$0.57	Apr....	\$0.57	July...	\$0.57	Oct.....	\$0.60
Feb.....	.57	May...	.57	Aug...	.60	Nov....	.60
Mar.....	.57	June...	.57	Sept...	.60	Dec....	.60
						Average	\$0.5825

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Farm products.									
	Barley: by sample.		Cattle: steers, choice to extra.		Cattle: steers, good to choice.		Corn: No. 2, cash.		Cotton: upland, middling.	
	Price per bushel.	Relative price.	Price per 100 lbs.	Relative price.	Price per 100 lbs.	Relative price.	Price per bushel.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899..	\$0.4534	100.0	\$5.3203	100.0	\$4.7347	100.0	\$0.3804	100.0	\$0.07762	100.0
Jan.....	.5690	125.5	5.6625	106.4	5.0000	105.6	.4497	118.2	.14413	185.7
Feb.....	.5675	125.2	5.5063	103.5	4.8875	103.2	.5019	131.9	.14825	191.0
Mar.....	.5538	122.1	5.6100	105.4	5.0000	105.6	.5218	137.2	.15440	198.9
Apr.....	.5550	122.4	5.4875	103.1	4.9875	104.3	.5108	134.3	.14400	185.5
May.....	.5625	124.1	5.5400	104.1	4.9750	105.1	.4835	127.1	.13410	172.8
June.....	.5663	124.9	6.1688	115.9	5.2563	111.0	.4881	128.3	.11538	148.6
July.....	.5080	112.0	6.2563	117.6	5.4250	114.6	.4913	129.2	.10850	139.8
Aug.....	.5063	111.7	5.8850	110.6	5.1500	108.8	.5405	142.1	.10930	140.8
Sept.....	.5150	113.6	5.9000	110.9	5.2188	110.2	.5344	140.5	.11000	141.7
Oct.....	.4850	107.0	6.3000	118.4	5.4781	115.7	.5222	137.3	.10313	132.9
Nov.....	.5025	110.8	6.5150	122.5	5.4850	115.8	.5318	139.8	.09980	128.6
Dec.....	.4760	105.0	6.7125	126.2	5.5944	116.9	.4644	122.1	.07762	100.0
Average, 1904.....	.5300	116.9	5.9562	112.0	5.1923	109.7	.5046	132.6	.12100	155.9

Month.	Farm products.									
	Flaxseed: No. 1.		Hay: timothy, No. 1.		Hides: green, salted, packers, heavy native steers.		Hogs: heavy.		Hogs: light.	
	Price per bushel.	Relative price.	Price per ton.	Relative price.	Price per pound.	Relative price.	Price per 100 lbs.	Relative price.	Price per 100 lbs.	Relative price.
Average, 1890-1899..	\$1.1132	100.0	\$10.4304	100.0	\$0.0937	100.0	\$4.4123	100.0	\$4.4206	100.0
Jan.....	1.0050	90.3	11.0625	106.1	.1100	117.4	4.9281	111.7	4.8063	108.7
Feb.....	1.1250	101.1	11.1250	106.7	.1075	114.7	5.2563	119.1	5.0438	114.1
Mar.....	1.1375	102.2	11.0500	105.9	.1052	112.3	5.5200	125.1	5.3925	122.0
Apr.....	1.1250	101.1	12.0625	115.6	.1071	114.3	5.1094	115.8	5.0188	113.5
May.....	1.0475	94.1	12.7500	122.2	.1094	116.8	4.7000	106.5	4.6375	106.0
June.....	1.0325	92.8	12.5000	119.8	.1118	119.3	5.1063	115.7	5.0656	114.6
July.....	1.0475	94.1	12.3750	118.6	.1181	120.7	5.4594	123.7	5.5250	125.0
Aug.....	1.2000	107.8	12.7000	121.8	.1186	126.6	5.2725	119.5	5.5050	124.5
Sept.....	1.2200	109.6	11.2500	107.9	.1175	125.4	5.7375	130.0	6.0000	135.7
Oct.....	1.1050	99.3	11.5000	110.3	.1231	131.4	5.5125	124.9	5.5500	125.5
Nov.....	1.1150	100.2	11.2500	107.9	.1369	146.1	4.7875	108.5	4.7725	108.0
Dec.....	1.1450	102.9	10.9375	104.9	.1395	148.9	4.5563	103.8	4.4688	101.1
Average, 1904.....	1.1088	99.6	11.7308	112.5	.1166	124.4	5.1550	116.8	5.1481	116.5

Month.	Farm products.									
	Hops: N. Y., choice.		Oats: cash.		Rye: No. 2, cash.		Sheep: native.		Sheep: Western.	
	Price per pound.	Relative price.	Price per bushel.	Relative price.	Price per bushel.	Relative price.	Price per 100 lbs.	Relative price.	Price per 100 lbs.	Relative price.
Average, 1890-1899..	\$0.1771	100.0	\$0.2688	100.0	\$0.5288	100.0	\$3.7580	100.0	\$3.9541	100.0
Jan.....	.3550	200.5	.3836	142.7	.5369	101.5	3.7688	100.3	3.8813	98.2
Feb.....	.3700	208.9	.4211	156.7	.6300	122.9	3.8375	102.1	4.1313	105.7
Mar.....	.3700	208.9	.3983	148.2	.7110	134.5	4.8800	116.6	4.3800	110.8
Apr.....	.3500	197.6	.3822	142.2	.6800	128.6	4.7888	126.9	5.2313	133.6
May.....	.3400	192.0	.4086	152.0	.7340	138.8	4.7700	126.9	4.8300	122.2
June.....	.3400	192.0	.4131	153.7	.6500	122.9	4.6063	122.6	4.5938	116.2
July.....	.3300	186.3	.4017	149.4	.6888	130.3	3.8750	103.1	4.1063	103.8
Aug.....	.3300	186.3	.3444	128.1	.7244	137.0	3.7600	100.1	3.7500	94.8
Sept.....	.3400	192.0	.3132	116.5	.7294	137.9	3.5625	94.8	3.8188	96.6
Oct.....	.3500	197.6	.3000	111.6	.7750	146.6	3.6188	96.3	3.8156	96.5
Nov.....	.3500	197.6	.3050	113.5	.7925	149.9	4.3200	115.0	4.0950	103.6
Dec.....	.3450	194.8	.2938	109.3	.7375	139.5	4.3188	114.9	4.3938	111.1
Average, 1904.....	.3475	196.2	.3649	135.8	.7056	133.4	4.1437	110.3	4.2608	107.8

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Farm products.		Food, etc.							
	Wheat: contract, cash.		Beans: medium, choice.		Bread: crackers, Boston X.		Bread: crackers, soda.		Bread: loaf (Wash. market)	
	Price per bushel.	Relative price.	Price per bushel.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per lb. before baking.	Relative price.
Average, 1890-1899..	\$0.7510	100.0	\$1.6699	100.0	\$0.0673	100.0	\$0.0718	100.0	\$0.0354	100.0
Jan	.8605	114.6	2.1000	125.8	.0700	104.0	.0650	90.5	.0356	100.6
Feb	.9660	128.6	2.0250	121.3	.0703	104.0	.0650	90.5	.0356	100.6
Mar	.9633	128.3	2.2000	131.7	.0700	104.0	.0650	90.5	.0356	100.6
Apr	.9674	128.8	2.0250	121.3	.0800	118.9	.0700	97.5	.0356	100.6
May	.9845	131.1	2.0500	122.8	.0800	118.9	.0700	97.5	.0356	100.6
June	.9816	130.7	2.0500	122.8	.0800	118.9	.0650	90.5	.0356	100.6
July	1.0113	134.7	1.9750	118.3	.0800	118.9	.0650	90.5	.0356	100.6
Aug	1.0833	144.2	1.9500	116.8	.0800	118.9	.0650	90.5	.0356	100.6
Sept	1.1521	153.4	1.9000	113.8	.0800	118.9	.0650	90.5	.0356	100.6
Oct	1.1653	155.2	1.9250	115.3	.0800	118.9	.0650	90.5	.0356	100.6
Nov	1.1609	154.6	2.0000	119.8	.0800	118.9	.0650	90.5	.0444	125.4
Dec	1.1632	154.9	1.9250	115.3	.0800	118.9	.0650	90.5	.0356	100.6
Average, 1904	1.0390	138.3	2.0104	120.4	.0775	115.2	.0658	91.6	.0363	102.5

Month.	Food, etc.									
	Bread: loaf, homemade (N. Y. market).		Bread: loaf, Vienna (N. Y. market).		Butter: cream- ery, Elgin (Elgin market).		Butter: cream- ery, extra (N. Y. market).		Butter: dairy, New York State.	
	Price per pound before baking.	Rela- tive price.	Price per pound before baking.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899..	\$0.0317	100.0	\$0.0352	100.0	\$0.2170	100.0	\$0.2242	100.0	\$0.2324	100.0
Jan	.0337	106.3	.0356	101.1	.2300	106.0	.2288	102.1	.1913	94.5
Feb	.0337	106.3	.0356	101.1	.2510	115.7	.2507	111.8	.1963	97.0
Mar	.0337	106.3	.0356	101.1	.2450	112.9	.2483	110.7	.2050	101.3
Apr	.0337	106.3	.0356	101.1	.2375	109.4	.2294	102.3	.2106	104.1
May	.0337	106.3	.0356	101.1	.1970	90.8	.2015	89.9	.1905	94.1
June	.0337	106.3	.0356	101.1	.1750	80.6	.1807	80.6	.1713	84.6
July	.0337	106.3	.0356	101.1	.1713	78.9	.1772	79.0	.1700	84.0
Aug	.0356	112.3	.0376	106.8	.1790	82.5	.1815	81.0	.1715	84.7
Sept	.0356	112.3	.0376	106.8	.1938	89.3	.1966	87.7	.1825	90.2
Oct	.0376	118.6	.0400	113.6	.2110	97.2	.2100	93.7	.1963	97.0
Nov	.0376	118.6	.0400	113.6	.2500	115.2	.2503	111.6	.2295	113.4
Dec	.0376	118.6	.0400	113.6	.2690	124.0	.2700	120.4	.2475	122.3
Average; 1904	.0350	110.4	.0370	105.1	.2178	100.4	.2189	97.6	.1970	97.3

Month.	Food, etc.									
	Cheese: N. Y. full cream.		Coffee: Rio No. 7.		Eggs: new-laid, fancy, near-by.		Fish: cod, dry, bank, large.		Fish: herring, shore, round.	
	Price per pound.	Rela- tive price.	Price per pound.	Relative price.	Price per dozen.	Rela- tive price.	Price per quintal.	Rela- tive price.	Price per barrel.	Relative price.
Average, 1890-1899..	\$0.0987	100.0	\$0.1313	100.0	\$0.1963	100.0	\$5.5849	100.0	\$3.7763	100.0
Jan	.1200	121.6	.0775	59.0	.3663	186.6	6.6250	118.6	5.0000	132.4
Feb	.1200	121.6	.0931	70.9	.3488	177.7	6.6250	118.6	5.1250	135.7
Mar	.1200	121.6	.0688	52.4	.2125	108.3	7.8750	141.0	5.2500	139.0
Apr	.1163	117.8	.0688	52.4	.1931	98.4	6.7500	120.9	5.2500	139.0
May	.0960	97.3	.0725	55.2	.1950	99.3	7.7500	138.8	5.0000	132.4
June	.0807	81.8	.0700	53.3	.2000	101.9	7.7500	138.8	(a)	.....
July	.0763	77.3	.0725	55.2	.2206	112.4	7.7500	138.8	(a)	.....
Aug	.0818	82.9	.0750	57.1	.2390	121.8	7.2500	129.8	(a)	.....
Sept	.0900	91.2	.0856	65.2	.2613	133.1	7.2500	129.8	(a)	.....
Oct	.0975	98.8	.0841	64.3	.2813	143.3	7.2500	129.8	6.0000	158.9
Nov	.1070	108.4	.0844	64.3	.5310	168.6	7.2500	129.8	6.0000	158.9
Dec	.1175	119.0	.0856	65.2	.3525	179.6	7.2500	129.8	6.0000	158.9
Average, 1904	.1019	103.2	.0782	59.6	.2650	135.0	7.2813	130.4	5.4531	144.4

a No quotation for month.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Food, etc.									
	Fish: mackerel, salt, large 3s.		Fish: salmon, canned.		Flour: buck-wheat.		Flour: rye.		Flour: wheat, spring patents.	
	Price per barrel.	Relative price.	Price per 12 cans.	Relative price.	Price per 100 lbs.	Relative price.	Price per barrel.	Relative price.	Price per barrel.	Relative price.
Average, 1890-1899..	\$14.1806	100.0	\$1.4781	100.0	\$1.9428	100.0	\$3.3171	100.0	\$4.2972	100.0
Jan	15.5000	109.7	1.7250	117.1	2.3250	119.7	3.3500	101.0	4.6438	108.1
Feb	15.5000	109.7	1.7250	117.1	2.0000	102.9	3.5000	105.5	4.9438	115.0
Mar	15.5000	109.7	1.7250	117.1	(a)	.....	4.6500	140.2	5.1150	119.0
Apr	15.5000	109.7	1.7250	117.1	(a)	.....	4.5000	135.7	5.0813	117.1
May	14.5000	102.6	1.7250	117.1	(a)	.....	4.4250	133.4	4.9950	116.2
June	12.5000	88.5	1.7250	117.1	(a)	.....	4.4000	132.6	4.9563	115.3
July	12.5000	88.5	1.7250	117.1	(a)	.....	4.3750	131.9	4.8750	113.4
Aug	13.5000	95.5	1.7250	117.1	(a)	.....	4.4250	133.4	5.6700	131.9
Sept	14.0000	99.1	1.7250	117.1	2.6500	136.4	4.6000	138.7	6.1500	143.1
Oct	15.0000	106.2	1.7250	117.1	2.5750	132.5	4.6500	140.2	6.1125	142.2
Nov	15.0000	106.2	1.7250	117.1	2.2250	114.5	4.7000	141.7	6.0550	140.9
Dec	15.0000	106.2	1.7250	117.1	2.2250	114.5	4.6000	138.7	5.9125	137.6
Average, 1904	14.5000	102.6	1.7250	117.1	2.3333	120.1	4.3479	131.1	5.3784	125.2

Month.	Food, etc.									
	Flour: wheat, winter straights.		Fruit: apples, evaporated, choice.		Fruit: apples, sun-dried, Southern, sliced.		Fruit: currants, in barrels.		Fruit: prunes, California.	
	Price per barrel.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899..	\$3.8450	100.0	\$0.0847	100.0	\$0.0515	100.0	\$0.0375	100.0	\$0.0774	100.0
Jan	4.0563	105.5	.0588	69.4	.0375	72.8	.0488	130.1	.0525	67.8
Feb	4.3875	114.1	.0575	67.9	.0375	72.8	.0494	131.7	.0500	64.6
Mar	4.8850	127.0	.0575	67.9	.0375	72.8	.0488	130.1	.0500	64.6
Apr	4.7875	124.5	.0638	75.3	.0375	72.8	.0488	130.1	.0475	61.4
May	4.7200	122.8	.0638	75.3	.0350	68.0	.0488	130.1	.0450	58.1
June	4.6813	121.8	.0625	73.8	.0350	68.0	.0488	130.1	.0450	58.1
July	4.5938	119.5	.0650	76.7	.0250	48.5	.0488	130.1	.0438	56.6
Aug	4.7550	123.7	.0650	76.7	.0250	48.5	.0488	130.1	.0438	56.6
Sept	5.1125	133.0	.0650	76.7	.0250	48.5	.0494	131.7	.0438	56.6
Oct	5.2688	137.0	.0588	69.4	.0350	68.0	.0488	130.1	.0438	56.6
Nov	5.3250	133.5	.0538	63.5	.0350	68.0	.0481	128.3	.0438	56.6
Dec	5.2500	136.5	.0525	62.0	.0350	68.0	.0488	130.1	.0438	56.6
Average, 1904	4.8264	125.5	.0603	71.2	.0333	64.7	.0488	130.1	.0461	59.6

Month.	Food, etc.									
	Fruit: raisins, California, London layer.		Glucose: 41° and 42° mixing.		Lard: prime contract.		Meal: corn, fine white.		Meal: corn, fine yellow.	
	Price per box.	Relative price.	Price per 100 lbs.	Relative price.	Price per pound.	Relative price.	Price per 100 lbs.	Relative price.	Price per 100 lbs.	Relative price.
Average, 1890-1899..	\$1.5006	100.0	\$1.4182	100.0	\$0.0654	100.0	\$1.0486	100.0	\$1.0169	100.0
Jan	1.5500	103.3	1.7000	119.9	.0732	111.9	1.2000	114.4	1.2250	120.5
Feb	1.6000	106.6	1.8500	130.4	.0780	119.3	1.3000	124.0	1.3000	127.8
Mar	1.6250	101.6	1.9500	137.6	.0740	113.1	1.3500	128.7	1.3500	132.8
Apr	1.5250	101.6	2.0500	144.5	.0701	107.2	1.2750	121.6	1.2750	125.4
May	1.4250	95.0	1.9500	137.5	.0683	104.4	1.2750	121.6	1.2750	125.4
June	1.4750	98.3	1.8500	130.4	.0706	106.0	1.3750	131.1	1.3750	135.2
July	1.4750	98.3	1.8500	130.4	.0716	109.5	1.4500	138.3	1.3750	135.2
Aug	1.5250	101.6	1.6100	113.5	.0720	110.1	1.4250	135.9	1.2500	122.9
Sept	1.5250	101.6	1.7100	120.6	.0757	115.7	1.3000	124.0	1.4250	140.1
Oct	1.3500	90.0	1.6100	113.5	.0787	120.3	1.2750	121.6	1.3000	127.8
Nov	1.3500	90.0	1.5600	110.0	.0743	113.6	1.4000	133.5	1.4000	137.7
Dec	1.3500	90.0	1.8100	127.6	.0724	110.7	1.4500	138.3	1.4500	142.6
Average, 1904	1.4729	98.2	1.7917	126.3	.0731	111.8	1.3396	127.8	1.3333	131.1

a Average for 1893-1899.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Food, etc.									
	Meat: bacon, short clear sides.		Meat: bacon, short rib sides.		Meat: beef, fresh, native sides.		Meat: beef, salt, extra mess.		Meat: beef, salt, hams, Western.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per barrel.	Relative price.	Price per barrel.	Relative price.
Average, 1890-1899..	\$0.0675	100.0	\$0.0656	100.0	\$0.0771	100.0	\$3.0166	100.0	\$18.0912	100.0
Jan	.0743	110.1	.0726	110.7	.0794	103.0	8.2500	102.9	21.2500	117.5
Feb	.0772	114.4	.0756	115.2	.0791	102.6	8.8750	110.7	21.2500	117.5
Mar	.0784	116.1	.0759	115.7	.0758	98.3	9.2500	115.4	21.2500	117.5
Apr	.0732	108.4	.0707	107.8	.0750	97.3	8.5500	106.7	21.2500	117.5
May	.0694	102.8	.0674	102.7	.0755	97.9	8.2500	102.9	20.7500	114.7
June	.0778	115.3	.0766	116.8	.0878	113.9	8.2500	102.9	21.1250	116.8
July	.0791	117.2	.0778	118.6	.0950	123.2	8.7500	109.1	22.2500	123.0
Aug	.0809	119.9	.0794	121.0	.0870	112.8	8.7500	109.1	23.7250	131.1
Sept	.0860	127.4	.0841	128.2	.0800	103.8	8.8125	109.9	24.7500	136.8
Oct	.0859	127.8	.0841	128.2	.0813	105.4	9.0000	112.3	24.3750	134.7
Nov	.0774	114.7	.0754	114.9	.0840	108.9	9.2500	115.4	23.3500	129.1
Dec	.0716	106.1	.0703	107.2	.0831	107.8	9.2500	115.4	22.7500	125.8
Average, 1904	.0775	114.8	.0757	115.4	.0818	106.1	8.7619	109.4	22.3541	123.5

Month.	Food, etc.									
	Meat: hams, smoked.		Meat: mutton, dressed.		Meat: pork, salt, mess, old to new.		Milk: fresh.		Molasses: New Orleans, open kettle.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per barrel.	Relative price.	Price per quart.	Relative price.	Price per gallon.	Relative price.
Average, 1890-1899..	\$0.0984	100.0	\$0.0754	100.0	\$11.6322	100.0	\$0.0255	100.0	\$0.3151	100.0
Jan	.1088	110.6	.0750	99.5	14.5563	126.0	.0312	122.4	.3400	107.9
Feb	.1113	113.1	.0794	105.3	15.9375	137.0	.0300	117.6	.3400	107.9
Mar	.1090	110.8	.0715	94.8	15.7500	135.4	.0300	117.6	.3400	107.9
Apr	.1044	106.1	.0806	106.9	14.1875	122.0	.0275	107.8	.3400	107.9
May	.1025	104.2	.0935	124.0	13.1250	112.8	.0237	92.9	.3400	107.9
June	.1069	108.6	.0850	112.7	14.1875	122.0	.0200	78.4	.3400	107.9
July	.1100	111.8	.0844	111.9	14.4063	123.8	.0209	82.0	.3400	107.9
Aug	.1150	116.9	.0840	111.4	13.8500	119.1	.0225	88.2	.3400	107.9
Sept	.1131	114.9	.0669	88.7	12.9688	111.5	.0250	98.0	.3400	107.9
Oct	.1085	110.3	.0669	88.7	13.0625	112.3	.0237	112.5	.3400	107.9
Nov	.1005	102.1	.0690	91.6	12.9000	110.9	.0332	130.2	.3400	107.9
Dec	.0975	99.1	.0763	101.2	13.4375	115.5	.0375	147.1	.3350	106.3
Average, 1904	.1072	108.9	.0778	103.2	14.0283	120.6	.0275	107.8	.3396	107.8

Month.	Food, etc.									
	Rice: domestic, choice.		Salt: American.		Soda: bicarbonate of, American.		Spices: nutmegs.		Spices: pepper, Singapore.	
	Price per pound.	Relative price.	Price per barrel.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899..	\$0.0561	100.0	\$0.7044	100.0	\$0.0209	100.0	\$0.4322	100.0	\$0.0749	100.0
Jan	.0488	87.0	.7500	106.5	.0130	62.2	.2750	63.6	.1263	168.6
Feb	.0481	85.7	.7500	106.5	.0130	62.2	.2650	61.3	.1263	168.6
Mar	.0481	85.7	.7500	106.5	.0130	62.2	.2525	58.4	.1231	164.4
Apr	.0481	85.7	.7500	106.5	.0130	62.2	.2200	50.9	.1256	167.7
May	.0481	85.7	.7500	106.5	.0130	62.2	.2050	47.4	.1213	161.9
June	.0438	78.1	.7500	106.5	.0130	62.2	.1950	45.1	.1194	159.4
July	.0425	75.8	.7500	106.5	.0130	62.2	.1925	44.5	.1144	152.7
Aug	.0444	79.1	.7500	106.5	.0130	62.2	.1925	44.5	.1175	156.9
Sept	.0394	70.2	.8100	115.0	.0130	62.2	.2050	47.4	.1194	159.4
Oct	.0394	70.2	.8100	115.0	.0130	62.2	.2075	48.0	.1288	172.0
Nov	.0394	70.2	.8100	115.0	.0130	62.2	.2025	46.9	.1294	172.8
Dec	.0394	70.2	.8100	115.0	.0130	62.2	.1975	45.7	.1238	165.3
Average, 1904	.0441	78.6	.7704	109.4	.0130	62.2	.2175	50.3	.1229	164.1

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Food, etc.									
	Starch: pure corn.		Sugar: 89° fair refining.		Sugar: 96° centrifugal.		Sugar: granulated.		Tallow.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899 ..	\$0.0548	100.0	\$0.03398	100.0	\$0.08869	100.0	\$0.04727	100.0	\$0.0435	100.0
Jan	.0513	93.6	.02912	85.7	.08382	87.4	.04340	91.8	.0513	117.9
Feb	.0513	93.6	.02849	83.8	.08356	86.7	.04260	90.1	.0507	116.6
Mar	.0513	93.6	.03032	89.2	.08530	91.2	.04444	94.0	.0503	115.6
Apr	.0513	93.6	.03180	92.1	.08630	93.8	.04438	93.9	.0468	107.6
May	.0513	93.6	.03323	97.8	.08825	98.9	.04663	98.6	.0429	98.6
June	.0513	93.6	.03426	100.8	.08909	101.0	.04760	100.7	.0422	97.0
July	.0513	93.6	.03485	102.6	.08940	101.8	.04863	102.9	.0432	99.3
Aug	.0513	93.6	.03641	107.2	.04171	107.8	.04975	105.2	.0445	102.8
Sept	.0550	100.4	.03750	110.4	.04298	111.1	.04980	105.4	.0447	102.8
Oct	.0550	100.4	.03750	110.4	.04253	109.9	.04850	102.6	.0455	104.6
Nov	.0550	100.4	.04000	117.7	.04549	117.6	.05200	110.0	.0434	99.8
Dec	.0550	100.4	.04325	127.3	.04825	124.7	.05460	115.5	.0466	107.1
Average, 1904	.0525	95.8	.03470	102.1	.03974	102.7	.04772	101.0	.0459	105.5

Month.	Food, etc.								Cloths and clothing.	
	Tea: Formosa, fine.		Vegetables, fresh: onions.		Vegetables, fresh: potatoes, Burbank.		Vinegar: cider, Monarch.		Bags: 2-bushel, Amoskeag.	
	Price per pound.	Relative price.	Price per barrel.	Relative price.	Price per bushel.	Relative price.	Price per gallon.	Relative price.	Price per bag.	Relative price.
Average, 1890-1899 ..	\$0.2839	100.0	\$3.3995	100.0	\$0.4991	100.0	\$0.1478	100.0	\$0.1399	100.0
Jan	.2600	91.6	3.7500	110.3	.7520	150.7	.1300	88.0	.1550	110.8
Feb	.2600	91.6	3.5000	108.0	.8813	176.6	.1300	88.0	.1800	128.7
Mar	.2800	98.6	4.4000	117.7	.9088	182.1	.1300	88.0	.1800	128.7
Apr	.2800	98.6	3.7500	110.3	1.0730	215.0	.1300	88.0	.1850	132.2
May	.2800	98.6	(a)	-----	1.0500	210.4	.1300	88.0	.1850	132.2
June	.2800	98.6	3.5000	108.0	1.1650	233.4	.1300	88.0	.1850	132.2
July	.2800	98.6	3.2500	95.6	(a)	-----	.1300	88.0	.1850	132.2
Aug	.2800	98.6	3.1250	91.9	(a)	-----	.1300	88.0	.1800	128.7
Sept	.2800	98.6	2.5000	73.5	(a)	-----	.1300	88.0	.1800	128.7
Oct	.2800	98.6	3.5000	108.0	.3563	71.4	.1400	94.7	.1800	128.7
Nov	.2750	96.9	4.0000	117.7	.3700	74.1	.1400	94.7	.1800	128.7
Dec	.2750	96.9	4.2500	125.0	.3420	68.5	.1400	94.7	.1800	128.7
Average, 1904	.2758	97.1	3.5568	104.6	.7301	146.3	.1325	89.6	.1796	128.4

Month.	Cloths and clothing.							
	Blankets: 11-4, 5 pounds to the pair, all wool.		Blankets: 11-4, 5 pounds to the pair, cotton warp, all wool filling.		Blankets: 11-4, 5 pounds to the pair, cotton warp, cotton and wool filling.		Boots and shoes: men's brogans, split.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pair.	Relative price.
Average, 1890-1899 ..	\$0.840	100.0	\$0.613	100.0	\$0.424	100.0	\$0.9894	100.0
Jan	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Feb	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Mar	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Apr	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
May	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
June	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
July	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Aug	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Sept	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Oct	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Nov	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Dec	.925	110.1	.725	118.3	.525	123.8	.9250	93.5
Average, 1904	.925	110.1	.725	118.3	.525	123.8	.9250	93.5

a No quotation for month.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Cloths and clothing.									
	Boots and shoes: men's calf bal. shoes, Good-year welt.		Boots and shoes: men's split boots.		Boots and shoes: men's vici kid shoes, Good-year welt.		Boots and shoes: women's solid grain shoes.		Broadcloths: first quality, black, 54-inch, XXX wool.	
	Price per pair.	Relative price.	Price per 12 pairs.	Relative price.	Price per pair.	Relative price.	Price per pair.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$2. 376	100.0	\$16. 350	100.0	\$2. 3000	100.0	\$0. 8175	100.0	\$1. 732	100.0
Jan.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9000	110.1	1. 910	110.3
Feb.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9000	110.1	1. 910	110.3
Mar.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9000	110.1	1. 910	110.3
Apr.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9000	110.1	1. 910	110.3
May.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9000	110.1	1. 910	110.3
June.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9000	110.1	1. 910	110.3
July.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9250	113.1	1. 910	110.3
Aug.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9250	113.1	1. 910	110.3
Sept.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9250	113.1	1. 910	110.3
Oct.....	2. 350	98.9	18. 500	113.1	2. 0000	87.0	.9500	116.2	1. 910	110.3
Nov.....	2. 350	98.9	19. 000	116.2	2. 0500	89.1	.9500	116.2	1. 910	110.3
Dec.....	2. 350	98.9	19. 000	116.2	2. 0500	89.1	.9500	116.2	1. 955	112.9
Average, 1904.....	2. 350	98.9	18. 583	113.7	2. 0083	87.3	.9183	112.3	1. 914	110.5

Month.	Cloths and clothing.									
	Calico: Coheco prints.		Carpets: Brussels, 5-frame, Bigelow.		Carpets: ingrain, 2-ply, Lowell.		Carpets: Wilton, 5-frame, Bigelow.		Cotton flannels: 2½ yards to the pound.	
	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$0. 0553	100.0	\$1. 0008	100.0	\$0. 4752	100.0	\$1. 8432	100.0	\$0. 0706	100.0
Jan.....	.0550	99.5	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0950	134.6
Feb.....	.0550	99.5	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0950	134.6
Mar.....	.0550	99.5	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0950	134.6
Apr.....	.0550	99.5	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0950	134.6
May.....	.0550	99.5	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0875	123.9
June.....	.0550	99.5	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0875	123.9
July.....	.0550	99.5	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0875	123.9
Aug.....	.0500	90.4	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0875	123.9
Sept.....	.0500	90.4	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0875	123.9
Oct.....	.0500	90.4	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0825	116.9
Nov.....	.0500	90.4	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0825	116.9
Dec.....	.0500	90.4	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0800	113.3
Average, 1904.....	.0529	95.7	1. 1040	110.3	.5184	109.1	2. 0400	110.7	.0885	125.4

Month.	Cloths and clothing.									
	Cotton flannels: 3½ yards to the pound.		Cotton thread: 6-cord, 200-yard spools, J. & P. Coats.		Cotton yarns: carded, white, mule-spun, Northern, cones, 10/1.		Cotton yarns: carded, white, mule-spun, Northern, cones, 22/1.		Denims: Amoskeag.	
	Price per yard.	Relative price.	Price per spool. (a)	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$0. 0575	100.0	\$0. 031008	100.0	\$0. 1608	100.0	\$0. 1969	100.0	\$0. 1044	100.0
Jan.....	.0775	134.8	.037240	120.1	.2100	130.6	.2400	121.9	.1250	119.7
Feb.....	.0775	134.8	.037240	120.1	.2425	150.8	.2700	137.1	.1300	124.5
Mar.....	.0775	134.8	.037240	120.1	.2225	138.4	.2550	129.5	.1300	124.5
Apr.....	.0775	134.8	.037240	120.1	.2250	139.9	.2550	129.5	.1300	124.5
May.....	.0725	126.1	.037240	120.1	.2100	130.6	.2400	121.9	.1300	124.5
June.....	.0725	126.1	.037240	120.1	.2000	124.4	.2200	111.7	.1300	124.5
July.....	.0725	126.1	.037240	120.1	.1850	115.0	.2100	106.7	.1200	114.9
Aug.....	.0725	126.1	.037240	120.1	.1700	105.7	.2050	104.1	.1150	110.2
Sept.....	.0725	126.1	.037240	120.1	.1750	108.8	.2050	104.1	.1150	110.2
Oct.....	.0675	117.4	.037240	120.1	.1800	111.9	.2200	111.7	.1150	110.2
Nov.....	.0675	117.4	.037240	120.1	.1775	110.4	.2100	106.7	.1100	105.4
Dec.....	.0600	104.3	.037240	120.1	.1800	111.9	.2050	104.1	.1100	105.4
Average, 1904.....	.0723	125.7	.037240	120.1	.1981	123.2	.2279	115.7	.1217	116.6

(a) Freight paid.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Cloths and clothing.									
	Drillings: brown, Peppercell.		Drillings: 30-inch, Stark A.		Flannels: white, 4-4, Ballard Vale No. 3.		Ginghams: Amoskeag.		Ginghams: Lancaster.	
	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$0.0572	100.0	\$0.0521	100.0	\$0.3768	100.0	\$0.0533	100.0	\$0.0573	100.0
Jan	.0725	126.7	.0698	134.0	.4433	117.6	.0550	103.2	.0575	100.3
Feb	.0750	131.1	.0726	139.3	.4433	117.6	.0575	107.9	.0575	100.3
Mar	.0800	139.9	.0719	138.0	.4433	117.6	.0575	107.9	.0575	100.3
Apr	.0800	139.9	.0653	125.3	.4433	117.6	.0575	107.9	.0575	100.3
May	.0750	131.1	.0672	129.0	.4433	117.6	.0575	107.9	.0575	100.3
June	.0700	122.4	.0652	125.1	.4433	117.6	.0575	107.9	.0575	100.3
July	.0700	122.4	.0620	119.0	.4433	117.6	.0575	107.9	.0575	100.3
Aug	.0700	122.4	.0613	117.7	.4433	117.6	.0575	107.9	.0575	100.3
Sept	.0700	122.4	.0628	120.5	.4433	117.6	.0500	93.8	.0575	100.3
Oct	.0700	122.4	.0654	125.5	.4433	117.6	.0500	93.8	.0500	87.3
Nov	.0700	122.4	.0620	119.0	.4433	117.6	.0500	93.8	.0500	87.3
Dec	.0700	122.4	.0640	122.8	.4433	117.6	.0500	93.8	.0500	87.3
Average, 1904	.0727	127.1	.0658	126.3	.4433	117.6	.0548	102.8	.0556	97.0

Month.	Cloths and clothing.									
	Horse blankets: 6 pounds each, all wool.		Hosiery: men's cotton half hose, seamless, fast black, 20 to 22 ounce.		Hosiery: men's cotton half hose, seamless, 84 needles.		Hosiery: women's combed Egyptian cotton hose, high spliced heel.		Hosiery: women's cotton hose, seamless, fast black, 26 to 28 ounce.	
	Price per pound.	Relative price.	Price per 12 pairs. ^a	Relative price. ^a	Price per 12 pairs.	Relative price.	Price per 12 pairs.	Relative price.	Price per 12 pairs.	Relative price.
Average, 1890-1899..	\$0.573	100.0	\$0.9555	100.0	\$0.7845	100.0	^b \$1.850	100.0	\$0.9310	100.0
Jan	.700	122.2	^c .6370	^c 82.1	.7500	95.6	1.800	97.3	^c .8085	^c 86.8
Feb	.700	122.2	^c .6370	^c 82.1	.7500	95.6	1.800	97.3	^c .8085	^c 86.8
Mar	.700	122.2	^c .6370	^c 82.1	.7500	95.6	1.800	97.3	^c .8085	^c 86.8
Apr	.700	122.2	^d .6615	^d 85.3	.7700	98.2	1.800	97.3	^d .7840	^d 84.2
May	.700	122.2	^d .6615	^d 85.3	.7700	98.2	1.800	97.3	^d .7840	^d 84.2
June	.700	122.2	^d .6615	^d 85.3	.7700	98.2	1.800	97.3	^d .7840	^d 84.2
July	.700	122.2	^d .6615	^d 85.3	.7700	98.2	1.800	97.3	^d .7840	^d 84.2
Aug	.700	122.2	^d .6615	^d 85.3	.7500	95.6	1.800	97.3	^d .7840	^d 84.2
Sept	.700	122.2	.6370	82.1	.7500	95.6	1.800	97.3	.7595	81.6
Oct	.700	122.2	^e .6370	^e 82.1	.7500	95.6	1.800	97.3	^e .7595	^e 81.6
Nov	.700	122.2	^e .6370	^e 82.1	.7250	92.4	1.800	97.3	^e .7595	^e 81.6
Dec	.700	122.2	^e .6370	^e 82.1	.7250	92.4	1.800	97.3	^e .7595	^e 81.6
Average, 1904	.700	122.2	^f .6370	^f 82.1	.7525	95.9	1.800	97.3	^f .7595	^f 81.6

^a Average price for 1890-1899 is for two-thread goods. Prices during 1904 are for single-thread goods. For method of computing relative price, see pages 409 and 410. Price of single-thread goods, \$0.6125 in April, 1903, and \$0.6370 in September, 1903.

^b Average for 1893-1899.

^c September, 1903, price.

^d April, 1904, price.

^e September, 1904, price.

^f September, 1904, price, which represents bulk of sales during the year.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Cloths and clothing.									
	Leather: harness, oak, packer's hides, heavy, No. 1.		Leather: sole, hemlock, Buenos Ayres.		Leather: sole, oak.		Leather: wax calf, 30 to 40 lbs. to the dozen, B grade.		Linen shoe thread: 10s., Barbour.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per sq. foot.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899..	\$0.2590	100.0	\$0.1939	100.0	\$0.3363	100.0	\$0.6545	100.0	\$0.8748	100.0
Jan	.3200	1110.4	.2300	118.6	.3550	105.6	.6875	105.0	.8460	96.7
Feb	.3200	1110.4	.2300	118.6	.3400	101.1	.6875	105.0	.8460	96.7
Mar	.3200	1110.4	.2300	118.6	.3400	101.1	.6875	105.0	.8460	96.7
Apr	.3200	1110.4	.2300	118.6	.3500	104.1	.6875	105.0	.8460	96.7
May	.3200	1110.4	.2300	118.6	.3550	105.6	.6875	105.0	.8460	96.7
June	.3200	1110.4	.2225	114.7	.3450	102.6	.6875	105.0	.8460	96.7
July	.3200	1110.4	.2200	113.5	.3250	96.6	.6875	105.0	.8460	96.7
Aug	.3200	1110.4	.2200	113.5	.3350	99.6	.6875	105.0	.8460	96.7
Sept	.3150	1108.7	.2200	113.5	.3350	99.6	.6875	105.0	.8460	96.7
Oct	.3150	1108.7	.2250	116.0	.3560	105.6	.6875	105.0	.8460	96.7
Nov	.3150	1108.7	.2250	116.0	.3560	105.6	.6875	105.0	.8460	96.7
Dec	.3200	1110.4	.2275	117.3	.3500	104.1	.6875	105.0	.8930	102.1
Average, 1904	.3188	1110.4	.2258	116.5	.3450	102.6	.6875	105.0	.8499	97.2

Month.	Cloths and clothing.									
	Linen thread: 3-cord, 200-yard spools, Barbour.		Overcoatings: beaver, Moscow, all wool, black.		Overcoatings: chinchilla, B-rough, all wool.		Overcoatings: chinchilla, cotton warp, C. C. grade.		Overcoatings: covert cloth, light weight, staple.	
	Price per dozen spools.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$0.8522	100.0	\$2.0817	100.0	\$2.1419	100.0	\$0.4883	100.0	\$2.3286	100.0
Jan	.8835	103.7	2.3250	111.7	2.2088	103.1	.4500	92.2	2.1899	94.0
Feb	.8835	103.7	2.3250	111.7	2.2088	103.1	.4500	92.2	2.1899	94.0
Mar	.8835	103.7	2.3250	111.7	2.2088	103.1	.4550	93.2	2.1899	94.0
Apr	.8835	103.7	2.3250	111.7	2.2088	103.1	.4500	92.2	2.1899	94.0
May	.8835	103.7	2.3250	111.7	2.2088	103.1	.4600	94.2	2.1899	94.0
June	.8835	103.7	2.3250	111.7	2.2088	103.1	.4550	93.2	2.1899	94.0
July	.8835	103.7	2.3250	111.7	2.2088	103.1	.4550	93.2	2.1899	94.0
Aug	.8835	103.7	2.3250	111.7	2.2088	103.1	.4550	93.2	2.1899	94.0
Sept	.8835	103.7	2.3250	111.7	2.2088	103.1	.4600	94.2	2.1899	94.0
Oct	.8835	103.7	2.3250	111.7	2.2088	103.1	.4600	94.2	2.1899	94.0
Nov	.8835	103.7	2.3250	111.7	2.2088	103.1	.4600	94.2	2.1899	94.0
Dec	.8835	103.7	2.3250	111.7	2.2088	103.1	.4600	94.2	2.1899	94.0
Average, 1904	.8835	103.7	2.3250	111.7	2.2088	103.1	.4558	93.3	2.1899	94.0

a Leather: harness, oak, country middles, 14 pounds and up (except overweights, 20 pounds and up).

b For method of computing relative price, see pages 409 and 410. Average price for 1933, \$0.3313.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Cloths and clothing.									
	Overcoatings: kersey, standard, 27 to 28 ounce.		Print cloths: 28-inch, 64x64.		Shawls: standard, all wool, 72x144 inch, 42-ounce.		Sheetings: bleached, 10-4, Atlantic.		Sheetings: bleached, 10-4, Pepperell.	
	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per shawl.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	^a \$1.2472	100.0	\$0.02838	100.0	\$4.5787	100.0	\$0.1836	100.0	\$0.1884	100.0
Jan	1.6250	130.3	.037000	130.4	4.9000	107.0	.2514	136.9	.2500	132.7
Feb	1.6250	130.3	.040000	140.9	4.9000	107.0	.2910	158.5	.2600	138.0
Mar	1.6250	130.3	.040000	140.9	4.9000	107.0	.2415	131.5	.2600	138.0
Apr	1.6250	130.3	.037625	132.6	4.9000	107.0	.2400	130.7	.2600	138.0
May	1.6250	130.3	.034063	120.0	4.9000	107.0	.2400	130.7	.2600	138.0
June	1.6250	130.3	.031563	111.2	4.9000	107.0	.2400	130.7	.2600	138.0
July	1.6250	130.3	.030500	107.5	4.9000	107.0	(b)	.2400	.2400	127.4
Aug	1.6250	130.3	.030000	105.7	4.9000	107.0	(b)	.2400	.2400	127.4
Sept	1.7000	136.3	.030000	105.7	4.9000	107.0	.2218	120.8	.2200	116.8
Oct	1.7000	136.3	.030000	105.7	4.9000	107.0	(b)	.2200	.2200	116.8
Nov	1.7000	136.3	.030000	105.7	4.9000	107.0	.1930	105.1	.2200	116.8
Dec	1.7000	136.3	.029250	103.1	4.9000	107.0	.2010	109.5	.2200	116.8
Average, 1904	1.6500	132.3	.033290	117.3	4.9000	107.0	.2355	128.3	.2425	128.7

Month.	Cloths and clothing.									
	Sheetings: bleached, 10-4, Wamsutta S. T.		Sheetings: brown, 4-4, Atlantic A.		Sheetings: brown, 4-4, Indian Head.		Sheetings: brown, 4-4, Mass. Mills, Flying Horse brand.		Sheetings: brown, 4-4, Pepperell R.	
	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$0.2949	100.0	\$0.0553	100.0	\$0.0626	100.0	^c \$0.0525	100.0	\$0.0551	100.0
Jan	.2925	99.2	.0671	121.3	.0750	119.8	.0700	114.5	.0675	122.5
Feb	.2925	99.2	.0710	128.4	.0775	123.8	.0725	118.6	.0700	127.0
Mar	.2925	99.2	.0767	138.7	.0850	135.8	.0750	122.7	.0725	131.6
Apr	.2925	99.2	.0783	141.6	.0850	135.8	.0750	122.7	.0725	131.6
May	.2700	91.6	.0783	141.6	.0850	135.8	.0725	118.6	.0725	131.6
June	.2700	91.6	.0783	141.6	.0850	135.8	.0725	118.6	.0725	131.6
July	.2700	91.6	.0730	132.0	.0800	127.8	.0700	114.5	.0625	113.4
Aug	.2700	91.6	.0730	132.0	.0800	127.8	.0700	114.5	.0625	113.4
Sept	.2700	91.6	.0721	130.4	.0775	123.8	.0700	114.5	.0625	113.4
Oct	.2700	91.6	.0643	116.3	.0775	123.8	.0700	114.5	.0625	113.4
Nov	.2700	91.6	.0653	118.1	.0775	123.8	.0700	114.5	.0625	113.4
Dec	.2700	91.6	.0637	115.2	.0775	123.8	.0700	114.5	.0625	113.4
Average, 1904	.2775	94.1	.0718	129.8	.0802	128.1	.0715	117.0	.0669	121.4

^a Average for 1897-1899.^b No sales during month.^c Sheetings: brown, 4-4, Stark A. A.^d For method of computing relative price, see pages 409 and 410. Average price for 1903, \$0.0623.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Cloths and clothing.									
	Shirts: bleached, 4-4, Fruit of the Loom.		Shirts: bleached, 4-4, Hope.		Shirts: bleached, 4-4, Lonsdale.		Shirts: bleached, 4-4, New York Mills.		Shirts: bleached, 4-4, Wamsutta <O>X.	
	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$0.0728	100.0	\$0.0630	100.0	\$0.0727	100.0	\$0.0876	100.0	\$0.0948	100.0
Jan	.0813	111.7	.0713	113.2	.0800	110.0	.0877	100.1	.0950	100.2
Feb	.0863	118.5	.0736	116.8	.0850	116.9	.0795	90.8	.0950	100.2
Mar	.0863	118.5	.0736	116.8	.0850	116.9	.0802	91.6	.0950	100.2
Apr	.0863	118.5	.0736	116.8	.0850	116.9	.0795	90.8	.0950	100.2
May	.0863	118.5	.0736	116.8	.0850	116.9	.0801	91.4	.0950	100.2
June	.0863	118.5	.0736	116.8	.0850	116.9	.0885	101.0	.0900	94.9
July	.0763	104.8	.0677	107.5	.0750	103.2	.0857	97.8	.0900	94.9
Aug	.0763	104.8	.0677	107.5	.0750	103.2	.0839	95.8	.0900	94.9
Sept	.0725	99.6	.0677	107.5	.0750	103.2	.0854	97.5	.0900	94.9
Oct	.0750	103.0	.0677	107.5	.0750	103.2	.0816	93.2	.0900	94.9
Nov	.0750	103.0	.0677	107.5	.0750	103.2	.0800	91.3	.0900	94.9
Dec	.0750	103.0	.0677	107.5	.0750	103.2	.0840	95.9	.0900	94.9
Average, 1904	.0802	110.2	.0705	111.9	.0796	109.5	.0830	94.7	.0921	97.2

Month.	Cloths and clothing.									
	Silk: raw, Italian, classical.		Silk: raw, Japan, filatures.		Suits: clay worsted diagonal, 12-ounce, Wash. Mills.		Suits: clay worsted diagonal, 16-ounce, Wash. Mills.		Suits: indigo blue, all wool, 54-in., 14-oz., Middlesex.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899..	\$4.2558	100.0	\$4.0187	100.0	\$0.8236	100.0	\$1.0068	100.0	\$1.3230	100.0
Jan	4.3065	101.2	3.7830	94.1	.9225	112.0	1.1025	109.5	1.4400	108.8
Feb	4.3065	101.2	3.8073	94.7	.9000	109.3	1.0800	107.3	1.4400	108.8
Mar	4.1580	97.7	3.6133	89.9	.9000	109.3	1.0800	107.3	1.4400	108.8
Apr	3.9105	91.9	3.5405	88.1	.9000	109.3	1.0800	107.3	1.4400	108.8
May	3.8363	90.1	3.5648	88.7	.9000	109.3	1.0800	107.3	1.4400	108.8
June	3.6259	85.2	3.5405	88.1	.9000	109.3	1.0800	107.3	1.4400	108.8
July	3.6383	85.5	3.4920	86.9	.9000	109.3	1.0800	107.3	1.4400	108.8
Aug	3.7620	88.4	3.6375	90.5	.9225	112.0	1.0980	109.1	1.4400	108.8
Sept	3.7002	86.9	3.6497	90.8	.9225	112.0	1.0980	109.1	1.4400	108.8
Oct	3.7125	87.2	3.6012	89.6	.9675	117.5	1.1475	114.0	1.4400	108.8
Nov	3.7125	87.2	3.7345	92.9	.9675	117.5	1.1475	114.0	1.4400	108.8
Dec	3.7125	87.2	3.7345	92.9	.9900	120.2	1.1700	116.2	1.4850	112.2
Average, 1904	3.8651	90.8	3.6416	90.6	.9244	112.2	1.1036	109.6	1.4438	109.1

a Average for 1895-1899.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Cloths and clothing.									
	Suits: indigo blue, all wool, 16-ounce.		Suits: serge, Washington Mills 6700.		Tickings: Amoskeag A. C. A.		Trousers: fancy worsted, 21 to 22 ounce.		Underwear: shirts and drawers, white, all wool, etc.	
	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per 12 garments.	Relative price.
Average, 1890-1899.	\$1.9154	100.0	\$0.7526	100.0	\$0.1061	100.0	\$1.9456	100.0	\$23.31	100.0
Jan.	2.1855	114.1	.7425	98.7	.1300	122.5	2.0925	104.6	23.40	100.4
Feb.	2.1855	114.1	.7425	98.7	.1300	122.5	2.0700	103.5	23.40	100.4
Mar.	2.1855	114.1	.7425	98.7	.1300	122.5	2.0700	103.5	23.40	100.4
Apr.	2.1855	114.1	.7425	98.7	.1350	127.2	2.0700	103.5	23.40	100.4
May.	2.1855	114.1	.7425	98.7	.1350	127.2	2.0700	103.5	23.40	100.4
June.	2.1855	114.1	.7425	98.7	.1350	127.2	2.1600	108.0	23.40	100.4
July.	2.1855	114.1	.7425	98.7	.1150	108.4	2.1600	108.0	23.40	100.4
Aug.	2.1855	114.1	.7875	104.6	.1150	108.4	2.1600	108.0	23.40	100.4
Sept.	2.1855	114.1	.7875	104.6	.1150	108.4	2.1600	108.0	23.40	100.4
Oct.	2.1855	114.1	.8325	110.6	.1050	99.0	2.1600	108.0	23.40	100.4
Nov.	2.1855	114.1	.8325	110.6	.1050	99.0	2.1600	108.0	23.40	100.4
Dec.	2.1855	114.1	.8550	113.6	.1050	99.0	2.1600	108.0	23.40	100.4
Average, 1904.	2.1855	114.1	.7744	102.9	.1213	114.3	2.1244	106.2	23.40	100.4

Month.	Cloths and clothing.									
	Underwear: shirts and drawers, white, merino, 60% wool, etc.		Women's dress goods: alpaca, cotton warp, 22-inch, Hamilton.		Women's dress goods: cashmere, all wool, 10-11 twill, 38-inch, Atlantic J.		Women's dress goods: cashmere, cotton warp, 9-twill, 4-4, Atlantic F.		Women's dress goods: cashmere, cotton warp, 22-inch, Hamilton.	
	Price per 12 garments.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per yard.	Relative price.
Average, 1890-1899.	\$15.57	100.0	\$0.0680	100.0	\$0.2905	100.0	\$0.1520	100.0	\$0.0758	100.0
Jan.	16.20	95.4	.0711	104.6	.3406	117.2	.1715	112.8	.0760	100.3
Feb.	16.20	95.4	.0711	104.6	.3406	117.2	.1715	112.8	.0760	100.3
Mar.	16.20	95.4	.0711	104.6	.3406	117.2	.1715	112.8	.0760	100.3
Apr.	16.20	95.4	.0711	104.6	.3406	117.2	.1715	112.8	.0760	100.3
May.	16.20	95.4	.0711	104.6	.3406	117.2	.1715	112.8	.0760	100.3
June.	16.20	95.4	.0760	111.8	.3406	117.2	.1715	112.8	.0760	100.3
July.	16.20	95.4	.0760	111.8	.3406	117.2	.1740	114.5	.0833	109.9
Aug.	16.20	95.4	.0760	111.8	.3406	117.2	.1740	114.5	.0833	109.9
Sept.	16.20	95.4	.0833	122.5	.3406	117.2	.1740	114.5	.0833	109.9
Oct.	16.20	95.4	.0833	122.5	.3406	117.2	.1740	114.5	.0882	116.4
Nov.	16.20	95.4	.0833	122.5	.3479	119.8	.1813	119.3	.0882	116.4
Dec.	16.20	95.4	.0833	122.5	.3479	119.8	.1813	119.3	.0882	116.4
Average, 1904.	16.20	95.4	.0764	112.4	.3418	117.7	.1740	114.5	.0809	106.7

a Average for 1892-1899.

b Average for 1892-1899; 22 to 23 ounce.

c For method of computing relative price, see pages 409 and 410. Average price for 1903, \$2.0925.

d 52 per cent wool and 48 per cent cotton.

e For method of computing relative price, see pages 409 and 410. Average price for 1903, \$16.20.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Cloths and clothing.									
	Women's dress goods: cashmere, cotton warp, 27-inch, Hamilton.		Women's dress goods: Franklin sackings, 6-4.		Wool: Ohio, fine fleece (X and XX grade), scoured.		Wool: Ohio, medium fleece ($\frac{1}{2}$ and $\frac{3}{4}$ grade), scoured.		Worsted yarns: 2-40s, Australian fine.	
	Price per yard.	Relative price.	Price per yard.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899...	\$0.0883	100.0	\$0.5151	100.0	\$0.5526	100.0	\$0.4564	100.0	\$1.0183	100.0
Jan	.0981	105.4	.5700	110.7	.6809	123.2	.4627	101.4	1.1750	115.4
Feb	.0981	105.4	.5700	110.7	.6809	123.2	.4627	101.4	1.1750	115.4
Mar	.0981	105.4	.5700	110.7	.6809	123.2	.4627	101.4	1.1750	115.4
Apr	.0981	105.4	.5700	110.7	.6809	123.2	.4627	101.4	1.1750	115.4
May	.0981	105.4	.5700	110.7	.6809	123.2	.4701	103.0	1.1750	115.4
June	.0980	111.0	.5700	110.7	.6809	123.2	.4776	104.6	1.1750	115.4
July	.0980	111.0	.5700	110.7	.6809	123.2	.4851	106.3	1.1750	115.4
Aug	.0980	111.0	.5700	110.7	.6809	123.2	.5000	109.6	1.1750	115.4
Sept	.1029	116.5	.5938	115.3	.6915	125.1	.5000	109.6	1.1750	115.4
Oct	.1029	116.5	.5938	115.3	.6915	125.1	.5000	109.6	1.2000	117.8
Nov	.1029	116.5	.6175	119.9	.6915	125.1	.5224	114.5	1.2250	120.3
Dec	.1029	116.5	.6413	124.5	.7128	128.9	.5373	117.7	1.2500	122.8
Average, 1904	.0976	110.5	.5839	113.4	.6862	124.2	.4869	106.7	1.1875	116.6

Month.	Cloths and clothing.		Fuel and lighting.							
	Worsted yarns: 2-40s, XXXX, white, in skeins.		Candles: adamantine, 6s, 14-ounce.		Coal: anthracite, broken.		Coal: anthracite, chestnut.		Coal: anthracite, egg.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per ton.	Relative price.	Price per ton.	Relative price.	Price per ton.	Relative price.
Average, 1890-1899...	\$1.0071	100.0	\$0.0782	100.0	\$3.3669	100.0	\$3.5953	100.0	\$3.5936	100.0
Jan	1.1700	116.2	.0900	115.1	4.2995	127.7	4.9580	137.9	4.9725	138.4
Feb	1.1700	116.2	.0900	115.1	4.3553	129.4	4.9587	137.8	4.9621	137.8
Mar	1.1700	116.2	.0900	115.1	4.2663	126.7	4.9516	137.7	4.9539	137.9
Apr	1.1700	116.2	.0900	115.1	4.2000	124.7	4.4500	123.8	4.4500	123.8
May	1.1500	114.2	.0900	115.1	4.2460	126.1	4.5441	126.4	4.5410	126.4
June	1.1500	114.2	.0900	115.1	4.2198	125.3	4.6375	129.0	4.6318	128.9
July	1.1500	114.2	.0900	115.1	4.2283	125.6	4.7500	132.1	4.7388	131.9
Aug	1.1500	114.2	.0900	115.1	4.2226	125.4	4.8500	134.9	4.8476	134.9
Sept	1.1500	114.2	.0900	115.1	4.2047	124.9	4.9495	137.7	4.9326	137.3
Oct	1.2100	120.1	.0900	115.1	4.2518	126.3	4.9549	137.8	4.9500	137.7
Nov	1.2100	120.1	.0900	115.1	4.2450	126.1	4.9505	137.7	4.9503	137.8
Dec	1.2100	120.1	.0900	115.1	4.2285	125.6	4.9506	137.7	4.9517	137.8
Average, 1904	1.1717	116.3	.0900	115.1	4.2473	126.1	4.8250	134.2	4.8227	134.2

Month.	Fuel and lighting.									
	Coal: anthracite, stove.		Coal: bituminous, Georges Creek (at mine).		Coal: bituminous, Georges Creek (f.o.b. N. Y. Harbor).		Coal, bituminous, Pittsburg (Youghiogheny).		Coke: Connells-ville, furnace.	
	Price per ton.	Relative price.	Price per ton.	Relative price.	Price per ton.	Relative price.	Price per bushel.	Relative price.	Price per ton.	Relative price.
Average, 1890-1899...	\$3.7949	100.0	\$0.8887	100.0	\$2.7429	100.0	\$0.0643	100.0	\$1.6983	100.0
Jan	4.9614	130.7	2.2500	253.2	3.4500	125.8	.0900	140.0	1.7000	100.1
Feb	4.9576	130.6	2.1500	241.9	3.3500	122.1	.0900	140.0	1.6250	95.7
Mar	4.9540	130.5	2.1000	236.3	3.2000	116.7	.0900	140.0	1.6250	95.7
Apr	4.4505	117.3	1.7000	191.3	3.1500	114.8	.0863	134.2	1.6500	97.2
May	4.5437	119.7	1.6000	180.0	3.1500	114.8	.0850	132.2	1.5500	91.3
June	4.6363	122.2	1.6000	180.0	3.1500	114.8	.0850	132.2	1.5750	92.7
July	4.7488	125.1	1.6000	180.0	3.1500	114.8	.0850	132.2	1.4250	83.9
Aug	4.8478	127.7	1.6000	180.0	3.1500	114.8	.0850	132.2	1.4750	86.9
Sept	4.9423	130.2	1.6000	180.0	3.1500	114.8	.0800	124.4	1.5000	88.3
Oct	4.9509	130.5	1.6000	180.0	3.1500	114.8	.0800	124.4	1.4750	86.9
Nov	4.9507	130.5	1.6000	180.0	3.1500	114.8	.0800	124.4	1.8000	106.0
Dec	4.9510	130.5	1.6000	180.0	3.1500	114.8	.0900	140.0	2.2500	132.5
Average, 1904	4.8246	127.1	1.7500	196.9	3.1958	116.5	.0852	132.5	1.6875	96.4

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Fuel and lighting.								Metals and implements.	
	Matches: parlor, domestic.		Petroleum: crude.		Petroleum: refined, for export.		Petroleum: refined, 150° fire test, w. w.		Augers: extra, 4-inch.	
	Price per gross of boxes (200s).	Relative price.	Price per barrel.	Relative price.	Price per gallon.	Relative price.	Price per gallon.	Relative price.	Price per auger.	Relative price.
Average, 1890-1899..	\$1.7563	100.0	\$0.9102	100.0	\$0.0649	100.0	\$0.0890	100.0	\$0.1608	100.0
Jan	1.5000	85.4	1.8500	203.3	.0910	140.2	.1500	168.5	.2400	149.3
Feb	1.5000	85.4	1.8200	200.0	.0910	140.2	.1500	168.5	.2400	149.3
Mar	1.5000	85.4	1.7200	189.0	.0875	134.8	.1400	157.3	.2400	149.3
Apr	1.5000	85.4	1.6583	181.7	.0850	131.0	.1400	157.3	.2400	149.3
May	1.5000	85.4	1.6200	178.0	.0815	125.6	.1400	157.3	.2400	149.3
June	1.5000	85.4	1.5863	174.3	.0815	125.6	.1400	157.3	.2400	149.3
July	1.5000	85.4	1.5200	167.0	.0795	122.5	.1300	146.1	.2400	149.3
Aug	1.5000	85.4	1.5000	164.3	.0770	118.6	.1300	146.1	.2400	149.3
Sept	1.5000	85.4	1.5363	168.3	.0785	121.0	.1300	146.1	.2400	149.3
Oct	1.5000	85.4	1.5600	171.4	.0795	122.5	.1300	146.1	.2400	149.3
Nov	1.5000	85.4	1.5875	174.4	.0795	122.5	.1300	146.1	.2400	149.3
Dec	1.5000	85.4	1.5700	172.5	.0795	122.5	.1300	146.1	.2400	149.3
Average, 1904.....	1.5000	85.4	1.6270	178.8	.0826	127.3	.1367	153.6	.2400	149.3

Month.	Metals and implements.									
	Axes: M. C. O., Yankee.		Bar iron: best refined, from mill (Pittsburg market).		Bar iron: best refined, from store (Philadelphia market).		Barb wire: galvanized.		Butts: loose joint, cast, 3 x 3 inch.	
	Price per ax.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per 100 pounds.	Relative price.	Price per pair.	Relative price.
Average, 1890-1899..	\$0.4693	100.0	\$0.0145	100.0	\$0.0164	100.0	\$2.5261	100.0	\$0.0316	100.0
Jan	.5000	106.5	.0130	89.7	.0171	104.3	2.6400	104.5	.0400	126.6
Feb	.5000	106.5	.0131	90.3	.0171	104.3	2.6500	104.9	.0400	126.6
Mar	.5000	106.5	.0138	95.2	.0171	104.3	2.6900	106.5	.0400	126.6
Apr	.6050	123.9	.0150	103.4	.0171	104.3	2.7000	106.9	.0400	126.6
May	.6050	123.9	.0150	103.4	.0171	104.3	2.7000	106.9	.0400	126.6
June	.6050	123.9	.0150	103.4	.0171	104.3	2.6800	106.1	.0400	126.6
July	.6050	123.9	.0150	103.4	.0171	104.3	2.6500	104.9	.0400	126.6
Aug	.6050	123.9	.0150	103.4	.0171	104.3	2.4250	96.0	.0400	126.6
Sept	.6050	123.9	.0150	103.4	.0171	104.3	2.2000	87.1	.0400	126.6
Oct	.6050	123.9	.0150	103.4	.0171	104.3	2.2000	87.1	.0400	126.6
Nov	.6050	123.9	.0152	104.8	.0171	104.3	2.2250	88.1	.0400	126.6
Dec	.6050	123.9	.0176	121.4	.0181	110.4	2.3300	92.2	.0400	126.6
Average, 1904.....	.5788	123.3	.0148	102.1	.0172	104.9	2.5075	99.3	.0400	126.6

Month.	Metals and implements.									
	Chisels: extra, socket firmer, 1-inch.		Copper: ingot, lake.		Copper: sheet, hot-rolled (base sizes).		Copper wire: bare.		Doorknobs: steel, bronze plated.	
	Price per chisel.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pair.	Relative price.
Average, 1890-1899..	\$0.1894	100.0	\$0.1234	100.0	\$0.1659	100.0	\$0.1464	100.0	\$0.1697	100.0
Jan	.8000	158.4	.1256	101.8	.1800	108.5	.1888	94.8	.2250	132.6
Feb	.8000	158.4	.1250	101.3	.1800	108.5	.1863	93.1	.2500	147.3
Mar	.8000	158.4	.1263	102.4	.1800	108.5	.1888	94.8	.2500	147.3
Apr	.8000	158.4	.1325	107.4	.1800	108.5	.1450	99.0	.2500	147.3
May	.8000	158.4	.1350	109.4	.1800	108.5	.1433	98.2	.2500	147.3
June	.8000	158.4	.1306	105.8	.1800	108.5	.1388	94.8	.2500	147.3
July	.8000	158.4	.1275	103.8	.1800	108.5	.1388	94.8	.2500	147.3
Aug	.8000	158.4	.1283	102.4	.1800	108.5	.1388	94.8	.2500	147.3
Sept	.8000	158.4	.1269	102.8	.1800	108.5	.1388	94.8	.2500	147.3
Oct	.8000	158.4	.1294	104.9	.1800	108.5	.1450	99.0	.2500	147.3
Nov	.8000	158.4	.1381	111.9	.1800	108.5	.1600	109.3	.2500	147.3
Dec	.8000	158.4	.1500	121.6	.1800	108.5	.1625	111.0	.2250	132.6
Average, 1904.....	.8000	158.4	.131	106.2	.1800	108.5	.1438	98.2	.2458	144.8

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Metals and implements.									
	Files: 8-inch mill bastard.		Hammers: Maydole No. 1½.		Lead: pig.		Lead pipe.		Locks: common mortise.	
	Price per dozen.	Relative price.	Price per hammer.	Relative price.	Price per pound.	Relative price.	Price per 100 lbs.	Relative price.	Price per lock.	Relative price.
Average, 1890-1899..	\$0.8527	100.0	\$0.3613	100.0	\$0.0381	100.0	\$4.8183	100.0	\$0.0817	100.0
Jan	1.0500	123.1	.4660	129.0	.0435	114.2	4.6700	96.9	.0900	110.2
Feb	1.0500	123.1	.4660	129.0	.0440	115.5	4.7400	98.4	.1050	128.5
Mar	1.0500	123.1	.4660	129.0	.0463	121.5	4.7700	99.0	.1050	128.5
Apr	1.0500	123.1	.4660	129.0	.0463	121.5	4.8200	100.0	.1050	128.5
May	1.0400	122.0	.4660	129.0	.0463	121.5	4.8600	100.9	.1050	128.5
June	1.0400	122.0	.4660	129.0	.0438	115.0	4.7500	98.6	.1050	128.5
July	1.0400	122.0	.4660	129.0	.0430	112.9	4.6400	96.3	.1050	128.5
Aug	1.0400	122.0	.4660	129.0	.0423	111.0	4.5600	94.6	.1050	128.5
Sept	1.0400	122.0	.4660	129.0	.0425	111.5	4.7300	98.2	.1050	128.5
Oct	1.0300	120.8	.4660	129.0	.0425	111.5	4.6000	95.5	.1050	128.5
Nov	1.0300	120.8	.4660	129.0	.0443	116.3	5.2000	107.9	.1050	128.5
Dec	1.0300	120.8	.4660	129.0	.0465	122.0	5.2000	107.9	.0900	110.2
Average, 1904	1.0400	122.0	.4660	129.0	.0443	116.3	4.7950	99.5	.1025	125.5

Month.	Metals and implements.									
	Nails: cut, 8-penny, fence and common.		Nails: wire, 8-penny, fence and common.		Pig iron: Bessemer.		Pig iron: foundry No. 1.		Pig iron: foundry No. 2.	
	Price per 100 lbs.	Relative price.	Price per 100 lbs.	Relative price.	Price per ton.	Relative price.	Price per ton.	Relative price.	Price per ton.	Relative price.
Average, 1890-1899..	\$1.8275	100.0	\$2.1618	100.0	\$13.7783	100.0	\$14.8042	100.0	\$13.0533	100.0
Jan	2.0000	109.4	1.9500	90.2	13.9000	100.9	15.5000	104.7	13.3500	106.1
Feb	1.8000	98.5	2.0000	92.5	13.6600	99.1	15.5000	104.7	13.3500	102.3
Mar	1.8000	98.5	2.0000	92.5	14.0300	101.8	15.4500	104.4	13.2500	101.5
Apr	1.8500	101.2	2.0000	92.5	14.1900	103.0	15.7500	106.4	14.1000	108.0
May	1.8500	101.2	2.0000	92.5	13.6000	98.7	15.4000	104.0	13.8000	101.9
June	1.8500	101.2	2.0000	92.5	12.8100	93.0	15.1900	102.6	13.0500	100.0
July	1.8500	101.2	2.0000	92.5	12.4600	90.4	14.9400	100.9	12.6000	96.5
Aug	1.8500	101.2	2.0000	92.5	12.7600	92.6	15.0000	101.3	12.8500	98.4
Sept	1.7250	94.4	1.7000	78.6	12.6900	92.1	15.0000	101.3	12.7250	97.5
Oct	1.7250	94.4	1.7000	78.6	13.1000	95.1	15.1200	102.1	12.8500	98.4
Nov	1.7250	94.4	1.7000	78.6	15.1500	110.0	16.4000	110.8	14.7250	112.8
Dec	1.8000	98.5	1.8250	84.4	16.7200	121.4	17.6200	119.0	16.8500	129.1
Average, 1904	1.8188	99.5	1.9063	88.2	13.7558	99.8	15.5725	105.2	13.6250	104.4

Month.	Metals and implements.									
	Pig iron: gray forge, Southern, coke.		Planes: Bailey No. 5.		Quicksilver.		Saws: crosscut, Disston.		Saws: hand, Disston No. 7.	
	Price per ton.	Relative price.	Price per plane.	Relative price.	Price per pound.	Relative price.	Price per saw.	Relative price.	Price per dozen.	Relative price.
Average, 1890-1899..	\$11.0892	100.0	\$1.3220	100.0	\$0.5593	100.0	\$1.6038	100.0	\$12.780	100.0
Jan	11.0000	99.2	1.5300	115.7	.6200	110.9	1.6038	100.0	12.600	98.6
Feb	11.2500	101.5	1.5300	115.7	.6150	110.0	1.6038	100.0	12.600	98.6
Mar	10.8750	98.1	1.5300	115.7	.6200	110.9	1.6038	100.0	12.600	98.6
Apr	11.6250	104.8	1.5300	115.7	.6200	110.9	1.6038	100.0	12.600	98.6
May	11.6250	104.8	1.5300	115.7	.6200	110.9	1.6038	100.0	12.600	98.6
June	10.8750	98.1	1.5300	115.7	.6100	109.1	1.6038	100.0	12.600	98.6
July	10.8750	98.1	1.5300	115.7	.6100	109.1	1.6038	100.0	12.600	98.6
Aug	11.1250	100.3	1.5300	115.7	.5650	101.0	1.6038	100.0	12.600	98.6
Sept	11.1250	100.3	1.5300	115.7	.5600	100.1	1.6038	100.0	12.600	98.6
Oct	11.1250	100.3	1.5300	115.7	.5500	98.3	1.6038	100.0	12.600	98.6
Nov	13.8750	125.1	1.5300	115.7	.5400	96.5	1.6038	100.0	12.600	98.6
Dec	14.7500	133.0	1.5300	115.7	.5500	98.3	1.6038	100.0	12.600	98.6
Average, 1904	11.6771	105.3	1.5300	115.7	.6900	105.5	1.6038	100.9	12.600	98.6

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Metals and implements.									
	Shovels: Ames No. 2.		Silver: bar, fine.		Spelter: West-ern.		Steel billets.		Steel rails.	
	Price per dozen.	Relative price.	Price per ounce.	Relative price.	Price per pound.	Relative price.	Price per ton.	Relative price.	Price per ton.	Relative price.
Average, 1890-1899..	\$7.8658	100.0	\$0.74899	100.0	\$0.0452	100.0	\$21.5262	100.0	\$26.0654	100.0
Jan	8.0200	102.0	.57634	76.9	.0510	112.8	23.0000	106.8	28.0000	107.4
Feb	7.6200	96.9	.58335	77.9	.0495	109.5	23.0000	106.8	28.0000	107.4
Mar	7.6200	96.9	.57347	76.6	.0510	112.8	23.0000	106.8	28.0000	107.4
Apr	7.6200	96.9	.54775	73.1	.0523	116.8	23.0000	106.8	28.0000	107.4
May	7.6200	96.9	.56045	74.8	.0523	115.7	23.0000	106.8	28.0000	107.4
June	7.6200	96.9	.56269	75.1	.0494	109.3	23.0000	106.8	28.0000	107.4
July	7.6200	96.9	.58697	78.4	.0490	108.4	23.0000	106.8	28.0000	107.4
Aug	7.6200	96.9	.58486	78.1	.0490	108.4	23.0000	106.8	28.0000	107.4
Sept	7.6200	96.9	.57692	77.0	.0506	111.9	21.2500	98.7	28.0000	107.4
Oct	7.6200	96.9	.58572	78.2	.0515	113.9	19.5000	90.6	28.0000	107.4
Nov	7.6200	96.9	.59091	78.9	.0533	119.0	20.4000	94.8	28.0000	107.4
Dec	7.6200	96.9	.61182	81.7	.0581	128.5	21.0000	97.6	28.0000	107.4
Average, 1904	7.6533	97.3	.57844	77.2	.0515	113.9	22.1792	108.0	28.0000	107.4

Month.	Metals and implements.									
	Steel sheets: black, No. 27.		Tin: pig.		Tin plates: domestic, Bessemer, coke, 14 x 20 in.		Trowels: M. C. O., brick, 10½ inch.		Vises: solid box, 50-pound.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per 100 lbs.	Relative price.	Price per trowel.	Relative price.	Price per vise.	Relative price.
Average, 1890-1899..	\$0.0224	100.0	\$0.1836	100.0	\$3.4148	100.0	\$0.3400	100.0	\$3.9009	100.0
Jan	.0223	99.6	.2900	158.0	3.7900	111.0	.3400	100.0	4.6000	117.9
Feb	.0218	97.3	.2775	151.1	3.6400	106.6	.3400	100.0	4.6000	117.9
Mar	.0220	98.2	.2820	153.6	3.6400	106.6	.3400	100.0	4.6000	117.9
Apr	.0218	97.3	.2853	155.2	3.6400	106.6	.3400	100.0	4.1400	106.1
May	.0213	95.1	.2803	152.7	3.6400	106.6	.3400	100.0	4.1400	106.1
June	.0213	95.1	.2700	147.1	3.6400	106.6	.3400	100.0	4.1400	106.1
July	.0203	90.6	.2570	140.0	3.6400	106.6	.3400	100.0	4.1400	106.1
Aug	.0200	89.3	.2710	147.6	3.4900	102.2	.3400	100.0	4.1400	106.1
Sept	.0200	89.3	.2763	150.5	3.4900	102.2	.3400	100.0	4.1400	106.1
Oct	.0200	89.3	.2835	154.6	3.4900	102.2	.3400	100.0	4.1400	106.1
Nov	.0200	89.3	.2935	159.9	3.4900	102.2	.3400	100.0	4.1400	106.1
Dec	.0210	93.8	.2920	159.0	3.6400	106.6	.3400	100.0	4.1400	106.1
Average, 1904	.0210	93.8	.2799	152.5	3.6025	105.5	.3400	100.0	4.2550	109.1

Month.	Metals and implements.				Lumber and building materials.					
	Wood screws: 1-inch, No. 10, flat head.		Zinc: sheet.		Brick: common domestic.		Carbonate of lead: American, in oil.		Cement: Portland, domestic.	
	Price per gross.	Relative price.	Price per 100 lbs.	Relative price.	Price per M.	Relative price.	Price per pound.	Relative price.	Price per barrel.	Relative price.
Average, 1890-1899..	\$0.1510	100.0	\$5.3112	100.0	\$5.5625	100.0	\$0.0577	100.0	\$1.9963	100.0
Jan	.0945	62.6	5.1700	97.3	8.2500	148.3	.0588	101.9	1.7500	87.7
Feb	.0945	62.6	5.2900	99.6	8.2500	148.3	.0588	101.9	1.5250	76.4
Mar	.0945	62.6	5.4300	102.2	7.7500	139.3	.0588	101.9	1.5250	76.4
Apr	.0945	62.6	5.6100	105.6	6.3750	114.6	.0588	101.9	1.5250	76.4
May	.0945	62.6	5.7000	107.3	6.5000	116.9	.0588	101.9	1.5000	75.1
June	.0945	62.6	5.5200	103.9	7.3125	131.5	.0613	106.2	1.5000	75.1
July	.0945	62.6	5.4300	102.2	7.3750	132.6	.0613	106.2	1.5000	75.1
Aug	.0945	62.6	5.5200	103.9	7.6250	137.1	.0613	106.2	1.4500	72.6
Sept	.0945	62.6	5.6100	105.6	7.6250	137.1	.0613	106.2	1.3250	66.4
Oct	.0945	62.6	5.7000	107.3	7.6250	137.1	.0588	101.9	1.3000	65.1
Nov	.0945	62.6	5.8900	110.9	7.6250	137.1	.0588	101.9	1.3000	65.1
Dec	.0945	62.6	6.4400	121.3	7.6250	137.1	.0613	106.2	1.3250	66.4
Average, 1904	.0945	62.6	5.6092	105.6	7.4948	134.7	.0598	103.6	1.4604	73.2

^a Average for the period July, 1894, to December, 1899.^c Average for 1895-1899.^b Average for 1896-1899.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Lumber and building materials.									
	Cement: Rosendale.		Doors: pine.		Hemlock.		Lime: common.		Linseed oil: raw.	
	Price per barrel.	Relative price.	Price per door.	Relative price.	Price per M feet.	Relative price.	Price per barrel.	Relative price.	Price per gallon.	Relative price.
Average, 1890-1899..	\$0.8871	100.0	\$1.0929	100.0	\$11.9625	100.0	\$0.8332	100.0	\$0.4535	100.0
Jan	.8500	95.8	1.6200	148.2	17.0000	142.1	.8100	97.2	.3700	81.6
Feb	.8250	93.0	1.6200	148.2	17.0000	142.1	.8100	97.2	.4200	92.6
Mar	.8750	98.6	1.6200	148.2	17.0000	142.1	.8100	97.2	.4200	92.6
Apr	.8750	98.6	1.6200	148.2	17.0000	142.1	.8100	97.2	.4200	92.6
May	.8500	95.8	1.6200	148.2	17.0000	142.1	.8100	97.2	.4200	92.6
June	.8500	95.8	1.9800	181.2	17.0000	142.1	.8100	97.2	.4000	88.2
July	.8250	93.0	1.9800	181.2	17.0000	142.1	.8100	97.2	.3900	86.0
Aug	.8000	90.2	1.9800	181.2	17.0000	142.1	.8600	103.2	.4500	99.2
Sept	.7500	84.5	1.5600	142.7	17.0000	142.1	.8600	103.2	.4500	99.2
Oct	.7250	81.7	1.5600	142.7	17.0000	142.1	.8250	99.0	.4300	94.8
Nov	.7000	78.9	1.5600	142.7	17.0000	142.1	.8100	97.2	.4100	90.4
Dec	.7000	78.9	1.5600	142.7	17.0000	142.1	.8700	104.4	.4100	90.4
Average, 1904	.8021	90.4	1.6900	154.6	17.0000	142.1	.8246	99.0	.4158	91.7

Month.	Lumber and building materials.									
	Maple: hard.		Oak: white, plain.		Oak: white, quartered.		Oxide of zinc.		Pine: white, boards, No. 2 barn.	
	Price per M feet.	Relative price.	Price per M feet.	Relative price.	Price per M feet.	Relative price.	Price per pound.	Relative price.	Price per M feet.	Relative price.
Average, 1890-1899..	\$26.5042	100.0	\$37.4292	100.0	\$53.6771	100.0	\$0.0400	100.0	\$17.1104	100.0
Jan	31.0000	117.0	46.5000	124.2	32.5000	153.7	.0463	115.8	23.0000	134.4
Feb	31.0000	117.0	46.5000	124.2	32.5000	153.7	.0463	115.8	23.0000	134.4
Mar	31.0000	117.0	46.5000	124.2	32.5000	153.7	.0463	115.8	23.0000	134.4
Apr	31.0000	117.0	46.5000	124.2	32.5000	153.7	.0463	115.8	23.0000	134.4
May	31.0000	117.0	46.5000	124.2	32.5000	153.7	.0463	115.8	23.0000	134.4
June	31.0000	117.0	46.5000	124.2	32.5000	153.7	.0463	115.8	23.0000	134.4
July	31.0000	117.0	46.5000	124.2	32.5000	153.7	.0463	115.8	23.0000	134.4
Aug	31.0000	117.0	46.5000	124.2	77.5000	144.4	.0463	115.8	23.0000	134.4
Sept	31.0000	117.0	46.5000	124.2	77.5000	144.4	.0463	115.8	23.0000	134.4
Oct	31.0000	117.0	46.5000	124.2	77.5000	144.4	.0463	115.8	23.0000	134.4
Nov	31.0000	117.0	46.5000	124.2	77.5000	144.4	.0463	115.8	23.0000	134.4
Dec	31.0000	117.0	46.5000	124.2	81.5000	151.8	.0463	115.8	23.0000	134.4
Average, 1904	31.0000	117.0	46.5000	124.2	80.7500	150.4	.0463	115.8	23.0000	134.4

Month.	Lumber and building materials.									
	Pine: white, boards, uppers.		Pine: yellow.		Plate glass: polished, area 3 to 5 sq. ft.		Plate glass: polished, area 5 to 10 sq. ft.		Poplar.	
	Price per M feet.	Relative price.	Price per M feet.	Relative price.	Price per square foot.	Relative price.	Price per square foot.	Relative price.	Price per M feet.	Relative price.
Average, 1890-1899..	\$46.5542	100.0	\$13.4646	100.0	\$0.3630	100.0	\$0.5190	100.0	\$31.3667	100.0
Jan	82.0000	176.1	21.0000	113.7	.2400	66.1	.3900	75.1	51.7500	165.0
Feb	82.0000	176.1	21.0000	113.7	.2400	66.1	.3900	75.1	51.7500	165.0
Mar	82.0000	176.1	21.0000	113.7	.2400	66.1	.3900	75.1	51.7500	165.0
Apr	82.0000	176.1	21.0000	113.7	.2300	63.4	.3700	71.3	51.7500	165.0
May	82.0000	176.1	21.0000	113.7	.2300	63.4	.3700	71.3	51.7500	165.0
June	82.0000	176.1	21.0000	113.7	.2300	63.4	.3700	71.3	51.7500	165.0
July	80.0000	171.8	21.0000	113.7	.2250	62.0	.3600	69.4	49.7500	158.6
Aug	80.0000	171.8	22.0000	119.1	.2250	62.0	.3600	69.4	48.5000	154.6
Sept	80.0000	171.8	22.0000	119.1	.2250	62.0	.3600	69.4	48.5000	154.6
Oct	80.0000	171.8	22.0000	119.1	.2150	59.2	.3400	65.5	48.5000	154.6
Nov	80.0000	171.8	22.0000	119.1	.2150	59.2	.3400	65.5	48.5000	154.6
Dec	80.0000	171.8	22.0000	119.1	.2150	59.2	.3400	65.5	48.5000	154.6
Average, 1904	81.0000	174.0	21.4167	116.0	.2275	62.7	.3650	70.3	50.3292	160.5

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Lumber and building materials.									
	Putty.		Resin: good, strained.		Shingles: cy-press.		Shingles: Mich. white pine, 16-in., XXXX.		Spruce.	
	Price per pound.	Relative price.	Price per barrel.	Relative price.	Price per M.	Relative price.	Price per M.	Relative price.	Price per M feet.	Relative price.
Average, 1890-1899..	\$0.0158	100.0	\$1.4399	100.0	\$2.8213	100.0	\$3.7484	100.0	\$14.3489	100.0
Jan.....	.0113	71.5	2.5750	178.8	2.6000	92.2	3.6500	125.1	20.5000	142.9
Feb.....	.0113	71.5	2.9750	206.6	2.6000	92.2	3.6500	125.1	20.5000	142.9
Mar.....	.0113	71.5	2.7000	187.5	2.6000	92.2	3.6500	125.1	20.5000	142.9
Apr.....	.0113	71.5	2.8000	194.5	2.6000	92.2	3.6500	125.1	20.5000	142.9
May.....	.0113	71.5	2.8500	197.9	2.6000	92.2	3.6500	125.1	20.5000	142.9
June.....	.0113	71.5	3.0500	211.8	2.6000	92.2	3.6500	125.1	20.5000	142.9
July.....	.0113	71.5	3.0000	208.3	2.6000	92.2	3.5000	120.0	20.5000	142.9
Aug.....	.0113	71.5	2.6500	184.0	2.6000	92.2	3.5000	120.0	20.5000	142.9
Sept.....	.0113	71.5	2.7000	187.5	2.6000	92.2	3.5000	120.0	20.5000	142.9
Oct.....	.0100	63.3	2.8000	194.5	2.6000	92.2	3.5000	120.0	20.5000	142.9
Nov.....	.0100	63.3	2.9500	204.9	2.6000	92.2	3.5000	120.0	20.5000	142.9
Dec.....	.0105	66.5	2.9500	204.9	2.6000	92.2	3.5000	120.0	20.5000	142.9
Average, 1904.....	.0110	69.6	2.8333	196.8	2.6000	92.2	3.5750	122.5	20.5000	142.9

Month.	Lumber and building materials.								Drugs and chemicals.	
	Tar.		Turpentine: spirits of.		Window glass: American, single, firsts, 6 x 8 to 10 x 15 inch.		Window glass: American, single, thirds, 6 x 8 to 10 x 15 inch.		Alcohol: grain, 94 per cent.	
	Price per barrel.	Relative price.	Price per gallon.	Relative price.	Price per 50 sq. ft.	Relative price.	Price per 50 sq. ft.	Relative price.	Price per gallon.	Relative price.
Average, 1890-1899..	\$1.2048	100.0	\$0.3343	100.0	\$2.1514	100.0	\$1.8190	100.0	\$2.2405	100.0
Jan.....	1.6000	132.8	.5975	178.7	2.9700	138.0	2.4300	133.6	2.4400	108.9
Feb.....	1.4000	116.2	.6450	192.9	2.9700	138.0	2.4300	133.6	2.4400	108.9
Mar.....	1.4500	120.4	.6250	187.0	2.9700	138.0	2.4300	133.6	2.4600	109.8
Apr.....	1.9000	157.7	.5900	176.5	2.9700	138.0	2.4300	133.6	2.4500	109.4
May.....	2.0000	166.0	.5800	173.5	2.9700	138.0	2.4300	133.6	2.4500	109.4
June.....	1.8000	149.4	.5738	171.6	2.9700	138.0	2.4300	133.6	2.4500	109.4
July.....	1.8000	149.4	.5650	169.0	2.9700	138.0	2.4300	133.6	2.4500	109.4
Aug.....	1.7000	141.1	.5675	169.8	2.9700	138.0	2.4300	133.6	2.4500	109.4
Sept.....	1.6000	132.8	.5600	167.5	2.7200	126.4	2.1250	116.8	2.4000	107.1
Oct.....	1.6000	132.8	.5600	167.5	2.7200	126.4	2.1250	116.8	2.4000	107.1
Nov.....	1.6000	132.8	.5450	163.0	2.7200	126.4	2.1250	116.8	2.4000	107.1
Dec.....	1.7000	141.1	.5000	149.6	2.7200	126.4	2.1250	116.8	2.4000	107.1
Average, 1904.....	1.6792	139.4	.5757	172.2	2.8867	134.2	2.3283	128.0	2.4325	108.6

Month.	Drugs and chemicals.									
	Alcohol: wood, refined, 95 per cent.		Alum: lump.		Brimstone: crude, seconds.		Glycerin: refined.		Muriatic acid: 20°.	
	Price per gallon.	Relative price.	Price per pound.	Relative price.	Price per ton.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899..	\$0.9539	100.0	\$0.0167	100.0	\$20.6958	100.0	\$0.1399	100.0	\$0.0104	100.0
Jan.....	.5500	57.7	.0175	104.8	22.0000	106.3	.1425	101.9	.0160	153.8
Feb.....	.5500	57.7	.0175	104.8	22.2500	107.5	.1425	101.9	.0160	153.8
Mar.....	.5500	57.7	.0175	104.8	22.0000	106.3	.1425	101.9	.0160	153.8
Apr.....	.6000	62.9	.0175	104.8	22.0000	106.3	.1425	101.9	.0160	153.8
May.....	.6000	62.9	.0175	104.8	22.0000	106.3	.1425	101.9	.0160	153.8
June.....	.6000	62.9	.0175	104.8	22.2500	107.5	.1425	101.9	.0160	153.8
July.....	.6000	62.9	.0175	104.8	21.7500	105.1	.1425	101.9	.0160	153.8
Aug.....	.6000	62.9	.0175	104.8	21.6500	104.6	.1375	98.3	.0160	153.8
Sept.....	.6000	62.9	.0175	104.8	21.6000	104.4	.1375	98.3	.0160	153.8
Oct.....	.6000	62.9	.0175	104.8	21.4000	103.4	.1375	98.3	.0160	153.8
Nov.....	.6000	62.9	.0175	104.8	20.9000	101.0	.1325	94.7	.0160	153.8
Dec.....	.6000	62.9	.0175	104.8	21.5000	103.9	.1325	94.7	.0160	153.8
Average, 1904.....	.5875	61.6	.0175	104.8	21.7750	105.2	.1396	99.8	.0160	153.8

a Shingles: white pine, 18-inch, XXXX.

b For method of computing relative price, see pages 409 and 410. Average price for 1903, \$3.65.

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Cont'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	Drugs and chemicals.						House furnishing goods.			
	Opium: natural, in cases.		Quinine: American.		Sulphuric acid: 66°.		Earthenware: plates, cream-colored.		Earthenware: plates, white granite.	
	Price per pound.	Relative price.	Price per ounce.	Relative price.	Price per pound.	Relative price.	Price per dozen.	Relative price.	Price per dozen.	Relative price.
Average, 1890-1899..	\$2.3602	100.0	\$0.2460	100.0	\$0.0089	100.0	\$0.4136	100.0	\$0.4479	100.0
Jan	2.9250	123.9	.2500	101.6	.0130	146.1	.4705	113.8	.4943	110.4
Feb	2.9250	123.9	.2200	89.4	.0130	146.1	.4705	113.8	.4943	110.4
Mar	2.8750	121.8	.2300	93.5	.0130	146.1	.4705	113.8	.4943	110.4
Apr	2.8250	119.7	.2500	101.6	.0130	146.1	.4705	113.8	.4943	110.4
May	2.7250	115.6	.2700	109.8	.0130	146.1	.4705	113.8	.4943	110.4
June	2.6250	111.2	.2400	97.6	.0130	146.1	.4705	113.8	.4943	110.4
July	2.6250	111.2	.2300	93.5	.0130	146.1	.4705	113.8	.4943	110.4
Aug	2.6750	113.3	.2300	93.5	.0130	146.1	.4705	113.8	.4943	110.4
Sept	2.6750	113.3	.2100	85.4	.0130	146.1	.4705	113.8	.4943	110.4
Oct	2.6500	112.3	.2100	85.4	.0130	146.1	.4705	113.8	.4943	110.4
Nov	2.7500	116.5	.2300	93.5	.0120	134.8	.4705	113.8	.4943	110.4
Dec	2.7250	115.6	.2300	93.5	.0130	146.1	.4705	113.8	.4943	110.4
Average, 1904	2.7500	116.5	.2353	94.8	.0129	144.9	.4705	113.8	.4943	110.4

Month.	House furnishing goods.									
	Earthenware: teacups and saucers, white granite.		Furniture: bedroom sets, ash.		Furniture: chairs, bedroom, maple.		Furniture: chairs, kitchen.		Furniture: tables, kitchen.	
	Price per gross (6 dozen cups and 6 dozen saucers).	Relative price.	Price per set.	Relative price.	Price per dozen.	Relative price.	Price per dozen.	Relative price.	Price per dozen.	Relative price.
Average, 1890-1899..	\$3.4292	100.0	\$10.555	100.0	\$6.195	100.0	\$3.8255	100.0	\$14.435	100.0
Jan	3.6503	106.4	12.250	116.1	8.000	129.1	5.0000	130.7	15.600	108.1
Feb	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Mar	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Apr	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
May	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
June	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
July	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Aug	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Sept	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Oct	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Nov	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Dec	3.6503	106.4	12.250	116.1	8.000	129.1	4.7500	124.2	15.600	108.1
Average, 1904	3.6503	106.4	12.250	116.1	8.000	129.1	4.7708	124.7	15.600	108.1

Month.	House furnishing goods.									
	Glassware: nappies, 4-inch.		Glassware: pitchers, 4-gallon, common.		Glassware: tumblers, 4-pint, common.		Table cutlery: carvers, stag handles.		Table cutlery: knives and forks, coco-bolo handles.	
	Price per dozen.	Relative price.	Price per dozen.	Relative price.	Price per dozen.	Relative price.	Price per pair.	Relative price.	Price per gross.	Relative price.
Average, 1890-1899..	\$0.112	100.0	\$1.175	100.0	\$0.1775	100.0	\$0.80	100.0	\$6.0600	100.0
Jan	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.5000	107.3
Feb	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.5000	107.3
Mar	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.5000	107.3
Apr	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.5000	107.3
May	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
June	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
July	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
Aug	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
Sept	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
Oct	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
Nov	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
Dec	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.7500	111.4
Average, 1904	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8	6.6667	110.0

TABLE III.—BASE PRICES (AVERAGE FOR 1890-1899), AND MONTHLY ACTUAL AND RELATIVE PRICES OF COMMODITIES IN 1904—Concl'd.

[For a more detailed description of the articles, see Table I. Average for 1904 computed from quotations in Table I; for explanation of method, see page 394.]

Month.	House furnishing goods.				Miscellaneous.					
	Wooden ware: pails, oak-grained.		Wooden ware: tubs, oak-grained.		Cotton-seed meal.		Cotton-seed oil: summer yellow, prime.		Jute: raw.	
	Price per dozen.	Relative price.	Price per nest of 3.	Relative price.	Price per ton of 2,000 lbs.	Relative price.	Price per gallon.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899..	\$1.2988	100.0	\$1.3471	100.0	\$21.9625	100.0	\$0.3044	100.0	\$0.0859	100.0
Jan	1.7000	130.9	1.4500	107.6	27.1000	123.4	.3600	118.3	.0425	118.4
Feb	1.7000	130.9	1.4500	107.6	26.6000	121.1	.3800	124.8	.0425	118.4
Mar	1.7000	130.9	1.4500	107.6	27.0000	122.9	.3850	126.5	.0450	125.3
Apr	1.7000	130.9	1.4500	107.6	26.6000	121.1	.3525	115.8	.0450	125.3
May	1.7000	130.9	1.4500	107.6	26.0000	118.4	.2975	97.7	.0450	125.3
June	1.7000	130.9	1.4500	107.6	25.3500	115.4	.2850	93.6	.0450	125.3
July	1.7000	130.9	1.4500	107.6	25.3500	115.4	.3100	101.8	.0450	125.3
Aug	1.7000	130.9	1.4500	107.6	26.1000	118.8	.2800	92.0	.0450	125.3
Sept	1.7000	130.9	1.4500	107.6	26.1000	118.8	.2950	96.9	.0450	125.3
Oct	1.7000	130.9	1.4500	107.6	26.1000	118.8	.2975	97.7	.0450	125.3
Nov	1.7000	130.9	1.4500	107.6	26.1000	118.8	.2725	89.5	.0425	118.4
Dec	1.7000	130.9	1.4500	107.6	26.0000	118.4	.2475	81.3	.0450	125.3
Average, 1904	1.7000	130.9	1.4500	107.6	26.2000	119.3	.3135	103.0	.0444	123.7

Month.	Miscellaneous.									
	Malt: Western made.		Paper: news.		Paper: wrapping, manila.		Proof spirits.		Rope: manila, 7/8-inch.	
	Price per bushel.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per gallon.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899 ..	\$0.7029	100.0	\$0.0299	100.0	\$0.0553	100.0	\$1.1499	100.0	\$0.0934	100.0
Jan	.7050	100.3	.0250	83.6	.0531	96.0	1.2700	110.4	.1150	123.1
Feb	.7050	100.3	.0250	83.6	.0531	96.0	1.2700	110.4	.1150	123.1
Mar	.7050	100.3	.0250	83.6	.0531	96.0	1.2760	111.0	.1200	128.5
Apr	.7050	100.3	.0250	83.6	.0531	96.0	1.2800	111.3	.1200	128.5
May	.7050	100.3	.0275	92.0	.0531	96.0	1.2800	111.3	.1200	128.5
June	.7050	100.3	.0275	92.0	.0531	96.0	1.2800	111.3	.1125	120.4
July	.6850	97.5	.0275	92.0	.0531	96.0	1.2800	111.3	.1150	123.1
Aug	.6550	93.2	.0275	92.0	.0531	96.0	1.2800	111.3	.1150	123.1
Sept	.6550	93.2	.0275	92.0	.0531	96.0	1.2763	111.0	.1150	123.1
Oct	.6350	90.3	.0275	92.0	.0525	94.9	1.2588	109.5	.1150	123.1
Nov	.6250	88.9	.0275	92.0	.0525	94.9	1.2400	107.8	.1175	125.8
Dec	.6250	88.9	.0275	92.0	.0525	94.9	1.2400	107.8	.1250	138.8
Average, 1904	.6758	96.1	.0267	89.3	.0530	95.8	1.2692	110.4	.1171	125.4

Month.	Miscellaneous.									
	Rubber: Para Island.		Soap: castile, mottled, pure.		Starch: laundry.		Tobacco: plug, Horseshoe.		Tobacco: smoking, granulated, Seal of N. C.	
	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.	Price per pound.	Relative price.
Average, 1890-1899.	\$0.8007	100.0	\$0.0569	100.0	\$0.0348	100.0	\$0.3962	100.0	\$0.5090	100.0
Jan	.9100	113.7	.0638	112.1	.0375	107.8	.4500	113.6	.5700	112.0
Feb	.9850	123.0	.0638	112.1	.0375	107.8	.4500	113.6	.5700	112.0
Mar	1.0250	128.0	.0638	112.1	.0375	107.8	.4500	113.6	.5700	112.0
Apr	1.0900	136.1	.0638	112.1	.0375	107.8	.4500	113.6	.5700	112.0
May	1.0850	135.5	.0638	112.1	.0425	122.1	.4500	113.6	.5700	112.0
June	1.0950	136.8	.0638	112.1	.0425	122.1	.4500	113.6	.5700	112.0
July	1.0850	135.5	.0638	112.1	.0425	122.1	.4900	123.7	.5700	112.0
Aug	1.1550	144.2	.0638	112.1	.0350	100.6	.4900	123.7	.6000	117.9
Sept.	1.1350	141.8	.0638	112.1	.0325	93.4	.4900	123.7	.6000	117.9
Oct	1.0950	136.8	.0725	127.4	.0325	93.4	.4900	123.7	.6000	117.9
Nov	1.1250	140.5	.0650	114.2	.0325	93.4	.4900	123.7	.6000	117.9
Dec	1.2650	158.0	.0650	114.2	.0325	93.4	.4900	123.7	.6000	117.9
Average, 1904	1.0875	135.8	.0647	113.7	.0369	106.0	.4700	118.6	.5825	114.4

a 7/8-inch.

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904.

[Average price for 1890-1899 = 100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Farm products.									
	Cotton: up- land, mid- dling.	Flax- seed: No. 1.	Grain.					Hay: timo- thy, No. 1.	Hides: green, salted, packers, heavy native steers.	Hops: New York State, choice.
			Barley: by sample.	Corn: No. 2, cash.	Oats: cash.	Rye: No. 2, cash.	Wheat: con- tract grades, cash.	Aver- age.		
Jan....	185.7	90.3	125.5	118.2	142.7	101.5	114.6	120.5	106.1	200.5
Feb....	191.0	101.1	125.2	131.9	156.7	122.9	128.6	133.1	106.7	208.9
Mar....	196.9	102.2	122.1	137.2	148.2	134.5	128.3	134.1	105.9	208.9
Apr....	186.5	101.1	122.4	134.3	142.2	128.6	128.8	131.3	115.6	197.6
May....	172.8	94.1	124.1	127.1	152.0	138.8	131.1	134.6	122.2	192.0
June....	148.6	92.8	124.9	128.3	158.7	122.9	130.7	132.1	119.8	192.0
July....	139.8	94.1	112.0	129.2	149.4	130.3	134.7	131.1	118.6	186.3
Aug....	140.8	107.8	111.7	142.1	128.1	137.0	144.2	132.6	121.8	186.3
Sept....	141.7	109.6	113.6	140.5	116.5	137.9	153.4	132.4	107.9	192.0
Oct....	132.9	99.3	107.0	137.3	111.6	146.6	155.2	131.5	110.3	197.6
Nov....	128.6	100.2	110.8	139.8	113.5	149.9	164.6	133.7	107.9	197.6
Dec....	100.0	102.9	105.0	122.1	109.3	139.5	154.9	126.2	104.9	194.8
1904....	155.9	99.6	116.9	132.6	135.8	133.4	138.3	131.4	112.5	196.2

Month.	Farm products.									
	Live stock.									
	Cattle.			Hogs.			Sheep.			Average, farm prod- ucts.
	Steers, choice to extra.	Steers, good to choice.	Aver- age.	Heavy.	Light.	Aver- age.	Native.	West- ern.	Aver- age.	
Jan....	106.4	105.6	106.0	111.7	108.7	110.2	100.3	98.2	99.3	120.8
Feb....	103.5	103.2	103.4	119.1	114.1	116.6	102.1	105.7	103.9	127.2
Mar....	105.4	105.6	105.5	125.1	122.0	123.6	116.6	110.8	113.7	130.3
Apr....	103.1	104.3	103.7	115.8	113.5	114.7	126.9	138.6	130.3	129.2
May....	104.1	105.1	104.6	106.5	106.0	106.3	126.9	122.2	124.6	127.6
June....	115.9	111.0	113.5	115.7	114.6	115.2	122.6	116.2	119.4	126.8
July....	117.6	114.6	116.1	123.7	125.0	124.4	103.1	108.8	108.5	125.2
Aug....	110.6	108.8	109.7	119.5	124.5	122.0	100.1	94.8	97.5	125.3
Sept....	110.9	110.2	110.6	130.0	135.7	132.9	94.8	96.6	95.7	126.0
Oct....	122.5	115.7	117.1	124.9	125.5	125.2	96.3	96.5	96.4	125.4
Nov....	122.5	115.8	119.2	108.5	108.0	108.3	115.0	108.6	109.3	126.4
Dec....	126.2	116.9	121.6	103.3	101.1	102.2	114.9	111.1	113.0	122.2
1904....	112.0	109.7	110.9	116.8	116.5	116.7	110.3	107.8	109.1	126.2

Month.	Food, etc.								
	Beans: medium, choice.	Bread.							
		Crackers.			Loaf.				Average.
		Boston.	Soda.	Average.	Washing- ton market.	Home- made (N. Y. market).	Vienna (N. Y. market).	Average.	
Jan....	125.8	104.0	90.5	97.3	100.6	106.3	101.1	102.7	100.5
Feb....	121.3	104.0	90.5	97.3	100.6	106.3	101.1	102.7	100.5
Mar....	131.7	104.0	90.5	97.3	100.6	106.3	101.1	102.7	100.5
Apr....	121.3	118.9	97.5	103.2	100.6	106.3	101.1	102.7	104.9
May....	122.8	118.9	97.5	103.2	100.6	106.3	101.1	102.7	104.9
June....	122.8	118.9	90.5	104.7	100.6	106.3	101.1	102.7	103.5
July....	118.3	118.9	90.5	104.7	100.6	106.3	101.1	102.7	103.5
Aug....	116.8	118.9	90.5	104.7	100.6	112.3	106.8	106.6	105.8
Sept....	113.8	118.9	90.5	104.7	100.6	112.3	106.8	106.6	105.8
Oct....	115.3	118.9	90.5	104.7	100.6	118.6	113.6	110.9	108.4
Nov....	119.8	118.9	90.5	104.7	125.4	118.6	113.6	119.2	113.4
Dec....	115.3	118.9	90.5	104.7	100.6	118.6	113.6	110.9	108.4
1904....	120.4	115.2	91.6	103.4	102.5	110.4	105.1	106.0	105.0

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Food, etc.										
	Butter.				Cheese: N. Y. State, full cream.	Coffee: Rio No. 7.	Eggs: new- laid, fancy, near- by.	Fish.			
	Cream- ery, El- gin (Elgin mar- ket).	Cream- ery, extra (N. Y. mar- ket).	Dairy, New York State.	Aver- age.				Cod, dry, bank, large.	Her- ring, shore, round.	Mack- erel, salt, large No. 3s.	Salmon, canned.
Jan....	106.0	102.1	94.5	100.9	121.6	59.0	186.6	118.6	132.4	109.7	117.1
Feb....	115.7	111.8	97.0	108.2	121.6	70.9	177.7	118.6	135.7	109.7	117.1
Mar....	112.9	110.7	101.3	108.3	121.6	52.4	108.3	141.0	139.0	109.7	117.1
Apr....	109.4	102.3	104.1	105.3	117.8	52.4	98.4	120.9	139.0	109.7	117.1
May....	90.8	89.9	94.1	91.6	97.3	55.2	99.3	138.8	132.4	102.6	117.1
June....	80.6	80.6	84.6	81.9	81.8	53.3	101.9	138.8	<i>a</i> 132.4	88.5	117.1
July....	78.9	79.0	84.0	80.6	77.3	55.2	112.4	138.8	<i>a</i> 132.4	88.5	117.1
Aug....	82.5	81.0	84.7	82.7	82.9	57.1	121.8	129.8	<i>a</i> 132.4	95.5	117.1
Sept....	89.3	87.7	90.2	89.1	91.2	65.2	133.1	129.8	<i>a</i> 132.4	99.1	117.1
Oct....	97.2	98.7	97.0	96.0	98.8	64.3	143.3	129.8	158.9	106.2	117.1
Nov....	115.2	111.6	113.4	113.4	108.4	64.3	168.6	129.8	158.9	106.2	117.1
Dec....	124.0	120.4	122.3	122.2	119.0	65.2	179.6	129.8	158.9	106.2	117.1
1904....	100.4	97.6	97.3	98.4	108.2	59.6	135.0	130.4	144.4	102.6	117.1

Month.	Food, etc.								
	Flour.						Fruit.		
	Buck- wheat.	Rye.	Wheat.			Average.	Apples.		
			Spring patents.	Winter straights.	Average.		Evapo- rated, choice.	Sun-dried, Southern, sliced.	Average.
Jan....	119.7	101.0	108.1	105.5	106.8	108.6	69.4	72.8	71.1
Feb....	102.9	105.5	115.0	114.1	114.6	109.4	67.9	72.8	70.4
Mar....	<i>a</i> 102.9	140.2	119.0	127.0	123.0	122.3	67.9	72.8	70.4
Apr....	<i>a</i> 102.9	135.7	117.1	124.5	120.8	120.1	75.3	72.8	74.1
May....	<i>a</i> 102.9	133.4	116.2	122.8	119.5	118.8	75.3	68.0	71.7
June....	<i>a</i> 102.9	132.6	115.3	121.8	118.6	118.2	73.8	68.0	70.9
July....	<i>a</i> 102.9	131.9	113.4	119.5	116.5	116.9	76.7	48.5	62.6
Aug....	<i>a</i> 102.9	133.4	131.9	123.7	127.3	123.0	76.7	48.5	62.6
Sept....	136.4	138.7	143.1	133.0	138.1	137.8	76.7	48.5	62.6
Oct....	132.5	140.2	142.2	137.0	139.6	138.0	69.4	68.0	68.7
Nov....	114.5	141.7	140.9	138.5	139.7	139.9	68.5	68.0	65.8
Dec....	114.5	138.7	137.6	136.5	137.1	131.8	62.0	68.0	65.0
1904....	120.1	131.1	125.2	125.5	125.4	125.5	71.2	64.7	68.0

Month.	Food, etc.								
	Fruit.				Glucose: 41° and 42° mix- ing. (b)	Lard: prime contract.	Meal: corn.		
	Currants, in barrels.	Prunes, California, in boxes.	Raisins, California, London layer.	Average.			Fine white.	Fine yellow.	Average.
Jan....	130.1	67.8	103.3	100.4	119.9	111.9	114.4	120.5	117.5
Feb....	131.7	64.6	106.6	101.0	130.4	119.3	124.0	127.8	125.9
Mar....	130.1	64.6	101.6	98.8	137.5	113.1	123.7	132.8	130.8
Apr....	130.1	61.4	101.6	97.7	144.5	107.2	121.6	125.4	123.5
May....	130.1	58.1	95.0	94.4	137.5	104.4	121.6	125.4	123.5
June....	130.1	58.1	98.3	95.5	130.4	108.0	131.1	135.2	133.2
July....	130.1	56.6	98.3	95.0	130.4	109.5	138.3	135.2	136.8
Aug....	130.1	56.6	101.6	96.1	113.5	110.1	135.9	122.9	129.4
Sept....	131.7	56.6	101.6	96.6	120.6	115.7	124.0	140.1	132.1
Oct....	130.1	56.6	90.0	92.2	113.5	120.3	121.6	127.8	124.7
Nov....	128.3	56.6	90.0	91.6	110.0	113.6	133.5	137.7	135.6
Dec....	130.1	56.6	90.0	92.2	127.6	110.7	138.3	142.6	140.5
1904....	130.1	59.6	93.2	96.0	126.3	111.8	127.8	131.1	129.5

a Nominal price; see explanation on page 411.

b Average for 1893-1899 = 100.

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Food, etc.										
	Meat.										
	Beef.				Pork.					Mutton, dressed.	Average.
	Fresh, native sides.	Salt, extra mess.	Salt, hams, West- ern.	Average.	Bacon, short clear sides.	Bacon, short ribsides.	Hams, smok- ed.	Salt, mess, old to new.	Average.		
Jan.....	103.0	102.9	117.5	107.8	110.1	110.7	110.6	126.0	114.4	99.5	110.0
Feb.....	102.6	110.7	117.5	110.8	114.4	115.2	113.1	137.0	119.9	105.3	114.5
Mar.....	98.3	115.4	117.5	110.4	116.1	115.7	110.8	135.4	119.5	94.8	113.0
Apr.....	97.3	106.7	117.5	107.2	108.4	107.8	106.1	122.0	111.1	106.9	109.1
May.....	97.9	102.9	114.7	105.2	102.8	102.7	104.2	112.8	105.6	124.0	107.8
June.....	113.9	102.9	116.8	111.2	115.3	116.8	108.6	122.0	115.7	112.7	113.6
July.....	123.2	109.1	123.0	118.4	117.2	118.6	111.8	123.8	117.9	111.9	117.3
Aug.....	112.8	109.1	131.1	117.7	119.9	121.0	116.9	119.1	119.2	111.4	117.7
Sept.....	103.8	109.9	136.8	116.8	127.4	128.2	114.9	111.5	120.5	88.7	115.2
Oct.....	105.4	112.3	134.7	117.5	127.3	128.2	110.3	112.3	119.5	88.7	114.9
Nov.....	108.9	115.4	129.1	117.8	114.7	114.9	102.1	110.9	110.7	91.5	110.9
Dec.....	107.8	115.4	125.8	116.3	106.1	107.2	99.1	115.5	107.0	101.2	109.3
1904.....	106.1	109.4	123.5	113.0	114.8	115.4	108.9	120.6	114.9	103.2	112.7

Month.	Food, etc.								
	Milk: fresh.	Molasses: New Or- leans, open ket- tle, prime.	Rice: do- mestic, choice.	Salt: Ameri- can.	Soda: bi- carbonate of, Ameri- can.	Spices.			Starch: pure corn.
						Nutmegs.	Pepper, Singa- pore.	Average.	
Jan.	122.4	107.9	87.0	106.5	62.2	63.6	168.6	116.1	93.6
Feb.	117.6	107.9	85.7	106.5	62.2	61.3	168.6	115.0	93.6
Mar.	117.6	107.9	85.7	106.5	62.2	58.4	164.4	111.4	93.6
Apr.	107.8	107.9	85.7	106.5	62.2	50.9	167.7	109.3	93.6
May.	92.9	107.9	85.7	106.5	62.2	47.4	161.9	104.7	93.6
June ..	78.4	107.9	78.1	106.5	62.2	45.1	159.4	102.3	93.6
July	82.0	107.9	75.8	106.5	62.2	44.5	152.7	98.6	93.6
Aug.	88.2	107.9	79.1	106.5	62.2	44.5	156.9	100.7	93.6
Sept.	98.0	107.9	70.2	115.0	62.2	47.4	159.4	103.4	100.4
Oct.	112.5	107.9	70.2	115.0	62.2	48.0	172.0	110.0	100.4
Nov.	130.2	107.9	70.2	115.0	62.2	46.9	172.8	109.9	100.4
Dec.	147.1	106.3	70.2	115.0	62.2	45.7	165.3	105.5	100.4
1904.	107.8	107.8	78.6	109.4	62.2	50.3	164.1	107.2	95.8

Month.	Food, etc.										
	Sugar.				Tallow.	Tea: Formosa, fine.	Vegetables, fresh.			Vinegar: cider, Mon- arch.	Average, food, etc.
	89° fair refin- ing.	96° cen- trifu- gal.	Granu- lated.	Aver- age.			Onions.	Potatoes, Bur- bank.	Aver- age.		
Jan....	85.7	87.4	91.8	88.3	117.9	91.6	110.3	150.7	130.5	88.0	106.3
Feb....	83.8	86.7	90.1	86.9	116.6	91.6	103.0	176.6	139.8	88.0	103.3
Mar....	89.2	91.2	94.0	91.5	115.6	98.6	117.7	182.1	149.9	88.0	103.7
Apr....	92.1	93.8	93.9	93.3	107.6	98.6	110.3	215.0	162.7	88.0	107.4
May....	97.8	98.9	98.6	98.4	98.6	98.6	^a 110.3	210.4	160.4	88.0	105.2
June....	100.8	101.0	100.7	100.8	97.0	98.6	108.0	233.4	168.2	88.0	105.1
July....	102.6	101.8	102.9	102.4	99.3	98.6	95.6	^a 233.4	164.5	88.0	105.2
Aug....	107.2	107.8	105.2	106.7	102.3	98.6	91.9	^a 233.4	162.7	88.0	106.3
Sept....	110.4	111.1	105.4	109.0	102.8	98.6	73.5	^a 233.4	153.5	88.0	106.5
Oct....	110.4	109.9	102.6	107.6	104.6	98.6	103.0	71.4	87.2	94.7	107.8
Nov....	117.7	117.6	110.0	115.1	99.8	96.9	117.7	74.1	95.9	94.7	110.2
Dec....	127.3	124.7	115.5	122.5	107.1	96.9	125.0	68.5	96.8	94.7	111.4
1904....	102.1	102.7	101.0	101.9	105.5	97.1	104.6	146.3	125.5	89.6	107.2

a Nominal price; see explanation on page 411.

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Cloths and clothing.											
Month.	Bags: 2-bu., Amos- keag.	Blankets.				Boots and shoes.					
		11-4, all wool.	11-4, cotton warp, all wool filling.	11-4, cotton warp, cotton and wool filling.	Average.	Men's bro- gans, split.	Men's calf bal. shoes, Good- year welt.	Men's split boots.	Men's vici kid shoes, Good- year welt.	Wo- men's solid grain shoes.	Aver- age.
Jan....	110.8	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	110.1	100.5
Feb....	128.7	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	110.1	100.5
Mar....	128.7	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	110.1	100.5
Apr....	132.2	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	110.1	100.5
May....	132.2	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	110.1	100.5
June....	132.2	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	110.1	100.5
July....	132.2	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	113.1	101.1
Aug....	128.7	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	113.1	101.1
Sept....	128.7	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	113.1	101.1
Oct....	128.7	110.1	118.3	123.8	117.4	93.5	98.9	113.1	87.0	116.2	101.7
Nov....	128.7	110.1	118.3	123.8	117.4	93.5	98.9	116.2	89.1	116.2	102.8
Dec....	128.7	110.1	118.3	123.8	117.4	93.5	98.9	116.2	89.1	116.2	102.8
1904....	128.4	110.1	118.3	123.8	117.4	93.5	98.9	113.7	87.3	112.3	101.1

Month.	Cloths and clothing.								
	Broad-cloths: first quality, black, 54-inch, XXX wool.	Calico: Cocheco prints.	Carpets.				Cotton flannels.		
			Brussels, 5-frame, Bigelow.	Ingrain, 2-ply, Lowell.	Wilton, 5-frame, Bigelow.	Average.	2½ yards to the pound.	3½ yards to the pound.	Average.
Jan....	110.3	99.5	110.3	109.1	110.7	110.0	134.6	134.8	134.7
Feb....	110.3	99.5	110.3	109.1	110.7	110.0	134.6	134.8	134.7
Mar....	110.3	99.5	110.3	109.1	110.7	110.0	134.6	134.8	134.7
Apr....	110.3	99.5	110.3	109.1	110.7	110.0	134.6	134.8	134.7
May....	110.3	99.5	110.3	109.1	110.7	110.0	123.9	126.1	125.0
June....	110.3	99.5	110.3	109.1	110.7	110.0	123.9	126.1	125.0
July....	110.3	99.5	110.3	109.1	110.7	110.0	123.9	126.1	125.0
Aug....	110.3	90.4	110.3	109.1	110.7	110.0	123.9	126.1	125.0
Sept....	110.3	90.4	110.3	109.1	110.7	110.0	123.9	126.1	125.0
Oct....	110.3	90.4	110.3	109.1	110.7	110.0	116.9	117.4	117.2
Nov....	110.3	90.4	110.3	109.1	110.7	110.0	116.9	117.4	117.2
Dec....	112.9	90.4	110.3	109.1	110.7	110.0	113.3	104.3	108.8
1904....	110.5	95.7	110.3	109.1	110.7	110.0	125.4	125.7	125.6

Month.	Cloths and clothing.								
	Cotton thread: 6-cord, 200-yard spools, J. & P. Coats.	Cotton yarns.			Denims: Amos- keag.	Drillings.			Flannels: white, 4-4, Bal- lard Vale No. 3.
		Carded, white, mule- spun, Northern, cones, 10/1.	Carded, white, mule- spun, Northern, cones, 22/1.	Average.		Brown, Pepper- ell.	30-inch, Stark A.	Average.	
Jan.....	120.1	130.6	121.9	126.3	119.7	126.7	134.0	130.4	117.6
Feb.....	120.1	150.8	137.1	144.0	124.5	131.1	139.3	135.2	117.6
Mar.....	120.1	138.4	129.5	134.0	124.5	139.9	138.0	139.0	117.6
Apr.....	120.1	139.9	129.5	134.7	124.5	139.9	125.3	132.6	117.6
May.....	120.1	130.6	121.9	126.3	124.5	131.1	129.0	130.1	117.6
June.....	120.1	124.4	111.7	118.1	124.5	122.4	125.1	123.8	117.6
July.....	120.1	115.0	106.7	110.9	114.9	122.4	119.0	120.7	117.6
Aug.....	120.1	105.7	104.1	104.9	110.2	122.4	117.7	120.1	117.6
Sept.....	120.1	108.8	104.1	106.5	110.2	122.4	120.5	121.5	117.6
Oct.....	120.1	111.9	111.7	111.8	110.2	122.4	125.5	124.0	117.6
Nov.....	120.1	110.4	106.7	108.6	105.4	122.4	119.0	120.7	117.6
Dec.....	120.1	111.9	104.1	108.0	105.4	122.4	122.8	122.6	117.6
1904.....	120.1	123.2	115.7	119.5	116.6	127.1	126.3	126.7	117.6

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Cloths and clothing.							
	Ginghams.			Horse blankets: 6 pounds each, all wool.	Hosiery.			
	Amos-keag.	Lan-caster.	Average.		Men's cotton half hose, seamless, fast black, 20 to 22 oz.	Men's cotton half hose, seamless, 84 needles.	Women's combed Egyptian cotton hose, high spliced heel. (a)	Women's cotton hose, seamless, fast black, 26 to 28 oz.
Jan....	103.2	100.3	101.8	122.2	b 82.1	95.6	97.3	b 86.8
Feb....	107.9	100.3	104.1	122.2	b 82.1	95.6	97.3	b 86.8
Mar....	107.9	100.3	104.1	122.2	b 82.1	95.6	97.3	b 86.8
Apr....	107.9	100.3	104.1	122.2	c 85.3	98.2	97.3	84.2
May....	107.9	100.3	104.1	122.2	c 85.3	98.2	97.3	c 84.2
June....	107.9	100.3	104.1	122.2	c 85.3	98.2	97.3	c 84.2
July....	107.9	100.3	104.1	122.2	c 85.3	98.2	97.3	c 84.2
Aug....	107.9	100.3	104.1	122.2	c 85.3	95.6	97.3	c 84.2
Sept....	93.8	100.3	97.1	122.2	82.1	95.6	97.3	81.6
Oct....	93.8	87.3	90.6	122.2	d 82.1	95.6	97.3	d 81.6
Nov....	93.8	87.3	90.6	122.2	d 82.1	92.4	97.3	d 81.6
Dec....	93.8	87.3	90.6	122.2	d 82.1	92.4	97.3	d 81.6
1904....	102.8	97.0	99.9	122.2	e 82.1	95.9	97.3	e 81.6

Month.	Cloths and clothing.							
	Leather.					Linen thread.		
	Harness, oak.	Sole, hemlock, non-acid, Buenos Ayres.	Sole, oak.	Wax calf, 30 to 40 lbs. to the dozen, B grade.	Average.	Shoe, 10s, Barbour.	3-cord, 200-yard spools, Barbour.	Average.
Jan....	110.4	118.6	105.6	105.0	109.9	96.7	103.7	100.2
Feb....	110.4	118.6	101.1	105.0	108.8	96.7	103.7	100.2
Mar....	110.4	118.6	101.1	105.0	108.8	96.7	103.7	100.2
Apr....	110.4	118.6	104.1	105.0	109.5	96.7	103.7	100.2
May....	110.4	118.6	105.6	105.0	109.9	96.7	103.7	100.2
June....	110.4	114.7	102.6	105.0	108.2	96.7	103.7	100.2
July....	110.4	113.5	96.6	105.0	106.4	96.7	103.7	100.2
Aug....	110.4	113.5	99.6	105.0	107.1	96.7	103.7	100.2
Sept....	108.7	113.5	99.6	105.0	106.7	96.7	103.7	100.2
Oct....	108.7	116.0	105.6	105.0	108.8	96.7	103.7	100.2
Nov....	108.7	116.0	105.6	105.0	108.8	96.7	103.7	100.2
Dec....	110.4	117.3	104.1	105.0	109.2	102.1	103.7	102.9
1904....	110.0	116.5	102.6	105.0	108.6	97.2	103.7	100.5

Month.	Cloths and clothing.							
	Overcoatings.						Print cloths, 28-inch, 64 x 64.	Shawls: standard, all wool, 72 x 144 inch, 42-ounce.
	Beaver, Moscow, all wool, black.	Chinchilla, B-rough, all wool.	Chinchilla, cotton warp, C. C. grade.	Covert cloth, light weight, staple.	Kersey, standard, 27 to 28 ounce. (f)	Average.		
Jan....	111.7	103.1	92.2	94.0	130.3	106.3	130.4	107.0
Feb....	111.7	103.1	92.2	94.0	130.3	106.3	140.9	107.0
Mar....	111.7	103.1	93.2	94.0	130.3	106.5	140.9	107.0
Apr....	111.7	103.1	92.2	94.0	130.3	106.3	132.6	107.0
May....	111.7	103.1	94.2	94.0	130.3	106.7	120.0	107.0
June....	111.7	103.1	93.2	94.0	130.3	106.5	111.2	107.0
July....	111.7	103.1	93.2	94.0	130.3	106.5	107.5	107.0
Aug....	111.7	103.1	93.2	94.0	130.3	106.5	105.7	107.0
Sept....	111.7	103.1	94.2	94.0	136.3	107.9	105.7	107.0
Oct....	111.7	103.1	94.2	94.0	136.3	107.9	105.7	107.0
Nov....	111.7	103.1	94.2	94.0	136.3	107.9	105.7	107.0
Dec....	111.7	103.1	94.2	94.0	136.3	107.9	103.1	107.0
1904....	111.7	103.1	93.3	94.0	132.3	106.9	117.3	107.0

a Average for 1893-1899=100.

b Computed from September, 1903, price.

c Computed from April, 1904, price.

d Computed from September, 1904, price.

e Computed from September, 1904, price, which represents bulk of sales during the year.

f Average for 1897-1899=100.

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Cloths and clothing.									
	Sheetings. .									
	Bleached.				Brown.					Aver- age.
	10-4, At- lantic.	10-4, Pepper- ell.	10-4, Wam- sutta S. T.	Aver- age.	4-4, At- lantic A.	4-4, Indian Head.	4-4, Mass. Mills, Flying Horse brand.	4-4, Pep- perell R.	Aver- age.	
Jan.	136.9	132.7	99.2	122.9	121.3	119.8	114.5	122.5	119.5		121.0
Feb.	158.5	138.0	99.2	131.9	128.4	123.8	118.6	127.0	124.5	127.6
Mar.	131.5	138.0	99.2	122.9	138.7	135.8	122.7	131.6	132.2	128.2
Apr.	130.7	138.0	99.2	122.6	141.6	135.8	122.7	131.6	132.9	128.5
May.	130.7	138.0	91.6	120.1	141.6	135.8	118.6	131.6	131.9	126.8
June.	130.7	138.0	91.6	120.1	141.6	135.8	118.6	131.6	131.9	126.8
July.	^a 130.7	127.4	91.6	116.6	132.0	127.8	114.5	113.4	121.9	119.6
Aug.	^a 130.7	127.4	91.6	116.6	132.0	127.8	114.5	113.4	121.9	119.6
Sept.	120.8	116.8	91.6	109.7	130.4	123.8	114.5	113.4	120.5	115.9
Oct.	^a 120.8	116.8	91.6	109.7	116.3	123.8	114.5	113.4	117.0	113.9
Nov.	105.1	116.8	91.6	104.5	118.1	123.8	114.5	113.4	117.5	111.9
Dec.	109.5	116.8	91.6	106.0	115.2	123.8	114.5	113.4	116.7	112.1
1904.	128.3	128.7	94.1	117.0	129.8	128.1	117.0	121.4	124.1	121.1

Month.	Cloths and clothing.								
	Shirtings: bleached.					Silk: raw.			
	4-4, Fruit of the Loom.	4-4, Hope.	4-4, Lons- dale.	4-4, New York Mills.	4-4, Wam- sutta ×>× ××	Average.	Italian, classical.	Japan, filatures.	Average.
Jan	111.7	113.2	110.0	100.1	100.2	107.0	101.2	94.1	97.7
Feb.....	118.5	116.8	116.9	90.8	100.2	108.6	101.2	94.7	98.0
Mar	118.5	116.8	116.9	91.6	100.2	108.8	97.7	89.9	93.8
Apr.....	118.5	116.8	116.9	90.8	100.2	108.6	91.9	88.1	90.0
May.....	118.5	116.8	116.9	91.4	100.2	108.8	90.1	88.7	89.4
June.....	118.5	116.8	116.9	101.0	94.9	109.6	85.2	88.1	86.7
July.....	104.8	107.5	103.2	97.8	94.9	101.6	85.5	86.9	86.2
Aug.....	104.8	107.5	103.2	95.8	94.9	101.2	88.4	90.5	89.5
Sept.....	99.6	107.5	103.2	97.5	94.9	100.5	86.9	90.8	88.9
Oct.....	103.0	107.5	103.2	93.2	94.9	100.4	87.2	89.6	88.4
Nov.....	103.0	107.5	103.2	91.3	94.9	100.0	87.2	92.9	90.1
Dec.....	103.0	107.5	103.2	95.9	94.9	100.9	87.2	92.9	90.1
1904.....	110.2	111.9	109.5	94.7	97.2	104.7	90.8	90.6	90.7

Month.	Cloths and clothing.							Ticking: Amoskeag A. C. A.
	Suits.							
	Clay worsted diagonal, 12-ounce, Washington Mills. ^b	Clay worsted diagonal, 16-ounce, Washington Mills. ^b	Indigo blue, all wool, 54-inch, 14-ounce, Middlesex.	Indigo blue, all wool, 16-ounce.	Serge, Washington Mills 6,700. ^(c)	Trouserings, fancy worsted. ^(c)	Average.	
Jan....	112.0	109.5	108.8	114.1	98.7	104.6	108.0	122.5
Feb....	109.3	107.3	108.8	114.1	98.7	103.5	107.0	122.5
Mar....	109.3	107.3	108.8	114.1	98.7	103.5	107.0	122.5
Apr....	109.3	107.3	108.8	114.1	98.7	103.5	107.0	127.2
May....	109.3	107.3	108.8	114.1	98.7	103.5	107.0	127.2
June....	109.3	107.3	108.8	114.1	98.7	108.0	107.7	127.2
July....	109.3	107.3	108.8	114.1	98.7	108.0	107.7	108.4
Aug....	112.0	109.1	108.8	114.1	104.6	108.0	109.4	108.4
Sept....	112.0	109.1	108.8	114.1	104.6	108.0	109.4	108.4
Oct....	117.5	114.0	108.8	114.1	110.6	108.0	112.2	99.0
Nov....	117.5	114.0	108.8	114.1	110.6	108.0	112.2	99.0
Dec....	120.2	116.2	112.2	114.1	113.6	108.0	114.1	99.0
1904....	112.2	109.6	109.1	114.1	102.9	106.2	109.0	114.3

^a Nominal price; see explanation on page 411.

^b Average for 1895-1899=100.

^c Average for 1892-1899=100.

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Cloths and clothing.									
	Underwear.			Women's dress goods.						
	Shirts and drawers, white, all wool, etc.	Shirts and drawers, white, merino, wool and cotton.	Average.	Alpaca, cotton warp, 22-inch, Hamilton.	Cashmere, all wool, 10-11 twill, 38-inch, Atlantic J.	Cashmere, cotton warp, 9-twill, 4-4, Atlantic F.	Cashmere, cotton warp, 22-inch, Hamilton.	Cashmere, cotton warp, 27-inch, Hamilton.	Franklin sackings, 6-4.	Average.
Jan....	100.4	95.4	97.9	104.6	117.2	112.8	100.3	105.4	110.7	108.5
Feb....	100.4	95.4	97.9	104.6	117.2	112.8	100.3	105.4	110.7	108.5
Mar....	100.4	95.4	97.9	104.6	117.2	112.8	100.3	105.4	110.7	108.5
Apr....	100.4	95.4	97.9	104.6	117.2	112.8	100.3	105.4	110.7	108.5
May....	100.4	95.4	97.9	104.6	117.2	112.8	100.3	105.4	110.7	108.5
June....	100.4	95.4	97.9	111.8	117.2	112.8	100.3	111.0	110.7	110.6
July....	100.4	95.4	97.9	111.8	117.2	114.5	109.9	111.0	110.7	112.5
Aug....	100.4	95.4	97.9	111.8	117.2	114.5	109.9	111.0	110.7	112.5
Sept....	100.4	95.4	97.9	122.5	117.2	114.5	109.9	116.5	115.3	116.0
Oct....	100.4	95.4	97.9	122.5	117.2	114.5	116.4	116.5	115.3	117.1
Nov....	100.4	95.4	97.9	122.5	119.8	119.3	116.4	116.5	119.9	119.1
Dec....	100.4	95.4	97.9	122.5	119.8	119.3	116.4	116.5	124.5	119.8
1904....	100.4	95.4	97.9	112.4	117.7	114.5	106.7	110.5	113.4	112.5

Month.	Cloths and clothing.						
	Wool.			Worsted yarns.			Average, cloths and clothing.
	Ohio, fine fleece (X and XX grade), scoured.	Ohio, medium fleece (1 and 1 1/2 grade), scoured.	Average.	2-40s, Australian fine.	2-40s, XXXX, white, in skeins.	Average.	
Jan....	123.2	101.4	112.3	115.4	116.2	115.8	110.4
Feb....	123.2	101.4	112.3	115.4	116.2	115.8	112.1
Mar....	123.2	101.4	112.3	115.4	116.2	115.8	111.9
Apr....	123.2	101.4	112.3	115.4	116.2	115.8	111.7
May....	123.2	103.0	113.1	115.4	114.2	114.8	110.9
June....	123.2	104.6	113.9	115.4	114.2	114.8	110.5
July....	123.2	106.3	114.8	115.4	114.2	114.8	108.8
Aug....	123.2	109.6	116.4	115.4	114.2	114.8	108.6
Sept....	125.1	109.6	117.4	115.4	114.2	114.8	108.4
Oct....	125.1	109.6	117.4	117.8	120.1	119.0	108.4
Nov....	125.1	114.5	119.8	120.3	120.1	120.2	108.3
Dec....	128.9	117.7	123.3	122.8	120.1	121.5	108.6
1904....	124.2	106.7	115.5	116.6	116.3	116.5	109.8

Month.	Fuel and lighting.											
	Candles: ada- man- tine, 6s, 14- ounce.	Coal.										
		Anthracite.					Bituminous.					Average.
		Broken.	Chest- nut.	Egg.	Stove.	Average.	Georges Creek (at mine).	Georges Creek (f.o.b. New York Harbor).	Pitts- burg (Yough- ioghe- ny).	Average.		
Jan....	115.1	127.7	137.9	138.4	130.7	133.7	253.2	125.8	140.0	173.0	150.5	
Feb....	115.1	129.4	137.8	137.8	130.6	133.9	241.9	122.1	140.0	168.0	148.5	
Mar....	115.1	126.7	137.7	137.9	130.5	133.2	236.8	116.7	140.0	164.3	146.5	
Apr....	115.1	124.7	123.8	123.8	117.3	122.4	191.3	114.8	134.2	146.8	132.8	
May....	115.1	126.1	126.4	126.4	119.7	124.7	180.0	114.8	132.2	142.3	132.2	
June....	115.1	125.3	129.0	128.9	122.2	126.4	180.0	114.8	132.2	142.3	133.2	
July....	115.1	125.6	132.1	131.9	125.1	128.7	180.0	114.8	132.2	142.3	134.5	
Aug....	115.1	125.4	134.9	134.9	127.7	130.7	180.0	114.8	132.2	142.3	135.7	
Sept....	115.1	124.9	137.7	137.3	130.2	132.5	180.0	114.8	124.4	139.7	135.6	
Oct....	115.1	126.3	137.8	137.7	130.5	133.1	180.0	114.8	124.4	139.7	135.9	
Nov....	115.1	126.1	137.7	137.8	130.5	133.0	180.0	114.8	124.4	139.7	135.9	
Dec....	115.1	125.6	137.7	137.8	130.5	132.9	180.0	114.8	140.0	144.9	138.1	
1904....	115.1	126.1	134.2	134.2	127.1	130.4	196.9	116.5	132.5	148.6	138.2	

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Fuel and lighting.							
	Coke: Connellsville, furnace.	Matches: parlor, do- mestic.	Petroleum.					Average, fuel and lighting.
			Crude.	Refined.			Average.	
				For export.	150° fire test, w. w.	Average.		
Jan....	100.1	85.4	208.3	140.2	168.5	154.4	170.7	143.6
Feb....	96.7	85.4	200.0	140.2	168.5	154.4	169.6	141.9
Mar....	95.7	85.4	189.0	134.8	157.3	146.1	160.4	138.7
Apr....	97.2	85.4	181.7	131.0	157.3	144.2	156.7	130.6
May....	91.3	85.4	178.0	125.6	157.3	141.5	158.6	129.1
June....	92.7	85.4	174.3	125.6	157.3	141.5	152.4	129.4
July....	83.9	85.4	167.0	122.5	146.1	134.3	145.2	127.8
Aug....	86.9	85.4	164.8	118.6	146.1	132.4	143.2	128.2
Sept....	88.3	85.4	168.8	121.0	146.1	133.6	145.3	128.8
Oct....	86.9	85.4	171.4	122.5	146.1	134.4	146.7	129.1
Nov....	106.0	85.4	174.4	122.5	146.1	134.4	147.7	130.8
Dec....	132.5	85.4	172.5	122.5	146.1	134.4	147.0	133.9
1904....	96.4	85.4	178.8	127.3	153.6	140.6	158.2	132.6

Month.	Metals and implements.											
	Bar iron: best refined.			Barb wire: galvan-ized.	Builders' hardware.				Copper.			
	From mill (Pitts-burg mar-ket).	From store (Phila-delphia mar-ket).	Aver-age.		Butts: loose joint, cast, 3 x 3 in.	Door-knobs: steel, bronze plated.	Locks: com-mon mor-tise.	Average.	Ingot, lake.	Sheet, hot-rolled (base sizes).	Wire, bare.	Average.
Jan.....	89.7	104.3	97.0	104.5	126.6	132.6	110.2	123.1	101.8	108.5	94.8	101.7
Feb.....	90.3	104.3	97.3	104.9	126.6	147.3	128.5	134.1	101.3	108.5	93.1	101.0
Mar.....	95.2	104.3	99.8	106.5	126.6	147.3	128.5	134.1	102.4	108.5	94.8	101.9
Apr.....	103.4	104.3	108.9	106.9	126.6	147.3	128.5	134.1	107.4	108.5	99.0	105.0
May.....	103.4	104.3	108.9	106.9	126.6	147.3	128.5	134.1	109.4	108.5	98.2	105.4
June.....	103.4	104.3	108.9	106.1	126.6	147.3	128.5	134.1	105.8	108.5	94.8	103.0
July.....	103.4	104.3	108.9	104.9	126.6	147.3	128.5	134.1	103.3	108.5	94.8	102.2
Aug.....	103.4	104.3	108.9	96.0	126.6	147.3	128.5	134.1	102.4	108.5	94.8	101.9
Sept.....	103.4	104.3	108.9	87.1	126.6	147.3	128.5	134.1	102.8	108.5	94.8	102.0
Oct.....	103.4	104.3	108.9	87.1	126.6	147.3	128.5	134.1	104.9	108.5	99.0	104.1
Nov.....	104.8	104.3	104.6	88.1	126.6	147.3	128.5	134.1	111.9	108.5	109.3	109.9
Dec.....	121.4	110.4	115.9	92.2	126.6	132.6	110.2	123.1	121.6	108.5	111.0	113.7
1904.....	102.1	104.9	108.5	99.3	126.6	144.8	125.5	132.3	106.2	108.5	98.2	104.3

Month.	Metals and implements.									
	Lead: pig.	Lead pipe.	Nails.			Pig iron.				
			Cut, 8-penny, fence and com- mon.	Wire, 8-penny, fence and com- mon.	Aver- age.	Besse- mer.	Foundry No. 1.	Foundry No. 2.	Gray forge, South- ern, coke.	Aver- age.
Jan....	114.2	96.9	109.4	90.2	99.8	100.9	104.7	106.1	99.2	102.7
Feb....	115.5	98.4	98.5	92.5	95.5	99.1	104.7	102.3	101.5	101.9
Mar....	121.5	99.0	98.5	92.5	95.5	101.8	104.4	101.5	98.1	101.5
Apr....	121.5	100.0	101.2	92.5	96.9	103.0	106.4	108.0	104.8	105.6
May....	121.5	100.9	101.2	92.5	96.9	98.7	104.0	101.9	104.8	102.4
June....	115.0	98.6	101.2	92.5	96.9	93.0	102.6	100.0	98.1	98.4
July....	112.9	96.3	101.2	92.5	96.9	90.4	100.9	96.5	98.1	96.5
Aug....	111.0	94.6	101.2	92.5	96.9	92.6	101.3	98.4	100.3	98.2
Sept....	111.5	98.2	94.4	78.6	86.5	92.1	101.3	97.5	100.3	97.8
Oct....	111.5	95.5	94.4	78.6	86.5	95.1	102.1	98.4	100.3	99.0
Nov....	116.3	107.9	94.4	78.6	86.5	110.0	110.8	112.8	125.1	114.7
Dec....	122.0	107.9	98.5	84.4	91.5	121.4	119.0	129.1	133.0	125.6
1904....	116.3	99.5	99.5	88.2	93.9	99.8	105.2	104.4	105.3	103.7

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Metals and implements.							Tin plates: domestic, Bessemer, coke, 14 x 20 in. ^(b)
	Quick-silver.	Silver: bar, fine.	Spelter: Western.	Steel billets.	Steel rails.	Steel sheets: black, No. 27. ^(a)	Tin: pig.	
Jan....	110.9	76.9	112.8	106.8	107.4	99.6	158.0	111.0
Feb....	110.0	77.9	109.5	106.8	107.4	97.3	151.1	106.6
Mar....	110.9	76.6	112.8	106.8	107.4	98.2	153.6	106.6
Apr....	110.9	73.1	116.8	106.8	107.4	97.3	155.2	106.6
May....	110.9	74.8	115.7	106.8	107.4	95.1	152.7	106.6
June....	109.1	75.1	109.3	106.8	107.4	95.1	147.1	106.6
July....	109.1	78.4	108.4	106.8	107.4	90.6	140.0	106.6
Aug....	101.0	78.1	108.4	106.8	107.4	89.3	147.6	102.2
Sept....	100.1	77.0	111.9	98.7	107.4	89.3	150.5	102.2
Oct....	98.3	78.2	113.9	90.6	107.4	89.3	154.6	102.2
Nov....	96.5	78.9	119.0	94.8	107.4	89.3	159.9	102.2
Dec....	98.3	81.7	123.5	97.6	107.4	93.8	159.0	106.6
1904....	105.5	77.2	113.9	103.0	107.4	93.8	152.5	105.5

Month.	Metals and implements.							
	Tools.							Saws.
	Augers: extra, 4-inch.	Axes: M. C. O., Yankee.	Chisels: extra, socket firmer, 1-inch.	Files: 8-inch mill bastard.	Hammers: Maydole No. 14.	Planes: Bailey No. 5.	Crosscut, Disston.	
Jan....	149.3	106.5	158.4	123.1	129.0	115.7	100.0	98.6
Feb....	149.3	106.5	158.4	123.1	129.0	115.7	100.0	98.6
Mar....	149.3	106.5	158.4	123.1	129.0	115.7	100.0	98.6
Apr....	149.3	128.9	158.4	123.1	129.0	115.7	100.0	98.6
May....	149.3	128.9	158.4	122.0	129.0	115.7	100.0	98.6
June....	149.3	128.9	158.4	122.0	129.0	115.7	100.0	98.6
July....	149.3	128.9	158.4	122.0	129.0	115.7	100.0	98.6
Aug....	149.3	128.9	158.4	122.0	129.0	115.7	100.0	98.6
Sept....	149.3	128.9	158.4	122.0	129.0	115.7	100.0	98.6
Oct....	149.3	128.9	158.4	120.8	129.0	115.7	100.0	98.6
Nov....	149.3	128.9	158.4	120.8	129.0	115.7	100.0	98.6
Dec....	149.3	128.9	158.4	120.8	129.0	115.7	100.0	98.6
1904....	149.3	123.3	158.4	122.0	129.0	115.7	100.0	98.6

Month.	Metals and implements.						
	Tools.				Wood screws: 1-inch, No. 10, flat head.	Zinc: sheet.	Average, metals and implements.
	Shovels: Ames No. 2.	Trowels: M. C. O., brick, 10 1/4-inch.	Vises: solid box, 50-pound.	Average.			
Jan....	102.0	100.0	117.9	118.2	62.6	97.3	108.9
Feb....	96.9	100.0	117.9	117.8	62.6	99.6	109.0
Mar....	96.9	100.0	117.9	117.8	62.6	102.2	109.6
Apr....	96.9	100.0	106.1	118.7	62.6	105.6	111.0
May....	96.9	100.0	106.1	118.6	62.6	107.3	110.6
June....	96.9	100.0	106.1	118.6	62.6	103.9	109.3
July....	96.9	100.0	106.1	118.6	62.6	102.2	108.6
Aug....	96.9	100.0	106.1	118.6	62.6	103.9	108.3
Sept....	96.9	100.0	106.1	118.6	62.6	105.6	107.6
Oct....	96.9	100.0	106.1	118.5	62.6	107.3	107.7
Nov....	96.9	100.0	106.1	118.5	62.6	110.9	110.8
Dec....	96.9	100.0	106.1	118.5	62.6	121.3	113.4
1904....	97.3	100.0	109.1	118.4	62.6	105.6	109.6

^a Average for the period July, 1894, to December, 1899=100.

^b Average for 1896-1899=100.

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Lumber and building materials.							
	Brick: common domestic.	Carbonate of lead: American, in oil.	Cement.			Doors: pine.	Lime: common.	Linseed oil: raw.
			Portland, domestic. ^a	Rosendale.	Average.			
Jan....	148.3	101.9	87.7	95.8	91.8	148.2	97.2	81.6
Feb....	148.3	101.9	76.4	93.0	84.7	148.2	97.2	92.6
Mar....	139.3	101.9	76.4	98.6	87.5	148.2	97.2	92.6
Apr....	114.6	101.9	76.4	98.6	87.5	148.2	97.2	92.6
May....	116.9	101.9	75.1	95.8	85.5	148.2	97.2	92.6
June...	131.5	106.2	75.1	95.8	85.5	181.2	97.2	88.2
July....	132.6	106.2	75.1	93.0	84.1	181.2	97.2	86.0
Aug....	137.1	106.2	72.6	90.2	81.4	181.2	103.2	99.2
Sept....	137.1	106.2	66.4	84.5	75.5	142.7	103.2	99.2
Oct....	137.1	101.9	65.1	81.7	73.4	142.7	99.0	94.8
Nov....	137.1	101.9	65.1	78.9	72.0	142.7	97.2	90.4
Dec....	137.1	106.2	66.4	78.9	72.7	142.7	104.4	90.4
1904....	134.7	103.6	73.2	90.4	81.8	154.6	99.0	91.7

Month.	Lumber and building materials.								
	Lumber.								
	Hem- lock.	Maple: hard.	Oak: white.			Pine.			
			Plain.	Quar- tered.	Aver- age.	White, boards.			Yellow.
						No. 2 barn.	Uppers.	Aver- age.	
Jan....	142.1	117.0	124.2	153.7	139.0	134.4	176.1	155.3	113.7
Feb....	142.1	117.0	124.2	153.7	139.0	134.4	176.1	155.3	113.7
Mar....	142.1	117.0	124.2	153.7	139.0	134.4	176.1	155.3	113.7
Apr....	142.1	117.0	124.2	153.7	139.0	134.4	176.1	155.3	113.7
May....	142.1	117.0	124.2	153.7	139.0	134.4	176.1	155.3	113.7
June...	142.1	117.0	124.2	153.7	139.0	134.4	176.1	155.3	113.7
July....	142.1	117.0	124.2	153.7	139.0	134.4	171.8	153.1	113.7
Aug....	142.1	117.0	124.2	144.4	134.3	134.4	171.8	153.1	119.1
Sept....	142.1	117.0	124.2	144.4	134.3	134.4	171.8	153.1	119.1
Oct....	142.1	117.0	124.2	144.4	134.3	134.4	171.8	153.1	119.1
Nov....	142.1	117.0	124.2	144.4	134.3	134.4	171.8	153.1	119.1
Dec....	142.1	117.0	124.2	151.8	138.0	134.4	171.8	153.1	119.1
1904....	142.1	117.0	124.2	150.4	137.3	134.4	174.0	154.2	116.0

Month.	Lumber and building materials.								
	Lumber.			Oxide of zinc.	Plate glass: polished, un- silvered.			Putty.	Resin: good, strained.
	Poplar.	Spruce.	Average.		Area, 3 to 5 square feet.	Area, 5 to 10 square feet.	Average.		
Jan....	165.0	142.9	141.0	115.8	66.1	75.1	70.6	71.5	178.8
Feb....	165.0	142.9	141.0	115.8	66.1	75.1	70.6	71.5	206.6
Mar....	165.0	142.9	141.0	115.8	66.1	75.1	70.6	71.5	187.5
Apr....	165.0	142.9	141.0	115.8	63.4	71.3	67.4	71.5	194.5
May....	165.0	142.9	141.0	115.8	63.4	71.3	67.4	71.5	197.9
June...	165.0	142.9	141.0	115.8	63.4	71.3	67.4	71.5	211.8
July....	158.6	142.9	139.8	115.8	62.0	69.4	65.7	71.5	208.3
Aug....	154.6	142.9	138.9	115.8	62.0	69.4	65.7	71.5	184.0
Sept....	154.6	142.9	138.9	115.8	62.0	69.4	65.7	71.5	187.5
Oct....	154.6	142.9	138.9	115.8	59.2	65.5	62.4	63.3	194.5
Nov....	154.6	142.9	138.9	115.8	59.2	65.5	62.4	63.3	204.9
Dec....	154.6	142.9	139.8	115.8	59.2	65.5	62.4	66.5	204.9
1904....	160.5	142.9	140.2	115.8	62.7	70.3	66.5	69.6	196.8

^a Average for 1895-1899=100.

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	Lumber and building materials.								
	Shingles.			Tar.	Turpen- tine: spirits of.	Window glass: American, single.			Average, lumber and building mate- rials.
	Cypress.	White pine.	Average.			Firsts, 6 x 8 to 10 x 15 inch.	Thirds, 6 x 8 to 10 x 15 inch.	Average.	
Jan....	92.2	125.1	108.7	132.8	178.7	138.0	133.6	135.8	123.6
Feb....	92.2	125.1	108.7	116.2	192.9	138.0	133.6	135.8	124.4
Mar....	92.2	125.1	108.7	120.4	187.0	138.0	133.6	135.8	123.5
Apr....	92.2	125.1	108.7	157.7	176.5	138.0	133.6	135.8	123.6
May....	92.2	125.1	108.7	166.0	173.5	138.0	133.6	135.8	123.9
June....	92.2	125.1	108.7	149.4	171.6	138.0	133.6	135.8	125.5
July....	92.2	120.0	106.1	149.4	169.0	138.0	133.6	135.8	124.4
Aug....	92.2	120.0	106.1	141.1	169.8	138.0	133.6	135.8	123.6
Sept....	92.2	120.0	106.1	132.8	167.5	126.4	116.8	121.6	120.4
Oct....	92.2	120.0	106.1	132.8	167.5	126.4	116.8	121.6	119.5
Nov....	92.2	120.0	106.1	132.8	163.0	126.4	116.8	121.6	119.4
Dec....	92.2	120.0	106.1	141.1	149.6	126.4	116.8	121.6	120.1
1904....	92.2	122.5	107.4	139.4	172.2	134.2	128.0	131.1	122.7

Month.	Drugs and chemicals.									Average, drugs and chemicals.
	Alcohol: grain, 94 percent.	Alcohol: wood, re- fined, 95 per cent.	Alum: lump.	Brim- stone: crude, seconds.	Glycer- in: re- fined.	Muriatic acid: 20°.	Opium: natural, in cases.	Quinine: Ameri- can.	Sulphur- ic acid: 66°.	
Jan....	108.9	57.7	104.8	106.3	101.9	153.8	123.9	101.6	146.1	111.7
Feb....	108.9	57.7	104.8	107.5	101.9	153.8	123.9	89.4	146.1	110.4
Mar....	108.8	57.7	104.8	106.3	101.9	153.8	121.8	93.5	146.1	110.6
Apr....	109.4	62.9	104.8	106.3	101.9	153.8	119.7	101.6	146.1	111.8
May....	109.4	62.9	104.8	106.3	101.9	153.8	115.5	109.8	146.1	112.3
June....	109.4	62.9	104.8	107.5	101.9	153.8	111.2	97.6	146.1	110.6
July....	109.4	62.9	104.8	105.1	101.9	153.8	111.2	93.5	146.1	109.9
Aug....	109.4	62.9	104.8	104.6	98.3	153.8	113.8	93.5	146.1	109.6
Sept....	107.1	62.9	104.8	104.4	98.3	153.8	113.8	85.4	146.1	108.5
Oct....	107.1	62.9	104.8	103.4	98.3	153.8	112.3	85.4	146.1	108.2
Nov....	107.1	62.9	104.8	101.0	94.7	153.8	116.5	93.5	134.8	107.7
Dec....	107.1	62.9	104.8	103.9	94.7	153.8	115.5	93.5	146.1	109.1
1904....	108.6	61.6	104.8	105.2	99.8	153.8	116.5	94.8	144.9	110.0

Month.	House furnishing goods.								
	Earthenware.				Furniture.				
	Plates, cream- colored.	Plates, white granite.	Teacups and saucers, white granite.	Average.	Bedroom sets, ash.	Chairs, bedroom, maple.	Chairs, kitchen.	Tables, kitchen.	Average.
Jan....	113.8	110.4	106.4	110.2	116.1	129.1	130.7	108.1	121.0
Feb....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
Mar....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
Apr....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
May....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
June ..	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
July....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
Aug....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
Sept....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
Oct....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
Nov....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
Dec....	113.8	110.4	106.4	110.2	116.1	129.1	124.2	108.1	119.4
1904....	113.8	110.4	106.4	110.2	116.1	129.1	124.7	108.1	119.5

TABLE III.—RELATIVE PRICES OF COMMODITIES IN 1904—Concluded.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I. Relative price for 1904 computed from average price for the year as shown in Table I.]

Month.	House furnishing goods.										
	Glassware.				Table cutlery.			Wooden ware.			Average, house furnishing goods.
	Nap-pies, 4-inch.	Pitch-ers, 1-gallon, com-mon.	Tum-blers, 1-pint, com-mon.	Aver-age.	Carvers, stag handles.	Knives and forks, cocobolo handles.	Aver-age.	Pails, oak-grain-ed.	Tubs, oak-grain-ed.	Aver-age.	
Jan.....	125.0	97.9	90.1	104.3	93.8	107.3	100.6	130.9	107.6	119.3	111.9
Feb.....	125.0	97.9	90.1	104.3	93.8	107.3	100.6	130.9	107.6	119.3	111.5
Mar.....	125.0	97.9	90.1	104.3	93.8	107.3	100.6	130.9	107.6	119.3	111.5
Apr.....	125.0	97.9	90.1	104.3	93.8	107.3	100.6	130.9	107.6	119.3	111.5
May.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
June.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
July.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
Aug.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
Sept.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
Oct.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
Nov.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
Dec.....	125.0	97.9	90.1	104.3	93.8	111.4	102.6	130.9	107.6	119.3	111.8
1904.....	125.0	97.9	90.1	104.3	93.8	110.0	101.9	130.9	107.6	119.3	111.7

Month.	Miscellaneous.							
	Cotton-seed meal.	Cotton-seed oil: summer yellow, prime.	Jute: raw.	Malt: Western made.	Paper.			Proof spirits.
					News.	Wrapping, manila.	Average.	
Jan	123.4	118.3	118.4	100.3	83.6	96.0	89.8	110.4
Feb.....	121.1	124.8	118.4	100.3	83.6	96.0	89.8	110.4
Mar.....	122.9	126.5	125.3	100.3	83.6	96.0	89.8	110.4
Apr.....	121.1	115.8	125.3	100.3	88.6	96.0	89.8	111.3
May.....	118.4	97.7	125.3	100.3	92.0	96.0	94.0	111.3
June.....	115.4	93.6	125.3	100.3	92.0	96.0	94.0	111.3
July.....	115.4	101.8	125.3	97.5	92.0	96.0	94.0	111.3
Aug.....	118.8	92.0	125.3	93.2	92.0	96.0	94.0	111.3
Sept.....	118.8	96.9	125.3	93.2	92.0	96.0	94.0	111.0
Oct.....	118.8	97.7	125.3	90.3	92.0	94.9	93.5	109.5
Nov.....	118.8	89.5	118.4	88.9	92.0	94.9	93.5	107.8
Dec.....	118.4	81.3	125.3	88.9	92.0	94.9	93.5	107.8
1904.....	119.3	103.0	123.7	96.1	89.3	95.8	92.6	110.4

Month.	Miscellaneous.							
	Rope: ma-nila.	Rubber: Para Island.	Soap: cas-tile, mot-tled, pure.	Starch: laundry.	Tobacco.			Average, miscella-neous.
					Plug, Horseshoe.	Smoking, gran., Seal of N. C.	Average.	
Jan....	123.1	113.7	112.1	107.8	113.6	112.0	112.8	110.2
Feb....	123.1	123.0	112.1	107.8	113.6	112.0	112.8	111.2
Mar....	128.5	123.0	112.1	107.8	113.6	112.0	112.8	112.9
Apr....	128.5	136.1	112.1	107.8	113.6	112.0	112.8	112.6
May....	128.5	135.5	112.1	122.1	113.6	112.0	112.8	112.7
June....	120.4	136.8	112.1	122.1	113.6	112.0	112.8	111.6
July....	123.1	135.5	112.1	122.1	123.7	112.0	117.9	112.9
Aug....	123.1	144.2	112.1	100.6	123.7	117.9	120.8	111.6
Sept....	123.1	141.8	112.1	93.4	123.7	117.9	120.8	111.2
Oct....	123.1	136.8	127.4	93.4	123.7	117.9	120.8	111.6
Nov....	125.8	140.5	114.2	93.4	123.7	117.9	120.8	109.7
Dec....	133.8	158.0	114.2	93.4	123.7	117.9	120.8	111.5
1904....	125.4	135.8	113.7	106.0	118.6	114.4	116.5	111.7

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904.

[For a more detailed description of the articles, see Table I.]

Year.	Farm products.									
	Barley: by sample.		Cattle: steers, choice to extra.		Cattle: steers, good to choice.		Corn: No. 2, cash.		Cotton: upland, middling.	
	Average price per bushel.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per bushel.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$0.4584	100.0	\$5.3203	100.0	\$4.7347	100.0	\$0.3804	100.0	\$0.07762	100.0
1890.....	.5062	111.6	4.8697	91.5	4.1375	87.4	.3950	103.8	.11089	142.9
1891.....	.6068	134.5	5.8851	110.6	5.0976	107.7	.5744	151.0	.08608	110.8
1892.....	.5085	112.2	5.0909	95.7	4.4986	95.0	.4500	118.3	.07686	99.0
1893.....	.4688	108.3	5.5211	108.8	4.8394	102.2	.3964	104.2	.08819	107.2
1894.....	.5134	113.2	5.1591	97.0	4.5245	95.6	.4326	113.7	.07002	90.2
1895.....	.4800	94.8	5.4849	108.1	4.9344	104.2	.3955	104.0	.07298	94.0
1896.....	.2977	65.7	4.6857	86.4	4.2712	90.2	.2580	67.8	.07918	102.0
1897.....	.3226	71.2	5.2256	98.2	4.7736	100.8	.2546	66.9	.07158	92.2
1898.....	.4943	95.9	5.3779	101.1	4.8846	106.2	.3144	82.6	.06972	76.9
1899.....	.4425	97.6	5.9928	112.6	5.8851	113.7	.3333	87.6	.06578	84.7
1900.....	.4815	106.2	5.7827	108.7	5.8983	113.9	.3811	100.2	.09609	123.8
1901.....	.5884	129.8	6.1217	115.1	5.5601	118.1	.4969	130.6	.08627	111.1
1902.....	.6321	139.4	7.4721	140.4	6.5572	138.5	.5968	156.9	.08982	115.1
1903.....	.5494	121.2	5.5678	104.7	5.0615	106.9	.4606	121.1	.11235	144.7
1904.....	.5300	116.9	5.9562	112.0	5.1923	109.7	.5046	132.6	.12100	155.9

Year.	Flaxseed: No. 1.		Hay: timothy, No. 1.		Hides: green, salted, packers, heavy native steers.		Hogs: heavy.		Hogs: light.	
	Average price per bushel.	Relative price.	Average price per ton.	Relative price.	Average price per pound.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per 100 lbs.	Relative price.
	Average price per bushel.	Relative price.	Average price per ton.	Relative price.	Average price per pound.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per 100 lbs.	Relative price.
Average, 1890-1899..	\$1.1132	100.0	\$10.4304	100.0	\$0.0987	100.0	\$4.4123	100.0	\$4.4206	100.0
1890.....	1.3967	125.5	9.9952	95.8	.0983	99.6	3.9534	89.6	3.9280	88.8
1891.....	1.0806	97.1	12.2861	117.8	.0951	101.5	4.4229	100.2	4.3404	98.2
1892.....	1.0179	91.4	11.8376	113.6	.0870	92.8	5.1550	116.8	5.0675	114.6
1893.....	1.0875	97.7	11.2067	107.4	.0749	79.9	6.5486	148.4	6.5752	148.7
1894.....	1.3533	121.6	10.4183	99.9	.0641	68.4	4.9719	112.7	4.9827	111.6
1895.....	1.2449	111.8	11.3844	109.1	.1023	103.7	4.2781	97.0	4.2583	96.2
1896.....	.8119	72.9	10.3269	99.0	.0811	86.6	3.3579	76.1	3.5591	80.6
1897.....	.8696	78.1	8.4423	80.9	.0996	106.3	3.5906	81.4	3.7223	84.2
1898.....	1.1116	99.8	8.3317	79.9	.1151	122.8	3.8053	86.2	3.7587	85.0
1899.....	1.1578	104.0	10.0745	96.6	.1285	131.8	4.0894	91.5	4.0709	92.1
1900.....	1.6223	145.7	11.5673	110.9	.1194	127.4	5.0815	115.2	5.1185	115.7
1901.....	1.6227	145.8	12.8255	123.0	.1287	132.0	5.9580	135.0	5.9177	138.9
1902.....	1.5027	135.0	12.6154	120.9	.1335	142.8	6.9704	158.0	6.7553	152.4
1903.....	1.0471	94.1	12.4279	119.2	.1169	124.8	6.0672	137.3	6.0541	137.0
1904.....	1.1083	99.6	11.7308	112.5	.1166	124.4	5.1550	116.8	5.1481	116.5

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Farm products.									
	Hops: N. Y. State, choice.		Oats: cash.		Rye No. 2, cash.		Sheep: native.		Sheep: Western.	
	Average price per pound.	Relative price.	Average price per bushel.	Relative price.	Average price per bushel.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per 100 lbs.	Relative price.
Average, 1890-1899...	\$0.1771	100.0	\$0.2688	100.0	\$0.5288	100.0	\$3.7580	100.0	\$3.9541	100.0
1890.....	.2621	148.0	.3106	115.6	.5447	103.0	4.5284	120.5	4.6644	118.0
1891.....	.2640	149.1	.3873	144.1	.3834	157.6	4.5106	120.0	4.5719	115.6
1892.....	.2505	141.4	.3042	113.2	.6751	127.7	4.7798	127.2	4.8695	123.2
1893.....	.2271	128.2	.2827	105.2	.4899	92.6	3.8781	103.2	4.1255	104.3
1894.....	.1515	85.5	.3110	115.7	.4660	88.1	2.6957	71.7	2.9808	75.4
1895.....	.0940	53.1	.2373	88.3	.4825	91.2	2.9495	78.5	3.0943	78.3
1896.....	.0877	49.5	.1801	67.0	.3517	66.5	2.9322	78.0	3.1411	79.4
1897.....	.1160	65.5	.1825	67.9	.3962	74.9	3.4971	98.1	3.7692	95.3
1898.....	.1621	91.5	.2470	91.9	.4958	93.8	3.9250	104.4	4.1625	105.3
1899.....	.1563	88.3	.2452	91.2	.5521	104.4	3.8837	103.3	4.1615	105.2
1900.....	.1483	83.7	.2271	84.5	.5177	97.9	4.1236	109.7	4.5207	114.8
1901.....	.1719	97.1	.3179	118.3	.5828	100.8	3.3519	89.2	3.7442	94.7
1902.....	.2375	134.1	.3960	147.3	.5418	102.5	3.7817	100.6	4.1784	105.7
1903.....	.2825	159.5	.3541	131.7	.5156	97.5	3.7101	98.7	3.8769	98.0
1904.....	.3475	196.2	.3649	135.8	.7056	133.4	4.1457	110.3	4.2608	107.8

Year.	Farm products.				Food, etc.							
	Wheat: contract, cash.		Beans: medium, choice.		Bread: crackers, Boston X.		Bread: crackers, soda.		Bread: loaf (Wash. market).			
	Average price per bushel.	Relative price.	Average price per bushel.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound. ^a	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899...	\$0.7510	100.0	\$1.6699	100.0	\$0.0673	100.0	\$0.0718	100.0	\$0.0354	100.0		
1890.....	.8983	118.9	2.0292	121.5	.0700	104.0	.0800	111.4	.0356	100.6		
1891.....	.9618	128.1	2.2531	134.9	.0700	104.0	.0800	111.4	.0356	100.6		
1892.....	.7876	104.9	1.8698	112.0	.0683	102.2	.0763	106.3	.0356	100.6		
1893.....	.6770	90.1	1.9906	119.2	.0650	96.6	.0750	104.5	.0356	100.6		
1894.....	.5587	74.4	1.8469	110.6	.0650	96.6	.0725	101.0	.0356	100.6		
1895.....	.6000	79.9	1.7896	107.2	.0654	97.2	.0675	94.0	.0333	94.1		
1896.....	.6413	85.4	1.1740	70.3	.0650	96.6	.0658	91.6	.0363	102.5		
1897.....	.7949	105.8	1.0448	62.6	.0592	88.0	.0592	82.5	.0356	100.6		
1898.....	.8849	117.8	1.2479	74.7	.0733	108.9	.0758	105.6	.0356	100.6		
1899.....	.7109	94.7	1.4531	87.0	.0713	105.9	.0663	92.3	.0356	100.6		
1900.....	.7040	93.7	2.0969	125.6	.0750	111.4	.0675	94.0	.0356	100.6		
1901.....	.7187	95.7	2.1927	131.3	.0800	118.9	.0700	97.5	.0356	100.6		
1902.....	.7414	98.7	1.9198	115.0	.0800	118.9	.0700	97.5	.0356	100.6		
1903.....	.7895	105.1	2.2625	135.5	.0758	112.6	.0646	90.0	.0356	100.6		
1904.....	1.0390	138.3	2.0104	120.4	.0775	115.2	.0658	91.6	.0363	102.5		

Year.	Food, etc.											
	Bread: loaf, homemade (N. Y. market).		Bread: loaf, Vienna (N. Y. market).		Butter: creamery, Elgin (Elgin market).		Butter: creamery, extra (N. Y. market).		Butter: dairy, New York State.			
	Average price per pound. ^a	Relative price.	Average price per pound. ^a	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899...	\$0.0317	100.0	\$0.0352	100.0	\$0.2170	100.0	\$0.2242	100.0	\$0.2024	100.0		
1890.....	.0320	100.9	.0356	101.1	.2238	103.1	.2276	101.5	.1954	96.5		
1891.....	.0320	100.9	.0356	101.1	.2501	115.3	.2586	115.3	.2380	117.6		
1892.....	.0320	100.9	.0356	101.1	.2528	116.5	.2612	116.5	.2350	116.1		
1893.....	.0320	100.9	.0356	101.1	.2581	118.9	.2701	120.5	.2521	124.6		
1894.....	.0320	100.9	.0356	101.1	.2194	101.1	.2288	102.1	.2091	103.3		
1895.....	.0320	100.9	.0356	101.1	.2064	95.1	.2137	95.3	.1832	93.0		
1896.....	.0287	90.5	.0319	90.6	.1793	82.6	.1841	82.1	.1665	82.3		
1897.....	.0320	100.9	.0356	101.1	.1837	84.7	.1895	84.5	.1684	83.2		
1898.....	.0320	100.9	.0356	101.1	.1886	86.9	.1954	87.2	.1749	86.4		
1899.....	.0320	100.9	.0356	101.1	.2075	95.6	.2126	94.8	.1965	97.1		
1900.....	.0320	100.9	.0356	101.1	.2178	100.4	.2245	100.1	.2115	104.5		
1901.....	.0320	100.9	.0356	101.1	.2114	97.4	.2163	96.5	.2007	99.2		
1902.....	.0320	100.9	.0356	101.1	.2413	111.2	.2480	110.6	.2318	114.5		
1903.....	.0320	100.9	.0356	101.1	.2302	106.1	.2348	104.7	.2150	106.2		
1904.....	.0350	110.4	.0370	105.1	.2178	100.4	.2189	97.6	.1970	97.3		

^a Before baking.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Food, etc.									
	Cheese: N. Y. full cream.		Coffee: Rio No. 7.		Eggs: new-laid, fancy, near-by.		Fish: cod, dry, bank, large.		Fish: herring, shore, round.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per dozen.	Relative price.	Average price per quintal.	Relative price.	Average price per barrel.	Relative price.
Average, 1890-1899.	\$0.0987	100.0	\$0.1813	100.0	\$0.1963	100.0	\$5.5849	100.0	\$3.7763	100.0
1890	.0958	97.1	.1793	136.6	.1945	99.1	5.6771	101.7	3.5250	93.3
1891	.1011	102.4	.1671	127.3	.2160	110.0	6.7292	120.5	4.7068	124.6
1892	.1058	107.2	.1430	108.9	.2167	110.4	7.0521	126.3	2.9375	77.8
1893	.1076	109.0	.1723	131.2	.2247	114.5	6.3802	114.2	3.8125	101.0
1894	.1060	107.4	.1654	126.0	.1835	93.5	5.9583	106.7	3.3958	89.9
1895	.0929	94.1	.1592	121.2	.2002	102.0	5.5208	98.9	3.1563	83.6
1896	.0908	92.0	.1233	93.9	.1741	88.7	4.2083	75.4	3.3542	88.8
1897	.0968	98.1	.0793	60.4	.1718	87.5	4.5208	80.9	3.6354	96.3
1898	.0822	83.3	.0633	48.2	.1817	92.6	4.6667	83.6	4.2083	111.4
1899	.1075	108.9	.0604	46.0	.1994	101.6	5.1354	92.0	5.0313	133.2
1900	.1128	114.3	.0822	62.6	.1977	100.7	5.3021	94.9	5.0833	134.6
1901	.1011	102.4	.0646	49.2	.2095	106.7	5.9896	107.2	4.9792	131.9
1902	.1126	114.1	.0586	44.6	.2409	122.7	5.0938	91.2	4.9063	129.9
1903	.1217	123.3	.0559	42.6	.2418	123.2	5.8646	105.0	5.7292	151.7
1904	.1019	103.2	.0782	59.6	.2650	135.0	7.2813	130.4	5.4531	144.4

Year.	Fish: mackerel, salt, large No. 3s.		Fish: salmon, canned.		Flour: buck-wheat.		Flour: rye.		Flour: wheat, spring patents.	
	Average price per barrel.	Relative price.	Average price per 12 cans.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per barrel.	Relative price.	Average price per barrel.	Relative price.
Average, 1890-1899.	\$14.1306	100.0	\$1.4731	100.0	\$1.9428	100.0	\$3.3171	100.0	\$4.2972	100.0
1890	18.2500	129.2	1.6417	111.4	2.0214	104.0	3.3646	101.4	5.1856	120.7
1891	15.3125	108.4	1.5000	101.8	2.4429	125.7	4.9208	148.3	5.3053	123.5
1892	13.0000	92.0	1.4833	100.7	1.7891	92.1	4.0167	121.1	4.3466	101.1
1893	13.0000	92.0	1.4938	101.4	2.3679	121.9	3.0854	93.0	4.0063	93.2
1894	11.0556	78.2	1.4250	96.7	2.4357	125.4	2.7813	83.8	3.5947	83.7
1895	15.6250	110.6	1.5042	102.1	1.6750	86.2	3.1333	94.5	3.6434	84.8
1896	13.9167	98.5	1.5500	105.2	1.3806	71.1	2.6833	80.9	3.7957	88.3
1897	12.2292	86.5	1.3375	90.8	1.4656	75.4	2.8063	84.6	4.5913	106.8
1898	13.6667	96.7	1.2667	86.0	1.5500	79.8	3.0813	92.9	4.7293	110.1
1899	15.2500	107.9	1.5292	103.8	2.3000	118.4	3.2979	99.4	3.7740	87.8
1900	13.8958	98.3	1.7708	120.2	2.1036	108.3	3.4250	103.3	3.8423	89.4
1901	10.8182	76.6	1.7125	116.3	2.1063	108.4	3.3208	100.1	3.8104	88.7
1902	13.7500	97.3	1.6146	109.6	2.2357	115.1	3.4417	103.8	3.8082	88.6
1903	17.4479	123.5	1.6208	110.0	2.3214	119.5	3.1479	94.9	4.3303	100.8
1904	14.5000	102.6	1.7250	117.1	2.3333	120.1	4.3479	131.1	5.3734	125.2

Year.	Flour: wheat, winter straights.		Fruit: apples, evaporated, choice.		Fruit: apples, sun-dried, Southern, sliced.		Fruit: currants, in barrels.		Fruit: prunes, California, in boxes.	
	Average price per barrel.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899.	\$3.8450	100.0	\$0.0847	100.0	\$0.0515	100.0	\$0.0375	100.0	\$0.0774	100.0
1890	4.6524	121.0	.1136	134.1	.0690	134.0	.0478	127.5	.1063	138.0
1891	4.9048	127.6	.1100	129.9	.0825	160.2	.0426	113.6	.1000	129.2
1892	4.1216	107.2	.0688	81.2	.0423	82.1	.0297	79.2	.0995	128.6
1893	3.2832	85.4	.0927	109.4	.0508	98.6	.0270	72.0	.1039	134.2
1894	2.7495	71.5	.1092	128.9	.0631	122.5	.0173	46.1	.0735	95.0
1895	3.2311	84.0	.0678	80.0	.0481	93.4	.0254	67.7	.0666	86.0
1896	3.6197	94.1	.0533	62.9	.0312	60.6	.0327	87.2	.0581	75.1
1897	4.3606	113.4	.0555	65.5	.0267	51.8	.0479	127.7	.0546	70.5
1898	4.1452	107.8	.0890	105.1	.0398	77.3	.0580	154.7	.0544	70.3
1899	3.3822	88.0	.0869	102.6	.0610	118.4	.0470	125.3	.0565	73.0
1900	3.3490	87.1	.0615	72.6	.0443	86.0	.0720	192.0	.0522	67.4
1901	3.3085	86.0	.0709	83.7	.0410	79.6	.0831	221.6	.0525	67.8
1902	3.4885	90.7	.0921	108.7	.0507	98.4	.0494	131.7	.0551	71.2
1903	3.5923	93.4	.0611	72.1	.0432	83.9	.0476	126.9	.0481	62.1
1904	4.8264	125.5	.0603	71.2	.0333	64.7	.0488	130.1	.0461	59.6

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Food, etc.									
	Fruit: raisins, California, London layer.		Glucose: 41° and 42° mixing.		Lard: prime contract.		Meal: corn, fine white.		Meal: corn, fine yellow.	
	Average price per box.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per pound.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per 100 lbs.	Relative price.
Average, 1890-1899...	\$1.5006	100.0	\$1.4182	100.0	\$0.0654	100.0	\$1.0486	100.0	\$1.0169	100.0
1890.....	2.3604	157.3	.....	.....	.0633	96.8	1.0613	101.2	1.0200	100.3
1891.....	1.8021	120.1	.....	.....	.0660	100.9	1.4746	140.6	1.4579	143.4
1892.....	1.4688	97.9	.....	.....	.0771	117.9	1.1921	113.7	1.1608	114.2
1893.....	1.7000	113.3	1.7625	124.3	.1030	157.5	1.1013	105.0	1.0833	106.5
1894.....	1.1542	76.9	1.5802	111.4	.0773	118.2	1.1188	106.7	1.0629	104.5
1895.....	1.4292	95.2	1.5492	109.2	.0658	99.8	1.0721	102.2	1.0613	104.4
1896.....	1.0188	67.9	1.1586	81.7	.0469	71.7	.8129	77.5	.7854	77.2
1897.....	1.3979	93.2	1.2190	86.0	.0441	67.4	.8158	77.8	.7633	75.1
1898.....	1.3917	92.7	1.3021	91.8	.0552	84.4	.8821	84.1	.8463	83.2
1899.....	1.2833	85.5	1.3558	95.6	.0556	85.0	.9554	91.1	.9273	91.2
1900.....	1.5208	101.3	1.4875	104.9	.0690	105.5	1.0115	96.5	.9908	97.4
1901.....	1.4117	96.1	1.6458	116.0	.0885	135.3	1.1979	114.2	1.1875	116.8
1902.....	1.6854	112.3	2.1788	153.6	.1059	161.9	1.5354	146.4	1.5250	150.0
1903.....	1.4458	96.3	1.8396	129.7	.0877	134.1	1.2967	123.7	1.2783	125.7
1904.....	1.4729	98.2	1.7917	126.3	.0731	111.8	1.3396	127.8	1.3333	131.1

Year.	Meat: bacon, short clear sides.		Meat: bacon, short rib sides.		Meat: beef, fresh, native sides.		Meat: beef, salt, extra mess.		Meat: beef, salt, hams, Western.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per barrel.	Relative price.
Average, 1890-1899...	\$0.0675	100.0	\$0.0656	100.0	\$0.0771	100.0	\$8.0166	100.0	\$18.0912	100.0
1890.....	.0603	89.3	.0586	89.3	.0688	89.2	6.9596	86.8	14.5409	80.4
1891.....	.0699	103.6	.0631	103.8	.0819	106.2	8.3654	104.4	15.5144	85.8
1892.....	.0787	116.6	.0764	116.5	.0762	98.8	6.7966	84.8	14.5577	80.5
1893.....	.1048	155.3	.1010	154.0	.0813	105.4	8.1938	102.2	17.8817	98.6
1894.....	.0751	111.3	.0736	112.2	.0748	97.0	8.0933	101.0	13.3558	101.5
1895.....	.0660	96.3	.0632	96.3	.0792	102.7	8.1274	101.4	17.3448	95.9
1896.....	.0494	73.2	.0479	73.0	.0698	90.5	7.5096	98.7	15.9327	88.1
1897.....	.0541	80.1	.0522	79.6	.0769	99.7	7.6755	95.7	22.6250	125.1
1898.....	.0596	88.3	.0594	90.5	.0781	101.3	9.1563	114.2	21.4890	118.8
1899.....	.0583	86.4	.0558	85.1	.0835	108.3	9.2385	115.9	22.7212	125.6
1900.....	.0752	111.4	.0732	111.6	.0804	104.3	9.7588	121.7	20.6587	114.2
1901.....	.0691	132.0	.0669	132.5	.0787	102.1	9.3204	116.3	20.3774	112.6
1902.....	.1073	159.0	.1046	159.5	.0971	125.9	11.7885	147.1	21.3413	118.0
1903.....	.0959	142.1	.0938	143.0	.0784	101.7	9.0673	113.1	21.2115	117.2
1904.....	.0775	114.8	.0757	115.4	.0818	106.1	8.7689	109.4	22.3341	123.5

Year.	Meat: hams, smoked.		Meat: mutton, dressed.		Meat: pork, salt, mess.		Milk: fresh.		Molasses: N. O., open kettle.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per quart.	Relative price.	Average price per gallon.	Relative price.
Average, 1890-1899...	\$0.0984	100.0	\$0.0754	100.0	\$11.6332	100.0	\$0.0255	100.0	\$0.3151	100.0
1890.....	.0995	101.1	.0993	123.7	12.1502	104.4	.0263	103.1	.3542	112.4
1891.....	.0982	99.8	.0866	114.9	11.3029	97.2	.0267	104.7	.2788	88.5
1892.....	.1076	109.3	.0914	121.2	11.5252	99.1	.0268	105.1	.3188	101.2
1893.....	.1249	126.9	.0806	106.5	18.3389	157.6	.0279	109.4	.3346	106.2
1894.....	.1019	103.6	.0805	80.2	14.1262	121.4	.0263	106.1	.3092	98.1
1895.....	.0947	96.2	.0620	82.2	11.8255	101.7	.0253	99.2	.3083	97.8
1896.....	.0943	95.8	.0625	82.9	8.9399	76.8	.0234	91.8	.3246	103.0
1897.....	.0894	90.9	.0728	96.6	8.9087	76.6	.0225	92.2	.2617	83.1
1898.....	.0807	82.0	.0739	98.0	9.8678	84.8	.0239	93.7	.3038	97.8
1899.....	.0923	93.8	.0711	94.3	9.3462	80.3	.0253	99.2	.3525	111.9
1900.....	.1025	104.2	.0727	96.4	12.5072	107.5	.0274	107.5	.4775	151.5
1901.....	.1075	109.2	.0675	89.5	15.6105	134.2	.0262	102.7	.3783	120.1
1902.....	.1211	123.1	.0738	97.9	17.9899	154.2	.0258	112.9	.3683	115.5
1903.....	.1271	129.2	.0744	98.7	16.6514	143.1	.0288	112.9	.3546	112.6
1904.....	.1072	108.9	.0778	103.2	14.0288	120.6	.0275	107.8	.3896	107.8

α Average for 1890-1899.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899); AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Food, etc.									
	Rice: domestic, choice.		Salt: American.		Salt: Ashton's.		Soda: bicarbonate of American.		Spices: nutmegs.	
	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per 224 lb. bag.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$0.0561	100.0	\$0.7044	100.0	\$2.2033	100.0	\$0.0209	100.0	\$0.4322	100.0
1890.....	.0605	107.8	.7921	112.5	2.4646	111.9	.0275	131.6	.6317	146.2
1891.....	.0637	113.5	.7865	111.7	2.3813	108.1	.0317	151.7	.6081	140.7
1892.....	.0569	101.4	.7575	107.5	2.3750	107.8	.0218	104.3	.5319	123.1
1893.....	.0459	81.8	.7019	99.6	2.3250	105.5	.0285	136.4	.4584	106.1
1894.....	.0526	93.8	.7192	102.1	2.2375	101.6	.0263	128.2	.3996	92.5
1895.....	.0538	95.0	.7019	99.6	2.0500	93.0	.0177	84.7	.3969	91.8
1896.....	.0519	92.5	.6226	88.4	2.0500	93.0	.0152	72.7	.3590	83.1
1897.....	.0542	96.6	.6648	94.4	2.0500	93.0	.0150	71.8	.3354	77.6
1898.....	.0608	108.4	.6648	94.4	2.0500	93.0	.0129	61.7	.3140	72.7
1899.....	.0607	108.2	.6365	90.4	2.0500	93.0	.0117	56.0	.2871	66.4
1900.....	.0548	97.7	1.0010	142.1	2.0500	93.0	.0123	58.9	.2601	60.2
1901.....	.0548	97.7	.8567	121.6	2.1813	99.0	.0107	51.2	.2846	54.3
1902.....	.0559	99.6	.6360	90.3	2.2250	101.0	.0103	51.7	.2028	46.9
1903.....	.0566	100.9	.6140	87.2	2.2479	102.0	.0129	61.7	.2877	66.6
1904.....	.0441	78.6	.7704	109.4	(a)	.....	.0130	62.2	.2175	50.3

Year.	Spices: pepper, Singapore.		Starch: pure corn.		Sugar: 89° fair refining.		Sugar: 96° centrifugal.		Sugar: granulated.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$0.0749	100.0	\$0.0548	100.0	\$0.03398	100.0	\$0.03869	100.0	\$0.04727	100.0
1890.....	.1151	153.7	.0546	99.6	.04890	143.9	.05460	141.1	.06168	130.5
1891.....	.0873	116.6	.0600	109.5	.03459	101.8	.03910	101.1	.04714	99.7
1892.....	.0689	92.0	.0600	109.5	.02878	84.5	.03315	85.7	.04354	92.1
1893.....	.0566	79.4	.0600	109.5	.03208	94.3	.03680	95.1	.04836	102.3
1894.....	.0516	68.9	.0567	103.5	.02759	81.2	.03229	83.5	.04111	87.0
1895.....	.0497	66.4	.0554	101.1	.02894	85.2	.03253	84.1	.04155	87.9
1896.....	.0500	66.8	.0513	93.6	.03192	93.9	.03624	93.7	.04532	95.9
1897.....	.0664	88.7	.0500	91.2	.03077	90.6	.03564	92.1	.04497	95.1
1898.....	.0891	119.0	.0500	91.2	.03712	109.2	.04235	109.5	.04974	105.2
1899.....	.1117	149.1	.0500	91.2	.03922	115.4	.04422	114.3	.04924	104.2
1900.....	.1291	172.4	.0500	91.2	.04051	119.2	.04572	118.2	.05332	112.8
1901.....	.1292	172.5	.0470	85.8	.03521	103.6	.04040	104.4	.05048	106.8
1902.....	.1255	167.6	.0440	80.3	.03085	89.3	.03542	91.5	.04455	94.2
1903.....	.1289	172.1	.0507	92.5	.03223	95.0	.03720	96.1	.04641	98.2
1904.....	.1229	164.1	.0525	95.8	.03470	102.1	.03974	102.7	.04772	101.0

Year.	Tallow.		Tea: Formosa, fine.		Vegetables, fresh: onions.		Vegetables, fresh: potatoes, Burbank.		Vinegar: cider, Monarch.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per bushel.	Relative price.	Average price per gallon.	Relative price.
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per bushel.	Relative price.	Average price per gallon.	Relative price.
Average, 1890-1899..	\$0.0435	100.0	\$0.2839	100.0	\$3.3995	100.0	\$0.4991	100.0	\$0.1478	100.0
1890.....	.0460	105.7	.2733	96.3	4.3483	127.8	.5956	119.3	.1558	105.4
1891.....	.0483	111.0	.2817	99.2	4.1250	121.3	.7730	154.9	.1800	121.8
1892.....	.0463	106.4	.3008	106.0	3.6042	106.0	.4546	91.1	.1642	111.1
1893.....	.0544	125.1	.2888	101.7	3.1875	93.8	.6714	134.5	.1500	101.5
1894.....	.0480	110.3	.2783	98.0	3.2500	95.6	.6128	122.3	.1500	101.5
1895.....	.0484	99.8	.2700	95.1	3.1146	91.6	.4326	86.7	.1450	98.1
1896.....	.0343	78.9	.2583	91.0	1.9479	57.3	.1965	39.4	.1300	88.0
1897.....	.0332	76.3	.2800	98.6	3.9271	115.5	.3279	65.7	.1300	88.0
1898.....	.0356	81.8	.2968	104.2	3.2708	96.2	.6094	102.1	.1325	89.6
1899.....	.0453	104.1	.3117	109.8	3.2238	94.8	.4172	83.6	.1400	94.7
1900.....	.0485	111.5	.2977	104.9	2.4271	71.4	.3736	74.9	.1350	91.3
1901.....	.0518	119.1	.2850	100.4	3.5000	103.0	.5642	113.0	.1325	89.6
1902.....	.0629	144.6	.3015	106.2	3.6453	107.2	.5968	119.4	.1408	95.3
1903.....	.0510	117.2	.2296	80.9	3.5675	104.9	.5249	105.2	.1300	88.0
1904.....	.0459	105.5	.2758	97.1	3.5563	104.6	.7301	146.3	.1325	89.6

(a) Quotations discontinued.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles see, Table I.]

Year.	Cloths and clothing.									
	Bags: 2-bushel, Amoskeag.		Blankets: 11-4, 5 pounds to the pair, all wool.		Blankets: 11-4, 5 pounds to the pair, cotton warp, all wool filling.		Blankets: 11-4, 5 pounds to the pair, cotton warp, cotton and wool filling.		Boots and shoes: men's brogans, split.	
	Average price per bag.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pair.	Relative price.
Average, 1890-1899..	\$0.1899	100.0	\$0.840	100.0	\$0.613	100.0	\$0.424	100.0	\$0.9894	100.0
1890	.1594	113.9	.910	108.3	.650	106.0	.460	108.5	1.0500	106.1
1891	.1563	111.7	.890	106.0	.650	106.0	.460	108.5	1.0500	106.1
1892	.1550	110.8	.900	107.1	.640	104.4	.430	101.4	1.0375	104.9
1893	.1494	106.8	.900	107.1	.640	104.4	.420	99.1	1.0125	102.3
1894	.1275	91.1	.850	101.2	.550	89.7	.410	96.7	.9688	97.9
1895	.1150	82.2	.750	89.3	.540	88.1	.400	94.3	.9813	99.2
1896	.1281	91.6	.750	89.3	.560	91.4	.400	94.3	.9938	100.4
1897	.1300	92.9	.750	89.3	.650	106.0	.420	99.1	.9500	96.0
1898	.1338	95.6	.900	107.1	.625	102.0	.420	99.1	.9125	92.2
1899	.1446	103.4	.800	95.2	.625	102.0	.420	99.1	.9375	94.8
1900	.1575	112.6	.900	107.1	.750	122.3	.525	123.8	.9375	94.8
1901	.1413	101.0	.850	101.2	.650	106.0	.475	112.0	.9438	95.4
1902	.1433	102.4	.850	101.2	.650	106.0	.475	112.0	.9313	94.1
1903	.1458	104.2	.925	110.1	.700	114.2	.500	117.9	.9250	93.5
1904	.1796	128.4	.925	110.1	.725	118.3	.525	123.8	.9250	93.5

Year.	Boots and shoes: men's calf bal. shoes, Goodyear welt.		Boots and shoes: men's split boots.		Boots and shoes: men's vici kid shoes, Goodyear welt.		Boots and shoes: women's solid grain shoes.		Broadcloths: first quality, black, 54-inch, XXX wool.	
	Average price per pair.	Relative price.	Average price per 12 pairs.	Relative price.	Average price per pair.	Relative price.	Average price per pair.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899..	\$2.376	100.0	\$16.350	100.0	\$2.3000	100.0	\$0.8175	100.0	\$1.732	100.0
1890	2.400	101.0	17.000	104.0	2.5000	108.7	.8500	104.0	1.970	113.7
1891	2.400	101.0	17.000	104.0	2.5000	108.7	.8000	97.9	1.970	113.7
1892	2.400	101.0	17.000	104.0	2.5000	108.7	.7750	94.8	1.970	113.7
1893	2.400	101.0	16.500	100.9	2.5000	108.7	.7500	91.7	1.970	113.7
1894	2.400	101.0	16.000	97.9	2.5000	108.7	.7500	91.7	1.580	91.2
1895	2.400	101.0	15.000	91.7	2.2500	97.8	.8500	104.0	1.380	79.7
1896	2.400	101.0	15.500	94.8	2.2500	97.8	.8500	104.0	1.380	79.7
1897	2.400	101.0	16.000	97.9	2.0000	87.0	.8500	104.0	1.700	98.2
1898	2.320	97.6	16.500	100.9	2.0000	87.0	.8500	104.0	1.700	98.2
1899	2.240	94.3	17.000	104.0	2.0000	87.0	.8500	104.0	1.700	98.2
1900	2.240	94.3	18.000	110.1	2.0000	87.0	.9042	110.6	1.870	108.0
1901	2.300	96.8	18.375	112.4	2.0000	87.0	.8542	104.5	1.910	110.3
1902	2.300	96.8	18.167	111.1	2.0000	87.0	.8625	105.5	1.910	110.3
1903	2.350	98.9	18.500	113.1	2.0000	87.0	.8875	108.6	1.910	110.3
1904	2.350	98.9	18.583	113.7	2.0083	87.3	.9183	112.3	1.914	110.5

Year.	Calico: Cochecho prints.		Carpets: Brussels, 5-frame, Bigelow.		Carpets: Ingrain, 2-ply, Lowell.		Carpets: Wilton, 6-frame, Bigelow.		Cotton flannels: 24 yards to the pound.	
	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899..	\$0.0553	100.0	\$1.0003	100.0	\$0.4752	100.0	\$1.8432	100.0	\$0.0706	100.0
1890	.0650	117.5	1.0320	103.1	.5160	108.6	1.9200	104.2	.0875	123.9
1891	.0575	104.0	1.1280	112.7	.5520	116.2	2.0160	109.4	.0875	123.9
1892	.0650	117.5	1.0320	103.1	.5040	106.1	1.9200	104.2	.0838	118.7
1893	.0625	113.0	.9640	98.3	.5280	111.1	1.9200	104.2	.0725	102.7
1894	.0550	99.5	.9360	93.5	.4680	98.5	1.9200	104.2	.0675	95.6
1895	.0525	94.9	.9360	93.5	.4200	88.4	1.6800	91.1	.0650	92.1
1896	.0525	94.9	.9360	93.5	.4080	85.9	1.6800	91.1	.0650	92.1
1897	.0500	90.4	.9600	95.9	.4320	90.9	1.7280	93.8	.0575	81.4
1898	.0450	81.4	1.0320	103.1	.4680	98.5	1.8240	99.0	.0575	81.4
1899	.0483	87.3	1.0320	103.1	.4560	96.0	1.8240	99.0	.0619	87.7
1900	.0525	94.9	1.0320	103.1	.4920	103.5	1.8720	101.6	.0738	104.5
1901	.0500	90.4	1.0320	103.1	.4800	101.0	1.8720	101.6	.0640	90.7
1902	.0500	90.4	1.0360	103.5	.4840	101.9	1.8840	102.2	.0650	92.1
1903	.0504	91.1	1.0880	108.7	.5136	108.1	2.0080	108.9	.0735	104.1
1904	.0529	95.7	1.1040	110.3	.5184	109.1	2.0400	110.7	.0885	125.4

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Cloths and clothing.									
	Cotton flannels: ¾ yards to the pound.		Cotton thread: 6-cord, 200-yard spools, J. & P. Coats.		Cotton yarns: carded, white, mule-spun, Northern, cones, 10/l.		Cotton yarns: carded, white, mule-spun, Northern, cones, 22/l.		Denims: Amos- keag.	
	Average price per yard.	Rela- tive price.	Average price per spool. (a)	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per yard.	Rela- tive price.
Average, 1890-1899..	\$0.0575	100.0	\$0.081008	100.0	\$0.1608	100.0	\$0.1969	100.0	\$0.1044	100.0
1890.....	.0688	119.7	.081514	101.6	b. 1790	111.3	b. 2208	112.1	.1175	112.5
1891.....	.0688	119.7	.081238	100.7	b. 1794	111.6	b. 2244	114.0	.1144	109.6
1892.....	.0650	113.0	.081238	100.7	b. 1885	117.2	b. 2300	116.8	.1144	109.6
1893.....	.0575	100.0	.081238	100.7	.1808	112.4	.2138	108.6	.1175	112.5
1894.....	.0550	95.7	.081238	100.7	.1523	94.7	.1796	91.2	.1100	105.4
1895.....	.0525	91.3	.081238	100.7	.1477	91.9	.1815	92.2	.0988	94.6
1896.....	.0550	95.7	.030871	99.6	.1483	92.2	.1844	93.7	.0988	94.6
1897.....	.0550	95.7	.030503	98.4	.1452	90.3	.1788	90.8	.0931	89.2
1898.....	.0463	80.5	.030503	98.4	.1456	90.5	.1792	91.0	.0897	85.9
1899.....	.0508	88.3	.030503	98.4	.1408	87.6	.1760	89.4	.0896	85.8
1900.....	.0567	98.6	.087240	120.1	.1850	115.0	.2283	115.9	.1073	102.8
1901.....	.0575	100.0	.087240	120.1	.1585	98.6	.1927	97.9	.1046	100.2
1902.....	.0575	100.0	.087240	120.1	.1538	95.6	.1819	92.4	.1050	100.6
1903.....	.0629	109.4	.087240	120.1	.1869	116.2	.2156	109.5	.1127	108.0
1904.....	.0723	125.7	.087240	120.1	.1981	123.2	.2279	115.7	.1217	116.6

Year.	Drillings: brown, Pep- perell.		Drillings: 30- inch, Stark A.		Flannels: white, 4-4, Bal- lard Vale No. 3.		Ginghams: Amoskeag.		Ginghams: Lancaster.	
	Average price per yard.	Rela- tive price.	Average price per yard.	Rela- tive price.	Average price per yard.	Rela- tive price.	Average price per yard.	Rela- tive price.	Average price per yard.	Rela- tive price.
Average, 1890-1899..	\$0.0572	100.0	\$0.0521	100.0	\$0.3768	100.0	\$0.0533	100.0	\$0.0573	100.0
1890.....	.0683	119.4	.0640	122.8	.4400	116.8	.0625	117.3	.0692	120.8
1891.....	.0652	114.0	.0600	115.2	.4400	116.8	.0650	122.0	.0700	122.2
1892.....	.0582	101.7	.0535	102.7	.4367	115.9	.0650	122.0	.0700	122.2
1893.....	.0590	103.1	.0563	108.1	.4125	109.5	.0631	118.4	.0638	111.3
1894.....	.0559	97.7	.0502	96.4	.3546	94.1	.0485	91.0	.0504	88.0
1895.....	.0529	92.5	.0489	93.9	.3080	81.7	.0466	87.4	.0496	86.6
1896.....	.0573	100.2	.0522	100.2	.3217	85.4	.0472	88.6	.0500	87.3
1897.....	.0525	91.8	.0463	88.9	.3113	82.6	.0438	82.2	.0494	86.2
1898.....	.0513	89.7	.0437	83.9	.3685	97.8	.0431	80.9	.0438	85.2
1899.....	.0510	89.2	.0457	87.7	.3750	99.5	.0477	89.5	.0515	89.9
1900.....	.0606	105.9	.0542	104.0	.4096	108.7	.0515	96.6	.0550	96.0
1901.....	.0585	102.3	.0532	102.1	.3800	100.8	.0490	91.9	.0531	92.7
1902.....	.0575	100.5	.0539	103.5	.3986	105.8	.0523	98.1	.0575	100.3
1903.....	.0619	108.2	.0581	111.5	.4306	114.3	.0550	103.2	.0575	100.3
1904.....	.0727	127.1	.0658	126.3	.4433	117.6	.0548	102.8	.0556	97.0

Year.	Horse blankets: 6 pounds each, all wool.		Hosiery: men's cotton half hose, 20 to 22 oz. (c)		Hosiery: men's cotton half hose, 84 needles.		Hosiery: wom- en's combed Egyptian cotton		Hosiery: wom- en's cotton hose, 26 to 28 oz.	
	Average price per pound.	Rela- tive price.	Average price per 12 prs. (d)	Rela- tive price.	Average price per 12 pairs.	Rela- tive price.	Average price per 12 pairs.	Rela- tive price.	Average price per 12 prs. (d)	Rela- tive price.
Average, 1890-1899..	\$0.573	100.0	\$0.9555	100.0	\$0.7845	100.0	e \$1.850	100.0	\$0.9310	100.0
1890.....	.625	109.1	1.2740	133.3	f. 9750	124.3	.....	.....	1.2250	131.6
1891.....	.600	104.7	1.1760	123.1	f. 9750	124.3	.....	.....	1.1270	121.1
1892.....	.625	109.1	1.0780	112.8	f. 9700	123.6	.....	.....	1.0780	115.8
1893.....	.600	104.7	1.0535	110.3	f. 8750	111.5	1.900	102.7	1.0585	113.2
1894.....	.550	96.0	.9800	102.6	f. 7250	92.4	1.900	102.7	.9800	105.3
1895.....	.530	92.5	.9065	94.9	f. 7000	89.2	1.875	101.4	.8675	92.1
1896.....	.520	90.8	.8330	87.2	f. 7000	89.2	1.875	101.4	.7840	84.2
1897.....	.570	99.5	.7840	82.1	f. 6500	82.9	1.850	100.0	.7595	81.6
1898.....	.570	99.5	.7350	76.9	f. 6500	82.9	1.800	97.3	.7105	76.3
1899.....	.540	94.2	.7350	76.9	f. 6250	79.7	1.750	94.6	.7350	78.9
1900.....	.630	118.7	.7840	82.1	f. 6500	82.9	1.900	102.7	.7595	81.6
1901.....	.630	109.9	.6860	71.8	f. 7250	92.4	2.000	108.1	.6615	71.1
1902.....	.630	109.9	.7350	76.9	.6667	85.0	1.850	100.0	.7350	78.9
1903.....	.675	117.8	.7840	82.1	.7063	90.0	1.875	101.4	.8085	86.8
1904.....	.700	122.2	.6370	82.1	.7525	95.9	1.800	97.3	.7595	81.6

a Freight paid.

b Records destroyed. Price estimated by person who furnished data for later years.

c The price for 1890-1903 is for two-thread goods. Price for 1904 is for single-thread goods. For method of computing relative price see pages 409 and 410. Price of single-thread goods \$0.6370 in September, 1903.

d September price.

e Average for 1893-1899.

f January price.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Cloths and clothing.									
	Leather: harness, oak, country madd.		Leather: sole, hemlock, Buennos Ayres.		Leather: sole, oak.		Leather: wax calf, 30 to 40 lbs. to the dozen.		Linen shoe thread: 10s. Barbour.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per sq. foot.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899...	\$0.2590	100.0	\$0.1939	100.0	\$0.3363	100.0	\$0.6545	100.0	\$0.8748	100.0
1890	.2571	99.3	.1921	99.1	.3771	112.1	.6000	91.7	.8910	101.9
1891	.2579	99.6	.1858	95.8	.3679	109.4	.6469	98.8	.8910	101.9
1892	.2367	91.4	.1727	89.1	.3421	101.7	.6929	106.9	.8910	101.9
1893	.2400	92.7	.1796	92.6	.3488	103.6	.6450	98.5	.8993	102.8
1894	.2275	87.8	.1715	88.4	.3279	97.5	.6042	92.3	.9182	105.0
1895	.2388	111.5	.2073	106.9	.3421	101.7	.7333	112.0	.8514	97.3
1896	.2554	98.6	.1881	97.0	.2925	87.0	.6433	98.3	.8514	97.3
1897	.2493	93.9	.2033	104.8	.3079	91.6	.6156	94.1	.8514	97.3
1898	.2825	109.1	.2129	109.8	.3213	95.5	.6760	103.3	.8514	97.3
1899	.3004	116.0	.2254	116.2	.3358	99.9	.6375	105.0	.8514	97.3
1900	.3025	116.8	.2490	128.4	.3608	107.3	.6563	100.3	.8877	101.5
1901	.2971	114.7	.2475	127.6	.3525	104.8	.6281	96.0	.8910	101.9
1902	c. 3325	1114.7	.2367	122.1	.3800	113.0	.6604	100.9	.8910	101.9
1903	c. 3313	1114.3	.2267	116.9	.3742	111.3	.6900	105.4	.8460	96.7
1904	c. 3188	1110.0	.2258	116.5	.3450	102.6	.6375	105.0	.8499	97.2

Year.	Linen thread: 3-cord, 200-yard spools, Barbour.		Overcoatings: beaver, Moscow, all wool.		Overcoatings: chinchilla, all wool.		Overcoatings: chinchilla, cotton warp.		Overcoatings: covert cloth, light weight.	
	Average price per dozen spools.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899...	\$0.8522	100.0	\$2.0817	100.0	\$2.1419	100.0	\$0.4883	100.0	\$2.3286	100.0
1890	.8910	104.6	b 2.4296	116.7	b 2.4296	113.4	.5325	109.1	2.4616	105.7
1891	.7945	93.2	b 2.4296	116.7	b 2.4296	113.4	.5258	107.7	2.4616	105.7
1892	.8019	94.1	b 2.4296	116.7	b 2.4296	113.4	.5329	109.1	2.4616	105.7
1893	.8308	97.5	2.3250	111.7	2.3250	108.5	.5367	109.9	2.4616	105.7
1894	.8514	99.9	1.9879	95.5	1.9879	92.8	.4733	96.9	2.4254	104.2
1895	.8514	99.9	1.7670	84.9	1.8774	87.7	.4508	92.3	2.3259	99.9
1896	.8514	99.9	1.7670	84.9	1.8774	87.7	.4354	89.2	2.0363	87.4
1897	.8679	101.8	1.7670	84.9	1.8774	87.7	.4575	93.7	1.9458	83.6
1898	.8910	104.6	1.8600	89.4	2.0925	97.7	.4900	98.3	2.2625	97.2
1899	.8910	104.6	2.0538	98.7	2.0925	97.7	.4583	93.9	2.4435	104.9
1900	.8910	104.6	2.4994	120.1	2.4994	116.7	.4392	100.2	2.3621	101.4
1901	.8910	104.6	2.2088	106.1	2.0925	97.7	.4433	90.8	2.2625	97.2
1902	.8910	104.6	2.2088	106.1	2.0925	97.7	.4508	92.3	2.2625	97.2
1903	.8370	98.2	2.4413	117.3	2.2088	103.1	.4533	92.3	2.1899	94.0
1904	.8885	103.7	2.3420	111.7	2.2088	103.1	.4558	93.3	2.1899	94.0

Year.	Overcoatings: kersey, standard, 27 to 28 oz.		Print cloths: 28-inch, 64x64.		Shawls: standard, all wool, 72x144 in., 42-oz.		Sheetings: bleached, 10-4, Atlantic.		Sheetings: bleached, 10-4, Pepperell.	
	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price each.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899...	\$1.2472	100.0	\$0.02838	100.0	\$4.5787	100.0	\$0.1836	100.0	\$0.1884	100.0
1890			.03340	117.7	4.9000	107.0	.2241	122.1	.2190	116.2
1891			.02938	103.5	4.9000	107.0	.2138	116.4	.2068	106.6
1892			.03386	119.3	4.9000	107.0	.1996	108.7	.1900	100.8
1893			.03251	114.6	4.9000	107.0	.2052	111.8	.1946	103.3
1894			.02748	96.8	4.9000	107.0	.1741	94.8	.1742	92.5
1895			.02864	100.9	4.9000	107.0	.1722	93.8	.1785	94.7
1896			.02581	90.9	4.0800	89.1	.1700	92.6	.1792	96.1
1897	1.1833	94.9	.02485	87.6	4.0570	89.5	.1604	87.4	.1738	92.3
1898	1.3006	104.2	.02069	72.6	4.1300	90.2	.1527	83.2	.1721	91.3
1899	1.2583	100.9	.02732	96.3	4.0800	89.1	.1641	89.4	.2021	107.3
1900	1.5750	126.3	.03083	108.6	4.9000	107.0	.2043	111.3	.2292	121.7
1901	1.5000	120.3	.02819	99.3	4.9000	107.0	.1853	100.9	.2117	112.4
1902	1.5000	120.3	.03090	108.9	4.9000	107.0	.1917	104.4	.2100	111.5
1903	1.5750	126.3	.032156	113.3	4.9000	107.0	.2124	115.7	.2275	120.8
1904	1.6500	132.3	.03329	117.3	4.9000	107.0	.2355	128.3	.2425	128.7

a Leather: harness oak, packers' hides, heavy, No. 1. For method of computing relative price see pages 409 and 410.

b Records destroyed. Price estimated by person who furnished data for later years.

c Average for 1897-1899.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Cloths and clothing.									
	Sheetings: bleached, 10-4, Wamsutta S. T.		Sheetings: brown, 4-4, Atlantic A.		Sheetings: brown, 4-4, Indian Head.		Sheetings: brown, 4-4, Peppercell R.		Sheetings: brown, 4-4, Stark A. A.	
	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899..	\$0.2949	100.0	\$0.0553	100.0	\$0.0626	100.0	\$0.0551	100.0	\$0.0525	100.0
1890.....	.3126	106.0	.0669	121.0	.0725	115.8	.0640	116.2	.0660	125.7
1891.....	.3162	107.2	.0653	118.1	.0727	116.1	.0597	108.3	.0594	113.1
1892.....	.2944	99.8	.0590	106.7	.0648	103.5	.0569	103.3	.0545	103.8
1893.....	.3056	103.6	.0619	111.9	.0679	108.5	.0583	105.8	.0574	109.3
1894.....	.2756	93.5	.0549	99.8	.0598	95.5	.0531	96.4	.0521	99.2
1895.....	.2719	92.2	.0520	94.0	.0585	93.5	.0529	96.0	.0513	97.7
1896.....	.2925	99.2	.0535	96.7	.0622	99.4	.0558	101.3	.0511	97.3
1897.....	.2925	99.2	.0490	88.6	.0588	93.9	.0525	95.3	.0452	86.1
1898.....	.2925	99.2	.0443	80.1	.0540	86.3	.0475	86.2	.0424	80.8
1899.....	.2951	100.1	.0466	84.3	.0544	86.9	.0504	91.5	.0451	85.9
1900.....	.3075	104.3	.0555	100.4	.0623	99.5	.0592	107.4	.0508	96.8
1901.....	.2925	99.2	.0542	98.0	.0631	100.8	.0592	107.4	.0494	94.1
1902.....	.2925	99.2	.0549	99.3	.0625	99.8	.0569	103.3	α .0566	α 92.6
1903.....	.3038	103.0	.0636	115.0	.0681	108.8	.0599	108.7	α .0623	α 101.9
1904.....	.2775	94.1	.0718	129.8	.0802	128.1	.0669	121.4	α .0715	α 117.0

Year.	Shirtings: bleached, 4-4, Fruit of the Loom.		Shirtings: bleached, 4-4, Hope.		Shirtings: bleached, 4-4, Lonsdale.		Shirtings: bleached, 4-4, New York Mills.		Shirtings: bleached, 4-4, Wamsutta <O>XX.	
	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899..	\$0.0728	100.0	\$0.0630	100.0	\$0.0727	100.0	\$0.0876	100.0	\$0.0948	100.0
1890.....	.0845	116.1	.0726	115.2	.0845	116.2	.0968	110.5	.1011	106.6
1891.....	.0799	109.8	.0703	111.6	.0822	113.1	.0965	110.2	.1009	106.4
1892.....	.0808	111.0	.0663	105.2	.0812	111.7	.0931	106.3	.0973	102.6
1893.....	.0832	114.3	.0713	113.2	.0832	114.4	.0925	105.6	.0981	103.5
1894.....	.0727	99.9	.0620	98.4	.0727	100.0	.0885	101.0	.0950	100.2
1895.....	.0700	96.2	.0608	96.5	.0697	95.9	.0851	97.1	.0969	102.2
1896.....	.0696	95.6	.0620	98.4	.0685	94.2	.0885	101.0	.0951	100.3
1897.....	.0641	88.0	.0574	91.1	.0633	87.1	.0836	95.4	.0935	98.6
1898.....	.0584	80.2	.0518	82.2	.0595	81.8	.0784	89.5	.0807	85.1
1899.....	.0644	88.5	.0551	87.5	.0626	86.1	.0725	82.8	.0892	94.1
1900.....	.0758	103.4	.0671	106.5	.0731	100.6	.0786	89.7	.0965	101.8
1901.....	.0750	103.0	.0699	111.0	.0738	101.5	.0760	86.8	.0875	92.3
1902.....	.0756	103.8	.0676	107.3	.0741	101.9	.0766	87.4	.0885	93.4
1903.....	.0767	105.4	.0675	107.1	.0755	103.9	.0850	97.0	.0974	102.7
1904.....	.0802	110.2	.0705	111.9	.0796	109.5	.0830	94.7	.0921	97.2

Year.	Silk: raw, Italian, classical.		Silk: raw, Japanese, flatures.		Sutings: clay worsted diagonal, 12-oz.		Sutings: clay worsted diagonal, 16-oz.		Sutings: Indigo blue; all wool, 14-oz., Middlesex.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899..	\$4.2558	100.0	\$4.0187	100.0	\$0.8236	100.0	\$1.0068	100.0	\$1.3230	100.0
1890.....	5.2238	122.7	5.2429	130.5	.....	.....	.....	.....	1.5470	116.9
1891.....	4.1865	98.4	4.0110	99.8	.....	.....	.....	.....	1.5470	116.9
1892.....	4.4826	105.3	4.3266	107.7	.....	.....	.....	.....	1.5470	116.9
1893.....	5.0289	118.2	4.5409	113.0	.....	.....	.....	.....	1.5064	114.0
1894.....	3.6816	86.5	3.3627	83.7	.....	.....	.....	.....	1.4697	111.1
1895.....	4.0373	94.9	3.7555	94.2	.7621	92.5	.9445	93.8	1.1523	87.1
1896.....	3.6293	85.3	3.4072	84.8	.7937	89.1	.8819	87.6	1.1375	86.0
1897.....	3.6404	85.5	3.4637	86.2	.7565	92.2	.9392	93.3	1.0465	79.1
1898.....	3.8768	91.1	3.6376	90.5	.9165	111.3	1.1216	111.4	1.1375	86.0
1899.....	4.7706	112.1	4.4085	109.7	.9461	114.9	1.1468	113.9	1.1375	86.0
1900.....	4.5128	106.0	4.1690	103.7	1.0819	131.4	1.3463	133.7	1.1375	86.0
1901.....	3.8466	90.4	3.5132	87.4	.9113	110.6	1.1175	111.0	1.1849	89.6
1902.....	4.1085	96.5	3.8224	95.1	.9131	110.9	1.0931	108.6	1.3119	99.2
1903.....	4.5241	106.3	4.1346	102.9	.9488	115.2	1.1288	112.1	1.4400	108.8
1904.....	3.8651	90.8	3.6416	90.6	.9244	112.2	1.1036	109.6	1.4438	109.1

α Sheetings: brown, 4-4, Massachusetts Mills, Flying Horse brand. For method of computing relative price see pages 409 and 410.

b Average for 1895-1899.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Cloths and clothing.									
	Suits: indigo blue, all wool, 16-oz.		Suits: serge, Washington Mills 6700.		Tickings: Amoskeag A. C. A.		Trouserings: fancy worsted, 22 to 23 oz.		Underwear: white, all wool, etc.	
	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price, 12 garments.	Relative price.
Average, 1890-1899...	\$1.9154	100.0	\$0.7526	100.0	\$0.1061	100.0	\$1.9456	100.0	\$23.31	100.0
1890.....	^b 2.0925	109.2	.....	.....	^b 1.200	113.1	.....	.....	24.75	106.2
1891.....	^b 2.0925	109.2	.....	.....	^b 1.175	110.7	.....	.....	25.65	110.0
1892.....	^b 2.0925	109.2	.....	.....	^b 1.150	108.4	2.0734	106.6	25.65	110.0
1893.....	2.0925	109.2	.....	.....	1.181	111.3	2.0734	106.6	25.65	110.0
1894.....	1.7670	92.3	.....	.....	1.084	102.2	1.9238	98.9	21.60	92.7
1895.....	1.5903	83.0	.....	.....	1.006	94.8	1.7100	87.9	21.60	92.7
1896.....	1.7228	89.9	.....	.....	1.019	96.0	1.7955	92.3	21.60	92.7
1897.....	1.6740	87.4	.....	.....	0.975	91.9	1.7955	92.3	21.60	92.7
1898.....	1.9763	103.2	.....	.....	0.984	94.3	2.1197	108.9	21.60	92.7
1899.....	2.0538	107.2	.....	.....	0.923	87.0	2.0784	106.6	23.40	100.4
1900.....	2.2669	118.4	.....	.....	1.084	102.2	2.2871	117.6	23.40	100.4
1901.....	2.0925	109.2	.....	.....	1.013	95.5	1.9879	102.2	23.40	100.4
1902.....	2.0925	109.2	.....	.....	1.050	99.0	1.9800	101.8	23.40	100.4
1903.....	2.1576	112.6	.....	.....	1.104	104.1	^c 2.0925	104.6	23.40	100.4
1904.....	2.1855	114.1	.....	.....	1.213	114.3	^c 2.1244	106.2	23.40	100.4

Year.	Underwear: white merino, 52½ wool, etc.		Women's dress goods: alpaca, cotton warp, 22-inch, Hamilton.		Women's dress goods: cashmere, all wool, Atlantic J.		Women's dress goods: cashmere, cotton warp, Atl. F.		Women's dress goods: cashmere, cot. warp, 22-in., Hamilton.	
	Average price, 12 garments.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per yard.	Relative price.
Average, 1890-1899...	\$15.57	100.0	\$0.0680	100.0	\$0.2905	100.0	\$0.1520	100.0	\$0.0758	100.0
1890.....	16.65	106.9	.....	.....	0.3479	119.8	0.1813	119.3	0.0833	109.9
1891.....	17.55	112.7	.....	.....	0.3663	126.1	0.1813	119.3	0.0833	109.9
1892.....	17.55	112.7	.....	.....	0.3724	128.2	0.1789	117.7	0.0821	108.3
1893.....	17.55	112.7	.....	.....	0.3247	111.8	0.1495	98.4	0.0809	106.7
1894.....	14.85	95.4	.....	.....	0.2450	84.3	0.1348	88.7	0.0760	100.3
1895.....	14.40	92.5	.....	.....	0.2352	81.0	0.1274	83.8	0.0735	97.0
1896.....	14.40	92.5	.....	.....	0.1960	67.5	0.1270	83.6	0.0711	93.8
1897.....	14.40	92.5	.....	.....	0.2389	82.2	0.1372	90.3	0.0686	90.5
1898.....	14.85	95.4	.....	.....	0.2573	88.6	0.1434	94.3	0.0686	90.5
1899.....	13.60	86.7	.....	.....	0.3208	110.4	0.1593	104.8	0.0706	93.1
1900.....	14.85	95.4	.....	.....	0.3459	119.1	0.1642	108.0	0.0760	100.3
1901.....	14.85	95.4	.....	.....	0.3234	111.3	0.1585	104.3	0.0760	100.3
1902.....	14.85	95.4	.....	.....	0.3234	111.3	0.1642	108.0	0.0754	99.5
1903.....	^d 16.20	^d 95.4	.....	.....	0.3320	114.3	0.1679	110.5	0.0741	97.8
1904.....	^d 16.20	^d 95.4	.....	.....	0.3418	117.7	0.1740	114.5	0.0809	106.7

Year.	Women's dress goods: cashmere, cot. warp, 27-in., Hamilton.		Women's dress goods: Franklin sackings, 6-4.		Wool: Ohio, fine fleece (X and XX grade), scoured.		Wool: Ohio, medium fleece (½ and ¾ grade), scoured.		Worsted yarns: 2-40s, Australian fine.	
	Average price per yard.	Relative price.	Average price per yard.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899...	\$0.0883	100.0	\$0.5151	100.0	\$0.5526	100.0	\$0.4564	100.0	\$1.0183	100.0
1890.....	0.0980	111.0	.....	.....	0.7156	129.5	0.6143	134.6	1.2263	120.4
1891.....	0.0980	111.0	.....	.....	0.6857	124.1	0.5820	127.5	1.2354	121.3
1892.....	0.0968	109.6	.....	.....	0.6119	110.7	0.5276	115.6	1.2175	119.6
1893.....	0.0937	106.1	.....	.....	0.5639	102.0	0.4620	101.2	1.1342	111.4
1894.....	0.0907	102.7	.....	.....	0.4448	80.5	0.3542	77.6	0.9292	91.3
1895.....	0.0846	95.8	.....	.....	0.3768	68.2	0.3280	71.9	0.7425	72.9
1896.....	0.0821	93.0	.....	.....	0.3940	71.3	0.3186	69.8	0.7250	71.2
1897.....	0.0784	88.8	.....	.....	0.4955	89.7	0.3999	87.6	0.8517	83.6
1898.....	0.0784	88.8	.....	.....	0.6150	111.3	0.4805	105.3	1.0308	101.2
1899.....	0.0821	93.0	.....	.....	0.6232	112.8	0.4966	108.8	1.0908	107.1
1900.....	0.0882	99.9	.....	.....	0.5694	119.3	0.5296	116.0	1.2050	118.3
1901.....	0.0907	102.7	.....	.....	0.5453	98.7	0.4315	94.5	1.0404	102.2
1902.....	0.0901	102.0	.....	.....	0.5770	104.4	0.4436	97.2	1.1229	110.3
1903.....	0.0894	101.2	.....	.....	0.6546	118.5	0.4658	102.1	1.1771	115.6
1904.....	0.0976	110.5	.....	.....	0.6862	124.2	0.4869	106.7	1.1875	116.6

^a Average for 1892-1899.^b Records destroyed. Price estimated by person who furnished data for later years.^c 21 to 22 ounce. For method of computing relative price, see pages 409 and 410.^d 60 per cent wool, etc. For method of computing relative price, see pages 409 and 410.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Cloths, etc.		Fuel and lighting.							
	Worsted yarns: 2-40s, XXX, white, in skeins.		Candles: adamantine, 6s, 14-ounce.		Coal: anthracite, broken.		Coal: anthracite, chestnut.		Coal: anthracite, egg.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per ton.	Relative price.	Average price per ton.	Relative price.	Average price per ton.	Relative price.
Average, 1890-1899...	\$1.0071	100.0	\$0.0782	100.0	\$3.3669	100.0	\$3.5953	100.0	\$3.5953	100.0
1890.....	1.2500	124.1	.0800	102.3	3.4858	103.5	3.3533	93.3	3.6142	100.6
1891.....	1.2625	125.4	.0800	102.3	3.4483	102.3	3.4758	96.7	3.7508	104.4
1892.....	1.1563	114.8	.0800	102.3	3.6152	107.4	3.9443	109.7	3.9803	110.8
1893.....	1.0833	107.6	.0833	112.9	3.5628	105.8	4.1673	115.9	3.8520	107.2
1894.....	.9188	91.2	.0867	110.9	3.4172	101.5	3.5416	98.5	3.3903	94.3
1895.....	.7563	75.1	.0850	108.7	3.2833	97.5	2.9793	82.9	3.0296	84.3
1896.....	.7500	74.5	.0850	108.7	3.2691	97.1	3.5561	98.9	3.5490	98.8
1897.....	.8188	81.3	.0745	95.3	3.2465	96.4	3.7366	103.9	3.7986	105.7
1898.....	1.0042	99.7	.0613	78.4	3.2108	95.4	3.5525	98.8	3.5993	100.2
1899.....	1.0708	106.3	.0613	78.4	3.1350	93.1	3.6458	101.4	3.3714	93.8
1900.....	1.1938	118.5	.1059	136.4	3.2706	97.1	3.9166	108.9	3.5843	99.7
1901.....	1.0233	102.1	.1100	140.7	3.5593	105.5	4.3270	120.4	4.0565	112.9
1902.....	α 1.1392	α 113.1	.1100	140.7	3.7186	110.4	4.4597	124.0	4.3673	121.5
1903.....	α 1.2125	α 120.4	.0996	127.4	4.2496	126.2	4.8251	134.2	4.8251	134.2
1904.....	α 1.1717	α 116.3	.0900	115.1	4.2473	126.1	4.8250	134.2	4.8227	134.2

Year.	Fuel and lighting.									
	Coal: anthracite, stove.		Coal: bituminous, Georges Creek (at mine).		Coal: bit. Georges Creek (f. o. b. N. Y. Harbor).		Coal: bit. Pittsburgh (Youghiogheny).		Coke: Connellsville, furnace.	
	Average price per ton.	Relative price.	Average price per ton.	Relative price.	Average price per ton.	Relative price.	Average price per bushel.	Relative price.	Average price per ton.	Relative price.
Average, 1890-1899...	\$3. 7949	100. 0	\$0. 8887	100. 0	\$2. 7429	100. 0	\$0. 0643	100. 0	\$1. 6983	100. 0
1890	3. 7108	97. 8	. 8625	97. 1	2. 9875	108. 9	. 0664	108. 3	2. 0833	122. 7
1891	3. 8542	101. 6	. 9500	106. 9	3. 0313	110. 5	. 0789	122. 7	1. 8750	110. 4
1892	4. 1532	109. 4	. 9000	101. 3	2. 9313	106. 9	. 0749	116. 5	1. 8083	106. 5
1893	4. 1931	110. 5	. 9208	103. 6	2. 9500	107. 6	. 0758	117. 9	1. 4792	87. 1
1894	3. 6003	94. 9	. 8208	92. 4	2. 7375	99. 8	. 0634	98. 6	1. 0583	62. 3
1895	3. 1264	82. 4	. 7750	87. 2	2. 8125	102. 5	. 0600	93. 3	1. 3250	78. 0
1896	3. 7942	100. 0	. 9000	101. 3	2. 6625	97. 1	. 0573	89. 1	1. 8750	110. 4
1897	4. 0146	105. 8	. 8333	93. 8	2. 4417	89. 0	. 0570	88. 6	1. 6167	95. 2
1898	3. 7978	100. 1	. 9125	102. 7	2. 1750	79. 3	. 0565	87. 9	1. 6771	98. 8
1899	3. 7047	97. 6	1. 0125	113. 9	2. 7000	98. 4	. 0631	82. 6	2. 1854	128. 7
1900	3. 9451	104. 0	1. 2000	135. 0	2. 9083	106. 0	. 0752	117. 0	2. 6458	155. 8
1901	4. 3224	113. 9	1. 3375	150. 5	2. 9250	106. 6	. 0752	117. 0	1. 9625	115. 6
1902	4. 4627	117. 6	2. 1250	239. 1	4. 0583	148. 0	. 0787	122. 4	2. 6875	158. 2
1903	4. 8245	127. 1	2. 3958	269. 6	4. 4375	161. 8	. 0925	143. 9	2. 9125	171. 5
1904	4. 8246	127. 1	1. 7500	196. 9	3. 1958	116. 5	. 0852	132. 5	1. 6375	96. 4

Year.	Fuel and lighting.								Metals and implements.	
	Matches: parlor, domestic.		Petroleum: crude.		Petroleum: re-refined, for export.		Petroleum: re-refined, 150°, w. w.		Augers: extra, 1/2-inch.	
	Average price 144 boxes (200s).	Relative price.	Average price per barrel.	Relative price.	Average price per gallon.	Relative price.	Average price per gallon.	Relative price.	Average price each.	Relative price.
Average, 1890-1899...	\$1.7563	100.0	\$0.9102	100.0	\$0.0649	100.0	\$0.0890	100.0	\$0.1608	100.0
1890.....	1.9583	111.5	.8680	95.4	.0732	112.9	.0995	111.8	.1900	118.2
1891.....	1.7500	99.6	.6697	73.6	.0685	105.5	.0879	98.8	.1900	118.2
1892.....	1.7500	99.6	.5564	61.1	.0609	93.8	.0794	89.2	.1900	118.2
1893.....	1.7500	99.6	.6399	70.3	.0522	80.4	.0725	81.5	.1800	111.9
1894.....	1.8667	94.9	.8389	92.2	.0515	79.4	.0725	81.5	.1542	95.9
1895.....	1.6375	96.1	1.3581	149.2	.0711	109.6	.0922	103.6	.1383	82.9
1896.....	1.7500	99.6	1.1789	129.5	.0702	108.2	.1039	116.7	.1394	86.7
1897.....	1.7500	99.6	.7869	86.5	.0597	92.0	.0900	101.1	.1425	88.6
1898.....	1.7500	99.6	.9118	100.2	.0628	96.8	.0909	102.1	.1425	88.6
1899.....	1.7500	99.6	1.2934	142.1	.0791	121.9	.1015	114.0	.1465	91.1
1900.....	1.7500	99.6	1.3521	148.5	.0854	131.6	.1188	133.5	.2000	124.4
1901.....	1.7500	99.6	1.2095	132.9	.0749	115.4	.1096	123.1	.1700	105.7
1902.....	1.5833	90.1	1.2369	135.9	.0734	113.1	.1108	124.5	.1800	111.9
1903.....	1.5000	85.4	1.5836	174.5	.0860	132.5	.1363	153.1	.2310	143.7
1904.....	1.5000	85.4	1.6270	178.8	.0826	127.3	.1367	153.6	.2400	149.3

α Designated as XXXX.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Metals and implements.									
	Axes: M. C. O., Yankee.		Bar iron: best refined, from mill (Pittsburg market).		Bar iron: best refined, from store (Philadel- phia market).		Barb wire: galvanized.		Butts: loose joint, cast, 3 x 3 inch.	
	Average price each.	Rela- tive price.	Average price per lb.	Rela- tive price.	Average price per lb.	Rela- tive price.	Average price per 100 lbs.	Rela- tive price.	Average price per pair.	Rela- tive price.
Average, 1890-1899..	\$0.4693	100.0	\$0.6145	100.0	\$0.6164	100.0	\$2.5261	100.0	\$0.0316	100.0
1890.....	.5650	120.4	.0184	126.9	.0205	125.0	3.5665	141.2	.0353	111.7
1891.....	.5550	118.3	.0171	117.9	.0190	115.9	3.2189	127.4	.0353	111.7
1892.....	.5000	106.5	.0164	113.1	.0187	114.0	2.7662	109.5	.0306	96.8
1893.....	.5000	106.5	.0150	103.4	.0170	103.7	2.5188	99.7	.0311	98.4
1894.....	.4733	100.9	.0120	82.8	.0134	81.7	2.1750	86.1	.0303	95.9
1895.....	.4900	98.0	.0125	86.2	.0144	87.8	2.2458	88.9	.0317	100.3
1896.....	.4150	88.4	.0122	84.1	.0140	85.4	1.9625	77.7	.0329	104.1
1897.....	.3938	83.9	.0110	75.9	.0131	79.9	1.8000	71.8	.0306	96.8
1898.....	.3750	79.9	.0107	73.8	.0128	78.0	1.8375	72.7	.0292	92.4
1899.....	.4555	97.1	.0195	134.5	.0207	126.2	3.1696	125.5	.0292	92.4
1900.....	.4831	102.9	.0215	148.3	.0196	119.5	3.3942	134.4	.0400	126.6
1901.....	.4166	88.8	.0180	124.1	.0184	112.2	3.0375	120.2	.0369	116.8
1902.....	.4333	103.0	.0194	138.8	.0213	129.9	2.9542	116.9	.0400	126.6
1903.....	.5050	107.6	.0177	122.1	.0200	122.0	2.7375	108.4	.0400	126.6
1904.....	.5738	123.3	.0148	102.1	.0172	104.9	2.5075	99.3	.0400	126.6

Year.	Chisels: extra, socket firmer, 1-inch.		Copper: ingot, lake.		Copper: sheet, hot-rolled (base sizes).		Copper wire: bare.		Doorknobs: steel, bronze plated.	
	Average price each.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per pair.	Rela- tive price.
Average, 1890-1899..	\$0.1894	100.0	\$0.1234	100.0	\$0.1659	100.0	\$0.1464	100.0	\$0.1697	100.0
1890.....	.2100	110.9	.1575	127.6	.2275	137.1	.1875	128.1	.1660	97.8
1891.....	.2100	110.9	.1365	105.8	.1900	114.5	.1650	112.7	.1660	97.8
1892.....	.2100	110.9	.1154	93.5	.1600	96.4	.1438	98.2	.1660	97.8
1893.....	.1933	102.1	.1093	88.6	.1500	90.4	.1350	92.2	.1660	97.8
1894.....	.1733	91.5	.0948	76.8	.1425	85.9	.1156	79.0	.1660	97.8
1895.....	.1710	90.3	.1075	87.1	.1425	85.9	.1238	84.6	.1953	115.1
1896.....	.1793	94.7	.1097	88.9	.1425	85.9	.1356	92.6	.1733	102.1
1897.....	.1710	90.3	.1132	91.7	.1463	88.2	.1375	93.9	.1660	97.8
1898.....	.1720	90.8	.1194	96.8	.1400	84.4	.1375	93.9	.1660	97.8
1899.....	.2038	107.6	.1767	143.2	.2175	131.1	.1825	124.7	.1660	97.8
1900.....	.2417	127.6	.1661	134.6	.2067	124.6	.1800	123.0	.1813	106.8
1901.....	.2300	121.4	.1687	136.7	.2083	125.9	.1815	124.0	.1900	112.0
1902.....	.2700	142.6	.1201	97.3	.1783	107.5	.1326	90.6	.2153	126.9
1903.....	.2800	147.8	.1368	110.9	.1917	115.6	.1497	102.3	.2250	132.6
1904.....	.3000	158.4	.1311	106.2	.1800	108.5	.1438	98.2	.2453	144.8

Year.	Files: 8-inch mill bastard.		Hammers: Maydole No. 14.		Lead: pig.		Lead pipe.		Locks: com- mon mortise.	
	Average price per dozen.	Rela- tive price.	Average price each.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per 100 lbs.	Rela- tive price.	Average price each.	Rela- tive price.
Average, 1890-1899..	\$0.8527	100.0	\$0.3613	100.0	\$0.0381	100.0	\$4.8183	100.0	\$0.0317	100.0
1890.....	.9100	106.7	.3500	96.9	.0440	115.5	5.4000	112.1	.0330	101.6
1891.....	.8917	104.6	.3500	96.9	.0437	114.7	5.6000	116.2	.0330	101.6
1892.....	.8717	102.2	.3500	96.9	.0413	108.4	5.1833	107.6	.0330	101.6
1893.....	.8667	101.6	.3500	96.9	.0374	98.2	5.0000	103.8	.0330	101.6
1894.....	.8300	97.3	.3500	96.9	.0331	86.9	4.4333	92.0	.0318	100.1
1895.....	.8133	95.4	.3525	97.6	.0326	85.6	4.2000	87.2	.0333	102.0
1896.....	.7775	91.2	.3800	105.2	.0300	78.7	4.1000	85.1	.0367	106.1
1897.....	.8050	94.4	.3800	105.2	.0358	94.0	4.3167	89.6	.0333	102.0
1898.....	.8250	96.8	.3633	100.6	.0380	99.7	4.6000	95.5	.0750	91.8
1899.....	.9358	109.7	.3867	107.0	.0448	117.6	5.3500	111.0	.0750	91.8
1900.....	1.0900	127.8	.4189	115.9	.0445	116.8	5.1208	106.3	.0788	96.5
1901.....	1.0500	123.1	.4233	117.2	.0438	115.0	5.0479	104.8	.0750	91.8
1902.....	1.0500	123.1	.4233	117.2	.0411	107.9	5.2167	108.3	.0850	104.0
1903.....	1.0500	123.1	.4660	129.0	.0428	112.3	5.1958	107.8	.0900	110.2
1904.....	1.0400	122.0	.4660	129.0	.0443	116.3	4.7950	99.5	.1025	125.5

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Metals and implements.									
	Nails: cut, 8-penny, fence and common.		Nails: wire, 8-penny, fence and common.		Pig iron: Bessemer.		Pig iron: foundry No. 1.		Pig iron: foundry No. 2.	
	Average price per 100 lbs.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per ton.	Relative price.	Average price per ton.	Relative price.	Average price per ton.	Relative price.
Average, 1890-1899..	\$1. 8275	100.0	\$2. 1618	100.0	\$13. 7733	100.0	\$14. 8042	100.0	\$13. 0533	100.0
1890.....	2. 2875	125.2	2. 9646	137.1	18. 8725	137.0	18. 4083	124.3	17. 1563	131.4
1891.....	1. 8333	100.3	2. 4667	114.1	15. 9500	115.8	17. 5208	118.4	15. 3958	117.9
1892.....	1. 7583	96.2	2. 1896	101.3	14. 3667	104.3	15. 7492	106.4	13. 7729	105.5
1893.....	1. 6813	92.0	1. 9917	92.1	12. 8692	93.4	14. 5167	98.1	12. 4996	95.3
1894.....	1. 5271	83.6	1. 6521	76.4	11. 3775	82.6	12. 6642	85.5	10. 8458	83.1
1895.....	1. 9250	105.3	2. 1177	98.0	12. 7167	92.3	13. 1033	88.5	11. 6750	89.4
1896.....	2. 7125	148.4	2. 9250	135.3	12. 1400	88.1	12. 9550	87.5	11. 7708	90.2
1897.....	1. 3329	72.9	1. 4854	68.7	10. 1253	73.5	12. 1008	81.7	10. 1000	77.4
1898.....	1. 1927	65.3	1. 4375	66.5	10. 3517	75.0	11. 6608	78.8	10. 0271	76.8
1899.....	2. 0240	110.8	2. 3875	110.4	19. 0333	133.1	19. 3633	130.8	17. 3500	132.9
1900.....	2. 2500	123.1	2. 6333	121.8	19. 4925	141.5	19. 9800	135.0	18. 5063	141.8
1901.....	2. 1125	115.6	2. 3646	109.4	15. 9350	115.7	15. 8683	107.2	14. 7188	112.8
1902.....	2. 1333	116.7	2. 1042	97.3	20. 6742	150.0	22. 1933	149.9	21. 2396	162.7
1903.....	2. 1953	120.2	2. 0750	96.0	18. 9758	137.7	19. 9158	134.5	19. 1417	146.6
1904.....	1. 8188	99.5	1. 9063	88.2	13. 7558	99.8	15. 5725	105.2	13. 6250	104.4

Year.	Pig iron: gray forge, Southern, coke.		Planes: Bailey No. 5.		Quicksilver.		Saws: cross-cut, Disston.		Saws: hand, Disston No. 7.	
	Average price per ton.	Relative price.	Average price each.	Relative price.	Average price per pound.	Relative price.	Average price each.	Relative price.	Average price per dozen.	Relative price.
Average, 1890-1899..	\$11. 0892	100.0	\$1. 3220	100.0	\$0. 5593	100.0	\$1. 6038	100.0	\$12. 780	100.0
1890.....	14. 5000	130.8	1. 4200	107.4	. 7300	130.5	1. 6038	100.0	12. 400	112.7
1891.....	12. 5167	112.9	1. 4200	107.4	. 6283	112.3	1. 6038	100.0	12. 600	98.6
1892.....	11. 7917	106.3	1. 4200	107.4	. 5642	100.9	1. 6038	100.0	12. 600	98.6
1893.....	10. 6354	95.9	1. 4200	107.4	. 5213	93.2	1. 6038	100.0	12. 600	98.6
1894.....	8. 9875	80.6	1. 3783	104.3	. 4792	85.7	1. 6038	100.0	12. 600	98.6
1895.....	10. 3229	93.1	1. 2417	93.9	. 5133	91.8	1. 6038	100.0	12. 600	98.6
1896.....	9. 6042	86.6	1. 2300	93.0	. 4979	89.0	1. 6038	100.0	12. 600	98.6
1897.....	8. 8021	79.4	1. 2300	93.0	. 5157	92.2	1. 6038	100.0	12. 600	98.6
1898.....	8. 7188	78.6	1. 2300	93.0	. 5425	97.0	1. 6038	100.0	12. 600	98.6
1899.....	15. 0625	135.8	1. 2300	93.0	. 6004	107.3	1. 6038	100.0	12. 600	98.6
1900.....	15. 6042	140.7	1. 4142	107.0	. 6769	121.0	1. 6038	100.0	12. 600	98.6
1901.....	12. 5521	113.2	1. 4600	110.4	. 6629	118.5	1. 6038	100.0	12. 600	98.6
1902.....	17. 6042	158.8	1. 5100	114.2	. 6458	115.5	1. 6038	100.0	12. 600	98.6
1903.....	16. 2292	146.4	1. 5300	115.7	. 6342	113.4	1. 6038	100.0	12. 600	98.6
1904.....	11. 6771	105.3	1. 5300	115.7	. 5900	105.5	1. 6038	100.0	12. 600	98.6

Year.	Shovels: Ames No. 2.		Silver: bar, fine.		Spelter: Western.		Steel billets.		Steel rails.	
	Average price per dozen.	Relative price.	Average price per ounce.	Relative price.	Average price per pound.	Relative price.	Average price per ton.	Relative price.	Average price per ton.	Relative price.
Average, 1890-1899..	\$7. 8658	100.0	\$0. 74899	100.0	\$0. 0452	100.0	\$21. 5262	100.0	\$26. 0654	100.0
1890.....	7. 8700	100.1	1. 05329	140.6	. 0554	122.6	30. 4675	141.5	31. 7792	121.9
1891.....	7. 8700	100.1	. 99034	132.2	. 0508	112.4	25. 3292	117.7	29. 9167	114.8
1892.....	7. 8700	100.1	. 87552	116.9	. 0465	102.9	23. 6308	109.8	30. 0000	115.1
1893.....	7. 8700	100.1	. 78219	104.4	. 0410	90.7	20. 4358	94.9	28. 1250	107.9
1894.....	7. 4500	94.7	. 64043	85.5	. 0355	78.5	16. 5783	77.0	24. 0000	92.1
1895.....	7. 4500	94.7	. 66268	88.5	. 0362	80.1	16. 4842	85.9	24. 3333	93.4
1896.....	7. 6100	99.3	. 68195	91.0	. 0401	88.7	13. 3333	87.5	28. 0000	107.4
1897.....	7. 9300	100.8	. 60775	81.1	. 0421	93.1	15. 0800	70.1	18. 7500	71.9
1898.....	7. 9300	100.8	. 55055	73.9	. 0458	100.2	15. 3058	71.1	17. 6250	67.6
1899.....	8. 6075	109.4	. 60507	80.8	. 0588	130.1	31. 1167	144.6	28. 1250	107.9
1900.....	9. 1200	115.9	. 62065	82.9	. 0442	97.8	25. 0625	116.4	27. 3333	123.9
1901.....	9. 1200	115.9	. 59703	79.7	. 0405	89.6	24. 1308	112.1	27. 3333	104.9
1902.....	9. 3550	118.9	. 52816	70.5	. 0487	107.7	30. 5992	142.1	28. 0000	107.4
1903.....	8. 0260	102.0	. 54208	72.4	. 0558	123.5	27. 9117	129.7	28. 0000	107.4
1904.....	7. 6533	97.3	. 57844	77.2	. 0515	113.9	22. 1792	103.0	28. 0000	107.4

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Metals and implements.									
	Steel sheets: black, No. 27.		Tin: pig.		Tin plates: domestic, Bessemer, coke.		Tin plates: imported, Bessemer, coke.		Trowels: M. C. O., brick, 10½-inch.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per 108 lbs. ^a	Relative price.	Average price each.	Relative price.
Average, 1890-1899..	\$0.0224	100.0	\$0.1836	100.0	\$3.4148	100.0	\$4.5862	100.0	\$0.3400	100.0
1890			.2121	115.5			4.7958	104.6	.3400	100.0
1891			.2025	110.3			5.3367	116.4	.3400	100.0
1892			.2037	110.9			5.3050	115.7	.3400	100.0
1893			.2002	109.0			5.3717	117.1	.3400	100.0
1894	.0225	104.9	.1812	98.7			4.8917	106.7	.3400	100.0
1895	.0244	108.9	.1405	76.5			3.8725	84.4	.3400	100.0
1896	.0215	96.0	.1330	72.4	3.4354	100.6	3.8000	82.9	.3400	100.0
1897	.0195	87.1	.1358	74.0	3.1823	93.2	3.9225	85.1	.3400	100.0
1898	.0180	84.8	.1551	84.5	2.8500	83.5	4.0000	87.2	.3400	100.0
1899	.0267	119.2	.2721	148.2	4.1913	122.7	(e)		.3400	100.0
1900	.0293	130.8	.3006	163.7	4.6775	137.0	(e)		.3400	100.0
1901	.0315	140.6	.2618	142.6	4.1900	122.7	(e)		.3400	100.0
1902	.0291	129.9	.2648	144.2	4.1233	120.7	(e)		.3400	100.0
1903	.0260	116.1	.2816	153.4	3.9400	115.4	(e)		.3400	100.0
1904	.0210	93.8	.2799	152.5	3.6025	105.5	(e)		.3400	100.0

Year.	Metals and implements.						Lumber and building materials.			
	Vises: solid box, 50-pound.		Wood screws: 1-inch, No. 10, flat head.		Zinc: sheet.		Brick: common domestic.		Carbonate of lead: American, in oil.	
	Average price each.	Relative price.	Average price per gross.	Relative price.	Average price per 100 lbs.	Relative price.	Average price per M.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$3.9009	100.0	\$0.1510	100.0	\$5.8112	100.0	\$5.5625	100.0	\$0.0577	100.0
1890	4.1400	106.1	.1970	130.5	6.0542	114.0	6.5625	118.0	.0638	110.6
1891	4.1400	106.1	.2000	132.5	5.7192	107.7	5.7083	102.6	.0650	112.7
1892	4.2550	109.1	.2100	139.1	5.4900	103.4	5.7708	103.7	.0658	114.0
1893	4.1975	107.6	.2100	139.1	4.9942	94.0	5.8333	104.9	.0609	105.5
1894	4.0567	104.0	.1558	103.2	3.9500	74.4	5.0000	89.9	.0524	90.8
1895	3.7933	97.2	.1117	74.0	4.5217	85.1	5.3125	95.5	.0525	91.0
1896	3.7200	95.4	.1083	68.4	4.9400	93.0	5.0625	91.0	.0517	89.6
1897	3.5000	89.7	.0850	56.3	4.9400	93.0	4.9375	88.8	.0535	92.7
1898	3.2800	84.1	.0918	60.8	5.4983	103.5	5.7500	103.4	.0543	94.1
1899	3.9267	100.7	.1452	96.2	7.0042	131.9	5.6875	102.2	.0563	98.4
1900	4.2633	109.4	.1820	120.5	6.0950	114.8	5.2500	94.4	.0625	108.3
1901	5.0200	128.7	.1045	69.2	5.5583	104.7	5.7656	103.7	.0576	99.8
1902	5.1300	131.5	.0952	63.0	5.7308	107.9	5.3854	96.8	.0539	93.4
1903	5.1767	132.7	.1093	72.4	6.0183	113.3	5.9063	106.2	.0615	106.6
1904	4.2550	109.1	.0945	62.6	5.6092	105.6	7.4948	134.7	.0593	103.6

Year.	Lumber and building materials.									
	Cement: Portland, domestic.		Cement: Rosendale.		Doors: pine.		Hemlock.		Lime: common.	
	Average price per barrel.	Relative price.	Average price per barrel.	Relative price.	Average price per door.	Relative price.	Average price per M feet.	Relative price.	Average price per barrel.	Relative price.
Average, 1890-1899..	\$1.9963	100.0	\$0.8871	100.0	\$1.0929	100.0	\$11.9625	100.0	\$0.8332	100.0
1890			1.0542	118.8	1.3750	125.8	12.5833	105.2	.9792	117.5
1891			.9417	106.2	1.2500	114.4	12.4583	104.1	.9125	109.5
1892			.9638	109.2	1.2500	114.4	12.2917	102.8	.9292	111.5
1893			.8875	100.0	1.2250	112.1	12.0000	100.8	.9292	111.5
1894			.9271	104.5	1.0500	96.1	11.7083	97.9	.8470	101.8
1895	1.9688	98.6	.8521	96.1	.9125	83.5	11.1458	98.2	.7813	93.8
1896	2.0000	100.2	.8533	93.9	.8375	76.6	11.1667	93.3	.6988	83.3
1897	1.9667	98.5	.7521	84.8	.8125	73.3	11.0000	92.0	.7188	86.3
1898	1.9979	100.1	.7604	85.7	.9250	84.6	11.7500	98.2	.7417	89.0
1899	2.0479	102.6	.8938	100.8	1.2917	118.2	13.5208	113.0	.7979	95.8
1900	2.1583	108.1	1.0167	114.6	1.5900	145.5	16.5000	137.9	.6833	82.0
1901	1.8896	94.7	1.0188	114.8	1.8913	173.1	15.0000	125.4	.7742	92.9
1902	1.9500	97.7	.8646	97.5	2.1208	194.1	15.8333	132.4	.8058	96.7
1903	2.0292	101.6	.8896	100.3	1.7292	158.2	16.7917	140.4	.7875	94.5
1904	1.4604	73.2	.8021	90.4	1.6900	154.6	17.0000	142.1	.8246	99.0

^a Duty paid. ^b Average for the period July, 1894, to December, 1899. ^c Average for 1896-1899.

^d Average for 1890-1898.

^e Quotations discontinued.

^f Average for 1896-1899.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Lumber and building materials.									
	Linseed oil: raw.		Maple: hard.		Oak: white, plain.		Oak: white, quartered.		Oxide of zinc.	
	Average price per gallon.	Relative price.	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$0.4535	100.0	\$26.5042	100.0	\$37.4292	100.0	\$53.6771	100.0	\$0.0400	100.0
1890	.6158	135.8	26.5000	100.0	37.8750	101.2	51.4583	95.9	.0425	106.3
1891	.4842	106.8	26.5000	100.0	38.0000	101.5	53.5833	99.8	.0419	104.8
1892	.4083	90.0	26.5000	100.0	38.4583	102.7	53.0000	98.7	.0426	106.5
1893	.4633	102.2	26.5000	100.0	38.7500	103.5	53.0000	98.7	.0413	103.3
1894	.5242	115.6	26.5000	100.0	37.2500	99.5	51.1250	95.2	.0373	93.3
1895	.5242	115.6	26.5000	100.0	36.2500	96.8	53.2500	99.2	.0350	87.5
1896	.3683	81.2	26.5000	100.0	36.2500	96.8	54.5000	101.5	.0383	95.8
1897	.3275	72.2	26.5000	100.0	36.2500	96.8	53.8333	100.3	.0377	94.3
1898	.3925	86.5	26.5000	100.0	36.2500	96.8	52.5000	97.8	.0396	99.0
1899	.4267	94.1	26.5417	100.1	38.9583	104.1	60.5208	112.7	.0438	109.5
1900	.6292	138.7	27.5000	103.8	40.8333	109.1	64.4583	120.1	.0451	112.8
1901	.6350	140.0	26.7083	100.8	36.7708	98.2	59.1667	110.2	.0438	109.5
1902	.5933	130.8	28.5833	107.8	40.8750	109.2	63.0833	117.5	.0440	110.0
1903	.4167	91.9	31.6667	119.5	44.8333	119.8	74.7917	139.3	.0463	115.8
1904	.4158	91.7	31.0000	117.0	46.5000	124.2	80.7500	150.4	.0463	115.8

Year.	Pine: white, boards, No. 2 barn.		Pine: white, boards, uppers.		Pine: yellow.		Plate glass: polished, 3 to 5 sq. ft.		Plate glass: polished, 5 to 10 sq. ft.	
	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per sq. ft.	Relative price.	Average price per sq. ft.	Relative price.
	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per sq. ft.	Relative price.	Average price per sq. ft.	Relative price.
Average, 1890-1899..	\$17.1104	100.0	\$46.5542	100.0	\$18.4646	100.0	\$0.3630	100.0	\$0.5190	100.0
1890	16.7917	98.1	44.0833	94.7	20.7500	112.4	.5300	146.0	.7000	134.9
1891	17.0000	99.4	45.0000	96.7	19.9583	108.1	.5200	143.3	.6900	132.9
1892	17.1458	100.2	46.0417	98.9	18.5000	100.2	.4200	115.7	.5500	106.0
1893	18.6250	108.9	48.5000	104.2	18.5000	100.2	.4200	115.7	.5500	106.0
1894	18.1667	106.2	46.4167	99.7	18.5000	100.2	.3300	90.9	.4500	86.7
1895	17.2500	100.8	46.0000	98.8	16.9167	91.6	.3000	82.6	.4800	92.5
1896	16.5000	96.4	46.6250	100.2	16.4167	88.9	.3400	93.7	.5400	104.0
1897	15.8333	92.5	46.3333	99.5	16.4375	89.0	.2000	55.1	.3200	61.7
1898	15.5000	90.6	46.0833	99.0	18.6250	100.9	.2700	74.4	.4300	82.9
1899	18.2917	106.9	50.4583	108.4	20.0417	108.5	.3000	82.6	.4800	92.5
1900	21.5000	125.7	57.5000	123.5	20.7083	112.2	.3400	93.7	.5400	104.0
1901	20.8750	122.0	60.4167	129.8	19.6667	106.5	.3200	88.2	.4900	94.4
1902	23.5000	137.3	74.8333	160.7	21.0000	113.7	.2575	70.9	.4113	79.2
1903	24.0000	140.3	80.0000	171.8	21.0000	113.7	.2625	72.3	.4313	83.1
1904	23.0000	134.4	81.0000	174.0	21.4167	116.0	.2275	62.7	.3650	70.3

Year.	Poplar.		Putty.		Resin: good, strained.		Shingles: cypress.		Shingles: white pine, 18 in.	
	Average price per M feet.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per M.	Relative price.	Average price per M.	Relative price.
	Average price per M feet.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per M.	Relative price.	Average price per M.	Relative price.
Average, 1890-1899..	\$31.3667	100.0	\$0.0158	100.0	\$1.4399	100.0	\$2.8213	100.0	\$3.7434	100.0
1890	30.5000	97.2	.0175	110.8	1.3844	96.1	3.3500	118.7	3.8417	102.6
1891	30.5000	97.2	.0175	110.8	1.4740	102.4	3.2500	115.2	4.0000	106.9
1892	30.6042	97.6	.0161	101.9	1.8417	93.2	3.1500	111.7	3.9063	104.4
1893	33.6250	107.2	.0160	101.3	1.2615	87.6	3.0000	106.3	3.8500	102.8
1894	31.7500	101.2	.0157	99.4	1.2510	86.9	2.8000	99.2	3.7500	100.2
1895	31.0000	98.8	.0145	91.8	1.5615	108.4	2.6500	93.9	3.7000	98.8
1896	31.0000	98.8	.0145	91.8	1.7458	121.2	2.5000	88.6	3.6125	96.5
1897	30.6667	97.8	.0145	91.8	1.6125	112.0	2.3500	83.3	3.5417	94.6
1898	30.0000	95.6	.0145	91.8	1.4208	98.7	2.5000	88.6	3.5521	94.9
1899	34.0208	108.5	.0168	106.3	1.3458	93.5	2.6625	94.4	3.6792	98.3
1900	37.6875	120.2	.0190	120.3	1.6021	111.3	2.8500	101.0	4.0000	106.9
1901	36.7083	117.0	.0150	94.9	1.5302	106.3	2.8500	101.0	4.1375	111.9
1902	42.1042	134.2	.0192	121.5	1.6125	112.0	2.6708	94.7	α 3.5875	α 125.1
1903	49.6458	158.3	.0141	89.2	2.2156	153.9	2.5667	91.0	α 3.6500	α 125.1
1904	50.3292	160.5	.0110	69.6	2.8333	196.8	2.6000	92.2	α 3.5750	α 122.5

α Shingles: Michigan white pine, 16 inches long, XXXX. For method of computing relative price see pages 409 and 410.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Lumber and building materials.									
	Spruce.		Tar.		Turpentine: spirits of.		Window glass: American, single, firsts, 6 x 8 to 10 x 15 inch.		Window glass: American, single, thirds, 6 x 8 to 10 x 15 inch.	
	Average price per M feet.	Relative price.	Average price per barrel.	Relative price.	Average price per gallon.	Relative price.	Average price per 50 sq. ft.	Relative price.	Average price per 50 sq. ft.	Relative price.
Average, 1890-1899..	\$14.3489	100.0	\$1.2048	100.0	\$0.3343	100.0	\$2.1514	100.0	\$1.8190	100.0
1890	16.2917	113.5	1.4750	122.4	.4080	122.0	2.2283	103.6	1.7858	98.2
1891	14.2183	99.1	1.5833	131.4	.3795	113.5	2.2125	102.8	1.7700	97.3
1892	14.8542	103.5	1.3000	107.9	.3227	96.5	1.9935	92.7	1.5948	87.7
1893	13.7708	96.0	1.0458	86.8	.3002	89.8	2.1375	99.4	1.7100	94.0
1894	12.7083	88.6	1.0917	90.6	.2932	87.7	1.9918	92.6	1.6326	89.8
1895	14.2500	99.3	1.1417	94.8	.2923	87.4	1.5688	74.3	1.3919	76.5
1896	14.2500	99.3	1.0125	84.0	.2743	82.1	1.8021	83.8	1.6000	88.0
1897	14.0000	97.6	1.0542	87.5	.2924	87.5	2.1986	102.2	1.9630	107.9
1898	13.7500	95.8	1.0979	91.1	.3221	96.4	2.6432	122.9	2.3428	128.8
1899	15.3958	107.3	1.2458	103.4	.4581	137.0	2.7081	125.9	2.3986	131.9
1900	17.3750	121.1	1.3625	113.1	.4771	142.7	2.6990	125.5	2.3194	127.5
1901	18.0000	125.4	1.2817	106.4	.3729	111.5	4.1282	191.9	3.2823	180.4
1902	19.2500	134.2	1.3250	110.0	.4740	141.8	3.2187	149.6	2.5649	141.0
1903	19.1875	133.7	1.6792	139.4	.5715	171.0	2.6400	122.7	2.1600	118.7
1904	20.5000	142.9	1.6792	139.4	.5757	172.2	2.8867	134.2	2.3283	128.0

Year.	Drugs and chemicals.							
	Alcohol: grain, 94 per cent.		Alcohol: wood, refined, 16 per cent.		Alum: lump.		Brimstone: crude, seconds.	
	Average price per gallon.	Relative price.	Average price per gallon.	Relative price.	Average price per pound.	Relative price.	Average price per ton.	Relative price.
Average, 1890-1899..	\$2.2405	100.0	\$0.9539	100.0	\$0.0167	100.0	\$20.6958	100.0
1890	2.0717	92.5	1.1375	119.2	.0182	109.0	21.1458	102.2
1891	2.2150	98.9	1.1598	121.6	.0158	94.6	28.6042	138.2
1892	2.1417	95.6	1.2973	136.0	.0160	95.8	24.1458	116.7
1893	2.1808	97.3	1.2917	135.4	.0174	104.2	18.7292	90.5
1894	2.1521	96.1	.7198	75.5	.0169	101.2	16.5833	80.1
1895	2.3292	104.0	.8667	90.9	.0160	95.8	15.6250	75.5
1896	2.3008	102.7	.8500	89.1	.0164	98.2	17.9583	86.8
1897	2.2767	101.6	.6958	72.9	.0166	99.4	20.1250	97.2
1898	2.3250	103.8	.7500	78.6	.0165	98.8	22.9167	110.7
1899	2.4117	107.6	.7708	80.8	.0168	100.6	21.1250	102.1
1900	2.3867	106.5	.8000	83.9	.0175	104.8	21.1458	102.2
1901	2.4583	109.7	.6125	64.2	.0175	104.8	22.0000	106.3
1902	2.4057	107.4	.6417	67.3	.0175	104.8	23.4375	113.2
1903	2.3958	106.9	.5917	62.0	.0173	103.6	22.3333	107.9
1904	2.4325	108.6	.5875	61.6	.0175	104.8	21.7750	105.2

Year.	Glycerin: refined.		Muriatic acid: 20°.		Opium: natural, in cases.		Quinine: American.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per ounce.	Relative price.
Average, 1890-1899..	\$0.1399	100.0	\$0.0104	100.0	\$2.3602	100.0	\$0.2460	100.0
1890	.1767	126.3	.0104	100.0	2.6208	111.0	.3275	133.1
1891	.1533	109.9	.0098	94.2	1.9438	82.4	.2508	102.0
1892	.1396	99.8	.0121	116.3	1.6708	70.8	.2183	88.7
1893	.1346	96.2	.0101	97.1	2.3917	101.3	.2150	87.4
1894	.1194	85.3	.0088	84.6	2.2854	96.8	.2621	106.5
1895	.1204	86.1	.0083	79.8	1.8413	78.0	.2608	102.0
1896	.1671	119.4	.0075	72.1	2.0917	88.6	.2406	97.8
1897	.1308	93.5	.0109	104.8	2.3417	99.2	.1829	74.3
1898	.1238	88.5	.0128	123.1	3.3417	141.6	.2146	87.2
1899	.1329	95.0	.0135	129.8	3.0729	130.2	.2975	120.9
1900	.1515	108.3	.0135	129.8	3.2000	135.6	.3325	135.2
1901	.1504	107.5	.0150	144.2	3.2292	136.8	.3025	123.0
1902	.1444	103.2	.0168	161.5	2.8313	120.0	.2575	104.7
1903	.1446	103.4	.0160	153.8	3.0813	130.6	.2525	102.6
1904	.1396	99.8	.0160	153.8	2.7500	116.5	.2333	94.8

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	Drugs, etc.		House furnishing goods.					
	Sulphuric acid: 66°.		Earthenware: plates, cream-colored.		Earthenware: plates, white granite.		Earthenware: teacups and saucers, white granite.	
	Average price per pound.	Relative price.	Average price per dozen.	Relative price.	Average price per dozen.	Relative price.	Average price per gross (6 dozen cups and 6 dozen saucers).	Relative price.
Average, 1890-1899..	\$0.0089	100.0	\$0.4136	100.0	\$0.4479	100.0	\$3.4292	100.0
1890.....	.0088	98.9	.4465	108.0	.4888	109.1	3.7600	109.6
1891.....	.0081	91.0	.4367	105.6	.4786	106.9	3.6817	107.4
1892.....	.0095	106.7	.4280	102.3	.4644	103.7	3.5720	104.2
1893.....	.0085	95.5	.4280	102.3	.4644	103.7	3.5720	104.2
1894.....	.0073	82.0	.4177	101.0	.4566	101.9	3.5250	102.8
1895.....	.0070	78.7	.3913	94.6	.4162	92.9	3.2374	94.4
1896.....	.0070	78.7	.3907	92.0	.3991	89.1	3.0907	90.1
1897.....	.0095	106.7	.3907	92.0	.3991	89.1	3.0907	90.1
1898.....	.0113	127.0	.4153	100.4	.4515	100.8	3.3595	98.0
1899.....	.0120	134.8	.4208	101.7	.4607	102.9	3.4026	99.2
1900.....	.0120	134.8	.4410	106.6	.4841	108.1	3.5750	104.3
1901.....	.0125	140.4	.4655	112.5	.5096	113.8	3.7632	109.7
1902.....	.0130	146.1	.4655	112.5	.5096	113.8	3.7632	109.7
1903.....	.0127	142.7	.4775	115.4	.4988	111.4	3.6832	107.4
1904.....	.0129	144.9	.4705	113.8	.4943	110.4	3.6503	106.4

Year.	House furnishing goods.							
	Furniture: bed-room sets, ash.		Furniture: chairs, bedroom, maple.		Furniture: chairs, kitchen.		Furniture: tables, kitchen.	
	Average price per set.	Relative price.	Average price per dozen.	Relative price.	Average price per dozen.	Relative price.	Average price per dozen.	Relative price.
Average, 1890-1899..	\$10.555	100.0	\$6.195	100.0	\$3.8255	100.0	\$14.435	100.0
1890.....	12.000	113.7	7.000	113.0	4.2000	109.8	15.000	103.9
1891.....	12.000	113.7	7.000	113.0	4.2000	109.8	15.000	103.9
1892.....	12.000	113.7	6.850	110.6	4.2500	111.1	15.000	103.9
1893.....	11.000	104.2	6.850	110.6	4.2500	111.1	15.000	103.9
1894.....	11.000	104.2	6.000	96.9	3.5000	91.5	14.250	98.7
1895.....	9.950	94.3	6.000	96.9	3.5000	91.5	14.250	98.7
1896.....	8.750	82.9	6.000	96.9	3.5000	91.5	13.800	95.6
1897.....	8.750	82.9	5.000	80.7	3.5000	91.5	13.800	95.6
1898.....	10.000	94.7	5.125	82.7	3.3130	86.6	13.800	95.6
1899.....	10.100	95.7	6.125	98.9	4.0420	105.7	14.450	100.1
1900.....	11.250	106.6	8.000	129.1	5.2080	136.1	15.600	108.1
1901.....	11.250	106.6	7.000	113.0	4.7500	124.2	15.600	108.1
1902.....	11.750	111.3	7.333	118.4	4.9167	128.5	15.600	108.1
1903.....	12.167	115.3	7.917	127.8	5.0000	130.7	15.600	108.1
1904.....	12.250	116.1	8.000	129.1	4.7708	124.7	15.600	108.1

Year.	Glassware: nappies, 4-inch.		Glassware: pitchers, 1-gallon, common.		Glassware: tumblers, 1-pint, common.		Table cutlery: carvers, stag handles.	
	Average price per dozen.	Relative price.	Average price per dozen.	Relative price.	Average price per dozen.	Relative price.	Average price per pair.	Relative price.
	Average price per dozen.	Relative price.	Average price per dozen.	Relative price.	Average price per dozen.	Relative price.	Average price per pair.	Relative price.
Average, 1890-1899..	\$0.112	100.0	\$1.175	100.0	\$0.1775	100.0	\$0.80	100.0
1890.....	.120	107.1	1.250	106.4	.1800	101.4	.80	100.0
1891.....	.120	107.1	1.250	106.4	.2000	112.7	.80	100.0
1892.....	.120	107.1	1.250	106.4	.1900	107.0	.80	100.0
1893.....	.120	107.1	1.250	106.4	.1900	107.0	.95	118.8
1894.....	.120	107.1	1.250	106.4	.1900	107.0	.80	100.0
1895.....	.120	107.1	1.250	106.4	.1850	104.2	.80	100.0
1896.....	.100	89.3	1.250	106.4	.1800	101.4	.80	100.0
1897.....	.100	89.3	1.000	85.1	.1700	95.8	.75	93.8
1898.....	.100	89.3	1.000	85.1	.1600	90.1	.75	93.8
1899.....	.100	89.3	1.000	85.1	.1300	73.2	.75	93.8
1900.....	.100	89.3	1.000	85.1	.1800	101.4	.75	93.8
1901.....	.140	125.0	1.300	110.6	.1800	101.4	.75	93.8
1902.....	.140	125.0	1.300	110.6	.1850	104.2	.75	93.8
1903.....	.140	125.0	1.300	110.6	.1767	99.5	.75	93.8
1904.....	.140	125.0	1.150	97.9	.1600	90.1	.75	93.8

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[For a more detailed description of the articles, see Table I.]

Year.	House furnishing goods.						Miscellaneous.	
	Table cutlery: knives and forks, coco-bolo handles.		Wooden ware: pails, oak-grained.		Wooden ware: tubs, oak-grained.		Cotton-seed meal.	
	Average price per gross.	Relative price.	Average price per dozen.	Relative price.	Average price per nest of 3.	Relative price.	Average price per ton of 2,000 pounds.	Relative price.
Average, 1890-1899..	\$6.0600	100.0	\$1.2988	100.0	\$1.3471	100.0	\$21.9625	100.0
1890.....	7.7500	127.9	1.5917	122.6	1.6500	122.5	23.3750	106.4
1891.....	7.7500	127.9	1.4500	111.6	1.5667	116.3	25.2083	114.8
1892.....	6.8500	113.0	1.3500	103.9	1.4000	108.9	23.6958	107.9
1893.....	5.5000	90.8	1.3125	101.1	1.3083	97.1	25.7042	117.0
1894.....	5.5000	90.8	1.2583	96.9	1.2875	95.6	22.5583	102.7
1895.....	5.5000	90.8	1.1208	86.3	1.2500	92.8	18.9125	86.1
1896.....	5.5000	90.8	1.2625	97.2	1.2500	92.8	19.9375	90.8
1897.....	5.0000	82.5	1.2417	95.6	1.2500	92.8	20.4375	93.1
1898.....	5.5000	90.8	1.1333	87.3	1.2500	92.8	19.0000	86.5
1899.....	5.7500	94.9	1.2667	97.5	1.2583	93.4	20.7958	94.7
1900.....	5.7500	94.9	1.4917	114.9	1.4417	107.0	25.5458	116.3
1901.....	6.5000	107.3	1.5500	119.3	1.4500	107.6	25.0208	113.9
1902.....	6.5000	107.3	1.5500	119.3	1.4500	107.6	27.1333	123.5
1903.....	6.5000	107.3	1.5875	122.2	1.4500	107.6	26.7083	121.6
1904.....	6.6667	110.0	1.7000	130.9	1.4500	107.6	26.2000	119.3

Year.	Miscellaneous.							
	Cotton-seed oil: summer yellow, prime.		Jute: raw.		Malt: Western made.		Paper: news.	
	Average price per gallon.	Relative price.	Average price per pound.	Relative price.	Average price per bushel.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$0.3044	100.0	\$0.0859	100.0	\$0.7029	100.0	\$0.0299	100.0
1890.....	.3446	113.2	.0888	103.1	.7500	106.7	.0382	127.8
1891.....	.3567	117.2	.0871	103.3	.9271	131.9	.0340	113.7
1892.....	.3088	101.4	.0475	55.2	.8015	114.0	.0340	113.7
1893.....	.4550	149.5	.0346	40.0	.7750	110.3	.0318	106.4
1894.....	.3238	106.4	.0345	40.0	.7446	105.9	.0323	108.0
1895.....	.2721	89.4	.0279	32.5	.6854	97.5	.0308	103.0
1896.....	.2513	82.6	.0319	36.9	.5629	80.1	.0275	92.0
1897.....	.2365	77.7	.0373	43.5	.5438	77.4	.0271	90.6
1898.....	.2288	75.2	.0332	38.8	.6163	87.7	.0219	73.2
1899.....	.2663	87.5	.0365	42.5	.6221	88.5	.0209	69.9
1900.....	.3556	116.8	.0435	50.5	.6533	93.0	.0281	94.0
1901.....	.3571	117.3	.0400	46.8	.7450	106.0	.0226	75.6
1902.....	.4067	133.6	.0438	50.9	.7925	112.7	.0242	80.9
1903.....	.3977	130.7	.0464	54.2	.7246	103.1	.0253	84.6
1904.....	.3135	103.0	.0444	51.5	.6758	96.1	.0267	89.3

Year.	Paper: wrapping, manila.		Proof spirits.		Rope: manila, ½-inch.		Rubber: Para Island.	
	Average price per pound.	Relative price.	Average price per gallon.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$0.0553	100.0	\$1.1499	100.0	\$0.0934	100.0	\$0.8007	100.0
1890.....	.0575	104.0	1.0533	91.6	.1494	160.0	.8379	104.6
1891.....	.0575	104.0	1.1052	96.1	.1038	111.1	.7908	98.8
1892.....	.0558	100.9	1.0757	93.5	.1148	122.9	.6763	84.5
1893.....	.0579	104.7	1.0713	93.2	.0919	98.4	.7167	89.5
1894.....	.0584	105.6	1.1326	98.5	.0770	82.4	.6744	84.2
1895.....	.0586	106.0	1.2109	105.3	.0735	78.7	.7425	92.7
1896.....	.0588	106.3	1.2031	104.6	.0664	71.1	.8000	99.9
1897.....	.0588	106.3	1.1830	102.9	.0631	67.6	.8454	105.6
1898.....	.0459	83.0	1.2220	106.3	.0842	90.1	.9271	115.8
1899.....	.0438	79.2	1.2421	108.0	.1094	117.1	.9954	124.3
1900.....	.0480	86.8	1.2460	108.4	.1320	141.3	.9817	122.6
1901.....	.0502	90.8	1.2861	111.8	.1092	116.9	.8496	106.1
1902.....	.0497	89.9	1.3138	114.3	.1348	144.8	.7273	90.8
1903.....	.0526	95.1	1.2809	111.4	α .1146	α 122.7	.9054	113.1
1904.....	.0530	95.8	1.2692	110.4	α .1171	α 125.4	1.0875	135.8

α 1/16-inch.

TABLE IV.—BASE PRICES (AVERAGE FOR 1890-1899), AND AVERAGE YEARLY ACTUAL AND RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Concluded.

[For a more detailed description of the articles, see Table I.]

Year.	Miscellaneous.							
	Soap: castile, mot- tled, pure.		Starch: laundry.		Tobacco: plug, Horseshoe.		Tobacco: smoking, gran., Seal of N. C.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
Average, 1890-1899..	\$0.0569	100.0	\$0.0348	100.0	\$0.3962	100.0	\$0.5090	100.0
1890.....	.0594	104.4	.0371	106.6	.4050	102.2	.5000	98.2
1891.....	.0621	109.1	.0426	122.4	.4008	101.2	.5000	98.2
1892.....	.0624	109.7	.0373	107.2	.3725	94.0	.5000	98.2
1893.....	.0615	108.1	.0366	105.2	.3967	100.1	.5000	98.2
1894.....	.0588	103.3	.0366	105.2	.4000	101.0	.5000	98.2
1895.....	.0507	89.1	.0363	104.3	.4000	101.0	.5000	98.2
1896.....	.0502	88.2	.0310	89.1	.3808	96.1	.5000	98.2
1897.....	.0531	93.3	.0300	86.2	.3758	94.9	.5000	98.2
1898.....	.0550	96.7	.0300	86.2	.4133	104.3	.5300	104.1
1899.....	.0558	98.1	.0300	86.2	.4175	105.4	.5600	110.0
1900.....	.0613	107.7	.0340	97.7	.4433	111.9	.5600	110.0
1901.....	.0655	115.1	.0363	104.3	.4658	117.6	.5600	110.0
1902.....	.0663	116.5	.0454	130.5	.4542	114.6	.5592	109.9
1903.....	.0658	115.6	.0431	123.9	.4500	113.6	.5700	112.0
1904.....	.0647	113.7	.0369	106.0	.4700	118.6	.5825	114.4

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Farm products.										
	Cotton: upland, mid- dling.	Flax- seed: No. 1.	Grain.						Hay: timo- thy, No. 1.	Hides: green, salted, packers, heavy native steers.	Hops: New York State, choice.
			Barley: by sample.	Corn: No. 2, cash.	Oats: cash.	Rye: No. 2, cash.	Wheat: contract grades, cash.	Average.			
1890.....	142.9	125.5	111.6	103.8	115.6	103.0	118.9	110.6	95.8	99.6	148.0
1891.....	110.8	97.1	134.5	151.0	144.1	157.6	128.1	143.1	117.8	101.5	149.1
1892.....	99.0	91.4	112.2	118.3	113.2	127.7	104.9	115.3	113.5	92.8	141.4
1893.....	107.2	97.7	103.3	104.2	105.2	92.6	90.1	99.1	107.4	79.9	128.2
1894.....	90.2	121.6	113.2	113.7	115.7	88.1	74.4	101.0	99.9	68.4	85.5
1895.....	94.0	111.8	94.8	104.0	88.3	91.2	79.9	91.6	109.1	109.7	53.1
1896.....	102.0	72.9	65.7	67.8	67.0	66.5	85.4	70.5	99.0	86.6	49.5
1897.....	92.2	78.1	71.2	66.9	67.9	74.9	105.8	77.3	80.9	106.3	65.5
1898.....	76.9	99.8	95.9	82.6	91.9	93.8	117.8	96.4	79.9	122.8	91.5
1899.....	84.7	104.0	97.6	87.6	91.2	104.4	94.7	95.1	96.6	131.8	88.3
1900.....	123.8	145.7	106.2	100.2	84.5	97.9	93.7	96.5	110.9	127.4	83.7
1901.....	111.1	145.8	129.8	130.6	118.3	100.8	95.7	115.0	123.0	132.0	97.1
1902.....	115.1	135.0	139.4	156.9	147.3	102.5	98.7	129.0	120.9	142.8	134.1
1903.....	144.7	94.1	121.2	121.1	131.7	97.5	105.1	115.3	119.2	124.8	159.5
1904.....	155.9	99.6	116.9	132.6	135.8	133.4	138.3	131.4	112.5	124.4	196.2

Year.	Live stock.										
	Cattle.			Hogs.			Sheep.			Average, farm prod- ucts.	
	Steers, choice to extra.	Steers, good to choice.	Average.	Heavy.	Light.	Average.	Native.	West- ern.	Average.		
1890.....	91.5	87.4	89.5	89.6	88.8	89.2	120.5	118.0	119.3	99.3	110.0
1891.....	110.6	107.7	109.2	100.2	98.2	99.2	120.0	115.6	117.8	108.7	121.5
1892.....	95.7	95.0	95.4	116.8	114.6	115.7	127.2	123.2	125.2	112.1	111.7
1893.....	103.8	102.2	103.0	148.4	148.7	148.6	103.2	104.3	103.8	118.4	107.9
1894.....	97.0	95.6	96.3	112.7	111.6	112.2	71.7	75.4	73.6	94.0	95.9
1895.....	103.1	104.2	103.7	97.0	96.2	96.6	78.5	78.3	78.4	92.9	93.3
1896.....	86.4	90.2	88.3	76.1	80.5	78.3	78.0	79.4	78.7	81.8	78.3
1897.....	98.2	100.8	99.5	81.4	84.2	82.8	93.1	95.3	94.2	92.2	85.2
1898.....	101.1	103.2	102.2	86.2	85.0	85.6	104.4	105.3	104.9	97.5	76.1
1899.....	112.6	113.7	113.2	91.5	92.1	91.8	103.3	105.2	104.3	103.1	100.0
1900.....	108.7	113.9	111.3	115.2	115.7	115.5	109.7	114.3	112.0	112.9	109.5
1901.....	115.1	118.1	116.6	135.0	133.9	134.5	89.2	94.7	92.0	114.3	116.9
1902.....	140.4	138.5	139.5	158.0	152.4	155.2	100.6	105.7	103.2	132.6	130.5
1903.....	104.7	106.9	105.8	137.3	137.0	137.2	98.7	98.0	98.4	113.8	113.8
1904.....	112.0	109.7	110.9	116.8	116.5	116.7	110.3	107.8	109.1	112.2	126.2

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

	Food, etc.									
Year.	Beans: medium, choice.	Bread.								Average.
		Crackers.			Loaf.					
		Boston X.	Soda.	Average.	Washing- ton mar- ket.	Home- made (N. Y. mar- ket).	Vienna (N. Y. market).	Average.		
1890....	121.5	104.0	111.4	107.7	100.6	100.9	101.1	100.9	103.6	
1891....	134.9	104.0	111.4	107.7	100.6	100.9	101.1	100.9	103.6	
1892....	112.0	102.2	106.3	104.3	100.6	100.9	101.1	100.9	102.2	
1893....	119.2	96.6	104.5	100.6	100.6	100.9	101.1	100.9	100.7	
1894....	110.6	96.6	101.0	98.8	100.6	100.9	101.1	100.9	100.0	
1895....	107.2	97.2	94.0	95.6	94.1	100.9	101.1	98.7	97.5	
1896....	70.3	96.6	91.6	94.1	102.5	90.5	90.6	94.5	94.4	
1897....	62.6	88.0	82.5	85.3	100.6	100.9	101.1	100.9	94.6	
1898....	74.7	108.9	105.6	107.3	100.6	100.9	101.1	100.9	103.4	
1899....	87.0	105.9	92.3	99.1	100.6	100.9	101.1	100.9	100.2	
1900....	125.6	111.4	94.0	102.7	100.6	100.9	101.1	100.9	101.6	
1901....	131.3	118.9	97.5	108.2	100.6	100.9	101.1	100.9	103.8	
1902....	115.0	118.9	97.5	108.2	100.6	100.9	101.1	100.9	103.8	
1903....	135.5	112.6	90.0	101.3	100.6	100.9	101.1	100.9	101.0	
1904....	120.4	115.2	91.6	103.4	102.5	110.4	105.1	106.0	105.0	

Year.	Butter.				Cheese: New York State, full cream.	Coffee: Rio No. 7.	Eggs: new-laid, fancy, near-by.	Fish.					
	Cream- ery, Elgin (mar- ket).	Cream- ery, extra (New York mar- ket).	Dairy, New York State.	Aver- age.					Cod, dry, bank, large.	Her- ring, shore, round.	Mack- erel, salt, large No. 3s.	Salmon, canned.	Aver- age.
1890....	103.1	101.5	96.5	100.4	97.1	136.6	99.1	101.7	93.3	129.2	111.4	108.9	
1891....	115.3	115.3	117.6	116.1	102.4	127.3	110.0	120.5	124.6	108.4	101.8	113.8	
1892....	116.5	116.5	116.1	116.4	107.2	108.9	110.4	126.3	77.8	92.0	100.7	99.2	
1893....	118.9	120.5	124.6	121.3	109.0	131.2	114.5	114.2	101.0	92.0	101.4	102.2	
1894....	101.1	102.1	103.3	102.2	107.4	126.0	93.5	106.7	89.9	78.2	96.7	92.9	
1895....	95.1	95.3	93.0	94.5	94.1	121.2	102.0	98.9	83.6	110.6	102.1	98.8	
1896....	82.6	82.1	82.3	82.3	92.0	98.9	88.7	75.4	88.8	98.5	105.2	92.0	
1897....	84.7	84.5	83.2	84.1	98.1	60.4	87.5	80.9	96.3	86.5	90.8	88.6	
1898....	86.9	87.2	86.4	86.8	83.3	48.2	92.6	83.6	111.4	96.7	86.0	94.4	
1899....	95.6	94.8	97.1	95.8	108.9	46.0	101.6	92.0	133.2	107.9	103.8	109.2	
1900....	100.4	100.1	104.5	101.7	114.3	62.6	100.7	94.9	134.6	98.3	120.2	112.0	
1901....	97.4	96.5	99.2	97.7	102.4	49.2	103.7	107.2	131.9	76.6	116.3	108.0	
1902....	111.2	110.6	114.5	112.1	114.1	44.6	122.7	91.2	129.9	97.3	109.6	107.0	
1903....	106.1	104.7	106.2	105.7	123.3	42.6	123.2	105.0	151.7	123.5	110.0	122.6	
1904....	100.4	97.6	97.3	98.4	103.2	59.6	135.0	130.4	144.4	102.6	117.1	123.6	

Year.	Flour.					Fruit.			
	Buck- wheat.	Rye.	Wheat.			Apples.			Average.
			Spring patents.	Winter straights.	Average.				
1890....	104.0	101.4	120.7	121.0	120.9	111.8	134.1	134.0	134.1
1891....	125.7	148.3	123.5	127.6	125.6	131.3	129.9	160.2	145.1
1892....	92.1	121.1	101.1	107.2	104.2	105.4	81.2	82.1	81.7
1893....	121.9	93.0	93.2	85.4	89.3	98.4	109.4	98.6	104.0
1894....	125.4	83.8	83.7	71.5	77.6	91.1	128.9	122.5	125.7
1895....	86.2	94.5	84.8	84.0	84.4	87.4	80.0	93.4	86.7
1896....	71.1	80.9	88.3	94.1	91.2	83.6	62.9	60.6	61.8
1897....	75.4	84.6	106.8	113.4	110.1	95.1	65.5	51.8	58.7
1898....	79.8	92.9	110.1	107.8	109.0	97.7	105.1	77.3	91.2
1899....	118.4	99.4	87.8	88.0	87.9	98.4	102.6	118.4	110.5
1900....	108.3	103.3	89.4	87.1	88.3	97.0	72.6	86.0	79.3
1901....	108.4	100.1	88.7	86.0	87.4	95.8	83.7	79.6	81.7
1902....	115.1	103.8	88.6	90.7	89.7	99.6	108.7	98.4	103.6
1903....	119.5	94.9	100.8	93.4	97.1	102.2	72.1	83.9	78.0
1904....	120.1	131.1	125.2	125.5	125.4	125.5	71.2	64.7	68.0

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Food, etc.								
	Fruit.				Glucose: 41° and 42° mix- ing. (a)	Lard: prime contract.	Meal: corn.		
	Currants, in barrels.	Prunes, California, in boxes.	Raisins, California, London layer.	Average.			Fine white.	Fine yellow.	Average.
1890....	127.5	138.0	157.3	138.2	.....	96.8	101.2	100.3	100.8
1891....	113.6	129.2	120.1	130.6	.....	100.9	140.6	143.4	142.0
1892....	79.2	128.6	97.9	93.8	.....	117.9	113.7	114.2	114.0
1893....	72.0	134.2	113.3	105.5	124.3	157.5	105.0	106.5	105.8
1894....	46.1	95.0	76.9	93.9	111.4	118.2	106.7	104.5	105.6
1895....	67.7	86.0	95.2	84.5	109.2	99.8	102.2	104.4	103.3
1896....	87.2	75.1	67.9	70.7	81.7	71.7	77.5	77.2	77.4
1897....	127.7	70.5	93.2	81.7	86.0	67.4	77.8	75.1	76.5
1898....	154.7	70.3	92.7	100.0	91.8	84.4	81.1	83.2	83.7
1899....	125.3	73.0	85.5	101.0	95.6	85.0	91.1	91.2	91.2
1900....	192.0	67.4	101.3	103.9	104.9	105.5	96.5	97.4	97.0
1901....	221.6	67.8	96.1	109.8	116.0	135.3	114.2	116.8	115.5
1902....	131.7	71.2	112.3	104.5	153.6	161.9	146.4	150.0	148.2
1903....	126.9	62.1	96.3	88.3	129.7	131.1	123.7	125.7	124.7
1904....	130.1	59.6	98.2	96.0	126.3	111.8	127.8	131.1	129.5

Year.	Meat.									
	Beef.				Pork.					Mutton, dressed.
	Fresh, native sides.	Salt, extra mess.	Salt, hams, West- ern.	Aver- age.	Bacon, short clear sides.	Bacon, short rib sides.	Hams, smoked.	Salt, mess, old to new.	Aver- age.	
1890....	89.2	86.8	80.4	85.5	89.3	89.3	101.1	104.4	96.0	123.7
1891....	106.2	104.4	85.8	93.8	103.6	103.8	99.8	97.2	101.1	114.9
1892....	98.8	84.8	60.5	88.0	116.6	116.5	109.3	99.1	110.4	121.2
1893....	105.4	102.2	98.6	102.1	155.3	154.0	126.9	157.6	148.5	106.5
1894....	97.0	101.0	101.5	99.8	111.3	112.2	103.6	121.4	112.1	80.2
1895....	102.7	101.4	95.9	100.0	96.3	96.3	96.2	101.7	97.6	82.2
1896....	90.5	93.7	88.1	90.8	73.2	73.0	95.8	76.8	79.7	82.9
1897....	99.7	95.7	125.1	106.8	80.1	79.6	90.9	76.6	81.8	96.6
1898....	101.3	114.2	118.8	111.4	83.3	90.5	82.0	84.8	86.4	98.0
1899....	108.3	115.9	125.6	116.6	86.4	85.1	93.8	80.3	86.4	94.3
1900....	104.8	121.7	114.2	113.4	111.4	111.6	104.2	107.5	108.7	96.4
1901....	102.1	116.8	112.6	110.3	132.0	132.5	109.2	134.2	127.0	89.5
1902....	125.9	147.1	118.0	130.3	159.0	159.5	123.1	154.2	149.0	97.9
1903....	101.7	113.1	117.2	110.7	142.1	143.0	129.2	143.1	139.4	98.7
1904....	106.1	109.4	123.5	113.0	114.8	115.4	108.9	120.6	114.9	103.2

Year.	Milk: fresh.	Molasses: New Orleans, open kettle, prime.	Rice: domes- tic, choice.	Salt.			Soda: bicar- bonate of, Ameri- can.	Spices.			Starch: pure corn.
				Ameri- can.	Ash- ton's.	Aver- age.		Nut- megs.	Pepper, Singa- pore.	Aver- age.	
1890....	103.1	112.4	107.8	112.5	111.9	112.2	131.6	146.2	153.7	150.0	99.6
1891....	104.7	88.5	113.5	111.7	108.1	109.9	151.7	140.7	116.6	128.7	109.5
1892....	105.1	101.2	101.4	107.5	107.8	107.7	104.3	123.1	92.0	107.6	109.5
1893....	109.4	106.2	81.8	99.6	105.5	102.6	136.4	106.1	79.4	92.3	109.5
1894....	103.1	98.1	93.8	102.1	101.6	101.9	128.2	92.5	68.9	80.7	108.5
1895....	99.2	97.8	95.0	99.6	96.3	96.3	84.7	91.8	66.4	79.1	101.1
1896....	91.8	103.0	92.5	88.4	93.0	90.7	72.7	83.1	66.8	75.0	86.6
1897....	92.2	83.1	96.6	93.9	93.0	93.5	71.8	77.6	58.7	83.2	81.2
1898....	93.7	97.8	108.4	94.4	93.0	93.7	61.7	72.7	119.0	95.9	81.2
1899....	99.2	111.9	108.2	90.4	93.0	91.7	56.0	66.4	149.1	107.8	91.2
1900....	107.5	151.5	97.7	142.1	93.0	117.6	58.9	60.2	172.4	116.3	91.2
1901....	102.7	120.1	97.7	121.6	99.0	110.3	51.2	54.3	172.5	113.4	85.8
1902....	112.9	115.5	99.6	90.3	101.0	95.7	51.7	46.9	167.6	107.3	80.3
1903....	112.9	112.5	100.9	87.2	102.0	94.6	61.7	66.6	172.1	119.4	92.5
1904....	107.8	107.8	78.6	109.4	(b)	109.4	62.2	50.3	164.1	107.2	95.8

a Average for 1893-1899=100.

b Quotations discontinued.

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Food, etc.									
	Sugar.				Tallow.	Tea: Formosa, fine.	Vegetables, fresh.			Vinegar: cider, Mon-arch.
	89° fair refining.	96° centrifugal.	Granulated.	Average.			Onions.	Potatoes, Burbank.	Average.	
1890....	143.9	141.1	130.5	138.5	105.7	96.3	127.8	119.3	123.6	105.4
1891....	101.8	101.1	99.7	100.9	111.0	99.2	121.3	154.9	138.1	121.8
1892....	84.5	85.7	92.1	87.4	106.4	106.0	106.0	91.1	98.6	111.1
1893....	94.3	95.1	102.3	97.2	125.1	101.7	93.8	134.5	114.2	101.5
1894....	81.2	83.5	87.0	83.9	110.3	98.0	95.6	122.3	109.2	101.5
1895....	85.2	84.1	87.9	85.7	99.8	95.1	91.6	86.7	89.2	98.1
1896....	93.9	93.7	95.9	94.5	78.9	91.0	57.3	39.4	48.4	88.0
1897....	90.6	92.1	95.1	92.6	76.3	98.6	115.5	65.7	90.6	88.0
1898....	109.2	109.5	105.2	108.0	81.8	104.2	96.2	102.1	99.2	89.6
1899....	115.4	114.3	104.2	111.3	104.1	109.3	94.3	83.6	89.2	94.7
1900....	119.2	118.2	112.8	116.7	111.5	104.9	71.4	74.9	73.2	91.3
1901....	103.6	104.4	106.8	104.9	119.1	100.4	103.0	113.0	103.0	89.6
1902....	89.3	91.5	94.2	91.7	144.6	106.2	107.2	119.4	113.3	95.3
1903....	95.0	96.1	98.2	96.4	117.2	80.9	104.9	105.2	105.1	88.0
1904....	102.1	102.7	101.0	101.9	105.5	97.1	104.6	146.3	125.5	89.6

Year.	Cloths and clothing.									
	Blankets.					Boots and shoes.				
	Bags: 2-bu., Amoskeag.	11-4, all wool.	11-4, cotton warp, all wool filling.	11-4, cotton warp, cotton and wool filling.	Average.	Men's brogans, split.	Men's calf bal. shoes, Good-year welt.	Men's split boots, etc.	Men's vici kid shoes, Good-year welt.	Women's solid grain shoes.
1890....	113.9	108.3	106.0	108.5	107.6	106.1	101.0	104.0	108.7	104.0
1891....	111.7	106.0	106.0	108.5	106.8	106.1	101.0	104.0	108.7	97.9
1892....	110.8	107.1	104.4	101.4	104.3	104.9	101.0	104.0	108.7	94.8
1893....	106.8	107.1	104.4	99.1	103.5	102.3	101.0	100.9	108.7	91.7
1894....	91.1	101.2	89.7	96.7	95.9	97.9	101.0	97.9	108.7	91.7
1895....	82.2	89.3	88.1	94.3	90.6	99.2	101.0	91.7	97.8	104.0
1896....	91.6	89.3	91.4	94.3	91.7	100.4	101.0	94.8	97.8	104.0
1897....	92.9	89.3	106.0	99.1	98.1	96.0	101.0	97.9	87.0	104.0
1898....	95.6	107.1	102.0	99.1	102.7	92.2	97.6	100.9	87.0	104.0
1899....	108.4	95.2	102.0	99.1	98.8	94.8	94.3	104.0	87.0	104.0
1900....	112.6	107.1	122.3	123.8	117.7	94.8	94.3	110.1	87.0	110.6
1901....	101.0	101.2	106.0	112.0	106.4	95.4	96.8	112.4	87.0	104.5
1902....	102.4	101.2	106.0	112.0	106.4	94.1	96.8	111.1	87.0	105.5
1903....	104.2	110.1	114.2	117.9	114.1	93.5	98.9	113.1	87.0	108.6
1904....	128.4	110.1	118.3	123.8	117.4	93.5	98.9	113.7	87.3	112.3

Year.	Broad-cloths: first quality, black, 54-inch, XXX wool.	Calico: Cochecho prints.	Carpets.				Cotton flannels.		
			Brussels, 5-frame, Bigelow.	Ingrain, 2-ply, Lowell.	Wilton, 5-frame, Bigelow.	Average.	2½ yards to the pound.	3½ yards to the pound.	Average.
1890....	113.7	117.5	103.1	108.6	104.2	105.3	123.9	119.7	121.8
1891....	113.7	104.0	112.7	116.2	109.4	112.8	123.9	119.7	121.8
1892....	113.7	117.5	103.1	106.1	104.2	104.5	118.7	113.0	115.9
1893....	113.7	113.0	98.3	111.1	104.2	104.5	102.7	100.0	101.4
1894....	91.2	99.5	93.5	98.5	104.2	98.7	95.6	95.7	95.7
1895....	79.7	94.9	93.5	88.4	91.1	91.0	92.1	91.3	91.7
1896....	79.7	94.9	93.5	85.9	91.1	90.2	92.1	95.7	93.9
1897....	98.2	90.4	95.9	90.9	93.8	93.5	81.4	95.7	88.6
1898....	98.2	81.4	103.1	98.5	99.0	100.2	81.4	80.5	81.0
1899....	98.2	87.3	103.1	96.0	99.0	99.4	87.7	88.3	88.0
1900....	108.0	94.9	103.1	103.5	101.6	102.7	104.5	98.6	101.6
1901....	110.3	90.4	103.1	101.0	101.6	101.9	90.7	100.0	95.4
1902....	110.3	90.4	103.5	101.9	102.2	102.5	92.1	100.0	96.1
1903....	110.3	91.1	108.7	108.1	108.9	108.6	104.1	109.4	106.8
1904....	110.5	95.7	110.3	109.1	110.7	110.0	125.4	125.7	125.6

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Cloths and clothing.								
	Cotton thread: 6-cord, 200-yard spools, J. & P. Coats.	Cotton yarns.			Denims: Amos-keag.	Drillings.			Flannels: white, 4-4, Ballard Vale No. 3.
		Carded, white, mule-spun, Northern, cones, 10/L.	Carded, white, mule-spun, Northern, cones, 22/L.	Average.		Brown, Pepperell.	30-inch, Stark A.	Average.	
1890....	101.6	111.3	112.1	111.7	112.5	119.4	122.8	121.1	116.8
1891....	100.7	111.6	114.0	112.8	109.6	114.0	115.2	114.6	116.8
1892....	100.7	117.2	116.8	117.0	109.6	101.7	102.7	102.2	115.9
1893....	100.7	112.4	108.6	110.5	112.5	103.1	108.1	105.6	109.5
1894....	100.7	94.7	91.2	98.0	105.4	97.7	96.4	97.1	94.1
1895....	100.7	91.9	92.2	92.1	94.6	92.5	93.9	93.2	81.7
1896....	99.6	92.2	93.7	93.0	94.6	100.2	100.2	100.2	85.4
1897....	98.4	90.3	90.8	90.6	89.2	91.8	88.9	90.4	82.6
1898....	98.4	90.5	91.0	90.8	85.9	89.7	83.9	86.8	97.8
1899....	98.4	87.6	89.4	88.5	85.8	89.2	87.7	88.5	99.5
1900....	120.1	115.0	115.9	115.5	102.8	105.9	104.0	105.0	108.7
1901....	120.1	98.6	97.9	98.3	100.2	102.3	102.1	102.2	100.8
1902....	120.1	95.6	92.4	94.0	100.6	100.5	103.5	102.0	105.8
1903....	120.1	116.2	109.5	112.9	108.0	108.2	111.5	109.9	114.3
1904....	120.1	123.2	115.7	119.5	116.6	127.1	126.3	126.7	117.6

Year.	Ginghams.			Horse blankets: 6 pounds each, all wool.	Hosiery.				
	Amos-keag.	Lancaster.	Average.		Men's cotton half hose, seamless, fast black, 20 to 22 oz.	Men's cotton half hose, seamless, 84 needles.	Women's combed Egyptian cotton hose, high spliced heel. (a)	Women's cotton hose, seamless, fast black, 25 to 28 oz.	Average.
1890....	117.3	120.8	119.1	109.1	133.3	124.3	.....	131.6	129.7
1891....	122.0	122.2	122.1	104.7	123.1	124.3	.....	121.1	122.8
1892....	122.0	122.2	122.1	109.1	112.8	123.6	.....	115.8	117.4
1893....	118.4	111.3	114.9	104.7	110.3	111.5	.....	113.2	109.4
1894....	91.0	88.0	89.5	96.0	102.6	92.4	102.7	105.3	100.8
1895....	87.4	86.6	87.0	92.5	94.9	89.2	101.4	92.1	94.4
1896....	88.6	87.3	88.0	90.8	87.2	89.2	101.4	84.2	90.5
1897....	82.2	86.2	84.2	99.5	82.1	82.9	100.0	81.6	86.7
1898....	80.9	85.2	83.1	99.5	76.9	82.9	97.3	76.3	83.4
1899....	89.5	89.9	89.7	94.2	76.9	79.7	94.6	78.9	82.5
1900....	96.6	96.0	96.3	118.7	82.1	82.9	102.7	81.6	87.3
1901....	91.9	92.7	92.3	109.9	71.8	92.4	108.1	71.1	85.9
1902....	98.1	100.3	99.2	109.9	76.9	85.0	100.0	78.9	85.2
1903....	103.2	100.3	101.8	117.8	82.1	90.0	101.4	86.8	90.1
1904....	102.8	97.0	99.9	122.2	82.1	95.9	97.3	81.6	89.2

Year.	Leather.				Linen thread.			
	Harness, oak.	Sole, hemlock, non-acid, Buenos Ayres.	Sole, oak.	Wax calf, 30 to 40 lbs. to the dozen, B grade.	Average.	Shoe, 10s, Barbour.	3-cord, 200-yard spools, Barbour.	Average.
1890....	99.3	99.1	112.1	91.7	100.6	101.9	104.6	103.3
1891....	99.6	95.3	109.4	98.8	100.9	101.9	98.2	97.6
1892....	91.4	89.1	101.7	105.9	97.0	101.9	94.1	98.0
1893....	92.7	92.6	103.6	98.5	96.9	102.8	97.5	100.2
1894....	87.8	88.4	97.5	92.3	91.5	105.0	99.9	102.5
1895....	111.5	106.9	101.7	112.0	108.0	97.3	99.9	98.6
1896....	96.6	97.0	87.0	98.3	95.2	97.3	99.9	98.6
1897....	93.9	104.8	91.6	94.1	96.1	97.3	101.8	99.6
1898....	109.1	109.8	95.5	103.3	104.4	97.3	104.6	101.0
1899....	116.0	116.2	99.9	105.0	109.3	97.3	104.6	101.0
1900....	116.8	128.4	107.3	100.3	113.2	101.5	104.6	103.1
1901....	114.7	127.6	104.8	96.0	110.8	101.9	104.6	103.3
1902....	114.7	122.1	113.0	100.9	112.7	101.9	104.6	103.3
1903....	114.3	116.9	111.3	105.4	112.0	96.7	98.2	97.5
1904....	110.0	116.5	102.6	105.0	108.5	97.2	103.7	100.5

a Average for 1893-1899=100.

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Cloths and clothing.							
	Overcoatings.						Print cloths: 28-inch, 61 x 64.	Shawls: standard, all wool, 72 x 144 in., 42-oz.
	Beaver, Moscow, all wool, black.	Chinchilla, B-rough, all wool.	Chinchilla, cotton warp, C. C. grade.	Covert cloth, light weight, staple.	Kersey, standard, 27 to 28 oz. (a)	Average.		
1890....	116.7	113.4	109.1	105.7	.....	111.2	117.7	107.0
1891....	116.7	113.4	107.7	105.7	.....	110.9	103.5	107.0
1892....	116.7	113.4	109.1	105.7	.....	111.2	119.3	107.0
1893....	111.7	108.5	109.9	105.7	.....	109.0	114.6	107.0
1894....	95.5	92.8	96.9	104.2	.....	97.4	96.8	107.0
1895....	84.9	87.7	92.3	99.9	.....	91.2	100.9	107.0
1896....	84.9	87.7	89.2	87.4	.....	87.3	90.9	89.1
1897....	84.9	87.7	93.7	83.6	94.9	89.0	87.6	89.5
1898....	89.4	97.7	98.3	97.2	104.2	97.4	72.6	90.2
1899....	98.7	97.7	93.9	104.9	100.9	99.2	96.3	89.1
1900....	120.1	116.7	100.2	101.4	126.3	112.9	108.6	107.0
1901....	106.1	97.7	90.8	97.2	120.3	102.4	99.3	107.0
1902....	106.1	97.7	92.3	97.2	120.3	102.7	108.9	107.0
1903....	117.3	103.1	92.8	94.0	126.3	106.7	113.3	107.0
1904....	111.7	103.1	93.3	94.0	132.3	106.9	117.3	107.0

Year.	Sheetings.								
	Bleached.				Brown.				Average.
	10-4, Atlantic.	10-4, Pepperell.	10-4, Wamsutta S. T.	Average.	4-4, Atlantic A.	4-4, Indian Head.	4-4, Pepperell R.	4-4, Stark A. A.	
1890....	122.1	116.2	106.0	114.8	121.0	115.8	116.2	125.7	119.7
1891....	116.4	106.6	107.2	110.1	118.1	116.1	108.3	113.1	113.9
1892....	108.7	100.8	99.8	103.1	108.7	103.5	103.3	103.8	103.8
1893....	111.8	103.3	103.6	106.2	111.9	108.5	105.8	109.3	108.9
1894....	94.8	92.5	93.5	93.6	99.3	95.5	96.4	99.2	97.6
1895....	93.8	94.7	92.2	93.6	94.0	93.5	96.0	97.7	95.3
1896....	92.6	95.1	99.2	95.6	96.7	99.4	101.3	97.3	98.7
1897....	87.4	92.3	99.2	93.0	88.6	93.9	95.3	86.1	91.0
1898....	83.2	91.3	99.2	91.2	80.1	86.3	86.2	80.8	83.4
1899....	89.4	107.3	100.1	98.9	84.3	86.9	91.5	85.9	87.2
1900....	111.3	121.7	104.8	112.4	100.4	99.5	107.4	96.8	101.0
1901....	100.9	112.4	99.2	104.2	98.0	100.8	107.4	94.1	100.1
1902....	104.4	111.5	99.2	105.0	99.3	99.8	103.3	^b 92.6	98.8
1903....	115.7	120.8	103.0	113.2	115.0	108.8	108.7	^b 101.9	108.6
1904....	128.3	123.7	94.1	117.0	129.8	128.1	121.4	^b 117.0	124.1

Year.	Shirtings: bleached.					Silk: raw.		
	4-4, Fruit of the Loom.	4-4, Hope.	4-4, Lonsdale.	4-4, New York Mills.	4-4, Wamsutta <O> XX.	Average.	Italian, classical.	Japan, filatures.
1890....	116.1	115.2	116.2	110.5	106.6	112.9	122.7	130.5
1891....	109.8	111.6	113.1	110.2	106.4	110.2	98.4	99.8
1892....	111.0	105.2	111.7	106.3	102.6	107.4	105.3	107.7
1893....	114.3	113.2	114.4	105.6	108.5	110.2	118.2	115.0
1894....	99.9	98.4	100.0	101.0	100.2	99.9	86.5	83.7
1895....	96.2	96.5	95.9	97.1	102.2	97.6	94.9	94.6
1896....	95.6	98.4	94.2	101.0	100.3	97.9	85.3	84.8
1897....	88.0	91.1	87.1	95.4	98.6	92.0	85.5	86.2
1898....	80.2	82.2	81.8	89.5	85.1	83.8	91.1	90.5
1899....	88.5	87.5	86.1	82.8	94.1	87.8	112.1	109.7
1900....	103.4	106.5	100.6	89.7	101.8	100.4	106.0	103.7
1901....	103.0	111.0	101.5	86.8	92.3	98.9	90.4	87.4
1902....	103.8	107.3	101.9	87.4	93.4	98.8	96.5	95.1
1903....	105.4	107.1	103.9	97.0	102.7	103.2	106.3	102.9
1904....	110.2	111.9	109.5	94.7	97.2	104.7	90.8	90.6

^a Average for 1897-1899=100.^b Sheetings: brown, 4-4, Massachusetts Mills, Flying Horse brand. For method of computing relative price, see pages 409 and 410.

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Cloths and clothing.								
Year.	Suitsings.							Tickings: Amos- keag A. C. A.
	Clay worsted diagonal, 12-oz., Wash. Mills. (a)	Clay worsted diagonal, 16-oz., Wash. Mills. (a)	Indigo blue, all wool, 54-inch, 14- ounce, Middlesex.	Indigo blue, all wool, 16- ounce.	Serge, Washing- ton Mills 6700. (b)	Trousersings, fancy worsted. (b)	Average.	
1890.....			116.9	109.2			113.1	113.1
1891.....			116.9	109.2			113.1	110.7
1892.....			116.9	109.2	120.9	106.6	113.4	108.4
1893.....			114.0	109.2	120.9	106.6	112.7	111.3
1894.....			111.1	92.3	90.7	98.9	98.3	102.2
1895.....	92.5	93.8	87.1	83.0	90.7	87.9	89.2	94.8
1896.....	89.1	87.6	86.0	89.9	81.6	82.3	87.8	96.0
1897.....	92.2	93.3	79.1	87.4	87.7	82.3	88.7	91.9
1898.....	111.3	111.4	86.0	103.2	99.8	103.9	103.4	84.3
1899.....	114.9	113.9	86.0	107.2	107.7	106.6	106.1	87.0
1900.....	131.4	133.7	86.0	118.4	107.6	117.6	115.8	102.2
1901.....	110.6	111.0	89.6	109.2	106.6	102.2	104.9	95.5
1902.....	110.9	108.6	99.2	109.2	105.1	101.8	105.8	99.0
1903.....	115.2	112.1	108.8	112.6	100.4	104.6	109.0	104.1
1904.....	112.2	109.6	109.1	114.1	102.9	106.2	109.0	114.3

Year.	Underwear.			Women's dress goods.						Average.
	Shirts and drawers, white, all wool, etc.	Shirts and drawers, white, merino, 52% wool, etc.	Average.	Alpaca, cotton warp, 22-inch, Hamil- ton.	Cash- mere, all wool, 10-11 twill, 38-in., Atlantic J.	Cash- mere, cotton warp, 9-twill, 4-4, Atlantic F.	Cash- mere, cotton warp, 22-inch, Hamil- ton.	Cash- mere, cotton warp, 27-inch, Hamil- ton.	Frank- lin sack- ings, 6-4.	
1890.....	106.2	106.9	106.6	108.1	119.8	119.3	109.9	111.0	115.3	113.9
1891.....	110.0	112.7	111.4	108.1	126.1	119.3	109.9	111.0	119.9	115.7
1892.....	110.0	112.7	111.4	106.3	128.2	117.7	108.3	109.6	119.9	115.0
1893.....	110.0	112.7	111.4	104.6	111.8	98.4	106.7	106.1	117.6	107.5
1894.....	92.7	95.4	94.1	100.9	84.3	88.7	100.3	102.7	96.8	95.6
1895.....	92.7	92.5	92.6	93.7	81.0	83.8	97.0	95.8	84.3	89.3
1896.....	92.7	92.5	92.6	93.7	67.5	83.6	93.8	93.0	80.7	85.4
1897.....	92.7	92.5	92.6	93.7	82.2	90.3	90.5	88.8	82.2	88.0
1898.....	92.7	95.4	94.1	93.7	88.6	94.3	90.5	88.8	88.4	90.7
1899.....	100.4	96.7	93.6	96.6	110.4	104.8	93.1	93.0	94.9	98.8
1900.....	100.4	95.4	97.9	104.6	119.1	108.0	100.3	99.9	118.3	108.4
1901.....	100.4	95.4	97.9	104.6	111.3	104.3	100.3	102.7	104.5	104.6
1902.....	100.4	95.4	97.9	103.7	111.3	108.0	99.5	102.0	108.3	105.5
1903.....	100.4	95.4	97.9	101.5	114.3	110.5	97.8	101.2	114.5	106.6
1904.....	100.4	95.4	97.9	112.4	117.7	114.5	106.7	110.5	113.4	112.5

Year.	Wool.			Worsted yarns.			Average, cloths and clothing.
	Ohio, fine fleece (X and XX grade), scoured.	Ohio, med- ium fleece (1 and 2 grade), scoured.	Average.	2-40s, Aus- tralian fine.	2-40s, XXX, white, in skeins.	Average.	
1890.....	129.5	134.6	132.1	120.4	124.1	122.3	113.5
1891.....	124.1	127.5	125.8	121.3	125.4	123.4	111.3
1892.....	110.7	115.6	113.2	119.6	114.8	117.2	109.0
1893.....	102.0	101.2	101.6	111.4	107.6	109.5	107.2
1894.....	80.5	77.6	79.1	91.3	91.2	91.3	96.1
1895.....	68.2	71.9	70.1	72.9	75.1	74.0	92.7
1896.....	71.3	69.8	70.6	71.2	74.5	72.9	91.3
1897.....	89.7	87.6	88.7	83.6	81.3	82.5	91.1
1898.....	111.3	105.3	108.3	101.2	99.7	100.5	93.4
1899.....	112.8	108.8	110.8	107.1	106.3	106.7	96.7
1900.....	119.3	116.0	117.7	118.3	118.5	118.4	106.8
1901.....	98.7	94.5	96.6	102.2	102.1	102.2	101.0
1902.....	104.4	97.2	100.8	110.3	c113.1	111.7	102.0
1903.....	118.5	102.1	110.3	115.6	c120.4	118.0	106.6
1904.....	124.2	106.7	115.5	116.6	c116.3	116.5	109.8

a Average for 1895-1899=100.

b Average for 1892-1899=100.

c Designated as XXXX.

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Fuel and lighting.										
	Candles: adaman- tine, 6s, 14-oz.	Coal.									Average.
		Anthracite.					Bituminous.				
		Broken.	Chest- nut.	Egg.	Stove.	Average.	Georges Creek (at mine).	Georges Creek (f. o. b. N. Y. Harbor).	Pitts- burg (Yough- io- gheny).	Average.	
1890....	102.3	103.5	93.3	100.6	97.8	98.8	97.1	108.9	103.3	103.1	100.6
1891....	102.3	102.3	96.7	104.4	101.6	101.3	106.9	110.5	122.7	113.4	106.4
1892....	102.3	107.4	109.7	110.8	109.4	109.3	101.3	106.9	116.5	108.2	108.9
1893....	112.9	105.8	115.9	107.2	110.5	109.9	103.6	107.6	117.9	109.7	109.8
1894....	110.9	101.5	98.5	94.3	94.9	97.3	92.4	99.8	98.6	96.9	97.1
1895....	108.7	97.5	82.9	84.3	82.4	86.8	87.2	102.5	93.3	94.3	90.0
1896....	108.7	97.1	98.9	98.8	100.0	98.7	101.3	97.1	89.1	95.8	97.5
1897....	95.3	96.4	103.9	105.7	105.8	103.0	93.8	89.0	88.6	90.5	97.6
1898....	78.4	95.4	98.8	100.2	100.1	98.6	102.7	79.3	87.9	90.0	94.9
1899....	78.4	93.1	101.4	93.8	97.6	96.5	113.9	98.4	82.6	98.3	97.3
1900....	135.4	97.1	108.9	99.7	104.0	102.4	135.0	106.0	117.0	119.3	109.7
1901....	140.7	105.5	120.4	112.9	113.9	113.2	150.5	106.6	117.0	124.7	118.1
1902....	140.7	110.4	124.0	121.5	117.6	118.4	239.1	148.0	122.4	169.8	140.4
1903....	127.4	126.2	134.2	134.3	127.1	130.5	269.6	161.8	143.9	191.8	156.7
1904....	115.1	126.1	134.2	134.2	127.1	130.4	196.9	116.5	132.5	148.6	138.2

Year.	Coke: Connellsville, furnace.	Matches: parlor, domestic.	Petroleum.					Average, fuel and lighting.
			Crude.	Refined.			Average.	
				For export.	150° fire test, w. w.	Average.		
	1890....	122.7	111.5	95.4	112.9	111.8	112.4	106.7	104.7
1891....	110.4	99.6	73.6	105.5	93.8	102.2	92.6	102.7
1892....	106.5	99.6	61.1	93.8	89.2	91.5	81.4	101.1
1893....	87.1	99.6	70.3	80.4	81.5	81.0	77.4	100.0
1894....	62.3	94.9	92.2	79.4	81.5	80.5	84.4	92.4
1895....	78.0	96.1	149.2	109.6	103.6	106.6	120.8	98.1
1896....	110.4	99.6	129.5	108.2	116.7	112.5	118.1	104.3
1897....	95.2	99.6	86.5	92.0	101.1	96.6	93.2	96.4
1898....	98.8	99.6	100.2	96.8	102.1	99.5	99.7	95.4
1899....	128.7	99.6	142.1	121.9	114.0	118.0	126.0	105.0
1900....	155.8	99.6	148.5	131.6	133.5	132.6	137.9	120.9
1901....	115.6	99.6	132.9	115.4	123.1	119.3	123.8	119.5
1902....	158.2	90.1	135.9	113.1	124.5	118.8	124.5	134.3
1903....	171.5	85.4	174.5	132.5	153.1	142.8	153.4	149.3
1904....	96.4	85.4	178.8	127.3	153.6	140.5	153.2	132.6

Year.	Metals and implements.												
	Bar iron: best refined.			Barb wire: galvan- ized.	Builders' hardware.				Copper.				
	From mill (Pitts- burg mar- ket).	From store (Phila. mar- ket).	Average.		Butts: loose joint, 3x3 in.	Door- knobs: steel, bronze plated.	Locks: com- mon mortise.	Average.	Ingot, lake.	Sheet, hot- rolled (base sizes).	Wire, bare.	Average.	
1890....	126.9	125.0	126.0	141.2	111.7	97.8	101.6	103.7	127.6	137.1	128.1	130.9	
1891....	117.9	115.9	116.9	127.4	111.7	97.8	101.6	103.7	105.8	114.5	112.7	111.0	
1892....	113.1	114.0	113.6	109.5	96.8	97.8	101.6	98.7	93.5	96.4	98.2	96.0	
1893....	103.4	103.7	103.6	99.7	98.4	97.8	101.6	99.3	88.6	90.4	92.2	90.4	
1894....	82.8	81.7	82.3	86.1	95.9	97.8	100.1	97.9	76.8	85.9	79.0	80.6	
1895....	86.2	87.8	87.0	88.9	100.3	115.1	102.0	105.8	87.1	86.9	84.6	85.9	
1896....	84.1	85.4	84.8	77.7	104.1	102.1	106.1	104.1	88.9	85.9	92.6	89.1	
1897....	75.9	79.9	77.9	71.3	96.8	97.8	102.0	98.9	91.7	88.2	93.9	91.3	
1898....	73.8	78.0	75.9	72.7	92.4	97.8	91.8	94.0	96.8	84.4	93.9	91.7	
1899....	134.5	126.2	130.4	125.5	92.4	97.8	91.8	94.0	143.2	131.1	124.7	133.0	
1900....	148.3	119.5	133.9	134.4	126.6	106.8	96.5	110.0	134.6	124.6	123.0	127.4	
1901....	124.1	112.2	118.2	120.2	116.8	112.0	91.8	106.9	136.7	125.9	124.0	128.9	
1902....	133.8	129.9	131.9	116.9	126.6	126.9	104.0	119.2	97.3	107.5	90.6	98.5	
1903....	122.1	122.0	122.1	108.4	126.6	132.6	110.2	123.1	110.9	115.6	102.3	109.6	
1904....	102.1	104.9	103.5	99.3	126.6	144.8	125.5	132.3	106.2	108.5	98.2	104.3	

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Metals and implements.								
	Lead: pig.	Lead pipe.	Nails.			Pig iron.			
			Cut, 8-penny, fence and common.	Wire, 8-penny, fence and common.	Average.	Bessemer.	Foundry No. 1.	Foundry No. 2.	Gray forge, Southern, coke.
1890....	115.5	112.1	125.2	137.1	131.2	137.0	124.3	131.4	130.8
1891....	114.7	116.2	100.3	114.1	107.2	115.8	118.4	117.9	112.9
1892....	108.4	107.6	96.2	101.3	98.8	104.3	106.4	105.5	106.3
1893....	98.2	103.8	92.0	92.1	92.1	93.4	98.1	95.3	95.9
1894....	86.9	92.0	83.6	76.4	80.0	82.6	85.5	83.1	80.6
1895....	85.6	87.2	105.3	98.0	101.7	92.3	88.5	89.4	93.1
1896....	78.7	85.1	148.4	135.3	141.9	88.1	87.5	90.2	86.4
1897....	94.0	89.6	72.9	68.7	70.8	73.5	91.7	77.4	79.4
1898....	99.7	95.6	65.3	66.5	65.9	75.0	78.8	76.8	78.6
1899....	117.6	111.0	110.8	110.4	110.6	138.1	130.8	132.9	135.8
1900....	116.8	106.3	123.1	121.8	122.5	141.5	135.0	141.8	140.7
1901....	115.0	104.8	115.6	109.4	112.5	115.7	107.2	112.8	118.2
1902....	107.9	108.3	116.7	97.3	107.0	150.0	149.9	162.7	153.8
1903....	112.3	107.8	120.2	96.0	108.1	137.7	134.5	146.6	146.4
1904....	116.3	99.5	99.5	88.2	93.9	99.8	105.2	104.4	105.3

Year.	Quick-silver.	Silver: bar, fine.	Spelter: Western.	Steel billets.	Steel rails.	Steel sheets: black, No. 27.(a)	Tin: pig.	Tin plates.		
								Domes- tic, Bessemer, coke, 14x20.(b)	Import- ed, Bessemer, coke, I.C., 14x20.(c)	Average.
1890....	130.5	140.6	122.6	141.5	121.9	.....	115.5	.....	104.6	104.6
1891....	112.3	132.2	112.4	117.7	114.3	.....	110.3	.....	116.4	116.4
1892....	100.9	116.9	102.9	109.8	115.1	.....	110.9	.....	115.7	115.7
1893....	93.2	104.4	90.7	94.9	107.9	.....	109.0	.....	117.1	117.1
1894....	85.7	85.5	73.5	77.0	92.1	104.9	98.7	.....	106.7	106.7
1895....	91.8	88.5	80.1	85.9	83.4	108.9	76.5	.....	84.4	84.4
1896....	89.0	91.0	88.7	87.5	107.4	96.0	72.4	100.6	82.9	91.8
1897....	92.2	81.1	93.1	70.1	71.9	87.1	74.0	93.2	85.1	89.2
1898....	97.0	78.9	100.2	71.1	67.6	84.8	84.5	93.5	87.2	85.4
1899....	107.3	80.8	130.1	144.6	107.9	119.2	148.2	122.7	(d)	122.7
1900....	121.0	82.9	97.8	116.4	123.9	130.8	163.7	137.0	(d)	137.0
1901....	118.5	79.7	89.6	112.1	104.9	140.6	142.6	122.7	(d)	122.7
1902....	115.5	70.5	107.7	142.1	107.4	129.9	144.2	120.7	(d)	120.7
1903....	113.4	72.4	123.5	129.7	107.4	116.1	153.4	115.4	(d)	115.4
1904....	106.5	77.2	113.9	103.0	107.4	98.8	152.5	105.5	(d)	105.5

Year.	Tools.							
	Augers: extra, ½-inch.	Axes: M. C. O., Yankee.	Chisels: extra, socket firmer, 1-inch.	Files: 8-inch mill bastard.	Hammers: Maydole No. 14.	Planes: Bailey No. 5.	Saws.	
							Crosscut, Disston.	Hand, Disston No. 7.
1890....	118.2	120.4	110.9	106.7	96.9	107.4	100.0	112.7
1891....	118.2	118.3	110.9	104.6	96.9	107.4	100.0	98.6
1892....	118.2	106.5	110.9	102.2	96.9	107.4	100.0	98.6
1893....	111.9	106.5	102.1	101.6	96.9	107.4	100.0	98.6
1894....	95.9	100.9	91.5	97.3	96.9	104.3	100.0	98.6
1895....	82.9	98.0	90.3	95.4	97.6	93.9	100.0	98.6
1896....	86.7	88.4	94.7	91.2	105.2	98.0	100.0	98.6
1897....	88.6	83.9	90.3	94.4	105.2	98.0	100.0	98.6
1898....	88.6	79.9	90.8	96.8	100.6	98.0	100.0	98.6
1899....	91.1	97.1	107.6	109.7	107.0	98.0	100.0	98.6
1900....	124.4	102.9	127.6	127.8	115.9	107.0	100.0	98.6
1901....	105.7	88.8	121.4	123.1	117.2	110.4	100.0	98.6
1902....	111.9	103.0	142.6	123.1	117.2	114.2	100.0	98.6
1903....	143.7	107.6	147.8	123.1	129.0	115.7	100.0	98.6
1904....	149.3	123.3	158.4	122.0	129.0	115.7	100.0	98.6

^a Average for the period July, 1894, to December, 1899=100.
^b Average for 1896-1899=100.

^c Average for 1890-1893=100.
^d Quotations discontinued.

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Metals and implements.						
	Tools.				Wood screws: 1-inch, No. 10, flat head.	Zinc: sheet.	Average, metals and implements.
	Shovels: Ames No. 2.	Trowels: M. C. O., brick, 10½-inch.	Vises: solid box, 60- pound.	Average.			
1890....	100.1	100.0	106.1	107.2	130.5	114.0	119.2
1891....	100.1	100.0	106.1	105.6	132.5	107.7	111.7
1892....	100.1	100.0	109.1	104.5	139.1	103.4	106.0
1893....	100.1	100.0	107.6	103.0	139.1	94.0	100.7
1894....	94.7	100.0	104.0	98.6	103.2	74.4	90.7
1895....	94.7	100.0	97.2	95.3	74.0	85.1	92.0
1896....	99.3	100.0	95.4	95.7	68.4	93.0	93.7
1897....	100.8	100.0	89.7	95.0	56.3	93.0	86.6
1898....	100.8	100.0	84.1	93.9	60.8	103.5	86.4
1899....	109.4	100.0	100.7	101.3	96.2	131.9	114.7
1900....	115.9	100.0	109.4	111.8	120.5	114.8	120.5
1901....	115.9	100.0	123.7	110.0	69.2	104.7	111.9
1902....	118.9	100.0	131.5	114.6	63.0	107.9	117.2
1903....	102.0	100.0	132.7	118.2	72.4	113.3	117.6
1904....	97.3	100.0	109.1	118.4	62.6	105.6	109.6

Year.	Lumber and building materials.							
	Brick: common domestic.	Carbonate of lead: American, in oil.	Cement.			Doors: pine.	Lime: common.	Linseed oil: raw.
			Portland, domestic. ^a	Rosendale.	Average.			
1890.....	118.0	110.6	.....	118.8	118.8	125.8	117.5	135.8
1891.....	102.6	112.7	.....	106.2	106.2	114.4	109.5	106.8
1892.....	103.7	114.0	.....	109.2	109.2	114.4	111.5	90.0
1893.....	104.9	105.5	.....	100.0	100.0	112.1	111.5	102.2
1894.....	89.9	90.8	.....	104.5	104.5	96.1	101.8	115.6
1895.....	96.5	91.0	98.6	96.1	97.4	83.5	93.8	115.6
1896.....	91.0	89.6	100.2	93.9	97.1	76.6	83.3	81.2
1897.....	88.8	92.7	98.5	84.8	91.7	74.3	86.3	72.2
1898.....	103.4	94.1	100.1	85.7	92.9	84.6	89.0	86.5
1899.....	102.2	98.4	102.6	100.8	101.7	118.2	95.8	94.1
1900.....	94.4	108.3	108.1	114.6	111.4	145.5	82.0	138.7
1901.....	103.7	99.8	94.7	114.8	104.8	173.1	92.9	140.0
1902.....	96.8	93.4	97.7	97.5	97.6	194.1	96.7	130.8
1903.....	106.2	106.6	101.6	100.3	101.0	158.2	94.5	91.9
1904.....	134.7	103.6	73.2	90.4	81.8	154.6	99.0	91.7

Year.	Lumber.								
	Hem- lock.	Maple: hard.	Oak: white.			Pine.			
			Plain.	Quar- tered.	Aver- age.	White, boards.			Yellow.
						No. 2 barn.	Uppers.	Aver- age.	
1890....	105.2	100.0	101.2	95.9	98.6	98.1	94.7	96.4	112.4
1891....	104.1	100.0	101.5	99.8	100.7	99.4	96.7	98.1	108.1
1892....	102.8	100.0	102.7	98.7	100.7	100.2	98.9	99.6	100.2
1893....	100.3	100.0	103.5	98.7	101.1	108.9	104.2	106.6	100.2
1894....	97.9	100.0	99.5	95.2	97.4	106.2	99.7	103.0	100.2
1895....	93.2	100.0	96.8	99.2	98.0	100.8	98.8	99.8	91.6
1896....	93.8	100.0	96.8	101.5	99.2	96.4	100.2	98.3	88.9
1897....	92.0	100.0	96.8	100.3	98.6	92.5	99.5	96.0	89.0
1898....	98.2	100.0	96.8	97.8	97.3	90.6	99.0	94.8	100.9
1899....	113.0	100.1	104.1	112.7	108.4	106.9	108.4	107.7	108.5
1900....	137.9	103.8	109.1	120.1	114.6	125.7	123.5	124.6	112.2
1901....	125.4	100.8	98.2	110.2	104.2	122.0	129.8	125.9	106.5
1902....	132.4	107.8	109.2	117.5	113.4	137.3	160.7	149.0	113.7
1903....	140.4	119.5	119.8	139.3	129.6	140.3	171.8	156.1	113.7
1904....	142.1	117.0	124.2	150.4	137.3	134.4	174.0	154.2	116.0

^a Average for 1895-1899-100.

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Lumber and building materials.								
	Lumber.			Oxide of zinc.	Plate glass: polished, unslivered.			Putty.	Resin: good, strained.
	Poplar.	Spruce.	Average.		Area 3 to 5 sq. ft.	Area 5 to 10 sq. ft.	Average.		
1890....	97.2	113.5	102.0	106.3	146.0	134.9	140.5	110.8	96.1
1891....	97.2	99.1	100.7	104.8	143.3	132.9	138.1	110.8	102.4
1892....	97.6	103.5	100.5	106.5	115.7	106.0	110.9	101.9	93.2
1893....	107.2	96.0	102.1	103.3	115.7	106.0	110.9	101.3	87.6
1894....	101.2	88.6	98.7	93.3	90.9	86.7	88.8	99.4	86.9
1895....	98.8	99.3	97.6	87.5	82.6	92.5	87.6	91.8	108.4
1896....	98.8	99.3	97.2	95.8	93.7	104.0	98.9	91.8	121.2
1897....	97.8	97.6	96.2	94.3	55.1	61.7	58.4	91.8	112.0
1898....	95.6	95.8	96.2	99.0	74.4	82.9	78.7	91.8	98.7
1899....	108.5	107.3	107.7	109.5	82.6	92.5	87.6	106.3	93.5
1900....	120.2	121.1	119.3	112.8	93.7	104.0	98.9	120.3	111.3
1901....	117.0	125.4	115.0	109.5	88.2	94.4	91.3	94.9	106.3
1902....	134.2	134.2	127.4	110.0	70.9	79.2	75.1	121.5	112.0
1903....	158.3	133.7	137.4	115.8	72.3	83.1	77.7	89.2	153.9
1904....	160.5	142.9	140.2	115.8	62.7	70.3	66.5	69.6	196.8

Year.	Shingles.			Tar.	Turpen- tine: spirits of.	Window glass: American, single.			Average, lumber and building materi- als.
	Cypress.	White pine.	Average.			Firsts, 6 x 8 to 10 x 15 inch.	Thirds, 6 x 8 to 10 x 15 inch.	Average.	
1890....	118.7	102.6	110.7	122.4	122.0	103.6	93.2	100.9	111.8
1891....	115.2	106.9	111.1	131.4	113.5	102.8	97.8	100.1	108.4
1892....	111.7	104.4	108.1	107.9	96.5	92.7	87.7	90.2	102.8
1893....	106.3	102.8	104.6	86.8	89.8	99.4	94.0	96.7	101.9
1894....	99.2	100.2	99.7	90.6	87.7	92.6	89.8	91.2	96.3
1895....	93.9	98.8	96.4	94.8	87.4	74.3	76.5	75.4	94.1
1896....	88.6	96.5	92.6	84.0	82.1	83.8	83.0	85.9	93.4
1897....	83.3	94.6	89.0	87.5	87.5	102.2	107.9	105.1	90.4
1898....	88.6	94.9	91.8	91.1	96.4	122.9	128.8	125.9	95.8
1899....	94.4	98.3	96.4	103.4	137.0	125.9	131.9	128.9	105.3
1900....	101.0	106.9	104.0	113.1	142.7	125.5	127.5	126.5	115.7
1901....	101.0	111.9	106.5	106.4	111.5	191.9	180.4	186.2	116.7
1902....	94.7	123.0	108.9	110.0	141.8	149.6	141.0	145.3	118.8
1903....	91.0	125.1	108.1	139.4	171.0	122.7	118.7	120.7	121.4
1904....	92.2	122.5	107.4	139.4	172.2	134.2	128.0	131.1	122.7

Year.	Drugs and chemicals.									
	Alcohol: grain, 94 per cent.	Alcohol: wood, refined, 95 per cent.	Alum: lump.	Brim- stone: crude, seconds.	Glycer- in: refined.	Muriatic acid: 20°.	Opium: natural, in cases.	Quinine: Ameri- can.	Sul- phuric acid: 66°.	Average, drugs and chemi- cals.
1890....	92.5	119.2	109.0	102.2	126.3	100.0	111.0	133.1	98.9	110.2
1891....	98.9	121.6	94.6	138.2	109.9	94.2	82.4	102.0	91.0	103.6
1892....	95.6	136.0	95.8	116.7	99.8	116.3	70.8	88.7	106.7	102.9
1893....	97.3	135.4	104.2	90.5	96.2	97.1	101.3	87.4	95.5	100.5
1894....	96.1	75.5	101.2	80.1	85.3	84.6	96.8	106.5	82.0	89.8
1895....	104.0	90.9	95.8	75.5	86.1	79.8	78.0	102.0	78.7	87.9
1896....	102.7	89.1	98.2	86.8	119.4	72.1	88.6	97.8	78.7	92.6
1897....	101.6	72.9	99.4	97.2	93.5	104.8	99.2	74.3	106.7	94.4
1898....	103.8	78.6	98.8	110.7	83.5	123.1	141.6	87.2	127.0	106.6
1899....	107.6	80.8	100.6	102.1	95.0	129.8	130.2	120.9	134.8	111.3
1900....	106.5	83.9	104.8	102.2	103.3	129.8	135.6	135.2	134.8	115.7
1901....	109.7	64.2	104.8	106.3	107.5	144.2	136.8	123.0	140.4	115.2
1902....	107.4	67.3	104.8	113.2	103.2	161.5	120.0	104.7	146.1	114.2
1903....	106.9	62.0	103.6	107.9	103.4	153.8	130.6	102.6	142.7	112.6
1904....	108.6	61.6	104.8	105.2	99.8	153.8	116.5	94.8	144.9	110.0

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Continued.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	House furnishing goods.									
	Earthenware.				Furniture.					
	Plates, cream-colored.	Plates, white granite.	Teacups and saucers, white granite.	Average.	Bedroom sets, ash.	Chairs, bedroom, maple.	Chairs, kitchen.	Tables, kitchen.	Average.	
1890....	108.0	109.1	109.6	108.9	113.7	113.0	109.8	103.9	110.1	
1891....	105.6	106.9	107.4	106.6	113.7	113.0	109.8	103.9	110.1	
1892....	102.3	103.7	104.2	103.4	113.7	110.6	111.1	103.9	109.8	
1893....	102.3	103.7	104.2	103.4	104.2	110.6	111.1	103.9	107.5	
1894....	101.0	101.9	102.8	101.9	104.2	96.9	91.5	98.7	97.8	
1895....	94.6	92.9	94.4	94.0	94.3	96.9	91.5	98.7	95.4	
1896....	92.0	89.1	90.1	90.4	82.9	96.9	91.5	95.6	91.7	
1897....	92.0	89.1	90.1	90.4	82.9	90.7	91.5	95.6	87.7	
1898....	100.4	100.8	98.0	99.7	94.7	82.7	86.6	95.6	89.9	
1899....	101.7	102.9	99.2	101.3	95.7	98.9	105.7	100.1	100.1	
1900....	106.6	108.1	104.3	106.3	106.6	129.1	136.1	108.1	120.0	
1901....	112.5	113.8	109.7	112.0	106.6	113.0	124.2	108.1	113.0	
1902....	112.5	113.8	109.7	112.0	111.3	118.4	128.5	108.1	116.6	
1903....	115.4	111.4	107.4	111.4	115.3	127.8	130.7	108.1	120.5	
1904....	113.8	110.4	106.4	110.2	116.1	129.1	124.7	108.1	119.5	

Year.	Glassware.				Table cutlery.			Wooden ware.			Average, house furnishing goods.
	Nap-pies, 4-inch.	Pitch-ers, 1-gallon, com-mon.	Tum-blers, 1-pint, com-mon.	Aver-age.	Carvers, stag handles.	Knives and forks, cocobolo handles.	Aver-age.	Pails, oak-grain-ed.	Tubs, oak-grain-ed.	Aver-age.	
1890....	107.1	106.4	101.4	105.0	100.0	127.9	114.0	122.6	122.5	122.6	111.1
1891....	107.1	106.4	112.7	108.7	100.0	127.9	114.0	111.6	116.3	114.0	110.2
1892....	107.1	106.4	107.0	106.8	100.0	113.0	106.5	108.9	108.9	108.9	106.5
1893....	107.1	106.4	107.0	106.8	113.8	90.8	104.8	101.1	97.1	99.1	104.9
1894....	107.1	106.4	107.0	106.8	100.0	90.8	95.4	96.9	95.6	96.3	100.1
1895....	107.1	106.4	104.2	105.9	100.0	90.8	95.4	86.3	92.8	89.6	96.5
1896....	89.3	106.4	101.4	99.0	100.0	90.8	95.4	97.2	92.8	95.0	94.0
1897....	89.3	85.1	95.8	90.1	93.8	82.5	88.2	95.6	92.8	94.2	89.8
1898....	89.3	85.1	90.1	88.2	93.8	90.8	92.3	87.3	92.8	90.1	92.0
1899....	89.3	85.1	73.2	82.5	93.8	94.9	94.4	97.5	93.4	95.5	95.1
1900....	89.3	85.1	101.4	91.9	93.8	94.9	94.4	114.9	107.0	111.0	106.1
1901....	125.0	110.6	101.4	112.3	93.8	107.3	100.6	119.3	107.6	118.5	110.9
1902....	125.0	110.6	104.2	113.3	93.8	107.3	100.6	119.3	107.6	118.5	112.2
1903....	125.0	110.6	99.5	111.7	93.8	107.3	100.6	122.2	107.6	114.9	113.0
1904....	125.0	97.9	90.1	104.3	93.8	110.0	101.9	130.9	107.6	119.3	111.7

Year.	Miscellaneous.							Proof spirits.
	Cotton-seed meal.	Cotton-seed oil: sum-mer yellow, prime.	Jute: raw.	Malt: Western made.	Paper.			
					News.	Wrapping, manilla.	Average.	
1890....	106.4	113.2	108.1	106.7	127.8	104.0	115.9	91.6
1891....	114.8	117.2	108.3	131.9	113.7	104.0	108.9	96.1
1892....	107.9	101.4	132.3	114.0	113.7	100.9	107.3	93.5
1893....	117.0	149.5	96.4	110.3	106.4	104.7	105.6	93.2
1894....	102.7	106.4	96.1	105.9	108.0	105.6	106.8	93.5
1895....	86.1	89.4	77.7	97.5	103.0	106.0	104.5	105.3
1896....	90.8	82.6	88.9	80.1	92.0	106.3	99.2	104.6
1897....	93.1	77.7	108.9	77.4	90.6	106.3	98.5	102.9
1898....	86.5	75.2	92.5	87.7	73.2	83.0	78.1	106.3
1899....	94.7	87.5	101.7	88.5	69.9	79.2	74.6	108.0
1900....	116.3	116.8	121.2	93.0	94.0	86.8	90.4	108.4
1901....	113.9	117.3	111.4	106.0	75.6	90.8	83.2	111.8
1902....	123.5	133.6	122.0	112.7	80.9	89.9	85.4	114.3
1903....	121.6	130.7	129.2	103.1	84.6	95.1	89.9	111.4
1904....	119.3	103.0	123.7	96.1	89.3	95.8	92.6	110.4

TABLE V.—RELATIVE PRICES OF COMMODITIES, 1890 TO 1904—Concluded.

[Average price for 1890-1899=100. For a more detailed description of the articles, see Table I.]

Year.	Miscellaneous.						
	Rope: ma- nila.	Rubber: Para Island.	Soap: cas- tile, mot- tled, pure.	Starch: laundry.	Tobacco.		
					Plug, Horseshoe.	Smoking, granu- lated, Seal of N. C.	Average.
1890....	160.0	104.6	104.4	106.6	102.2	98.2	100.2
1891....	111.1	98.8	109.1	122.4	101.2	98.2	99.7
1892....	122.9	84.5	109.7	107.2	94.0	98.2	96.1
1893....	98.4	89.5	108.1	105.2	100.1	98.2	99.2
1894....	82.4	84.2	103.3	105.2	101.0	98.2	99.6
1895....	78.7	92.7	89.1	104.3	101.0	98.2	99.6
1896....	71.1	99.9	88.2	89.1	96.1	98.2	97.2
1897....	67.6	105.6	93.3	86.2	94.9	98.2	96.6
1898....	90.1	115.8	96.7	86.2	104.3	104.1	104.2
1899....	117.1	124.3	93.1	86.2	105.4	110.0	107.7
1900....	141.3	122.6	107.7	97.7	111.9	110.0	111.0
1901....	116.9	106.1	115.1	104.3	117.6	110.0	113.8
1902....	144.3	90.8	116.5	130.5	114.6	109.9	112.3
1903....	122.7	113.1	115.6	123.9	113.6	112.0	112.8
1904....	125.4	135.8	113.7	106.0	118.6	114.4	116.5

STREET RAILWAY EMPLOYMENT IN THE UNITED STATES.

BY WALTER E. WEYL, PH. D.

INTRODUCTION AND SUMMARY.

The conditions of street railway employment in the United States are worthy of study. Within the half century during which street railways have existed in this country a huge army of men has been recruited for city transportation lines—an army which is rapidly and continually increasing. The street railways show a far greater increase in the number of their employees than do most industries of equal age. The introduction and extension of electric traction have more than doubled the number of employees, so that in 1902 there were some 140,000 men, including officers and clerks, upon the pay rolls of the street railways of this country. No other country has as many as one-fourth of this number of street car employees. Excluding officials and clerks, the number of persons engaged in street railway transportation in this country amounted in 1902 to 133,641, or, in other words, to almost one-eighth of the number of men employed upon our 200,000 miles of steam railroads.

This vast body of street railway employees is largely concentrated in the populous cities of the Union. Almost all of them are found in the northern tier of States stretching from the Atlantic to the Mississippi. As the industry is essentially urban, practically all of the men engaged in it are residents of cities and towns, and a very large proportion live in the few metropolises. This fact, that a majority of the men engaged in American street railway service are urban dwellers, and residents, moreover, of the largest cities, should be borne in mind in considering the wages which are paid to them and the cost of their living.

The condition of street railway men is one which lends itself to general observation by the fact that the majority of those engaged in the industry perform their work in the full view of the public. About three-fifths of all employees of the street and electric railways of the United States, excluding higher officials and clerks, consist of motormen and conductors, with the general nature of whose work everyone is sufficiently familiar. The remaining two-fifths of street railway employees are engaged in the car barns and power stations. In this part of the service the introduction of electricity as the motive power has led to considerable division of labor and differentiation of function.

During the horse car days approximately the same proportion obtained between the drivers and conductors on the one hand and the station and barn employees on the other.

The occupations in city railway transportation are almost exclusively monopolized by adult males. No women are engaged upon the platforms of the car, and the number of female employees generally is so small that they may be disregarded. Although a few boy conductors were employed during horse car days, they entirely disappeared from the service with the introduction of electricity, and the great majority of companies accept no person as conductor or motorman under 20 years of age.

The fatiguing nature of the work in which street railway employees are engaged has led to a selection, among the numerous applicants for positions, of men who are physically and mentally capable of coping with the difficulties. The stress and strain of the work, which has been enormously increased by the introduction of mechanical traction and is aggravated by the long hours of work, has necessitated a selection along these lines, and the very large number of applicants for positions has enabled such a selection to take place. In the following pages the requirements as to age, weight, and height of street railway employees, as well as the character of the physical examinations which the men must undergo, are given in detail, and statistics are also presented giving the average standing in this regard of accepted applicants. The requirements as to age and the age statistics of successful applicants are especially worthy of note, since they confirm the general impression of the youthfulness of the men employed at this occupation. The work is essentially that of young men, and while efforts are made to retain employees of experience as long as their physical vigor remains unimpaired, the rules of the majority of the companies absolutely exclude from the occupation new men over 35 or 40 years of age. In a considerable number of companies the limit is placed at 35.

The character of the occupation imposes still other requirements of a physical nature. It is indispensable that the platform men, and especially the conductors, be able to speak and read the language of the country. It is equally essential that both motorman and conductor be alert and familiar with the city streets. As a consequence, several companies prefer the employment of city rather than country men, owing to their greater alertness, although the majority prefer country men owing to their greater vigor, strength, honesty, and loyalty, and their willingness to work cheaper. The opportunities which the conductor has of "knocking down," or withholding fares, necessitates the selection of honest men for this position, and references are usually demanded. As a rule deposits or bonds, ranging from fifteen to one

thousand dollars, are required of all accepted applicants for this position.

Notwithstanding the nature of these requirements, the street railway service receives applicants from all classes and all conditions of men. The ranks of the street railway men are recruited from scores of occupations (specified in this report), from farmers, clerks, unsuccessful professional men, and from thousands of skilled artisans temporarily unemployed. The extent to which many classes of temporarily unemployed men resort to the street railway service is due to the fact that a knowledge of the work is readily acquired. Eligible applicants for positions are given a preparatory training, lasting from three days to two weeks, and averaging about a week. After a successful examination, such men are placed on trial cars and are admitted as extras. The proportion of extra men is large. The system in the past produced a debasement of the conditions of the employees. The use of a certain proportion of extra men is inevitable from the nature of the occupation and the requirement that cars be run at all times irrespective of the ability of the regular employees to man them. But in the past the ease with which unemployed men could secure the position of extras attracted too large a proportion of the unemployed of great cities, and on many lines an unduly large body of partially employed men was created, few of these men earning wages commensurate with the cost of their enforced attendance at the barns.

As stated, the effect of this mass of partially employed men was to debase the condition of the regular employees. By the rules of the companies, men were suspended for missing their cars or losing time, and their cars were given to the extra men. The regular men tried to hold their jobs from the extra men by working excessive hours, and, as a consequence, the system led, in many cases, to a serious over-employment of regular men and to a chronic under-employment of extra men. These evil conditions were at their worst during horse car days, but within the last decade a marked improvement has taken place in this as in certain other features of street railway work.

The evil resulting from the impermanency and irregularity of the occupation has been, to a considerable extent, remedied within recent years. Both the companies and the men, as represented in their trade unions, are endeavoring to secure a more permanent and stable body of street railway employees, and to convert the occupation from one which is open to the casual, unskilled, and temporarily unemployed man into one which is based upon a regular, well-disciplined, and thoroughly coordinated group. The introduction of electricity, necessitating a higher grade of employees, has been the prime factor in this development, by which the character and caliber of the men employed are being revolutionized. This improvement in the character of

employees is attested by the great majority of street railway officials, and is the most important and salient feature of the recent development in the street car service.

The nature of the employment has left its stamp upon the men admitted into the service; and this report will show their general characteristics. It will give detailed information concerning, among other things, the citizenship and nativity of employees, their length of residence in the place of their work, their age, their conjugal condition, their weight and height, their former occupations, their savings, their ownership of houses, their cost of living, their liability to mortgage and debt, and their expenditure for insurance against death and accident.

The strict liability to which street railway companies are held for the loss of life, limb, or health, due to accidents, has compelled the adoption of rigid disciplinary rules for the government of employees. According to the law, street railway companies, like other employers, are liable for the actions of their employees in the regular course of their occupation, and the dangerous character of the work requires the establishment and maintenance of regulations for the government of the men engaged in it. Great progress has been shown in this direction, as the result of the concentration of formerly competing lines into gigantic systems covering entire cities and as the result of the improvement in the character of the employees. Formerly each petty company had its body of rules printed or written or oral, and more or less observed according to the character of the superintendent. Favoritism, which was manifested in the appointment and promotion of men, was also evidenced in the discipline. Men were discharged without other cause than the desire to supplant them by candidates with political or other backing, and the morale of the force was, as a consequence, at the lowest. Men going from one line to another passed from one body of rules to another. The usual punishment was suspension, with the result that the man so punished returned much the worse for wear, and with a permanent grudge against the officer of the company who suspended him. The first reform grew out of the consolidation of the companies, and the standardization of the rules for all the lines within a district or within a State. Still further progress was made by the adoption on some lines of the merit system and by the abolition of suspensions, although such measures are still merely in an experimental stage, and very much yet remains to be done to perfect the discipline. The inherent difficulty of the situation lies in the fact that the majority of the men employed work alone, and their actions can not be subjected to any adequate inspection or review:

Those lines which have adopted the merit system have usually based thereon a system of promotion. The opportunities for promotion

from one branch of the service to another are not particularly great, the chief reward of the men engaged in the train service being promotion from a bad to a good run. As is indicated by certain statistics in this report, the wages earned by men on different runs do not vary to any great extent. Another system of promotion, more automatic in character, provides for increased pay with an increased period of service. Somewhat over half of the companies have adopted a system of paying slightly higher wages during the second year of the man's employment than during the first year, still higher wages during the third, and still higher during the fourth and fifth years. The workmen, organized in the trade union, are, as a rule, opposed to both of these systems of promotion, on the ground that they work for favoritism, which they allege forces the men to curry favor with superior officers to the detriment of their fellow-employees.

In the street railway service, as in other occupations, promotion is a moot question of dispute between the employer and the unions, since loyalty is largely based upon the hope of promotion, and each party desires to obtain the adherence of the men to as large an extent as possible.

In this report the wages of street railway men are given in detail for the various cities of the Union and for the various grades of street railway employment. The statistics include not only average and classified wages, but the rates of pay per hour and per day for several hundred specified street railway companies. Wages given in the past by the street car companies of various States are also presented, and comparisons are made between the wages during horse car days and since the introduction of electric traction. Statistics are also shown as to the savings of men engaged in this service in several of the systems throughout the country. The salient feature of these wage statistics is the clearly established fact of an extremely rapid increase of wages during the last decade. The statistics of wages on the old horse cars show clearly that the amounts earned at that time were entirely inadequate, and the increase in wages since then has amounted in cases to 50 or 100 or even over 100 per cent in the rate of remuneration per hour. The rates of wages, however, are still much lower than upon the steam railroads, although any comparison between the rates of pay to employees in these two industries is rendered difficult by the inherent differences in the nature of the occupations.

The rise in wages of street car employees appears to be due to the increasing difficulty of the work; to the improved character of the men employed; to the rapidly growing receipts of the consolidated operating companies, and to the action of the trade unions, which have endeavored to improve conditions. Wages are higher in the well-organized cities, and are, of course, higher in large than in small cities. The influences governing wages in other occupations, such as

the cost of living, etc., are found to prevail equally in the street car service, wages being at their maximum in the far Western cities and at their minimum in the cities and towns of the South.

The statistics of wages as given in the tables herein presented do not include premiums which are paid on several lines for care or for extra efficient work. These premiums, while they amount in some places to an increase of about 5 per cent in the wages of the men receiving them, are not sufficiently common to affect the wages of employees as a whole. A description of the premiums is given in the report.

These premiums excepted, there are no supplementary wages earned by street car men. Several companies have adopted a system of granting pensions to men attaining an advanced age after a long term of service. These pensions, a description of which is given for two or three companies, usually provide for retirement at the age of 65 or 70 and after 25 years or more of continuous service. The amount of the pensions and the conditions under which they are granted are of such a nature, however, that they involve the pensioning company in no great expenditure, and they can not be considered as an appreciable addition to the regular wages of the great mass of employees. The pioneer company in this movement, the Metropolitan Street Railway Company of New York City, has a provision limiting its maximum expenditure for pensions to \$50,000 a year, which thus makes its total maximum expenditure about 1 per cent of the total wages of the men. Though of benefit in individual cases, therefore, the system neither in breadth nor generosity overcomes the criticism and opposition of the employees organized into the trade union.

While the daily wages of street railway employees have increased during the last 15 years, progress in this direction has not been nearly so great as that which has been effected in the reduction of the hours of labor. Twenty years ago, probably no class of employ  es, not excluding the workers in the sweatshops, was so mercilessly and systematically exploited by overwork as the drivers and conductors of street cars.

The statistics of the hours of labor for employees of companies in various parts of the United States during this period are given in detail in this report, and they serve to demonstrate the fact that the hours of labor during this period were entirely excessive. Upon many lines the normal working day was 14 hours and the normal working week 98 hours, and instances were not rare of a normal working day of 16 and actually of 17 hours and more per day. The street car service during that period acted as a parasite upon other trades by excessively overworking young men and throwing them back upon the community at a comparatively early age. Conditions in this respect have greatly improved, owing largely to a change from horse to electric traction and to the activity of the trade union.

The excessive hours of work which were possible on the slow-moving horse cars became an absolute physical impossibility with the strain and stress of the rapid electric vehicles. The hours of labor now prevailing upon street railways are given for several hundred street car systems in the country, and they show that the great majority of employees are working from 9 to 13 hours. Even at the present time this working day, in view of the strain and tension of rapid electric transportation, is considered to be excessive by the majority of employees and by the community in general, and in a number of States laws have been enacted limiting the hours of labor of the men engaged in the service. The constitutionality of one of these laws, that of Rhode Island, limiting the hours of employment of street railway men, was passed upon and affirmed by the supreme court of that State.

The hours of labor of the platform or car men of street railways must be considered in relation to the fact that the majority of men work seven days a week. The cars are obliged to run Sundays as well as week days, and the traffic is almost as great as, and on many lines—especially on interurban systems—greater than, on week days. The former opposition to the running of street cars on Sunday soon subsided and the system arose of employing the majority of men, and especially of platform men, on seven days of the week. On some systems the men are enabled to obtain two or three days or more per month of rest without pay, but the system of a regular Sunday holiday does not exist for the platform men of any large street railway system in the community.

Street railway service is, therefore, one of the most constant employments. It is in very small degree affected by seasonal factors, and the opportunities of work on the car range from three hundred to three hundred and sixty-five days per year. Statistics are given showing the average number of actual working days for a number of street railway employees, and the figures confirm the ordinary impression that the occupation is extremely regular throughout the year.

Much of the improvement in the condition of street railway men has been ascribed to the action of the union, the Amalgamated Association of Street Railway Employees of America. This report contains data showing the history of the organization, its constitution, finances, and general condition, its benefit features, its strikes, and the advances in wages, which it ascribes to its activity. Owing to the nature of the work, the organization is founded on industry rather than on occupation lines, all men engaged in or about the cars being eligible to membership.

The report also contains certain information covering strikes, arbitrations between the companies and their employees, and trade agree-

ments made between the union or its local branches and the officers of the street railway companies.

One of the salient features in the recent development of street railway employment is the creation, largely at the instance and with the assistance of the company, of associations for the benefit and improvement of the employees. These associations have rapidly increased in number, and are being copied in many systems throughout the country. The general nature and activities of a number of these organizations are described in the report, together with the inception and development of Young Men's Christian Associations among the street railway employees of several cities.

The report also considers the question of accidents to street railway employees. The number of these accidents, while large, is much smaller than upon steam railways. Accidents on street railways primarily affect passengers and passers-by. The death rate from accidents on the steam railroads in 1902 was 1 per 401 employees, and for trainmen 1 per 135 men, while for wage-earners upon street railways, not including officials and clerks, the death rate from accidents was 1 to 1,095. The chance of an employee being killed was thus 173 per cent greater upon the steam railroads than upon the street railways, while the chance of death to trainmen on steam railroads was far greater than that of platform men on street railways.

The ordinary status of employees has been modified in the case of street railway employees by a series of laws providing for their special benefit. In 25 States, laws have been passed requiring the vestibuling of cars in order to protect the employees from the excessive cold of winter days. In 10 States, laws have been enacted regulating the hours of labor and establishing a maximum working day and a maximum period of time during which this work shall be performed. The legal status of street railway employees has been more largely influenced by direct legislation of this sort than by the insertion of labor clauses in franchise grants. While in many foreign cities, as in Paris, for instance, the employees of private street railway companies are protected, and their wages, hours of labor, the payment of pensions, the free grant of uniforms, and other conditions are expressly stipulated when the original franchise is granted, this system has been adopted to only a very limited extent in the United States. Many of the laws providing for the protection and welfare of railroad employees have been interpreted as applying also to street railway employees. The constitutionality of this particular legislation has been tested at various times, and from recent decisions it appears that the laws regulating the hours of labor of street railway employees are defensible on constitutional grounds.

In conclusion it would appear that as a result of the development of the last 15 years, and as a consequence notably of the introduction

of electric traction, the great body of street railway employees is being converted from a loosely aggregated, fluctuating, constantly changing body of unskilled, untrained men, working excessive hours for inadequate pay, under extremely vicious conditions, into a more compact, coherent, and regularly employed body of men, earning better wages and working shorter hours under improved conditions. The development has manifested merely a tendency in the direction of amelioration and it can not be regarded as a completed process.

NUMBER OF EMPLOYEES.

According to the special report of the United States Census Office, entitled "Street and Electric Railways, 1902," published in 1903, the number of employees on street railways of the United States, including the Territories, was 140,769. In other words, in that year about one-eighth as many persons were employed on street and electric railways as upon steam railroads.^(a) While no definite statistics exist for former years, the data furnished by the census enumerations and occupations for 1890 and 1900 show a rapid increase in the number of street railway employees. Of the 140,769 persons employed in 1902 upon street and electric railways, 7,128, or 5 per cent of the total number, came under the list of salaried officials and clerks. In that year there were 1,480 general officers with an annual average income of \$2,021, 1,327 other officers, managers, and superintendents with an average annual salary of \$1,371, and 4,321 clerks with an average salary of \$609 per year. The average annual earnings of these 7,128 men was \$1,044.

The remaining 133,641 employees of the street and electric railways of the United States in 1902 may be properly classed as wage-earners. These men are divided into a number of groups, consisting of foremen, inspectors, conductors, motormen, starters, watchmen, switchmen, road and track men, hostlers, stable men, etc., linemen, engineers, dynamo and switchboard men, electricians, firemen, mechanics, lamp trimmers, and other employees. The largest group of these employees consists of conductors and motormen, the number of whom combined amounts to 80,144, or 60 per cent of the total wage-earners. The next largest single group consists of the road and track men, containing 11,474 men, or 8.6 per cent; the next of mechanics, consisting of 9,197, or 6.9 per cent, these four groups of motormen, conductors, road and track men, and mechanics, aggregating 75.5 per cent of all wage-earners.

^a In 1902 there were 1,189,315 employees, including general and other officers and clerks, employed on the steam railroads, or 8.45 times as many as those employed on street railways. (See reports of the Interstate Commerce Commission on Statistics of Railways in the United States.)

The following table shows the distribution of street railway employees by States, the State referring to the location of the railway and not to the residence of the employee:

TOTAL NUMBER OF EMPLOYEES (NOT INCLUDING SALARIED OFFICIALS AND CLERKS)
ON STREET RAILWAYS IN 1902, BY STATES.

[From special report of the United States Census Office on Street and Electric Railways, 1902, page 233.]

State.	Number of employees.	Per cent of total.	State.	Number of employees.	Per cent of total.
New York	33,192	24.8	Maine	969	0.7
Pennsylvania	16,721	11.7	Virginia	960	.7
Massachusetts	13,998	10.5	Texas	929	.7
Illinois	11,057	8.3	Alabama	921	.7
Ohio	9,451	7.1	West Virginia	621	.5
California	5,187	3.9	Nebraska	527	.4
Missouri	5,186	3.9	Oregon	490	.4
New Jersey	3,880	2.9	North Carolina	376	.3
Michigan	3,192	2.4	Florida	374	.3
Maryland	2,883	2.2	South Carolina	372	.3
Connecticut	2,536	1.9	New Hampshire	357	.3
Indiana	2,448	1.8	Utah	285	.2
Wisconsin	2,042	1.5	Kansas	275	.2
Georgia	1,971	1.5	Delaware	236	.2
Louisiana	1,646	1.2	Arkansas	225	.2
Rhode Island	1,609	1.2	Montana	178	.1
Iowa	1,516	1.1	Vermont	165	.1
Minnesota	1,509	1.1	Mississippi	137	.1
Kentucky	1,331	1.0	Other States	1,455	1.1
Washington	1,250	.9			
Tennessee	1,205	.9			
Colorado	979	.7	Total United States	133,641	100.0

The foregoing table shows to what an extent street railway employees are confined to the populous States. Thus, of the entire number employed (not including salaried officials and clerks) upon all the street railways of the United States, almost one-quarter work upon the street railways of the State of New York. The States in the order of the number of street railway employees are New York, Pennsylvania, Massachusetts, Illinois, and Ohio. The street railways of these 5 States employ 83,419 wage-earners, leaving 50,222 for all the other States and Territories of the Union. In other words, over 62 per cent or about five-eighths of all street railway wage-earners in the United States are employed by roads in these 5 States. The States next in order following are California, Missouri, New Jersey, Michigan, and Maryland, all of which are States with comparatively dense populations and with large cities. Upon the street railways of these 5 States there are 20,328 street railway employees, making 103,747, or 78 per cent of the total, for the first 10 States. A majority of the States have upon their street and electric railways less than 1,000 employees each. It is typical of the extent to which railway employment is confined to States with large cities that the State of Rhode Island, with a population of only 428,556, has 1,609 street railway employees, while the State of Texas, with a population of 3,048,710, has but 929 employees. In other words, while Rhode Island has 38 street railway employees for 10,000 inhabitants, Texas has but 3 per

10,000. The proportion of street railway employees in such States as North and South Dakota is still smaller, being too slight even for special enumeration.

Practically the same distribution holds true of the several classes into which street railway employment is divided. In the number of motormen the States lead in the order of New York, Pennsylvania, Massachusetts, Ohio, and Illinois; these 5 States furnishing 61.1 per cent of all the motormen in the country. The States of California, Missouri, and New Jersey, furnish 11.8 per cent, making a total of 72.9 per cent for these 8 States. No other State has over 1,000 motormen, but the States of Michigan, Maryland, Connecticut, Indiana, Kentucky, Louisiana, and Georgia each have between 500 and 1,000, or a total of 12.3 per cent of all motormen. Twelve other States range from 200 to 500 employees, forming a total of 10.4 per cent of all motormen, or an average of 0.9 per cent each. Seven other enumerated States, besides the unenumerated States, average less than 100 motormen, the State of Mississippi having but 32, or less than one-tenth of 1 per cent.

The following table shows the number of motormen by States. Similar tables could be made for all classes of employment, since the distribution is approximately the same for all the various grades of service in street railway employment.

NUMBER AND PER CENT OF MOTORMEN ON STREET RAILWAYS IN 1902, BY STATES.

[From special report of the United States Census Office on Street and Electric Railways, 1902, page 233.]

States.	Number of motor- men.	Per cent of total.	States.	Number of motor- men.	Per cent of total.
New York	9,204	23.0	Colorado	302	0.8
Pennsylvania	5,479	13.7	Maine	259	.7
Massachusetts	4,001	10.0	Virginia	247	.6
Ohio	3,019	7.6	Alabama	217	.5
Illinois	2,738	6.8	West Virginia	204	.5
California	1,776	4.4	Nebraska	187	.5
Missouri	1,740	4.4	Oregon	155	.4
New Jersey	1,218	3.0	New Hampshire	123	.3
Michigan	951	2.4	South Carolina	113	.3
Maryland	933	2.3	Utah	103	.3
Connecticut	778	1.9	Kansas	102	.3
Indiana	674	1.7	Florida	99	.3
Kentucky	557	1.4	North Carolina	95	.2
Louisiana	538	1.3	Arkansas	85	.2
Georgia	512	1.3	Delaware	82	.2
Minnesota	482	1.2	Vermont	56	.1
Wisconsin	477	1.2	Montana	55	.1
Iowa	443	1.1	Mississippi	32	.1
Rhode Island	419	1.0	All others	447	1.1
Tennessee	399	1.0			
Washington	358	.9	Total United States....	40,003	100.0
Texas	349	.9			

The statistics of occupations of the Twelfth Census of the United States show a much smaller number of men engaged in street railroad- ing than is shown by the special report of the Census Office on Street and Electric Railways, 1902. According to the Twelfth Census, there were but 68,936 street railway employees in the United States. This

figure, however, is necessarily incomplete, owing to the fact that the statistics were taken not by industries, but by the particular trade or occupation of the individual workman making the return.

Persons filling such positions in the street railway service as foremen, starters, watchmen, switchmen, road and track men, linemen, engineers, electricians, firemen, mechanics, lamp trimmers, etc., do not usually report themselves as street railway employees, and it is only those occupations which specifically pertain to the street railway service which show their full quota of men. Thus, according to the United States census of population, it would appear that 89.2 per cent of all street railway employees were motormen and conductors, whereas according to the fuller statistics furnished in the special report, only 60 per cent are shown to be motormen and conductors. The census report returned 24,038 conductors as against 37,436 motormen, showing clearly that many conductors were not classed as street railway employees, while probably all motormen were. In other words, according to the statistics of population, there were 56 per cent more motormen than conductors, while the special report shows that the numbers were practically identical for the two occupations. (The proportion between motormen and conductors was as 997 to 1,000.) Although necessarily incomplete, the figures of the census of occupations are valuable because they furnish information supplementing that of the special census report.

The following table shows the division of wage-earners of street and electric railways according to occupations:

NUMBER AND PER CENT OF WAGE-EARNING EMPLOYEES IN EACH OCCUPATION IN STREET RAILWAY SERVICE, 1902.

[From special report of the United States Census Office on Street and Electric Railways, 1902, pages 233 to 235.]

Occupation.	Number of employees.	Per cent of total.
Conductors	40,141	30.0
Motormen	40,003	29.9
Road and track men.....	11,474	8.6
Mechanics	9,197	6.9
Firemen	2,694	2.0
Linemen.....	2,288	1.7
Foremen.....	1,782	1.3
Engineers.....	1,751	1.3
Hostlers, stablemen, etc	1,345	1.0
Switchmen	1,198	.9
Dynamo and switch-board men.....	1,167	.9
Electricians.....	1,150	.9
Inspectors	1,095	.8
Starters	960	.7
Watchmen	921	.7
Lamp trimmers.....	838	.6
Others.....	16,137	12.1
Total.....	133,641	100.0

Of the 133,641 wage-earners employed by the street and electric railways of the country during the year 1902, the greater proportion were to be found in the Northern States. Of the entire number, 72,427,

or almost 55 per cent, were employed on railways in the North Atlantic and 37,203, or over 27 per cent, in the North Central States. On the other hand, there were but 9,233 employees, or 7 per cent of the total, in the South Atlantic States, and but 6,394, or less than 5 per cent, in the South Central, making a total of less than 12 per cent in the South Atlantic and South Central States. The Western States had, in 1902, 8,384 street and electric railway employees, or over 6 per cent of the total. In other words, owing to the much larger population and the greater preponderance in the Northern States of urban centers, the number of street railway employees in that region was almost seven times as great as in the Southern States.

During the last 12 years, moreover, the absolute increase in the number of street railway employees in the Northern States was almost seven times as great as in the Southern.

INCREASE IN THE STREET RAILWAY EMPLOYMENT, 1890-1902, BY GEOGRAPHICAL DIVISIONS.

[From special report of the United States Census Office on Street and Electric Railways, 1902, page 6.]

Geographical division.	Number of employees, 1890.	Number of employees, 1902.	Per cent of increase.
North Atlantic	37,412	75,928	103.0
South Atlantic	4,139	9,839	137.7
North Central	20,314	39,405	94.0
South Central	3,830	6,731	75.7
Western	5,069	8,866	74.9
Total	70,764	140,769	98.9

DENSITY OF STREET RAILWAY EMPLOYMENT.

By the density of railway employment is meant the number of persons employed upon the railways in whatsoever capacity, divided by the number of miles. Thus, the steam railroads of the United States in the year 1902 had a length of 202,472 miles and employed 1,189,315 persons, including general and other officers, giving an average of 5.94 employees per mile. (^a) This figure is called the density of employment. The density of employment upon street railways is somewhat larger. Thus, in 1902 there were 6.2 persons, including salaried officials and clerks, per mile of road. The density was naturally larger in the North Atlantic States where traffic is denser. The number of persons employed upon street railways does not appear to vary in direct proportion to the length of the track, but tends rather to increase with the traffic. It would therefore naturally be expected that those railroads possessing the densest traffic would have the largest number of employees per mile of road. The street and electric railways of the North Atlantic States have a density of 7.5 per

^a Fifteenth Annual Report of the Interstate Commerce Commission on the Statistics of Railways in the United States, for the year ending June 30, 1902.

mile of track, those of the South Atlantic, 5.9; those of the Western States, 5.5, and those of the North Central States, 5.0 per mile of track. The density of employment upon the street railways has of late years tended to diminish somewhat as a result of the introduction of long interurban lines, enjoying but a feeble traffic and employing only a small number of wage-earners.

The following table shows this density of employment by geographical groups:

DENSITY OF EMPLOYMENT UPON STREET RAILWAYS IN 1902, BY GEOGRAPHICAL DIVISIONS.

[From special report of the United States Census Office on Street and Electric Railways, 1902, page 6.]

Geographical division.	Number of employees.	Length of track.	Average employees.
North Atlantic	75,928	10,164.89	7.5
South Atlantic	9,839	1,670.15	5.9
North Central	39,405	7,815.32	5.0
South Central	6,731	1,322.45	5.1
Western	8,866	1,604.18	5.5
Total	140,769	22,576.99	6.2

SEX OF STREET RAILWAY EMPLOYEES.

Street railway employment is confined almost entirely to males. According to the statistics of occupation of the United States census only 2 out of 37,436 motormen and only 13 out of 24,038 conductors were women, while of 1,366 drivers none were women. The exact number of female clerks and of station employees generally can not be exactly stated, as many of these clerks are not reported under street railway service. The census gives 46 females out of a total of 68,936 employees, or 0.07 per cent of the entire number, but this is probably smaller than the true number. Eight of the 13 female conductors are reported from the State of Ohio.

ADMISSION TO EMPLOYMENT.

The street railway companies and the employees, organized and unorganized, are interested in the gradual raising of the standard of the men selected for employment. It is extremely advantageous both to employers and employees in this industry, as well as to the community in general, that the men selected for employment should be capable and in good physical and mental condition. The safety of many members of the community depends in a large measure upon the sobriety and quick-wittedness of street railway employees. The tendency in this industry, as in some others, has been toward an improvement in the quality of the service. The caliber of men admitted to employment has advanced, the preliminary physical examinations required becoming more and more exacting. Instead of placing on the platform any man with a political pull, as was the case less than

twenty years ago, it is becoming more and more the custom to compel all applicants to pass rigid examinations, and to subject them, if admitted, to a training of about a week's duration on the average.

The work of street railway employees is thus being lifted out of the class of unskilled jobs, for which any man at any time is fitted, into a definite and specialized trade which will command higher wages and require shorter hours. At the present time this development is only partially completed, and upon many of the lines the requirements as to character and ability of employees are still low.

To a certain extent employment in the street railway service still retains a temporary character. Many men are attracted to it who do not desire to remain in the business, but who wish to keep their position for a few years until they are able to secure something better. On the other hand, the occupation is in large measure, although to a less extent than formerly, the dumping ground for temporarily unemployed men from higher and better paid positions. As a consequence, the personnel of the service is still largely fluctuating, and the tenure of position is still much shorter than that which obtains on the steam railroads of the country.

A more or less uniform system of admitting applicants to the street railway service has been gradually worked out. The usual method is to have the applicant first interviewed by the manager or some subordinate official, and if he creates a favorable impression, he is given a blank application to fill out, and an application for a bond for the faithful performance of his work. The application blanks vary among the different railroads, but usually include such items as name, address, length of residence in the city in which the street railway is situated, nationality, birthplace, marital condition, age, height, weight, hearing, eyesight, color of eyes and hair, as well as other distinguishing marks. The applicant is also frequently asked whether his wife lives with him, whether he possesses a trade, what schooling he has had, what his former employment was, whether his life is insured, whether he is a member of the militia or of any benevolent association, and whether he has ever been arrested or convicted of any crime. The employment blank usually has blank spaces for the names of persons recommending the applicant. If the blank is filled out properly the applicant undergoes a physical examination, which is approximately the same for the large companies. Generally speaking, it bears upon the apparent age, the height, weight, chest measure, abdominal girth, pulse rate, etc., of the applicant, as well as such distinguishing marks as the color of the hair and eyes, and the general figure. Eyesight and hearing are tested, as well as the inspiration of the lungs, the action of the heart, and the respiration. The applicant is usually examined further for fistula, piles, varicose veins, and disease of the genital or urinary organs, as well as for vaccination marks.

Each railway establishes certain minimum requirements which must be met by all applicants, and usually a minimum and a maximum age at which applicants will be admitted are fixed. As a rule no person is taken into the service who is under 21 or over 40 or 45 years of age. A minimum height is also set, and certain fairly severe tests of sight and hearing are required. On the Birmingham Railway, Light and Power Company, for instance, it is required of each applicant that he be able to see with each eye one-half inch letters placed at a distance of 10 feet and that he hear with either ear the tick of a standard watch placed at arm's length. Heart, lungs, kidneys, and liver must be in good condition, or the applicant is not accepted.

If the medical or physical examination is successful, the applicant is usually turned over to the dispatcher of one of the divisions and put upon active work. For a shorter or longer period, ranging generally from one to two weeks, he is obliged to practice on the cars, and is also required to study a number of questions and answers covering the general rules and regulations of the company and the ordinary and usual management of the car and of its passengers. Upon these questions he is subsequently examined. Not until the examination is successfully passed, and the applicant has shown himself capable in the practice work, is he admitted to the service.

AGE LIMIT OF CONDUCTORS AND MOTORMEN.

The minimum age at which conductors are taken on is usually 21 years. This is sometimes provided for by law, in other cases by custom and by the desire of the company to avoid the charge of culpability for accidents resulting from the extreme youth of its employees. On some roads the rule is not inflexible, but is approximately adhered to.

From returns furnished by a number of street car companies, it was found that the great majority reporting limitations upon age, fixed the minimum age at which a conductor would be employed at 21 years. Thirty-five companies placed the minimum at 21 years, 2 at 20 years, and 1 at 18 years. A few of the companies raised the minimum still higher. Thus 1 company fixed the minimum age for employment of conductors at 22, 6 companies at 23, 2 companies at 25, while 1 company fixed the minimum age for employing conductors at 30 years.

About the same rule prevails for motormen. Almost all the companies have the same minimum and maximum ages for motormen as for conductors, and the rules as to age, applying to conductors, may also be taken as applying to motormen.

The maximum age at which street railway employees, whether conductors or motormen, are taken into the service ranges from 35 to 50 years. The general maximum prescribed is about 40 years. In

only 1 company was provision made for employing men as old as 50 years. On 12 lines the maximum age prescribed was 45 years, on 26 lines the maximum age for conductors was 40 years, on 2 lines the maximum age was 38, and on 12 lines the maximum age was 35. No new employees who are above these ages are taken into the service.

The progressive shortening of the trade life by reducing the age at which the men can enter the employment is felt by many of the men as a great hardship, and is used as an argument to show the difficulty and nervous strain and the unfavorable conditions surrounding the work.

In the old horse-car days a man of 45 could ordinarily secure a position with a street railway, but now the tension and strain is felt to be so severe that the age at which new men are taken on has been gradually lowered. On an average there are only some 18 years between the average minimum and the average maximum age at which men may be admitted to the service. The establishment of a low maximum like that of 35 years tends to force employees above this age to become extremely cautious and conservative in the maintenance of their present positions.

The street railways usually establish a certain definite minimum weight for conductors and motormen. While the rule may not be in every case rigidly enforced, in many companies the applicant is actually weighed. Even though companies do not prescribe in their rules the minimum weight accepted, they are inclined to reject men who are undersized.

The average weight required of conductors is about 145 pounds. One company insists on a weight not less than 120 pounds, 1 upon 125 pounds, 2 upon 130 pounds, 4 upon 135 pounds, 3 upon 140 pounds, 2 upon 145 pounds, 8 upon 150 pounds, 4 upon 160 pounds, and 2 upon 165 pounds. The minimum weight required of motormen is somewhat higher, ranging about 150 pounds. One company insists upon a minimum of 120 pounds, 1 upon 130 pounds, 2 upon 135 pounds, 2 upon 140 pounds, 3 upon 145 pounds, 10 upon 150 pounds, 7 upon 160 pounds, and 4 upon 165 pounds. The average minimum weight for conductors upon 27 street railway companies was 145.4 pounds, and for motormen upon 30 railways, 150.5 pounds.

The companies also establish definite standards of height for all applicants for the positions of motormen and conductors. Undersized men and men of light weight or small strength can not generally secure a position. As a rule, no man under 5 feet 6 inches or 5 feet 7 inches can secure employment as a street railway conductor, and no man under 5 feet 7 or 8 inches as a motorman.

An investigation of 38 companies showed that in 5 companies the minimum height required of conductors was 5 feet 4 inches; in 1 company, 5 feet 5 inches; 13 companies, 5 feet 6 inches; 5 companies, 5

feet 7 inches; 2 companies, 5 feet 7½ inches; 10 companies, 5 feet 8 inches; 1 company, 5 feet 9 inches, and 1 company, 5 feet 10 inches. The average minimum height required by these 38 companies was 5 feet 6.6 inches.

The minimum height required of motormen is somewhat greater. In 3 companies the minimum height required was 5 feet 4 inches; 1 company, 5 feet 5 inches; 10 companies, 5 feet 6 inches; 5 companies, 5 feet 7 inches; 1 company, 5 feet 7½ inches; 17 companies, 5 feet 8 inches; 1 company, 5 feet 9 inches, and 1 company, 5 feet 10 inches.

The average minimum height for motormen required by these 39 companies was 5 feet 7 inches.

COUNTRY MEN AND CITY MEN.

An attempt was made to discover to what extent the ranks of street railway men, and, above all, of carmen, were recruited from the country and city, respectively, and which of these two classes of labor was preferred by the companies. Such an investigation could not of course be carried out with scientific exactness, since there is no clear line of demarcation between a country man and a city man, either as respects the length of time of residence in the city or the size or density of the population which would constitute a city. The results therefore refer roughly to the relative popularity with the employing companies of men who have recently come from farms and of long-time residents of cities.

It was found that in a majority of places the ranks of the street railway men were recruited from both sources. A number of companies stated that they had no preference; a few stated their preference for city men; the overwhelming majority were in favor of men from the country. The reasons given by the various companies for preferring city men were that they "knew the city better," were "better qualified to handle city people," were "better able to deal with the difficulties of the situation," and were "better educated." The preference given on the other hand to country men was upon the ground that they were "in better physical condition," were "more honest," "more rugged, more faithful, more competent," "more moral in their conduct," "more honest and willing to work," "used to long hours," "more steady," "more reliable," "not so easily influenced by unworthy persons," "more diligent," "with better habits," and because they "need the work." In other words, a minority of the companies preferred city men on account of their knowledge of the streets and their greater intelligence, while a majority preferred country men because of their working at lower wages and for longer hours, and on account of their greater honesty.

No accurate statistics can be given as to the exact proportion of these two classes in the employ of the companies.

EMPLOYMENT OF NEGROES

Very few, if any, Negroes seem to be employed in the transportation department of street railways. Inquiries were sent to most of the street railway companies of the country asking for information regarding the employment of Negroes. In the great majority of cases the reply was that no Negroes were employed. Such Negroes as are employed are either in the track department or as porters, foremen, or laborers. The Nashville Railroad Company, of Nashville, Tenn., reported some 4 or 5 Negro porters; the Alton Railway, Gas and Electric Company, of Alton, Ill., reported 5 Negroes in their employ; the Utica and Mohawk Railway Company, of Utica, New York, reported from 75 to 100 Negro laborers; the Mobile Light and Railroad Company, of Mobile, Ala., reported 10 colored trackmen, and a number of other companies reported colored laborers as janitors, car washers, track hands, and general laborers, etc.

BONDING OF CONDUCTORS.

The system of bonding conductors is apparently growing, although it is not yet general throughout the country. Of 78 American street railways asked this question, 27 reported that either a bond or a cash deposit was required. These bonds ranged from \$150 to \$500. The bond required by the Oakland Transit Consolidated Company of Oakland, Cal., was \$250, that of the Nashville Railway Company, \$500, that of the Jersey City Street Railway Company, \$150, that of the Elmira Water, Light and Railroad Company \$200, that of the Utica and Mohawk Valley Railway Company \$200, that of the Harrisburg Traction Company \$200, that of the Old Colony Street Railway Company, Boston, Mass., \$300, and that of the Springfield and Xenia Traction Company \$500. In the case of the Boston Elevated Railway Company, two bondsmen are required with a bond of \$300 each. In the case of the Schenectady Railway Company a blanket bond is required covering all men for \$50 each. In a number of cases the railway company bonds its conductors with a guaranty company, which thus becomes responsible for the money of each and all of the conductors.

Where a deposit of money is made in lieu of a bond the amount is much smaller. The Metropolitan Street Railway Company, of Kansas City, Mo., requires a \$25 cash security, as does also the Augusta Railway and Electric Company, of Augusta, Ga., and the United Railroads of San Francisco, Cal. The Evansville Electric Railway Company, of Evansville, Ind., requires only a \$15 deposit, as does the Manchester Street Railway Company. The deposit required by the Mobile Light and Railroad Company, of Mobile, Ala., is only \$10. The cash deposits range as a rule from \$10 to \$25.

PREVIOUS EMPLOYMENT OF STREET RAILWAY EMPLOYEES.

The majority of employees of street railways are obliged to state in their applications for positions whether or not they have had any former experience in street railroading.

Of 216 employees of the Connecticut Railway and Lighting Company, of Bridgeport, Conn., 58 reported that they had been previously employed by a railroad company, and 88 stated that they had not. Seventy failed to make any reply to this question.

Of 50 employees on the Scranton Railway Company, of Scranton, Pa., 14 had had previous experience in street railroading and 34 had not, while 2 failed to reply to this question.

Of 200 employees on the United Railways of Detroit, Mich., 21 had been employed by the companies before, 38 by some other railway company, while 141 had never been employed by any railway company.

Of 200 employees of the Philadelphia Rapid Transit Company, of Philadelphia, Pa., 61 had previously been employed by a steam or street railway and 139 had not. Of these same 200, 42 had formerly made application to the company for positions, whereas 158 had not.

Out of 50 employees of the Scranton Railway Company, of Scranton, Pa., 14 were employed at the time of their application for the position of motorman or conductor, 15 had been out of employment for less than two weeks, 14 had been out of employment for over two weeks, while in the case of 7 the length of previous unemployment, if any, was unknown.

NUMBER OF APPLICANTS FOR EMPLOYMENT.

The number of applicants for street railway positions is usually far in excess of the number of available positions. During the period from May 4 to July 3, 1903, there were 16 hiring days on the United Railroads of San Francisco. The number of applicants on these days was 662, an average of 41 per day. As compared with this the average of new employment was 6 employees per hiring day. This is typical of all cities, the demand for positions being always considerably in excess of the supply. According to the testimony of one of the witnesses of the company in its arbitration with the Amalgamated Association of Street Railway Employees, the applicants included "men who have been miners, shinglers, ex-motormen and conductors, medical students, brakemen, warehousemen, seamen, farmers, salesmen, locksmiths," etc.

PROMOTION IN THE STREET RAILWAY SERVICE.

The railway companies prefer to have an entirely free hand in the promotion of the men. Somewhat over one-half of the companies pay their men more with each successive year of service up to five years,

while almost one-half of the companies pay a flat rate for all men engaged at the same occupation. The demand made by the New Orleans branch of the Amalgamated Association for promotion by seniority was met with the opposition of the company, which claimed that such a system did not distinguish between the efficient and the inefficient, but by the mere passage of time threw the best positions into the hands of the older men. The union, as will be shown in the discussion on wages, prefers generally that there shall be no promotion for employees in the shape of an increased rate of pay with increased years of service.

The policy of the union in this regard appears to aim as far as possible to make promotion automatic, in order to prevent favoritism and the consequent splitting up of the labor force into groups with separate and possibly antagonistic interests. In the street railway service, as in other occupations, promotion is a debatable ground of conflict between the employer and the organization of employees. Loyalty is largely based upon the hope of promotion, and to a certain extent, at least, there is a conflict between the union and the employer for the loyalty of the men.

Promotion for motormen and conductors within the street-car service is largely from the worse to the better runs. Time tables are necessarily arranged with relation to the probable traffic, and as a consequence the opportunities for work and earnings vary in different lines. The amount of variation is not as great as in many other occupations, but there is a sufficient difference both in the difficulty of the work and in the remuneration of the workman, to make the better runs an object of desire.

The following table, taken from the testimony of the United Railroads of San Francisco in its arbitration with the Amalgamated Society of Street Railway Employees in 1903, illustrates the difference in the average earnings of men upon different lines. The average daily earnings for platform men for the whole system were \$2.51, and the amount of variation from this average was slight. The average earnings of the men upon the best lines were \$2.65, and upon the worst, \$2.35, the maximum wage being thus less than 13 per cent above the minimum and less than 6 per cent above the average.

AVERAGE DAILY EARNINGS OF MEN HAVING REGULAR RUNS ON VARIOUS LINES OF THE UNITED RAILROADS OF SAN FRANCISCO.

Line.	Average daily earnings.	Line.	Average daily earnings.
Hayes Street Line.....	\$2. 61	West 22d and 24th Streets Line.....	\$2. 36
McAllister Street Line.....	2. 51	Howard Street Line.....	2. 48
Haight Street Line.....	2. 47	East 22d and 24th Streets Line.....	2. 35
Valencia Street Line.....	2. 56	Kentucky Street Line.....	2. 51
Castro Street Line.....	2. 50	Third and Kearny Streets Line.....	2. 60
Montgomery and 10th Streets Line.....	2. 53	Sixth Street Line.....	2. 61
Kearny and Mission Streets Line.....	2. 49	Fifth and Sansome Streets Line.....	2. 57
Sutter Street Line (conductors).....	2. 50	Central and Eighth Avenues Line.....	2. 46
Sutter Street Line (gripmen).....	2. 53	Central Avenue and Clement Line.....	2. 38
Ellis, Park and Ocean Line.....	2. 58	Guerrero and Ingleside Line.....	2. 47
Masonic Avenue Line.....	2. 44	Cemeteries and Mission Line.....	2. 44
Fillmore and 16th Streets Line.....	2. 56	Eighteenth Street Line.....	2. 38
Fillmore Hill Line.....	2. 46	Powell Street Line.....	2. 55
Ellis and O'Farrell Streets Line.....	2. 65	Mission Street Line.....	2. 47
Folsom Street Line.....	2. 56	Polk and Larkin Streets Line.....	2. 54
Eddy and Fulton Streets Line.....	2. 54	Jackson Street Line.....	2. 51
Folsom Extension Line.....	2. 55	Sacramento Street Line.....	2. 56
San Mateo Suburban Line.....	2. 46		
Eighth and 18th Streets Line.....	2. 55		
Bryant Street Line.....	2. 46	Average daily earnings on all lines.....	2. 51

PERMANENCY OF EMPLOYMENT.

Street railway employment is noted for lack of permanency. To an unusual extent, as compared with other industries, the street cars are operated by men who have taken up the work because they were out of a job and anxious to secure temporary employment, and the service is frequently accepted by men who have no intention of permanently remaining on the platform. The following table shows the number of platform men (conductors and motormen) who in 1903 had been employed by the United Railroads of San Francisco for over 10 years. In all, 326 men had been in the service from 10 to 26 years. Of this number, 286, or over seven-eighths, had been in the service 15 years or less, and 308 men, or over 94 per cent, had been in the service 17 years or less.

NUMBER OF EMPLOYEES OF THE UNITED RAILROADS OF SAN FRANCISCO, 1903, WHO HAD BEEN IN THE SERVICE 10 YEARS OR OVER.

Years of service.	Number of employees.	Years of service.	Number of employees.
10.....	63	19.....	4
11.....	50	20.....	3
12.....	51	21.....	1
13.....	73	22.....	1
14.....	28	23.....	2
15.....	21	25.....	2
16.....	12	26.....	1
17.....	10		
18.....	4	Total.....	326

Of 107 men on the pay rolls of the Washington Water-Power Company of Spokane, Wash., in October, 1902, the period of employment was as follows:

PERIOD OF EMPLOYMENT OF EMPLOYEES OF THE WASHINGTON WATER-POWER COMPANY, SPOKANE, WASH.

Period of employment.	Number of employees.	Period of employment.	Number of employees.
Less than 1 year	40	8 years or less than 9 years.....	1
1 year or less than 2 years.....	19	9 years or less than 10 years.....	2
2 years or less than 3 years.....	10	10 years or less than 11 years.....	2
3 years or less than 4 years.....	6	11 years or less than 13 years.....	9
4 years or less than 5 years.....	6	Over 13 years.....	2
5 years or less than 6 years.....	6		
6 years or less than 7 years.....	3	Total.....	107
7 years or less than 8 years.....	1		

NATIVITY, CITIZENSHIP, AGE, AND CONJUGAL AND GENERAL CONDITION OF EMPLOYEES.

Of 786 employees and officials of electric railroads in Rhode Island in the year 1895, 639, or 81.3 per cent, were natives of the United States; 81, or 10.3 per cent, were natives of Ireland; 37 were Canadians (21 English and 16 French Canadians); 19 were English; 5 Swedes; 1 German, and 4 from other countries.^(a) In 1885, somewhat similar conditions existed; 88.7 per cent of all railroad officials and employees being of American and 10.3 per cent of Irish nativity.^(b)

Of 1,865 employees on Michigan street railways in 1895, 1,070, or almost three-fifths, were natives of the United States, and 215, or over 11 per cent, were natives of Canada, or just across the river from Detroit. Of the remaining employees the majority originally came either from Germany or from the United Kingdom. The following table shows the nativity of these employees:

NATIVITY OF EMPLOYEES OF MICHIGAN STREET RAILWAYS, 1895.

[From Thirteenth Annual Report of the Bureau of Labor and Industrial Statistics of Michigan, p. 54.]

Nativity.	Number of employees.	Nativity.	Number of employees.
United States.....	1,070	Poles.....	5
Canadians.....	215	Danes.....	4
Irish.....	193	Norwegians.....	3
Germans.....	173	Belgians.....	3
English.....	83	Jews.....	1
Scotch.....	57	Africans.....	1
Swedes.....	29		
French.....	23	Total.....	1,865
Hollanders.....	5		

Nearly all street railway employees are citizens of the United States, and a majority are native citizens. Of 200 street railway employees

^a Census of Rhode Island, 1895, pp. 452, 453.

^b Census of State of Rhode Island, 1885, pp. 292, 293.

of the Detroit United Railway Company of Detroit, Mich., all were citizens, and of these 52 were naturalized, and 148 native. Of the 52 so naturalized, 13 had been naturalized less than 1 year previous to receiving employment, 12 had been naturalized from 1 to 5 years previous to receiving employment, 16 from 6 to 10 years previous to receiving employment, 4 from 11 to 15 years previous to receiving employment, 3 from 16 to 20 years previous to receiving employment, while in the case of 4 men the period lapsing between their naturalization and their employment was unknown.

As a general rule the majority of street railway employees at work in any city are natives of the State or of adjoining States. Thus, the majority of 200 motormen and conductors on the Detroit United Railway were recruited from the neighborhood of the city of Detroit, and the majority of these were natives of the State. Of the entire 200 conductors and motormen from whom returns were obtained, 132 were natives of Michigan, while 37 were natives of Canada immediately across the river. Only 15 were natives of other foreign countries, 5 coming from England, 5 from Ireland, 4 from Germany, and 1 from Russia.

The following table shows the nativity of these 200 conductors and motormen upon the United Railway of Detroit, Mich.:

NATIVITY OF 200 CONDUCTORS AND MOTORMEN EMPLOYED BY THE DETROIT UNITED RAILWAY COMPANY.

Nativity.	Number of employees.	Nativity.	Number of employees.
Canada	37	Massachusetts	1
Colorado	1	Michigan	132
England	5	Missouri	1
Germany	4	New York	6
Illinois	3	Ohio	1
Indiana	1	Russia	1
Ireland	5		
Kansas	1	Total	200
Kentucky	1		

Of 50 trainmen of the Scranton Railway Company, Scranton, Pa., 42, or 84 per cent, were natives of Pennsylvania, and 1 a native of New York City. There were 5 foreign-born employees, 2 coming from Canada, 2 from Germany, and 1 from Sweden. Of these 50 employees, 49 were citizens of the United States and 1 was an alien.

Of 200 motormen and conductors employed by the Pittsburg Railway Company, of Pittsburg, Pa., 93 were natives of Pennsylvania, while 19 were natives of West Virginia, 13 of Maryland, and 13 of Ohio. In other words, 138, or 69 per cent, were natives of Pennsylvania or of the near-by States.

NATIVITY OF CONDUCTORS AND MOTORMEN OF THE PITTSBURG RAILWAYS COMPANY,
PITTSBURG, PA.

Nativity.	Number of em- ployees.	Nativity.	Number of em- ployees.
Alabama.....	1	New York.....	11
Austria.....	2	North Carolina.....	1
Austria-Hungary.....	2	Ohio.....	18
District of Columbia.....	1	Pennsylvania.....	98
England.....	3	Russia.....	2
Illinois.....	1	Scotland.....	1
Indiana.....	1	South Carolina.....	1
Ireland.....	18	Switzerland.....	1
Kansas.....	1	Virginia.....	11
Kentucky.....	1	West Virginia.....	19
Maine.....	1	"In America".....	1
Maryland.....	13	Total.....	200
Missouri.....	1		

Of 216 conductors and motormen employed by the Connecticut Railway and Lighting Company, of Bridgeport, Conn., 83 were natives of Connecticut, 36 of New York State, and 15 of Massachusetts. The largest contingent of foreign-born employees was furnished by Ireland, with 27 persons.

NATIVITY OF CONDUCTORS AND MOTORMEN OF THE CONNECTICUT RAILWAY AND
LIGHTING COMPANY, BRIDGEPORT, CONN.

Nativity.	Number of em- ployees.	Nativity.	Number of em- ployees.
Austria.....	2	Michigan.....	2
Canada.....	2	Missouri.....	1
Connecticut.....	83	New Hampshire.....	1
Denmark.....	4	New Jersey.....	5
England.....	3	Nova Scotia.....	1
Germany.....	4	New York.....	36
Illinois.....	1	Ohio.....	3
Iowa.....	1	Pennsylvania.....	8
Indiana.....	1	Scotland.....	3
Ireland.....	27	Sweden.....	1
Italy.....	2	Switzerland.....	1
Hungary.....	1	Vermont.....	2
Kentucky.....	1	Virginia.....	1
Maine.....	3	Total.....	216
Maryland.....	1		
Massachusetts.....	15		

AGE OF EMPLOYEES.

The comparatively early age at which employees enter or reenter the street railway service is shown by statistics of the ages of successful applicants for employment furnished by several of the companies. Thus, of 200 new employees of the Philadelphia Rapid Transit Company, of Philadelphia, Pa., 108, or 54 per cent, were from 21 to 25 years of age, 50, or 25 per cent, from 26 to 30, 22, or 11 per cent, from 31 to 35, 12 from 36 to 39, 7 from 40 to 45, while only 1, was above the age of 45.

The conductors seem to have been younger than the motormen, as will appear from the following table:

AGE OF CONDUCTORS AND MOTORMEN AT ENTERING THE SERVICE OF THE PHILADELPHIA RAPID TRANSIT COMPANY.

Age at entering service.	Conductors.	Motor-men.
From 21 to 25 years	63	45
From 26 to 30 years	21	29
From 31 to 35 years	9	13
From 36 to 40 years	4	10
From 41 to 45 years	3	2
From 46 to 50 years		1
Total.....	100	100

Of 113 motormen of the Connecticut Railway and Lighting Company, of Bridgeport, Conn., 49 were below the age of 26, and only 4 above the age of 40. Of 103 conductors on the same line, 54 were below the age of 26, and only 3 were above the age of 40.

The following table shows the classification, by age, of street railway employees, both motormen and conductors, of the Connecticut Railway and Lighting Company, of Bridgeport, Conn.

AGE OF CONDUCTORS AND MOTORMEN AT ENTERING THE SERVICE OF THE CONNECTICUT RAILWAY AND LIGHTING COMPANY.

Age at entering service.	Conductors.	Motor-men.
16 to 20 years.....	8	3
21 to 25 years.....	46	46
26 to 30 years.....	23	20
31 to 35 years.....	16	26
36 to 40 years.....	7	14
41 to 45 years.....	2	2
46 to 50 years.....	1	1
51 to 55 years.....		1
Total.....	103	113

Of 100 motormen in the employ of the Pittsburg Railways Company of Pittsburg, Pa., 55 were from 19 to 25 years of age, 32 from 26 to 30, 12 from 31 to 35, and 1 above the age of 35. Of 100 conductors upon the same line 78 were from 19 to 25, 9 from 26 to 30, 7 from 31 to 35, 5 from 36 to 40, while 1 was above the age of 40. As on other lines, the conductors are here younger than the motormen.

Of 50 street railway men in the employ of the Scranton Railway Company, of Scranton, Pa., 31 were from 21 to 25 years of age, 10 from 26 to 30, and 9 from 31 to 36.

Of 200 street railway men of the Detroit United Railway of Detroit, Mich., 101 were from 21 to 25 years of age, 61 from 26 to 30, 29 from 31 to 35, 8 from 36 to 40, while only 1 was above the age of 40.

CONJUGAL CONDITION OF EMPLOYEES.

From such statistics as have been gathered it would appear that a large percentage of the successful applicants for employment with street railway companies are single. Thus, of 200 employees on the Detroit United Railway, 79 were married and 121 single.^(a) Of 50 employees of the Scranton Railway Company, 18 were married and 32 were single. Of 100 conductors of the Pittsburgh Railways Company, 21 were married, 2 were widowers, and 77 were single, while of 100 motormen 37 were married, 1 was a widower, and 62 were single. Of 200 employees of the Philadelphia Rapid Transit Company, 77 were married and 123 were single, while of 216 street railway employees of the Connecticut Railway and Lighting Company of Bridgeport, Conn., 101 were married and 115 single. In this company, as in the others, motormen are the older, and the proportion of married men is greater for motormen than for conductors, 44 per cent of the conductors and 50 per cent of the motormen being married.

The German Industrial Census of 1895^(b) gives the ages of the street railway men in that country. The prevailing age is from 20 to 40. Of the 15,446 street railway employees in Germany in 1895, 5,090, or 33 per cent, were from 20 to 30 years of age; 5,903, or 38 per cent, were from 30 to 40; there being 71 per cent from 20 to 40, and over 88 per cent from 20 to 50. Above the age of 50 there were but few. There were but 800 employees, or 5.2 per cent, from 50 to 60; but 217, or 1.4 per cent, from 60 to 70; and but 31, or 1 in 500, over 70.

The great majority of the street railway employees were married. Thus, of the total number, 11,205, or almost 73 per cent, were married; 3,941, or 25 per cent, were single; while 300, or 2 per cent, were widowed or divorced. After 30 the employees married rapidly, and even after 20, only 48 per cent of the employees from 20 to 30 years of age being single; only 10 per cent from 30 to 40, and only 4 per cent of those above 40 years of age.

Of the 15,446 employees on street railways in Germany, only 408, or less than 3 per cent, were with other occupation; and only 110, or less than 1 per cent, were with other occupation outside of agriculture.

Of the total number of street railway employees in Germany in 1895, 15,303, or over 99 per cent, were men, and 143, or less than 1 per cent, were women. Of the latter, only 46, or less than one-third, were married, there being 49 single and 48 widowed or divorced.

Of 1,865 employees of the street railway companies of Michigan in 1895, 1,285, or 69 per cent, were married; 557, or 30 per cent, were single; and 23, or 1 per cent, were widowed. The families of the

^aOf these 200 men, 69 were housekeeping and 131 boarding.

^bBerufs- und Gewerbezahlung vom 14. Juni, 1895 (Statistik des Deutschen Reichs, Neue Folge, Band 103), pp. 352, 353.

1,308 married and widowed employees comprised 2,647 adults and 2,444 children, or a total of 5,091 persons. The family of each married and widowed person included, therefore, in all, 3.9 persons.^(a)

The following table shows the classification by weight of 200 newly appointed conductors and motormen on the Philadelphia Rapid Transit Company, of Philadelphia, Pa.:

WEIGHT OF CONDUCTORS AND MOTORMEN AT ENTERING THE SERVICE OF THE PHILADELPHIA RAPID TRANSIT COMPANY.

Weight of employees.	Con- ductors.	Motor- men.
Less than 130 pounds	4	5
130 to 140 pounds.....	50	27
141 to 150 pounds.....	20	31
151 to 160 pounds.....	18	17
161 to 170 pounds.....	5	11
171 to 180 pounds.....	3	6
181 to 190 pounds.....	.....	1
191 to 200 pounds.....	.....	2
201 to 210 pounds.....	.....	.....
Total.....	100	100

The following table shows the classification by weight of 200 motormen and conductors upon the Pittsburg Railways Company, of Pittsburg, Pa. The table shows a greater weight for motormen than for conductors:

WEIGHT OF CONDUCTORS AND MOTORMEN AT ENTERING THE SERVICE OF THE PITTSBURG RAILWAYS COMPANY.

Weight of employees.	Con- ductors.	Motor- men.
128 to 140 pounds.....	26	5
141 to 150 pounds.....	37	27
151 to 160 pounds.....	27	29
161 to 170 pounds.....	7	15
171 to 180 pounds.....	1	13
181 to 190 pounds.....	.....	5
191 to 200 pounds.....	2	6
201 to 210 pounds.....	.....	.....
Total.....	100	100

The following table shows the height of 100 conductors and 100 motormen employed by the Philadelphia Rapid Transit Company, of Philadelphia, Pa.:

HEIGHT OF CONDUCTORS AND MOTORMEN AT ENTERING THE SERVICE OF THE PHILADELPHIA RAPID TRANSIT COMPANY.

Height of employees.	Con- ductors.	Motor- men.
5 feet 3½ inches to 5 feet 4½ inches, inclusive.....	4	1
5 feet 5 inches to 5 feet 6 inches, inclusive.....	13	3
5 feet 6½ inches to 5 feet 7½ inches, inclusive.....	30	22
5 feet 8 inches to 5 feet 9 inches, inclusive.....	24	26
5 feet 9½ inches to 5 feet 10½ inches, inclusive.....	15	25
5 feet 11 inches to 6 feet, inclusive.....	12	15
6 feet 1 inch to 6 feet 2 inches, inclusive.....	2	3
Total.....	100	100

^aThirteenth Annual Report of the Bureau of Labor of Michigan, p. 54.

The following table shows the height of 100 conductors and 100 motormen employed by the Pittsburg Railways Company, of Pittsburg, Pa.

HEIGHT OF CONDUCTORS AND MOTORMEN AT ENTERING THE SERVICE OF THE PITTSBURG RAILWAYS COMPANY.

Height of employees.	Con- ductors.	Motor- men.
5 feet 2 inches and less than 5 feet 4 inches.....	2	.....
5 feet 4 inches and less than 5 feet 6 inches.....	10	5
5 feet 6 inches and less than 5 feet 8 inches.....	30	20
5 feet 8 inches and less than 5 feet 10 inches.....	35	30
5 feet 10 inches and less than 6 feet.....	19	34
6 feet and less than 6 feet 2 inches.....	4	8
Over 6 feet 2 inches.....	.....	8
Total.....	100	100

FORMER OCCUPATIONS OF EMPLOYEES.

Some idea of the varied character of the former occupations of street railway conductors and motormen may be seen from the blanks to be filled out by applicants for these positions. No less than 87 different former occupations were represented by 200 persons seeking employment as conductor and motorman with the Philadelphia Rapid Transit Company, of Philadelphia, Pa. Of these 200, 26 had been farmers, 21 drivers, and 19 general laborers, but representatives were found from bakers, barbers, bookkeepers, butchers, carpenters, cooks, glass blowers, hostlers, janitors, millers, miners, nurses, painters, tailors, students, etc.

PREVIOUS OCCUPATIONS OF APPLICANTS FOR POSITIONS WITH THE PHILADELPHIA RAPID TRANSIT COMPANY.

Occupation.	Number of men.	Occupation.	Number of men.
Attendant.....	3	Feeder.....	1
Agent.....	1	Fireman.....	3
Bag making.....	1	Flour miller.....	1
Baker.....	1	Foreman.....	2
Barber.....	1	Finisher.....	1
Bench hand.....	1	Glass blower.....	1
Boarding house.....	1	Grocer.....	6
Boiler maker.....	1	Helper.....	5
Bookkeeper.....	2	Hostler.....	2
Brakeman.....	2	Husker.....	1
Broom maker.....	2	Ice business.....	1
Brush maker.....	1	Inspector.....	1
Butcher.....	1	Janitor.....	1
Card hand.....	1	Laborer.....	19
Carpenter.....	2	Leather dresser.....	2
Cigar store.....	1	Machine helper.....	1
Clerk.....	15	Machinist.....	1
Coachman.....	2	Meat cutter.....	1
Coffee roaster.....	1	Metal turner.....	1
Collector.....	1	Miller.....	3
Confectioner.....	1	Miner.....	1
Conductor (steam railway).....	1	Miner's helper.....	1
Cook.....	1	Morocco finisher.....	1
Counter man.....	1	Motorman.....	3
Designer.....	1	Nurse.....	1
Drill hand.....	1	Operator.....	1
Driver.....	21	Painter.....	5
Dry-room hand.....	1	Paper carrier.....	1
Engineer.....	3	Pin setter.....	1
Engineer's helper.....	1	Polisher.....	1
Farmer.....	26	Printer.....	1

PREVIOUS OCCUPATIONS OF APPLICANTS FOR POSITIONS WITH THE PHILADELPHIA
RAPID TRANSIT COMPANY—Concluded.

Occupation.	Number of men.	Occupation.	Number of men.
Riveter.....	1	Student.....	3
Rope maker.....	1	Tailor.....	1
Rubber cutter.....	1	Teacher.....	1
Running air hammer.....	1	Tile setter.....	1
Salesman.....	1	Timekeeper.....	1
Sawyer.....	2	Trucker.....	1
Shipper.....	1	Upholsterer.....	3
Sheet writer.....	1	United States Army.....	1
Steel worker.....	1	Weaver.....	2
Shoe cutter.....	1	Wheelman.....	1
Shoemaker.....	1	Not reported.....	1
Stonemason.....	1		
Stove finisher.....	1	Total.....	200

GENERAL CHARACTER OF EMPLOYEES.

With the change from horse cars to electric cars has come a marked improvement in the character of the men employed. It was soon found that the man who was capable of standing upon a car behind a pair of overdriven horses was not necessarily intelligent enough to run an electric car. Despite greater speed the congestion of traffic increased, and on the main streets of large cities the work became so intense and exigent that a higher class of men gradually came to the fore. This development has been very generally recognized by the companies. According to an editorial in the *Street Railway Journal*, May 3, 1902, "it requires a higher order of intelligence to drive a high-speed electric car than it does to drive a mule team, and it takes a more active and able-bodied man on the rear platform to collect fares on a 40-foot car running 10 miles an hour than on a 12-foot horse car traveling at 6 miles an hour. To be sure, many horse-car employees have held over to the present time, but they are better men than they were in horse-car days, for they have grown to their new positions along with the advancement of the industry."

This improvement is partly to be accounted for by the fact that a revolution is taking place in the street railway industry, by which the personnel is being changed from a loose body of unskilled men to a closer and more homogeneous group of steadily employed skilled men. Formerly, and the same is true to a certain extent even to-day, street railway employees consisted of men who were picked up and put upon cars without any previous training and without any assurance of a fixed position. The introduction of electricity tended to make employment more regular and to improve the quality of the men employed. The damage which might result from a careless handling of the car, and the resulting financial loss to the company, made the management more careful in the selection of its employees. In reply to a question addressed to a number of street railway presidents throughout the country, as to whether the caliber of employees had improved, a large

number of answers were received. The overwhelming preponderance of opinion is to the effect that the improvement has been very marked.

To a certain extent, however, street railway employment still acts as a training school for men in other occupations. It still serves as a refuge for men out of employment, and many a man takes a job as motorman or conductor during hard times when work is scarce. The result is seen in a visible lowering of the average age of platform men when the older and better men rise to higher positions in other fields of work, and an increase in this average age in bad times when men are forced out of other positions and are obliged to have recourse to street railway operations.

Upon the whole there is now a strong tendency toward restricting employment as far as possible to men who desire to engage in the work permanently. The attempt to organize the service into one of a permanent character is fostered both by the trade unions and by the railway companies. Trade unions, in accumulating funds and making temporary sacrifices for permanent gains, necessarily appeal most strongly to men who intend to remain in the service and to benefit ultimately by their sacrifices. The companies, on the other hand, by paying higher rates of wages to men who have been in their employ for longer periods also accentuate this tendency. The requirements of modern electric service compel the creation of a permanent force.

From a large number of statements made by various representatives of street railway companies upon this point, a single one is selected: "In a general way, we find more men willing to take up street car work as their regular employment, and we make it a condition of their employment. We avoid, wherever possible, employing a man who simply wants a temporary job. The use of electrical machinery and the additional speed at which people require to be carried, makes it necessary for us to employ a better class of men—and to select them with greater care and to have them well drilled and informed in regard to the machinery, etc., on the car—than was necessary in old times either with horses or cables."

FORMER CONDITIONS.

The evil conditions under which employees worked during horse car days were evidenced by an investigation made by the bureau of statistics of labor of New York in 1885 into the conditions of street railway employment in that State. This report was quite extended, and included testimony from large numbers of conductors, drivers, and other employees. The result of the inquiry was to convince the commissioner of labor "that this class of wage-workers have grievances of a real and serious nature, which, in my judgment, it is not only within the power but it is the solemn duty of the legislature to

relieve.”^(a) “In no other trade or occupation,” says the commissioner, “at which men labor for a livelihood, do I believe there exist grievances approximating in the slightest degree, in number and gravity, to those resulting from the general management of the street railroads of this State.”

The street railroad management in Buffalo, Rochester, Albany, Troy, and other small cities of the State was found to be bad and “open to severe criticism;” but the conditions in New York City were worse, and in Brooklyn still worse. The hours were found to be too long, the rules unduly numerous and exacting, while the men were held to be subject to continual petty tyranny by petty bosses. The men secured their positions largely through political influence, this being especially the case in New York City. Another way of securing positions was by the open use of money. Drivers and conductors frequently paid for their jobs and, in some cases, made advances to unauthorized persons without securing the coveted positions.

The method of applying for positions and the system of employing extra men were found to be extremely onerous. The extra men were obliged to be regular in their attendance and to answer to roll call without the compensating advantages of steady work and a steady wage. Applicants for the position of conductor were almost always obliged to put up a bond varying from \$15 to \$1,000. The conductor was also obliged to purchase his uniform, as well as a watch, without which he could not work. On many roads conductors are compelled to provide themselves with a register, and are required to make a deposit of 25 cents for a strap which holds it. There were other little expenses, such as for kindling wood and matches, shovels, and lamp chimneys, which on certain roads were charged to the conductors. The same rule applied to drivers, who were forced to have in their possession a patent horseshoe, a hook, a whip, and a badge, “and frequently the company compels him to purchase a bell.”^(b)

It was further found that street railway employees worked excessive hours for inadequate remuneration. On the whole, the treatment of the men was held to be much worse than that of the horses. One of the grievances of the men was the existence of a large force of detectives, or “spotters”—special police who, it was charged by some of the men, added to their income by blackmail. It was further found that the health of the men suffered from their being obliged to stand up all day, from their lack of room and exercise, and from the fact that they were not permitted to leave the car when necessary for their health and comfort.

Upon the whole, the report appears to show that extremely bad conditions existed on the various lines of the city.

^a Fourth Annual Report of the Bureau of Statistics of Labor of New York, p. 809.

^b Fourth Annual Report of the Bureau of Statistics of Labor of New York, p. 818.

HEALTH OF STREET RAILWAY MEN.

According to the findings of the Commissioners of Labor of New York in the year 1886 there were a number of ailments peculiar to horse-car employees, both conductors and drivers suffering to a considerable extent from varicose veins, as a result of their standing all day, their lack of exercise, and their cramped quarters. Drivers also suffered from frostbites, owing to their unprotected position on the front of the car; no seats were provided for car drivers, and "drivers and conductors are unable to go to the water-closet when nature asserts itself."^(a) According to the testimony of a physician, Dr. George Henry Fox, "street-car employees are especially liable to suffer from varicose veins, extensive ulceration, and intractable cutaneous diseases of the legs as a direct result of their peculiar occupation."

In some respects the healthfulness of the occupation has failed to improve despite the change from horse cars to electric cars. The speed of movement has increased, and with it has come a greater nervous strain and a growing tension upon the gripmen or motormen, as well as a more intense suffering resulting from the cold when the car is unprotected by vestibule. "The gripman on the cable car and the motorman on the electric car stands at his post of duty during long hours, engrossed with the cares and watchfulness attending these positions, often when the mercury is below zero, facing, it may be, the northwestern blast, and poorly protected against the rain and blinding snow. It is impossible for them to put on clothes sufficient to keep them warm, and, although in constant motion, stamping their feet and swinging their arms to increase the circulation, many a poor fellow becomes numb with the chill, and sometimes has his feet, his hands, and his ears frozen. At Springfield the cab of the motorman is inclosed with glass in front and on the sides, which wonderfully mitigates the hardships spoken of. Managers, however, claim that this protection would not be practical in large cities, because it would increase the danger to pedestrians and others using the street, for the reason that the breath of the motorman would congeal on the glass, making it partially or entirely opaque, so that he would be unable to see and avoid danger."^(b) Since that time, 1893, the healthfulness of the occupation has improved as the result of the decreased number of hours of work and the largely increased use of inclosed platforms.

DISCIPLINE OF STREET RAILWAY EMPLOYEES.

The growing size of street railway corporations and the increasing number of men employed by them necessitate the adoption of more

^a Fourth Annual Report of the Bureau of Statistics of New York, p. 822.

^b Fifteenth Annual Report of the Bureau of Labor Statistics of the State of Missouri, p. 278.

or less rigid rules for the management and discipline of the men. As a consequence, systems have been worked out to establish fixed relations between employers and employed and to determine the duties and powers of each. These relations are sometimes fixed by the company rules alone and sometimes by written or verbal agreements with the trade union. The rules provide for conditions of admission to employment, promotion within the ranks, punishment, dismissal or suspension, as well as for the ordinary conduct of business.

The importance of discipline is all the greater in view of the duties and responsibilities of the street railway companies toward the general public. The street railway corporation is a quasi-public corporation obtaining rights and privileges from the city or State, and with duties and obligations corresponding to its privileges. The street railway is, moreover, to a greater extent than most other business undertakings, liable to the public, both morally and financially, for the conduct of its business. During the year 1902 there were, including employees, 1,218 persons killed, and 47,429 persons injured by street railways, and in a large number of cases the street railways have been held responsible in damages, and huge sums have been recovered, for accidents and injuries due to the negligence of their employees.

Whatever the system adopted for the discipline of the men, its success will depend in large measure upon the tact, skill, and good will of the officials of the company and upon the spirit which animates the employees. As long as a persistent hostility exists between the managers and the employees of the company, or as long as the officials regard their men in a lordly or patronizing manner, there can be little hope of efficient cooperation. To preserve efficient discipline, it is necessary to have trained foremen; to promote the individual initiative of the men; to protect men from the dislike, jealousy, favoritism, or discrimination of the foreman, and to secure to each man the right of appeal. The problem in street railway management is the same as in other industries, where men must be subordinated and controlled.

The development of scientific systems of discipline in street railway employment is of comparatively recent origin. The necessity for systems of discipline arose as a result of the increased size of the companies. As the companies grew, direct personal relations between employer and employee ceased, and the former soon became merged in a fluctuating and distant body of stockholders, almost as numerous as the employees themselves.

STANDARDIZATION OF RULES.

The possibility of accidents in the street railway service is so great that it is essential to make detailed rules for the government of employees. The fate of fifty people in a car may be hazarded by one employee through carelessness or through ignorance of the rules. It

was thus found necessary to regulate in detail the conduct of street railway men, and especially of motormen. On each of the several street railways of the country a system of rules grew up referring to the habits, customs, personal appearance, and manners of employees, to their appropriate actions while on the cars or at the stations; and many other regulations were made in regard to emergencies or special occasions and specifying the various things which it is the duty of the employee to do or to refrain from doing.

There was, of course, much variance in these rules, but as the street railway systems grew and were merged into larger groups, standard rules were adopted for the whole system or for groups of systems. At the present time a tentative body of rules has been made for all the members of the Street Railway Association of the State of New York, an examination of which will give a sufficiently accurate idea of the nature of the rules governing street railway service in general.

In street railway service, as elsewhere, ignorance of the law is no excuse. Conductors and motormen are obliged to be familiar with the rules, and are under special orders to examine the bulletin board daily for special instructions and for all necessary information. Promptness is also necessary, and conductors and motormen must report for duty at least ten minutes before leaving on their first trip, or must give notice of their inability so to report. It is required that conductors and motormen report for duty in their full regulation uniform, which must be clean and neat in appearance. A high standard of politeness is required, and the rules of these companies, as of most street railways, require employees to use the utmost forbearance and self-control under all circumstances and to refrain from using "loud, uncivil, indecent, or profane language," no matter how great the provocation.

The regulations against drinking are generally very stringent. Employees while on duty are prohibited from drinking liquors of any description. They are also prohibited when in uniform from entering a saloon or other place where intoxicating beverages are kept, from carrying intoxicating drinks about them or on the company's premises, or from indulging at any time in the use of liquors. Employees are forbidden to smoke or gamble while on duty or at any time on the premises of the company.

Many of the rules refer to the ordinary conduct of transportation. Thus, motormen are obliged to prevent unauthorized persons from riding on the front platform of the car. Running ahead of schedule time, traversing steam railroad crossings without the proper warning or without given precautions, and starting cars together after a blockade, are all forbidden. A special rule makes it the duty of all conductors and motormen to report to the foreman or inspector all defects, whether in car, track, or wire, and to make written reports

of the same to the superintendent. The rules provide for the hearing of complaints of any employee who feels aggrieved.

There is a series of more or less technical rules for conductors, in regard to their remaining on the rear platform, their behavior toward passengers, the announcement of stops or transfer points, removing trolley from the wire at end of the run, placing route signs in the proper way at the end of each half trip, etc.

Many of the rules governing conductors refer to instructions which they must give to passengers. Thus, the conductor must prevent passengers from carrying bulky packages aboard cars, he must direct standing passengers to seats, and must endeavor to find seats wherever possible. He must refuse to allow passengers to bring dogs on the car except under certain conditions, and must give assistance to all women and children and feeble persons in general. He must take charge of the trolley rope in passing over switches or crossings or going around curves and must replace it if it leaves the wire. He must keep the gates closed, shut off lights when the cars are being housed, and must do all the various things which are so familiar in the ordinary work of the conductor and which are specified in the rules.

The rules governing the conduct of the motorman do not refer so much to passengers, with whom he has much less to do than has the conductor, but apply generally to machinery, brakes, and the method of running the car under certain conditions. He is required to keep a lookout on both sides of the street and, except under certain conditions, to bring the car to a full stop for each person signaling. The rules give in detail the places where, and the conditions under which, cars should or should not stop when signaled, and there are rules governing the passing of churches during services, etc. Elaborate rules are made for governing the economical use of the electric current, and for directing the motorman to obtain the maximum speed gradually, to apply the brake properly, and to use such other means to prevent the waste of power or the jolting that comes from bad running. The regulations also bear upon such matters as the throwing of overhead switches, running the cars through water upon the streets, sanding rails, the spinning or slipping or sliding of wheels, the oiling or greasing of cars, etc. One of the most important rules of this order prohibits leaving the platform without taking precautions to prevent the starting of the car.

A considerable section of the code of rules refers to bell signals. The safety of the passengers depends largely upon the perfection with which these rules are conceived and obeyed, and a perfect system of signals is necessary for the government of the car by the motorman and conductor. Many of the rules to which the street railway employees are subject refer to accidents and to such precautionary measures as may be taken to prevent them.

The safety of the passengers is held to be the first consideration in all cases, and all reasonable precautions are deemed to be necessary to prevent injury either to persons or to property. Motormen are obliged to bring their cars to a full stop when any police, fire department vehicle, or company patrol is observed approaching, and ambulances must be given the right of way. The utmost care must be exercised by conductors and motormen to prevent passengers from jumping on or off the cars while in motion, or from standing on the steps or buffers, and under no circumstances is a woman or a child to be allowed to ride on the steps. Special rules are made for cases of cars passing in the opposite direction at points where persons may be standing between the tracks, or for cases in which a vehicle is passing alongside of the track ahead of the car, or in which the car passes standing cars from which persons may alight. In all cases of accidents, no matter how slight, the motorman and conductor are ordered to render all necessary and practicable assistance, and must not leave the injured person without first caring for him; but they are directed not to employ medical attendants for injured persons, or to visit them subsequently, unless specially instructed so to do by an officer of the company. Other rules exist defining the proper conduct of motormen and conductors in case of fatal or serious injuries. In all cases of accident, whether fatal, serious, or trivial, a report must be made by the conductor, giving the name and residence of witnesses, the date, exact time, exact place, run and car number, direction in which the car was moving, nature of the accident, cause of its occurrence, name and address of injured person, extent of injuries, and other information referring to the particular event. Verbal reports must be made to the first inspector or official of the company, but in no case must an employee give any information concerning any accident, delay, blockade, or mishap of any kind to any unauthorized person. The rules provide that employees shall be held strictly accountable for any damages caused by their neglect, carelessness, or disobedience of rules. The entire body of rules governing accidents is intended, as far as possible, to prevent injuries and to mitigate their effects. Every precaution is taken to prevent unnecessary damage suits, and from the moment that an accident occurs every practicable measure is adopted to place the company in as strongly entrenched a position as possible in the event of possible litigation.

In many cases companies have been mulcted in heavy damages for an unduly forcible ejection of passengers from cars. The rules therefore provide that "no person shall be forcibly ejected from the car for any cause whatsoever without an order from an inspector, starter, or an official of the company, unless the conduct of the passenger is dangerous or grossly offensive." The rules are particularly stringent against using unnecessary force in ejecting passengers, and rigid regu-

lations are made for the attitude of conductors toward intoxicated persons, people stealing rides, or passengers spitting on the floor or otherwise disobeying the rules. Regulations upon this subject are extremely conservative and require of the conductor a vast amount of forbearance and wisdom. Other rules govern the conduct of conductors in the matter of fares and transfers and in everything else requiring individual initiative.

THE MERIT SYSTEM.

The standardization of rules upon street railways has been accompanied by a change in the manner in which these rules are enforced. The former system of disciplining employees was by fine, suspension, and dismissal, and the two latter methods are even now the usual means of punishing recalcitrant or disobedient employees. More recently, however, a merit system of discipline has grown up, analogous to that in vogue on the steam railroads, by which the employee is removed somewhat from the summary, variable, and uncontrolled discipline of his immediate superior.

The advantages of the merit system from the point of view of the company is that within a short time after its adoption a standard of good conduct is established. The system, as it is worked out on the lines of the Metropolitan Street Railway Company of Kansas City, Mo., consists of granting certain merit and demerit marks and crediting men with a certain mark for especially meritorious conduct, while debiting them with a given fixed amount for an infraction of the rules. The credits to be received and the debits to be inflicted are determined in advance, so that every employee knows, at least approximately, to what extent his credit will be impaired by any particular offense, and knows that such infliction will not be materially different in his case from that of others. Where the debits are in excess of the credits a man may be summarily discharged.^(a)

Even in this system there are five offenses, namely: Disloyalty to the company, the making of false statements, intoxication, dishonesty, and grossly ungentlemanly conduct, for which a man may be immediately discharged. Other offenses, such as avoidable accidents, failure to report accidents, or incompetence, may, in aggravated cases, be visited with 100 demerits. There are a few other offenses for which as many as 25 or 50 demerits may be inflicted, but the average infliction of debits is not more than 10. For entering saloons in uniform without good cause, neglecting to pick up passengers, disobedience of orders, unnecessary conversation with passengers, following the car in front too closely, starting electric car before closing gates, opening gates before electric car stops, leaving car without taking

^aSee Street Railway Journal, October 18, 1902.

reverse lever, for trouble with passengers where motorman is to blame, or failing to stop for passengers, the motorman is visited with 10 demerits, while the same punishment is inflicted on the conductor for such offenses as reading on duty, entering a saloon in uniform without good excuse, failing to turn the register at end of line, or indulging in unnecessary conversation with passengers. The smaller offenses receive smaller punishment. Thus, a motorman receives only 5 demerits for recommending unworthy men for employment, allowing unauthorized persons in the front vestibule, for fast running, profanity while on duty, failing to report trouble with car, failing to obey conductor's signal, while for still less grave offenses there are but 3 or even only 2 demerits. For failing to report delays the motorman is fined 2 demerits, and for not promptly answering signals, 1 demerit, while the conductor receives 2 demerits for inattention to passengers, untidy condition of dress, error in punching transfers, failure to report delays, and 1 demerit for burning back headlight, except in cases of fog.

The system has been worked out in great detail, there being 60 separate punishments for motormen or gripmen and 57 for conductors, and the attempt is made as far as possible to make the punishment fit the offense. (^a)

There are also merits, ranging from a reward of 2 merits for warning persons in the act of jumping on or off a moving car to wait for the car to stop, to a reward of 50 merits for a specially meritorious act calling for recognition from the company.

THE MERIT SYSTEM AND DISCHARGES.

The merit system has been employed during the last two years by the Detroit United Railway Company. This system was introduced January 1, 1902, and a plan was adopted of granting 5 merits at the close of each three months, and of discharging upon the accumulation of 60 demerits. The records of the first six months indicate in what manner this system worked. There were 237 conductors and 341 motormen having no demerit marks during the first six months, 89 conductors and 124 motormen having between 10 and 20 demerit marks, 3 conductors and 16 motormen having over 20 demerit marks, 267 conductors and 180 motormen having under 30 demerit marks, 13 conductors and 22 motormen having over 30 and under 60 demerit marks, while only 21 conductors and 16 motormen were discharged. (^b) The percentage of discharges was thus small, and the system of suspension by which losses of wages were formerly entailed was abolished.

The system has resulted in uniformity of punishment and discipline throughout the entire system of the Detroit railways. It is claimed

^a Street Railway Journal, October 18, 1902.

^b Street Railway Journal, October 4, 1902.

that it has prevented favoritism, and done away with the necessity of applying the same rigid punishment to all men committing the same offense, whatever their past record. It has further prevented the demoralizing effect of the system of suspension, by which men loaf about during the period of their lay-off and come back to work very much the worse for their enforced idleness.

According to the testimony of the general superintendent of the Detroit United Railway, Mr. Albert H. Stanley, the system has furnished a strong incentive to the men to do especially meritorious acts. Broken trolleys are immediately removed, and everything is done to prevent possible accidents or disasters. "The system has received the approval of the majority of the conductors and motormen, and has aroused in all of them a strong desire to avoid demerit marks and to take advantage of every circumstance to get merit marks, and those who have been given merit marks have been very much encouraged."^a

ADVANTAGES AND DISADVANTAGES OF THE MERIT SYSTEM.

The advocates of the merit system of discipline favor it chiefly on the ground of the stimulus which it affords to the workmen. In some cases this system is adopted by merely publishing the record of the men and discharging them when they fall below a certain mark, while in others, promotion is based upon the number of merits which the employee has to his credit. A somewhat different system is promotion by a merit system combined with the principle of seniority. Each man is granted a certain number of merit marks every month, so that the longer he is in the service the greater his chance of standing at the head. This modification of the seniority system permits an exceptionally able, industrious, and attentive man to advance more rapidly than men who have been admitted to employment at the same time as he, and in the eyes of its advocates it furnishes a motive for good conduct, while giving to those employees who have remained in the service an advantage over the more recently recruited men.

The merit system of discipline and of promotion is objected to by a number of street railway officials on the ground of its alleged impracticability. It is quite impossible to report all instances in which the men deserve merits or debits, and the very incompleteness of the records would be, it is believed, sufficient to earn for it the contempt of the men. It is also felt that it would not be agreeable to the employees. The system has not as yet been generally adopted, although the tendency seems to be to favor it.

Whatever the future of the merit system of discipline may be, there seems no doubt that the formerly universal plan of summarily sus-

^aStreet Railway Journal, October 4, 1902.

pending men as a punishment for slight violations or infractions of the rules is gradually losing ground. Street railway managers are apparently coming to the conclusion that there should be no intermediate punishment between a reprimand and a final discharge. Men upon whom repeated reprimands and warnings have no effect are not liable to be benefited by a suspension of from five to thirty days, and experience has shown that such suspensions merely render the men more careless, while at the same time inspiring them with an intense antagonism to the company and the officials inflicting the punishment.

UNIFORMITY OF WAGES IN STREET RAILWAY EMPLOYMENT.

The 133,641 employees of the street railway companies earned in 1902 the sum of \$80,770,449, or an average of slightly over \$600 per man. These wages represent merely a lump sum and fail to show the rates of pay earned by the different classes of employees. Statistics of this nature were obtained for 94,874 employees, or 71 per cent of all.

The employees are divided into ten classes, the first class earning less than \$1 per day, the last class earning \$3 or more per day. The rates paid do not include the earnings of salaried officials and clerks.

The most striking feature of these wages is their comparative uniformity. Of the total number of men employed as wage-earners on the street railways of the United States whose wages were given, 39,663, or 42 per cent, earned between \$2 and \$2.24 per day. This appears to be the prevailing wage in the industry, especially for conductors and motormen. Of the entire number of conductors almost 54 per cent earned wages ranging from \$2 to \$2.24, while the proportion was 51 per cent for motormen. The wages of road and track men range lower, those of engineers higher, while for firemen, mechanics, and other classes of employees no uniform level is maintained. It is a noteworthy fact, however, that so large a percentage of the street railway employees enjoy this particular wage, and the uniformity is especially striking in the case of conductors and engineers.

If we take a larger group, we find that the overwhelming mass of employees earned from \$1.50 to \$2.49 per day. Of the total number of employees for whom statistics were obtained, 80,728, or 85.1 per cent, fell within this group. The proportion for the motormen and conductors was still higher. Of the total number of conductors, 92.8 per cent earned from \$1.50 to \$2.49, and 92.1 per cent of the motormen obtained these wages.

If we divide the wages of all classes into three groups of men earning under \$1.50, from \$1.50 to \$2.49, and \$2.50 or over, we will find that for all classes 8.3 per cent earned below \$1.50, 85.1 per cent from \$1.50 to \$2.49, and only 6.6 per cent \$2.50 or over. For the

conductors, 6.3 per cent earned below \$1.50, 92.8 per cent from \$1.50 to \$2.49, while less than 1 per cent earned \$2.50 or over. A somewhat larger proportion, amounting to 1.6 per cent, earned \$2.50 or over among the motormen, and 2.1 per cent of the road and track men and 3 per cent of the firemen were in this class. In the case of the engineers and mechanics there is an entirely different shifting of the classes. Of the entire number of engineers employed whose rates of pay are given, only 47, or 3 per cent, earned less than \$1.50; 675, or 44 per cent, earned from \$1.50 to \$2.49, while the majority, 812, or 53 per cent, earned \$2.50 or over. These engineers are highly skilled men and receive a greater rate of remuneration on the average than any other class of wage-earners in the street railway service. A somewhat similar wage distribution applies to the mechanics. Of these, 299, or 4.4 per cent, earned less than \$1.50; 4,682, or 69.4 per cent, earned from \$1.50 to \$2.49, while 1,772, or 26.2 per cent, earned \$2.50 or over.

Of the total number of men employed on street railways, 1,996, or only 2.1 per cent, were found to be earning \$3 or over. The largest number of persons in this wage class is found in the group of engineers, 423, or 27.6 per cent of the whole, earning this wage, a large majority of these being employed at from \$4 to \$4.24 per day. Of the miscellaneous employees, 791, or 7.9 per cent, were earning \$3 or over. The mechanics also furnish a larger quota than most other classes, 409 individuals, or 6 per cent of the whole, obtaining this wage. For those occupations, however, in which the largest number of men are employed such wages are not often paid. There were only 239 motormen, or 0.7 per cent, and 73 conductors, or 0.2 per cent, obtaining over \$3 per day, and there were but 40 road and track men and but 21 firemen obtaining this wage.

The following table, taken from the special report of the United States Census Office on Street and Electric Railways, 1902, shows this distribution of employees according to occupations and rate of pay:

NUMBER OF WAGE-EARNERS AT SPECIFIED DAILY RATES OF PAY, 1902.

Classified rates of pay per day.	All classes.	Conductors.	Motormen.	Road and track men.	Engineers.	Firemen.	Mechanics.	All other classes.
Less than \$1.00.....	656	50	23	473	3	16	21	70
\$1.00 to \$1.24.....	2,719	899	884	477	5	76	83	295
1.25 to 1.49.....	4,468	1,046	1,128	1,368	39	135	195	562
1.50 to 1.74.....	15,431	3,983	3,374	4,505	104	469	896	2,100
1.75 to 1.99.....	15,213	5,426	5,481	1,280	89	637	1,062	1,223
2.00 to 2.24.....	39,663	17,069	16,665	1,229	295	770	1,707	1,953
2.25 to 2.49.....	10,421	3,124	4,325	384	187	171	1,017	1,213
2.50 to 2.74.....	3,262	192	291	162	274	48	936	1,359
2.75 to 2.99.....	1,045	17	7	8	115	1	427	470
3.00 or over.....	1,996	73	239	40	423	21	409	791
Total.....	94,874	31,869	32,412	9,926	1,534	2,344	6,753	10,036

HOURLY RATES OF WAGES.

The best indication of the hourly rates of wages paid by the various street railway companies of the United States is furnished by the returns of an extended investigation made by the United Railroads of San Francisco. In May, 1903, a printed circular was sent to 825 traction companies throughout the United States with a request for a statement of the rates of pay and the hours of labor of carmen upon their lines. Returns were received from 345 companies, doing business in every State and Territory in the Union, excepting South Carolina, North and South Dakota, Indian Territory, Wyoming, New Mexico, Nevada, and Ohio.

These statistics were presented in the form of rates of wages per hour. The returns, showing the rates of wages per hour and the hours of labor per day for the 345 companies, are presented in the following table:

AVERAGE WAGES PER HOUR AND AVERAGE HOURS OF LABOR PER DAY OF CARMEN EMPLOYED BY STREET RAILWAY COMPANIES IN 1903, BY STATES AND CITIES.

[From testimony in arbitration case of the United Railroads of San Francisco.]

City and company.	Average hours of labor.	Average rate per hour (cents).	City and company.	Average hours of labor.	Average rate per hour (cents).
NORTH ATLANTIC STATES.			NORTH ATLANTIC STATES—CON.		
Maine:			Massachusetts—Concluded.		
Augusta	10	15.36	Boston—		
Bangor	10	16.42	Boston Elevated Rwy.....	10	22.5
Rockland	10	15.9	Old Colony Street Rwy....	10	21.9
Skowhegan.....	(a)	19.0	Boston and Northern		
New Hampshire:			Street Rwy	10	21.6
Berlin	(a)	b 17.5	Brookfield.....	10	17.5
Chester	9	b 20.0	Byfield	8	20.0
Concord	10	b 19.4	Danvers	(a)	21.8
Vermont:			East Templeton	10	19.0
Barre	10	18.0	Franklin	10	20.0
Brattleboro.....	10	17.0	Gardner	10	20.0
Rutland	8½	18.0	Greenfield.....	10	19.5
Massachusetts:			Marlboro	(a)	20.0
Norwood	10	20.0	Maynard	10	20.0
North Adams.....	9.7	20.0	Merrimac	10	19.7
Northampton—			Middleboro	10	20.0
Northampton and Am-			Milford	10	20.0
herst Street Rwy.....	10	19.5	Newburyport.....	10	19.7
Northampton Street Rwy.	10	20.0	Newton	10	21.0
Palmer	10	23.0	Norton	10	20.0
Pittsfield—			Rhode Island:		
Berlin Street Rwy.....	10	21.0	Providence—Providenceand		
Pittsfield Electric Street			Danielson Rwy.....	10	20.0
Rwy	10	20.0	The Rhode Island Co.....	11	20.45
Reading	10	21.6	Woonsocket	(a)	20.0
Shelburne	10	17.0	Connecticut:		
South Walpole	10	21.6	Bristol	9½	20.0
Springfield	9	21.0	Bridgeport	10	19.6
Uxbridge	10	20.0	Danbury	11	20.0
Westboro	10	20.0	Hartford	10	17.5
Westfield	10	20.0	Meriden	11	18.8
Westwood	10	20.0	Middletown.....	(a)	15.8
Worcester—			New Haven	10	20.0
Worcester Consolidated			New London	10	18.5
Street Rwy.....	9½	21.6	Norwich—		
Amesbury—Amesbury and			Montville Street Rwy.....	10	18.7
Hampton Street Rwy.....	9½	22.0	Norwich Street Rwy.....	10	18.7
Athol.....	(a)	19.0	Torrington	(a)	19.6

a Not reported.

b Company also furnishes clothing.

AVERAGE WAGES PER HOUR AND AVERAGE HOURS OF LABOR PER DAY OF CARMEN EMPLOYED BY STREET RAILWAY COMPANIES IN 1903, BY STATES AND CITIES—Continued.

[From testimony in arbitration case of the United Railroads of San Francisco.]

City and company.	Average hours of labor.	Average rate per hour (cents).	City and company.	Average hours of labor.	Average rate per hour (cents).
NORTH CENTRAL STATES—CON.			NORTH CENTRAL STATES—CON.		
Ohio—Concluded.			Illinois—Concluded.		
Cleveland—			Chicago—		
East Ohio Traction.....	10	20.4	Aurora, Elgin and Eastern Rwy.....	9½	24.2
Ohio Central Traction.....	11	17.8	Calumet Electric Street Rwy.....	11½	21.0
Columbus—			Chicago City Rwy.....	11½	21.0
Central Market Street Rwy.....	9	18.0	Chicago Consolidated Traction.....	10½	23.0
Columbus, Buckeye Lake and Newark Traction....	9½	20.0	Chicago Union Traction.....	10½	24.5
Columbus, Delaware and Marion Railways.....	9	18.6	Chicago and Milwaukee (a)	10	20.6
Columbus, Grove City and Southwestern Rwy.....	11	20.0	Champaign.....	10½	17.54
Columbus, London and Springfield Rwy.....	10½	20.0	Danville.....	10½	18.25
Columbus, New Albany and Johnstown Traction.	11½	19.0	Decatur.....	11	15.35
Dayton—			Dekalb.....	9	22.0
City Rwy.....	9½	20.0	East St. Louis.....	9½	22.6
Dayton Traction.....	9½	20.0	Freeport.....	10½	15.4
Dayton and Western.....	9	20.0	Joliet.....	10	19.7
Oakwood Street Rwy.....	12	20.0	Moline.....	10	18.0
Defiance.....	10	15.64	Peoria—Peoria and Pekin.....	9½	19.2
East Liverpool.....	10	22.2	Rockford.....	12	17.8
Findlay.....	10	18.15	Streator.....	(a)	15.8
Fostoria.....	(a)	17.3	Venice.....	10	20.0
Lancaster.....	11	15.0	Michigan—		
Lorain.....	10	21.8	Bay City.....	11	17.6
Lima.....	10	19.5	Detroit—		
Mansfield.....	12	15.8	Detroit United Rwy.....	9½	23.5
Marion.....	10½	18.6	Detroit, Ypsilanti, Ann Arbor and Jackson Rwy.	8	22.5
Newark.....	9	18.0	Rapid Rwy. System.....	10	20.25
Pomeroy.....	10½	15.0	Escanaba.....	(a)	16.6
Portsmouth.....	12	12.88	Grand Rapids.....	10	18.4
Salem.....	12	16.9	Hancock.....	10	21.6
Springfield—			Ishpeming.....	12	16.0
Dayton, Springfield and Urbana Electric Rwy....	10	20.0	Kalamazoo.....	12	16.7
Springfield and Xenia Traction.....	10	19.6	Muskegon.....	11	16.7
Springfield Rwy.....	9	17.7	Owosso.....	10	15.0
Steubenville.....	11	20.0	Saginaw.....	10	20.0
Tiffin.....	9	19.5	St. Joseph.....	12	16.66
Toledo—			Wisconsin—		
Toledo and Indiana Rwy..	9	19.0	Ashland.....	11½	15.4
Toledo Railway and Light.	10	19.8	Fond du Lac.....	9	17.8
Toledo and Western Rwy..	10	19.0	Green Bay.....	10	17.4
Wellston.....	12	20.0	La Crosse—La Crosse City Rwy.....	11½	16.8
Willoughby.....	9	22.2	Marquette.....	13	16.2
Youngstown—			Oshkosh.....	11½	17.0
Mineral Ridge and Niles...	11	19.0	Sheboygan Falls.....	10	14.2
Trumbull Electric R. R....	11	20.0	Waupaca.....	11	16.1
Youngstown and Sharon...	10	23.0	Minnesota—		
Indiana—			Duluth.....	(a)	20.0
Anderson.....	9	20.12	Minneapolis—		
Evansville.....	12	15.5	Twin City Rapid Transit...	11	20.0
Fort Wayne.....	10½	17.0	Land and Improvement...	9	18.0
Indianapolis—			Winona.....	8½	18.8
Indianapolis, Columbus and Southern Traction...	10½	18.0	Iowa—		
Indianapolis and Eastern Rwy.....	12	18.8	Davenport.....	11	19.4
Indianapolis Street Rwy..	11	18.0	Dubuque.....	11½	17.2
Logansport.....	11½	16.0	Oskaloosa.....	11½	13.2
Michigan City.....	17	15.0	Sioux City.....	11	17.7
Muncie.....	10	21.0	Waterloo.....	9	15.0
Richmond—			Missouri—		
Richmond Street and Interurban Rwy.....	10½	16.2	Hannibal.....	(a)	10.0
Richmond and Northwest-ern Electric Rwy.....	9½	20.0	Jackson.....	(a)	14.8
South Bend.....	(a)	17.5	Kansas City—Metropolitan Street Rwy.....	11	18.6
Terre Haute.....	12+	17.0	Nevada.....	12	14.5
Illinois—			Springfield—Springfield Traction.....	11	15.0
Alton—Alton Railway, Gas and Electric.....	9	19.4	St. Louis.....	9½	20.0
Bloomington.....	11	16.8	Webb City.....	12	16.8
			Wellston.....	9	20.0
			Nebraska—		
			Lincoln.....	11	16.0
			Omaha.....	10	21.4

a Not reported.

STREET RAILWAY EMPLOYMENT IN UNITED STATES. 595

AVERAGE WAGES PER HOUR AND AVERAGE HOURS OF LABOR PER DAY OF CARMEN EMPLOYED BY STREET RAILWAY COMPANIES IN 1903, BY STATES AND CITIES—Concluded.

[From testimony in arbitration case of the United Railroads of San Francisco.]

City and company.	Average hours of labor.	Average rate per hour (cents).	City and company.	Average hours of labor.	Average rate per hour (cents).
NORTH CENTRAL STATES—CON.			WESTERN STATES.		
Kansas:			Colorado:		
Junction City.....	12	15.0	Boulder.....	10	20.0
Topeka—Topeka Rwy.....	(a)	16.66	Colorado Springs.....	10½	23.5
Wichita.....	11	15.52	Denver.....	12	23.0
			Durango.....	10	22.0
			Pueblo.....	12	22.0
SOUTH CENTRAL STATES.			Arizona: Phoenix.....	10	19.0
Kentucky:			Utah:		
Bowling Green.....	10	10.0	Ogden.....	10*	19.0
Covington.....	10	19.0	Salt Lake City.....	9½	23.5
Iola.....	11	15.0	Montana:		
Lexington—			Anaconda.....	10	29.0
Georgetown and Lexington Traction.....	10	17.5	Butte.....	10	34.5
Lexington Rwy.....	10	13.6	Great Falls.....	9½	29.75
Louisville—Louisville and Eastern R. R.....	10	20.0	Helena.....	11	27.5
Owensboro.....	10	12.0	Washington:		
Tennessee:			Everett.....	10	22.4
Chattanooga.....	12	15.6	Olympia.....	10	20.0
Jackson.....	11½	12.2	Seattle—		
Knoxville—Knoxville Traction.....	12	13.6	Seattle and Renton Rwy..	10	24.0
Memphis.....	10	17.0	Seattle Electric.....	9½	24.4
Nashville.....	10	13.6	Spokane—		
Alabama:			Spokane and Montrose Motor R. R.....	9	25.0
Birmingham.....	10½	17.9	Washington Water Power.....	11½	24.1
Gadsden.....	11	13.5	Oregon:		
Huntsville.....	10	12.5	Astoria.....	11½	18.4
Mobile.....	10½	16.4	Oregon City.....	12	20.7
Mississippi:			Portland—		
Meridian.....	10	14.8	City and Suburban Rwy..	9½	23.8
Natchez.....	(a)	14.0	Oregon Water Power and Rwy.....	(a)	23.0
Louisiana:			Portland Rwy.....	10	23.5
Baton Rouge.....	10	15.0	California:		
Shreveport.....	12	16.9	Fresno.....	9½	22.5
Texas:			Los Angeles—		
Austin.....	12	13.85	Los Angeles Rwy.....	10½	22.5
Beaumont.....	12	20.0	Los Angeles Redondo Rwy.....	(a)	22.5
Fort Worth.....	12	18.8	Los Angeles Traction.....	9½	22.5
Galveston.....	11	18.8	Los Angeles Pacific Rwy..	10	23.5
Houston.....	12	19.4	Pacific Electric Rwy.....	10½	22.5
Huntington.....	10½	17.5	Oakland.....	10½	25.0
San Antonio.....	9	19.6	Redlands.....	12	20.0
Waco.....	12	13.75	San Diego.....	9	22.0
Arkansas:			San Francisco—		
Eureka Springs.....	10	11.25	Geary Street, Park and Ocean R. R.....	10	25.0
Fort Smith.....	11½	12.4	Presidio and Ferries R. R.....	10	25.0
Hot Springs.....	11½	20.0	San Jose—San Jose and Santa Clara R. R.....	10	17.5
Oklahoma: Oklahoma City.....	11	15.4	Stockton.....	10	22.5

* Not reported.

The following table for these 345 companies shows by geographical divisions the number of companies paying each classified hourly rate of wages:

SUMMARY OF CLASSIFIED HOURLY WAGES OF CARMEN EMPLOYED BY STREET RAILWAY COMPANIES IN 1903, BY GEOGRAPHICAL DIVISIONS.

Rate of wages per hour (cents).	Number of companies paying specified rate per hour.					
	North Atlantic States.	North Central States.	South Atlantic States.	South Central States.	Western States.	United States.
10 to 10.9.....		1	1	1		3
11 to 11.9.....			2	2		4
12 to 12.9.....	3	1	3	3		10
13 to 13.9.....	2	1	1	6		10
14 to 14.9.....	5	4	2	1		12
15 to 15.9.....	11	16	3	3		33
16 to 16.9.....	16	16	1	2		35
17 to 17.9.....	18	18	3	4	1	44
18 to 18.9.....	17	14		2	1	34
19 to 19.9.....	15	13		3	2	33
20 to 20.9.....	31	23	2	3	4	63
21 to 21.9.....	10	7	1			18
22 to 22.9.....	2				10	19
23 to 23.9.....	3	3			7	13
24 to 24.9.....	1	2			3	6
25 to 25.9.....					4	4
26 to 26.9.....						None.
27 to 27.9.....					1	1
28 to 28.9.....						None.
29 to 29.9.....					2	2
30 to 30.9.....						None.
31 to 31.9.....						None.
32 to 32.9.....						None.
33 to 33.9.....						None.
34 to 34.9.....					1	1
Total number of returns.....	134	126	19	30	36	345

An analysis of this table shows that the prevailing rate of wages is 20 cents per hour. Of all the companies reporting, 63, or over 18 per cent of the whole, paid 20 cents or less than 21 cents. A still larger group paid all the way from 15 cents to 19.9 cents per hour. There were in this group 179 companies, or over 50 per cent of the whole; thus, in over 68 per cent of the companies the prevailing wage was from 15 cents to 20.9 cents. Thirty-nine companies, or 11 per cent of the whole, paid wages under 15 cents an hour, and 7 companies, or 2 per cent of the whole, under 12 cents per hour. Only 14 companies, or 4 per cent of the whole, paid wages of 24 cents or over, and only 4 companies, or about 1 per cent of the whole, paid wages of 26 cents or over, the highest company showing a wage of 34 cents.

These wages, it must be understood, represent lines in all parts of the country and in cities of all sizes. The very small wages are usually found on lines in small towns and villages, and wages of 15 cents an hour or less are paid in sparsely inhabited regions. The wages of 24 cents or over are usually to be found in the West. Of the 8 street railways paying 25 cents or over, all are in the Western States; of the 46 paying 22 cents or over, 28, or almost two-thirds, are situated in the Western States. The lowest wages are found in the South Atlantic and South Central States. In the South Atlantic States 12 compa-

nies, or almost two-thirds of all in that group, were paying less than 16 cents per hour, and of the 30 companies for which returns were obtained in the South Central States, 16, or over one-half, were also paying less than 16 cents.

Many of the rates of wages in the foregoing table refer to towns of small population. The following table gives the result of a classification of rates of pay for 10 of the largest cities of the country, together with 3 Western cities. These cities are Boston, Buffalo, New York and Brooklyn, Philadelphia, Pittsburg, New Orleans, Chicago, Cleveland, St. Louis, Los Angeles, Portland, Oreg., and Butte, Mont. The number of motormen included in this table is 17,790, of conductors, 19,654:

CLASSIFIED DAILY WAGES OF CONDUCTORS AND MOTORMEN IN 13 CITIES.

Rate of wages per day.	Number of—		Per cent of—	
	Con- ductors.	Motor- men.	Con- ductors.	Motor- men.
\$1.00 to \$1.04	10	10	0.05	0.06
1.25 to 1.29		1		
1.30 to 1.34	3		.01	
1.35 to 1.39		5		.03
1.50 to 1.54	604	99	3.07	.56
1.60 to 1.64	61	2	.31	.01
1.65 to 1.69	423	40	2.15	.22
1.70 to 1.74	140	52	.71	1.29
1.75 to 1.79	908	300	4.62	1.69
1.80 to 1.84	939	920	4.77	5.17
1.85 to 1.89	601	1	3.06	
1.90 to 1.94	241	121	1.23	.68
1.95 to 1.99	53	53	.27	.30
2.00 to 2.04	7,504	6,879	38.18	38.67
2.05 to 2.09	670	518	3.41	2.91
2.10 to 2.14	1,423	1,408	7.24	7.92
2.15 to 2.19	225	204	1.15	1.15
2.20 to 2.24	1,386	206	10.11	1.16
2.25 to 2.29	1,167	2,818	5.94	15.84
2.30 to 2.34	1,436	961	7.31	5.40
2.35 to 2.39	336	405	1.71	2.28
2.40 to 2.44	47	1,566	.24	8.80
2.45 to 2.49		724	4.14	4.07
2.50 to 2.54	813	141	.01	.79
2.70 to 2.74	2	33		.18
3.00 to 3.04	8	85	.04	.48
3.50 to 3.54	48	231	.24	1.30
3.75 to 3.79	6	7	.03	.04
Total	19,654	17,790	100.00	100.00

This table indicates very clearly the extent to which certain rates of pay prevail. The \$2 to \$2.04 rates are received by 38.18 per cent of all the conductors herein included; 10.11 per cent are found to receive a wage from \$2.20 to \$2.24. Of the motormen 54.51 per cent are in the wage classes receiving \$2 to \$2.04 and \$2.25 to \$2.29. Of the total number of conductors 75.05 per cent receive wages from \$2 to \$2.39, while 84.13 per cent, or over five-sixths of all motormen, receive wages of from \$2 to \$2.44. Less than one conductor in 1,500, and less than one motorman in 1,100 receives a wage less than \$1.40 a day, and less than one conductor in 300, and less than one motorman in 35 receives a wage of over \$2.50.

WAGES IN SAN FRANCISCO, CAL.

A most accurate and complete classification of street railway employees by earnings was made in the year 1903 by the United Railroads of San Francisco in their arbitration with the Amalgamated Association of Street Railway Employees of America. The money wages paid by this company, it was shown, were higher than those of the vast majority of street car men in the United States, only four cases being on record of companies paying higher wages, and only four or five cases where wages of an equal amount were paid. ^(a)

The following table shows the earnings of carmen during the 13 weeks from February 14 to May 15, 1903. The earnings are from the pay rolls of the company. These wages were raised 5 and 10 per cent by the award of the arbitrator:

EARNINGS OF CARMEN (REGULAR AND EXTRA MEN) IN THE EMPLOY OF THE UNITED RAILROADS OF SAN FRANCISCO, DURING THE 13 WEEKS FROM FEBRUARY 14 TO MAY 15, 1903, BY CLASSIFIED GROUPS.

Earnings.	Regular men.		Extra men.	
	Number.	Per cent of total.	Number.	Per cent of total.
Under \$100.....	87	6.10	129	24.29
\$100 to \$124.....	30	2.10	51	9.60
125 to 149.....	73	5.12	66	12.43
150 to 174.....	172	12.06	128	24.11
175 to 199.....	491	34.44	126	23.73
200 to 204.....	148	10.38	14	2.64
205 to 209.....	153	10.73	10	1.88
210 to 214.....	135	9.47	4	.75
215 to 219.....	67	4.70	2	.38
220 to 224.....	35	2.45	1	.19
225 to 229.....	19	1.33		
230 or over.....	16	1.12		
Total.....	1,426	100.00	531	100.00

The foregoing table shows that of the regular men employed in 1903 by the United Railroads of San Francisco the great majority earned over \$175 a quarter or over \$700 per year; 74.62 per cent, or almost three-quarters of the men averaging over \$175, and only 25.38 per cent, or slightly over one-quarter, earning less than \$175. In other words three-quarters of the men averaged \$14 a week or over for 50 weeks in the year. Of the men earning less than \$175 a quarter almost one-half earned \$150 or over; only 13.32 per cent or about two-fifteenths of all the men earned less than \$150, the earnings below that sum being those of men who were idle for various reasons.

If we analyze these wages according to smaller wage classes, we will find that the wages of the men were centered largely around certain groups. Only 2.45 per cent of the men earned \$225 or over, the great majority of the men who earned over \$200 receiving less than

^a The companies paying equal or greater wages were Western lines, principally in Montana.

\$215. Of the 87 men earning less than \$100 during the quarter, 22 or one-quarter earned from \$75 to \$99, 24 or over one-quarter earned from \$50 to \$74, and 10 earned less than \$10.

These wages are claimed by the company to have been slightly lower than the actual wages, since the full pay rolls in the auditing office showed that \$1,839.09 were paid out in wages unaccounted for in this calculation. This discrepancy, however, amounted to less than 0.6 per cent of all the wages. Another element tending to make the returns appear slightly smaller than the actual, was the fact that some men were reported twice, owing to their having worked at different periods of the quarter from different car barns. The men claim that these wages are too high to be taken as typical for the year, because the quarter taken was one in which the traffic was the highest; but the company claimed in its brief that this did not influence the result. "Carrying more passengers does not imply running more cars nor employing more men nor working longer hours."^a

The results of this investigation showed that before the increase granted in the award, almost one-half of the number of carmen employed by the United Railroads of San Francisco were earning \$195 and over, and almost three-fourths were earning \$175 or over within the quarter. The larger sum would indicate a working time of 312 days per year for one-half of the men on an estimate of \$2.51 a day, and a working time of 280 days per year for three-fourths of the men on the same basis of wages.

The company held that the vast majority of absences were due to causes not within the control of the company. The company tabulated the causes of loss of time of 50 regular carmen earning less than \$100 during a quarter. The total number of days lost by these 50 men was 3,248, or 65 days per man out of a total of 91 possible days during the 13 weeks. Of these 3,248 days lost, only 160, or less than 5 per cent, were due to suspensions, while 901 days were lost by sickness, 918 on leave, 199 for temporary transfers, 347 as a result of resignations, and 525 for causes unspecified. These figures would indicate that the majority of days lost are due to causes with which the company has nothing to do.

WAGES AS AFFECTED BY LENGTH OF SERVICE.

Two systems prevail in fixing the rate of wages with reference to service. In some companies the system of a flat rate is adopted, while in others the rate of wages increases with the period of continuous service. The trade union, as a rule, prefers the former method, and in a number of cases has endeavored to enforce it, while the method

^a Oral argument of A. Moore for United Railways of San Francisco in the matter of the arbitration of certain differences, etc.

preferred by the companies is gradually to increase the wage with the period of service in the company. The reason for this difference is probably to be found in the endeavor of each party to secure the allegiance of the men. It is apparently felt by the union that the men will act in better harmony if there is a minimum, if not a common, rate for all, and that there will be greater difficulty in obtaining concerted action and a greater reluctance on the part of the older men to strike if the amount of wages increases with the length of time in the service of the company. This opinion appears also to be held by the companies.

The street railway companies seem to be about equally divided in their adherence to one or the other of the two systems. An investigation made into this subject by the United Railroads of San Francisco covered 370 street car companies throughout the country. Of these companies 198, or over 53 per cent, paid rates graduated according to the term of service, while 172 paid a flat rate, irrespective of the time of employment. The difference in the rate of pay between different years on lines having graduated rates shows a considerable increase, especially during the second year of service. The average rate of pay of the 198 companies paying a graduated wage was 16.69 cents an hour for the first year; 17.96 cents an hour, or an increase of 7.6 per cent, for the second year; 18.74 cents an hour, or an increase of 4.2 per cent, in the third year; 19.06 cents an hour, or an increase of 1.6 per cent, in the fifth year, the increase from the first to the fifth year being 14 per cent. The question of a flat versus a graduated rate was fought out during the arbitration of the United Railroads of San Francisco versus the Amalgamated Association, and was decided in favor of the company and the graduated rate.

WAGES AND REVENUE OF THE COMPANIES.

The business of street railway transportation is of such a nature that one would naturally expect determined resistance on the part of the companies to any considerable increase in wages. This conclusion would result from the large proportion which the wages bear to the total operating expenses of the street railways, and from the fact that for the most part the street railways of this country are monopolies restricted by law from increasing their rates and presumably obtaining a traffic independent of the amount of wages paid or other expenses incurred.

The operating expenses of the street railways of this country are low as compared with steam railroads. While the steam railroads operated in the year 1902 at an expense of 64.66 per cent, the street railways operated in the same year at an expense of only 57.5 per cent. The percentage of operating expenses, or in other words the relationship which the cost of operation bears to the total income, was naturally

much larger in outlying districts and on small systems, the percentage of operating expenses ranging between 70 and 80 per cent on the street and electric railways of Maine, New Hampshire, Delaware, North Carolina, Mississippi, and Montana, and over 80 per cent on the street and electric railways of Vermont. The average operating expenses for all the railways were only 57.5 per cent, and the net earnings were 42.5 per cent, or over \$105,000,000.

The analysis of the operating expenses shows that an extremely large proportion of the expenses of operation is due directly to wages. These wages amount to over 56 per cent of the entire operating expenses. A certain large percentage of the cost of operation was expended in fuel, miscellaneous supplies, electric cables, buildings, fixtures, printing and stationery, office rent, advertising, damages, legal expenses, insurance, etc. All these items combined did not amount to nearly as much as did wages. An increase of 10 per cent in wages would mean an increase of 5.6 per cent in total operating expenses or a decrease of 7.7 per cent in net earnings.

The effect of an increase in wages in reducing earnings is the more immediate and obvious, owing to the fact that such an increase in wages does not appreciably increase the earnings of the company or materially reduce its expenses. To a certain extent such an increase in wages may have the effect of reducing accidents, and therefore the items of damages and legal expenses. But the larger items of expense are practically uninfluenced by an increase in the wages of street railway men. The amount of traffic to be secured is also independent of the wages paid to the employees, and, as a general rule, the fares charged are fixed by law and have already attained the legal maximum and can not be increased as a result of an increase in wages. As a consequence it rarely happens in the street railway service that an increase in wages can be compensated for by an increase in fares.

The receipts from other sources than passenger fares, which receipts in 1902 were less than 4 per cent of the total receipts, are also of such a nature that as a rule they can not be increased. The situation is therefore plainly this: A certain fund is to be divided between the street railway employees and the holders of street railway securities. In 1902 this fund amounted to about \$180,000,000, of which the wage-earners received about \$80,000,000 and the holders of railway securities about \$100,000,000.^a This fund is likely to increase in the future as in the past, but for any given year it is a fixed fund, and an increase in wages means a decrease to an equal amount in the dividends received by the holders of street railway stocks.

^a There is a slight range of error in this statement, owing to the fact that the wages are for all companies except 18 which failed to give this particular information. Moreover, no separate statement has been made for taxes and they have been roughly estimated.

INCREASES IN WAGES.

The wages of the front platform men have largely increased as the result of the substitution of electricity for animal power in the haulage of the cars. A higher grade man was required for taking charge of the motor than for driving horses, and from the first days of electric traction motormen secured higher wages than drivers. Thus in Missouri in 1893, 25 per cent of all drivers received a wage of less than a dollar and a half a day, while no motorman received so low a wage. Only 36 per cent of the drivers received \$1.90 or over, the proportion of motormen receiving that wage being 81 per cent. While only 1 per cent of the drivers received \$2.10 or over, fully 16 per cent of all the motormen received that wage. The following table shows the wages of motormen and of drivers, respectively, on the Missouri street railways in 1893:

CLASSIFIED DAILY WAGES OF DRIVERS AND MOTORMEN ON MISSOURI STREET RAILWAYS IN 1893.

Daily wages.	Number receiving specified daily wages.	
	Drivers.	Motormen.
Under \$1.00	2	.....
\$1.00 or less than \$1.10	6	.....
\$1.10 or less than \$1.20	9	.....
\$1.20 or less than \$1.30	4	.....
\$1.30 or less than \$1.40	17	.....
\$1.40 or less than \$1.50	2	.....
\$1.50 or less than \$1.60	3	63
\$1.60 or less than \$1.70	57	27
\$1.70 or less than \$1.80 .....	.....	1
\$1.80 or less than \$1.90 .....	.....	135
\$1.90 or less than \$2.00	65	182
\$2.00 or less than \$2.10 .....	.....	78
\$2.10 or less than \$2.20	2	.....
\$2.20 or less than \$2.30 .....	.....	.....
Total	157	486

In New Jersey, also, the effect of the substitution of electric for horse power was an increase in the rate of wages. "The wage rates," says the Twenty-third Annual Report of the Bureau of Statistics of Labor of New Jersey, 1900, "are interesting, showing as they do a marked increase over those of the old days of horse-car service." In this year, 1900, 3,065 employees on the North Jersey Street Railway, including superintendents and assistant superintendents, averaged \$11.88 per week, while 1,081 employees of the Jersey City, Hoboken and Paterson Street Railway Company, and Bergen County Traction Company, averaged \$10.05 per week. The conductors on the first line averaged \$12.14 for from 10 to 12 hours per day for 7 days per week, while in the second they averaged \$10 per week for 10 hours per day for from 6 to 7 days per week. The motormen on the first line averaged \$12.66 per week for from 10 to 12 hours per day for from 6 to 7 days per week, and on the second, \$10.25 per week for 10 hours per day for from 6 to 7 days per week. The wages of conductors thus

averaged from 14.5 to 17.3 cents per hour upon the North Jersey Street Railway, and from 14.3 to 16.7 cents per hour on the Jersey City, Hoboken and Paterson Street Railway. Laborers averaged \$8.45 per week, or 14.1 cents per hour on the first railway, and \$6.27 per week, or 10.5 cents per hour, on the second railway.

WAGES IN HORSE-CAR DAYS.

Of the 912 drivers employed by the Philadelphia horse-car lines in 1885, 3 earned less than a dollar a day, 50 earned between \$1.60 and \$1.70, 444 between \$1.70 and \$1.80, 55 between \$1.80 and \$1.90, and 360 between \$2 and \$2.10. The average pay was \$1.85, or 12 cents per hour. The pay of drivers upon the Pittsburg and Allegheny lines was somewhat smaller, averaging about \$1.75 for 15½ hours, or 11.3 cents per hour. The average pay of conductors was somewhat higher, amounting to 14 per cent more for conductors in Philadelphia and 8 per cent more for conductors in Pittsburg. On one small line in Philadelphia the drivers (who were perhaps boys) worked 12 hours per day for a rate of 65 cents. On the Stroudsburg lines, which had but one driver, the pay was 75 cents for 17 hours.^(a)

The following table shows the weekly wages, the hours of labor per day, the number of days per week, and the wages per hour for work for conductors, drivers, and hostlers upon the horse cars of various cities of Iowa for the year 1887:

WAGES AND HOURS OF LABOR OF CONDUCTORS, DRIVERS, AND HOSTLERS ON STREET RAILWAYS IN IOWA IN 1887.

[From Second Biennial Report of the Bureau of Labor Statistics for the State of Iowa, 1886, 1887.]

City and occupation.	Weekly Wages.	Hours per day.	Days per week.	Wages per hour.
Clinton:				<i>Cents.</i>
Drivers.....	\$10.50	10	7	15.0
Hostlers.....	10.00	10	7	14.3
Council Bluffs:				
Drivers.....	8.75	12	7	10.4
Hostlers.....	8.75	12		
Davenport:				
Drivers.....	12.00	14	7	12.2
Hostlers.....	11.25	14	7	11.5
Des Moines:				
Conductors.....	10.50	12	7	12.5
Drivers.....	10.50	14	7	10.7
Hostlers.....	9.50	10	7	13.6
Capital City:				
Drivers.....	10.50	15	7	10.0
Hostlers.....	9.00	12	7	10.7
Dubuque:				
Drivers.....	9.50	14	7	9.7
Hostlers.....	10.50	16	7	9.4
Keokuk:				
Conductors.....	8.00	12	7	9.5
Hostlers.....	7.00	12	7	8.3
Marshalltown: Drivers.....	7.50	15½	7	6.9
Muscatine:				
Drivers.....	9.35	13	7	10.3
Hostlers.....	9.50	13	7	10.4

^a For similar conditions see Annual Report of the Bureau of Industrial Statistics of Pennsylvania for 1884, pp. 157 to 159.

SUPPLEMENTARY WAGES AND PREMIUMS.

On a number of street-car lines supplementary wages are paid in the form of premiums for meritorious behavior or in that of pensions for long-continued service. Neither of these is important in its effect upon the gross amount of wages, whatever its influence upon the discipline of the force and the relations between the companies and their employees.

The premium system for rewarding motormen and conductors has been adopted by a considerable number of street railway companies. Among these is the International Traction Company of Buffalo and Niagara Falls. The system arose upon the conclusion of the Pan-American Exposition as the result of a proposed reduction of the wages of motormen and conductors, the wages having been increased just prior to that event. It was agreed by the company, however, that men whose record was free from accidents would not have their wages decreased, so that such men practically received a bonus of the difference, which amounted to 1 cent per hour. According to the testimony of the company the system has worked well. A majority of the men received rewards, and during the period of 5½ weeks from November 23, 1901, to January 1, 1902, the sum of \$3,500 was distributed. A large proportion of the men employed received premiums, and the initiation of the system resulted in a decrease during this period of 42 per cent in the number of accidents.

The following account of the Buffalo system is from the Street Railway Journal of February 8, 1902:

The expenses charged against accidents, in case they occur and have to be debited against a man's account, include the following items: Witness fees and expenses, expert testimony, medical expense, special service, incidentals, office expenses; etc., salaries, salaries of attorneys, court fees and legal expenses. Minor cases of injury, however, either to the company's property or to property for which the company is responsible, where damages do not exceed \$1 or \$2, are not allowed to count against the men's chances of getting the premium, and their record is consequently kept clear.

PENSIONS.

A few street railway companies have organized a system of pensions to be paid to employees retired at an advanced age after a long number of years of service. The systems so far adopted have been few in number, and the disbursements under them have been small. There seems to be no general tendency to imitate the example of the leaders in this movement, and the experiment is too recent to permit any final judgment upon its probable ultimate results. The average employee seems to display no great enthusiasm for the present system.

of pensions, and the attitude of the organized workmen, as manifested by the utterances of union officials, is frankly antagonistic.

The most important pension system, that of the Metropolitan Street Railway Company of New York, was inaugurated on July 1, 1902. Its direction is in the hands of a new department of the railway company, which is called the pension department. Persons eligible for pensions are employees 70 years of age or over, or employees from 65 to 69, both inclusive, who have been in the service of the company 25 years or more and have become physically disqualified for continuing in service.

The pensions department is in charge of a pension board, which is annually appointed in the month of June by the president of the Metropolitan Street Railway Company. The members of this board serve for one year, beginning from the 1st of July, and they have the power, subject to the veto of the president of the company, of making and enforcing rules for the protection of the department, of passing upon the eligibility of applicants for pensions, of fixing the amount of the pension, and of prescribing the conditions under which allowances may be made or withheld.

It is provided that no employee whose maximum wage has exceeded \$1,200 per year for a period of over 5 years shall be entitled to the receipt of a pension. No employee who enters the service after the 1st day of July, 1902, shall be eligible for the pension allowance unless he shall have joined the Metropolitan Street Railway Association within 5 years of entering the service of the company nor unless his service in that association is continuous.

Any employee between the ages of 65 and 69, inclusive, who has been 25 years or more in the service, may claim to be physically disqualified for further service and make application for a pension to the pension board, the decision of which is final. Such applicants, however, must submit to a physical examination by a physician appointed by the pension board.

The pension allowance authorized by the president of the Metropolitan Street Railway Company is to be fixed for the present upon the following basis: If the applicant has been 35 years or more in the service of the company, his pension shall amount to 40 per cent of the annual average wages for the past 10 years; if he has been in the service from 30 to 35 years, he shall receive 30 per cent, and if from 25 to 30 years, he shall receive 25 per cent.

It is provided in the circular of the president of the Metropolitan Street Railway Company, which circular furnishes the constitution of this pension department, that when the allowances created by this pension system shall exceed \$50,000 a year, the company shall reserve the right to reduce the pension allowance pro rata in order to bring the allowance down to this basis.

If any employee resigns or is discharged from the service of the company and is reemployed, his service for pension purposes is construed to date from the time of his reemployment. The pensions granted by the board are to be paid monthly, but may be revoked for misconduct, the pension board being the sole judge, without the right of appeal. Assignment of pensions is not permitted. In forming this pension department, the company specifically states that the establishment of the system of pensions does not recognize in any employee the legal right to such pension or to a continuation of his service with the idea of securing a pension. "The company expressly reserves its right and privilege to discharge at any time any officer, agent, or employee when the interests of the company in its judgment may require such discharge, without liability for any claim for pension or other allowance other than salary or wages due and unpaid." The acceptance of the pension allowance does not debar former employees from entering into any other business, but it does debar them from reentering the employ of the Metropolitan Street Railway Company.

The pension plans apparently call for a very small expenditure. Thus the New York plan, which is probably the most generous of all, limits the expenditure at \$50,000 a year, which is about 50 cents per month, or less than 2 cents per day per man.

A system of pensioning and insuring employees has also been adopted on a wholesale scale by the Denver City Tramway Company. On May 16, 1903, a general plan of insurance and of granting pensions was described in a bulletin issued by the general manager of the company. As a result of this bulletin, two funds were established, one for the insurance of employees against death, sickness, or other disability, and one for a general system of pensions.

The pension system of the Denver City Tramway Company was adopted after an extensive study of the workings of other systems in connection with other street railway lines. By the system adopted, employees attaining the age of 70 years, who have been 25 years or more in the company's service, are compulsorily retired and are paid a pension, whereas employees ranging from 65 to 69 years of age, who have been 25 years in the service of the company, may be retired if they are believed to be physically disqualified. Employees, however, who are members of the Tramway Mutual Aid Association may receive pensions after 15 years' service if they have attained the age of 65 years.

The pension paid amounts to \$25 a month for all uniformed employees in the regular train service, or for all employees whatsoever who, during the 10 years immediately preceding retirement, averaged a monthly wage of \$80 or more. For those whose wage averaged from \$60 to \$79 a month the pension amounts to \$20 a month. The accept-

ance of a pension prevents the recipient from continuing in the service of the company, but does not prevent him from engaging in any other business. The company, moreover, reserves the right to reduce these pensions pro rata in case the total expenditures resulting therefrom exceed \$18,000.

While the pension fund of the street railway company derives its income entirely from contributions from the company, the Mutual Aid Association secures its funds chiefly from contributions by the employees. For every \$100 contributed by the employees to this fund the company contributes \$25, but the company also guarantees the payment of insurance and sick benefits.

The Mutual Aid Association is subject to a board of trustees, the majority (five) of whom are appointed by the officials of the street railway company. Members whose monthly earnings are \$80 or over pay \$1 per month and receive \$1,000 in case of death. Members whose monthly earnings range between \$60 and \$79 pay 75 cents per month and receive a death benefit of \$750, and members whose monthly earnings are less than \$60 pay 50 cents a month and receive \$500 in case of death. In case of disability as a result of accident or sickness, a benefit is paid for a period of at least fifty-two weeks, if the disability lasts that long, which sum amounts to \$6 per week for members contributing \$1 a month, \$4.50 a week for members contributing 75 cents a month, and \$3 a week for members contributing 50 cents a month.

The Mutual Aid Association has established several conditions in order to safeguard the funds in the association. Thus, where sickness or disability is not produced by bodily injuries, through external, violent, or accidental means, no payment is made for the first ten days, and no injury is accounted a disability unless it means a total incapacity to carry on any occupation in the service of the Denver City Tramway Company. No benefit or indemnity is paid for sickness or death, resulting in whole or in part, directly or indirectly, by reason of certain prohibited acts and practices, among which are the use of alcoholic liquors as a beverage, intoxication, acts of immorality, fighting, except in self-defense, voluntary and unnecessary exposure to danger of injury, contagion, or infection, unless in pursuance of duty as an employee of the company, etc.

In consideration of the payment of \$25 by the company per each \$100 paid by the employees, and in consideration, further, of the agreement of the company to pay the operating expenses of the association, members in case of sickness or accident, and beneficiaries in case of the death of members, shall receipt to the company in full, upon payment of benefits or indemnity, for all liability on the part of the company.

Provision is also made for additional insurance by members upon entering the association.

Whatever the motives of the street railway companies in organizing insurance and granting pensions and benefits for sick, disabled, or incapacitated employees, there can be no doubt that the attitude of the organized employees is distinctly adverse. The street railway employees, individually and through their unions, are opposed to any system of compulsory insurance in companies established by employers, and look with equal disfavor upon the payment of pensions to aged workmen. Many, if not most, of the employees feel that this system is intended to delude the workmen—to prevent their organization and to hold out promises which are seemingly large, but which in reality dwindle down to almost nothing. The offers of the company are belittled on account of the smallness of the sums paid and the advanced age which the workmen must attain before they can secure benefits, and the demand is continually made that the street railways increase the wages of their employees rather than hold out illusory promises as to what they will do when the workmen attain an impossible age.

The attitude of the labor organization among street railway employees, the Amalgamated Association of Street and Electric Employees of America, may be indicated from extracts from its official journal. Regarding the pension system in Denver, the journal of this organization, the Motorman and Conductor, says:

The terms of the pension proposition are certainly amusing, and its absurdity is apparent to all railway employees.

Let the railway men of any corporation number the men among them of 75 years of age who have been continuously employees of the company for twenty-five years, or the number of employees engaged by their respective corporations who could be placed on the pension list of the Denver City Tramway Company, and they will find the number to be very few. In fact, it is questionable if the Denver City Tramway Company has even one man in its employ who can take advantage of the wonderful benevolence of the company. Men 70 years of age who are working for railway corporations are very few, and they are never continued to that age unless there is some question of responsibility on the part of the company for injuries sustained in accidents or otherwise while in the service.

Most of our craft understand the nature of benefit associations when promoted by railway companies. There is always a nigger in the woodpile somewhere. ^(a)

SAVINGS OF STREET RAILWAY EMPLOYEES.

In the year 1903 a census was taken by the United Railroads of San Francisco to determine how many of its platform men had saved money. A blank form was distributed among the men, each man receiving a statement. Of the total number of platform men in the employ of the company, 937, or over one-half, filed statements of

^a Motorman and Conductor, June, 1903, p. 19.

their earnings and savings. Reports were made upon these according to the local divisions of the company and the results summarized. It was found that 378 of the employees, or 20 per cent of the whole number of platform men employed by the company or 40.3 per cent of all those answering the inquiries, had savings. These savings ranged from sums not stated up to \$3,800. Forty-six platform men filling out the blanks did not answer the questions relating to savings, and 513 platform men claimed that they had no savings. The savings in question did not refer to the savings of the year immediately preceding, but included the amount saved during the entire time in which the man was in the service of the company.

Of 1,865 employees of the street railways of Michigan in the year 1895, 798, or 43 per cent, reported that they had saved money from their salaries during the year immediately preceding; 994, or 53 per cent, stated that they did not save money during the year preceding, and 73, or 4 per cent, failed to reply. The amount saved during the year was \$98,377, which amounted to a saving of \$123.28, or \$10.27 per month, or \$2.37 per week, for each of the men saving; and to a saving of somewhat less than \$53 per employee, whether saving or not. The total amount saved was 9.6 per cent of the total amount earned during the year.

Of the entire number, 1,865 employees, 460, or nearly 25 per cent, reported that they owned their houses, and 1,394, or 75 per cent, reported that they did not own their houses, while 11 failed to reply. Of the 460 employees owning their houses, 254, or 55 per cent, owned them clear of incumbrances; 203 had their houses encumbered, and 3 failed to answer. Of the 203 who had their houses encumbered, 116 had a debt on contract, and 83 on mortgage. The total number of employees owning their houses clear of incumbrance was but 13.6 per cent of the total number of employees. The total incumbrance upon 198 of the 203 encumbered houses was \$113,830, or an average incumbrance of \$575. An average rate of interest of $6\frac{1}{2}$ per cent was paid on this debt.

Of the 460 employees who owned their own houses, 398 kept them insured and 43 failed to do so, while 19 did not reply to the inquiry as to the matter.

Of the total number of employees 821 rented houses and paid an average rent of \$7.27 per month.

Of the 1,865 employees, 924 had their lives insured by an agency other than the trade union; 910 did not have their lives so insured, while 31 failed to reply. Of the same 1,865 employees 260 had accident insurance by an agency other than the trade union, 1,464 did not have such accident insurance, and 141 failed to reply. The report showed that 1,074 of the 1,865 employees, or almost 58 per cent, belonged to labor organizations; 632 did not belong to labor organizations, and 159 failed to reply.

FORMER HOURS OF LABOR.

Until the early eighties the street railway employees of the country were almost everywhere grievously overworked. Both in the East and West, in large cities and in small, the term of daily service on the street cars was in almost all cases excessive. In many cities and towns the normal working day ranged from 12 to 14 and even to 16 and 18 hours. The car left the barn manned by a driver and conductor "who remained on the car from the time it left the barn in the early morning until it had completed the day's run late at night." "This meant," says Dr. Frederick W. Speirs, speaking of Philadelphia conditions, "a daily service of from 15 to 18 hours of continuous work, with very brief respite for breakfast, dinner, and supper."

The conditions prevailing on the numerous lines of the city of Philadelphia were typical of those existing at large throughout the country. The excessive hours and their evil effects were not seldom taken cognizance of by the courts. In 1864 a coroner's jury in the city of Philadelphia, passing upon a fatal accident, said: "Nor should we expect vigilance and attention from employees worn out by 17 hours of incessant labor. * * * The constant occurrence of passenger railway accidents demands from this jury an unequivocal condemnation of the companies who compel men to do work to which the bodily and mental frame is not usually equal." Public meetings were also held by drivers and conductors, but until after the year 1885 nothing of great importance was accomplished, either in Philadelphia or other cities, toward the reduction of the working day or the amelioration in other respects of the condition of street railway employees.

The first great step toward the improvement of these conditions was made by the Knights of Labor about the year 1886. This organization, which had existed since 1869, but which had only attained its full sudden growth in the late eighties, was appealed to by the street railway men of New York, Philadelphia, Baltimore, and other cities for relief from excessive toil. Local orders of the Knights of Labor were organized in several cities (in Philadelphia under the name of the Quaker City Protective Association), and a demand was made for a reduction of the hours.

This movement resulted in certain places in success. In Philadelphia the men organized secretly and were prepared to strike if their demands were not granted. On March 23, 1886, representatives of the two parties met and the men presented their demands, which, briefly, were for the establishment of a working day of 12 hours and a standard rate of pay of \$2, for relief from the rule requiring them to buy uniforms (except the cap and badge), for the granting of an allowance of 30 minutes for dinner and 15 minutes for breakfast and sup-

per, and for several minor reforms. The railway presidents, after a week's consideration, conceded these demands.

In the following session of the general assembly of the State of Pennsylvania an attempt was made to secure the enactment of a law establishing a maximum 12 hours' working day upon street railways. The law was passed, but was rendered entirely nugatory by a provision that "all necessary labor, over and above the time set by this section, shall be considered overwork, for which the laborer shall receive additional compensation."^(a) As a consequence, the law failed to give the protection which was contemplated by the enactment.

The excessive hours of labor of street railway employees during the old horse-car days is shown by the time worked by conductors and motormen on the horse cars of Pennsylvania in the year 1885. The average time worked by the 912 drivers of the Philadelphia Traction Companies of that year was 15 hours 11 minutes and 17 seconds per day.^(b) Of the total of 912 men, 50 worked 12 hours or less than 13; 50 worked 13 hours or less than 14; 155, 14 hours or less than 15; 372, 15 hours or less than 16; 235, 16 hours or less than 17, and 50, 17 hours or less than 18 per day. Of the 139 drivers employed by the Pittsburg and Allegheny railways, 37 worked 14 hours or less than 15; 84 worked 16 hours or less than 17, and 18 worked 17 hours or less than 18; the average time of drivers upon this line being 15 hours 41 minutes and 24 seconds per day.

On the whole, conductors worked slightly longer than the drivers, but the hostlers, feeders, car-house men, blacksmiths, teamsters, watchmen, and other employees worked somewhat shorter time.

The hours of labor of street railway employees rapidly decreased as a result of the introduction of electricity. That this decrease in hours was largely due to the introduction of electricity and to the increased speed which resulted as a consequence is stated by officials of the various companies, as well as by employees and outside observers, official and unofficial. "It is gratifying to state," says the labor commissioner of the State of Missouri in 1893, "that the improved motors have shortened the hours of labor obtaining under the horse motor. The drivers and conductors on horse cars usually work 14 to 18 hours a day." Testimony to this effect could be quoted from many other quarters.

In 1893, although electricity had to a considerable extent supplanted animal power, the number of hours of labor upon many lines was still

^a Act of March 24, 1887.

^b These statistics of time have been computed from the Report of the Bureau of Industrial Statistics of Pennsylvania for the year 1885. The report itself exaggerates the working time of the employees. On page 108 it says: "If the importance of location is taken into account the average working time would be about 18½ hours per day." This result would be accurate if it is understood that it represents a 6-day week, since the men averaged over 15 hours per day for 7 days in the week.

unduly high. The following table shows the number of hours worked by men employed on Missouri street railroads in 1893:

CLASSIFIED HOURS OF LABOR PER DAY OF STREET RAILWAY EMPLOYEES IN MISSOURI IN 1893, BY OCCUPATIONS.

Hours of labor per day.	Number working each specified number of hours per day.					
	Conductors.	Drivers.	Gripmen.	Motor-men.	Blacksmiths.	Car cleaners.
Less than 10.....	217	2	50	166	2	.....
10 or less than 11.....	342	16	235	133	50	56
11 or less than 12.....	237	30	42	133	.....	.....
12 or less than 13.....	220	89	69	23	2	8
13 or less than 14.....	23	15	.....	31	.....	.....
14 or less than 15.....	.....	3	.....	.....	.....	.....
15.....	17	.....	.....	.....	.....	.....
Total.....	1,056	155	a 456	486	54	64

a Including 60 reported as working 9 to 12 hours.

It will be seen from this table that the hours of labor of drivers were considerably longer than those of gripmen and motormen. While 69 per cent of all drivers worked 12 hours or over, only 15 per cent of the gripmen worked that period of time, and only 11 per cent of motormen worked 12 hours or more. In other words, the reduction of hours took place most rapidly on those railways where mechanical power supplanted animal power.

In the year 1902 an investigation was made by the United Railroads of San Francisco into the hours of labor of platform men prevailing on the street railways of a number of cities of the country. Returns were secured from 297 companies, representing all parts of the United States and the transportation systems of both large cities and small towns. The prevailing hours of service were from 10 to 11 hours, over one-half of the companies reporting this working day.

The following table presents the classification of these companies according to the length of their working day:

HOURS OF LABOR OF PLATFORM MEN IN THE EMPLOY OF 297 STREET RAILWAY COMPANIES IN 1902.

Hours of labor per day.	Number of companies requiring specified hours per day.	Hours of labor per day.	Number of companies requiring specified hours per day.
8 to 9.....	4	13.....	3
9 to 10.....	50	14.....	1
10 to 11.....	150	Total.....	297
11 to 12.....	55		
12 to 13.....	34		

SUNDAY EMPLOYMENT OF STREET RAILWAY MEN.

Owing to the constant demand for transportation, there is no cessation of work on street railways on Sundays. In all large cities cars run every day in the year, and while the volume, destination, and con-

centration of the traffic is different on Sundays and on holidays, the demands made upon the men are as great as, and in the case of companies doing a suburban business, often greater than, on week days. The volume of Sunday traffic is increased as a result of the electric railways, which have opened up the suburbs and have led to inter-urban traffic and to an enormous development of traveling for pleasure.

The earliest street railways, or as they were originally called, horse railroads, did not run cars on Sunday. There was a strong feeling against it on the part of many elements in the community, and the traffic did not promise to be sufficiently remunerative to cause the promoters of the first street railways to face an antagonistic public opinion or to violate the Sunday laws. The demand for Sunday service came from the people themselves. A very strong agitation arose in Boston, Philadelphia, and other cities for the institution of a Sunday service, and this movement was backed by many of the most influential members of the community. It was argued that the Sunday cars were necessary to enable the people to go to the churches which they preferred, to carry the children to their Sunday schools, and to enable other acts of devotion or charity to be performed. The institution of a Sunday car service was opposed because it would bring out the roughs and toughs of the city and, on the further ground, that if street railway men were induced by their companies to break the fourth commandment they could not be expected to "keep the eighth." The question of the effect of Sunday labor upon the health of the employees does not seem to have entered into the argument. It required several years of agitation before the system of running the cars on Sunday became general, and many of the companies did not institute the practice until five or six years after its inauguration.

An investigation into the volume of Sunday labor in Massachusetts was made by the Massachusetts commissioner of labor, Carroll D. Wright, in the year 1885. According to this report, after steam railroads "the next largest industry in the Commonwealth in which men are kept at work on Sunday is that of the horse railroads." The report showed the gradual development of the practice of running cars on Sunday on the Massachusetts horse railroads and the rapid development of the Sunday service. The number of Sunday cars rapidly increased, 128 cars being originally started by the several roads,^a while by the year 1885 the number of cars had been increased to 786.

Of the 3,650 employees on horse railroads making returns, it was found that 2,958 worked on Sunday. In other words, 81.04 per cent of the men ordinarily employed on week days were usually employed on Sundays, the proportion being 82.03 per cent for the street

^a These cars were not started simultaneously, but the figures represent the sum of cars run by the different companies at the time of each beginning a Sunday service.

railways running to or in Boston and 73.80 per cent for the horse railroads in other cities and towns.

Even without Sunday service a certain amount of labor would have been required. Stablemen, hostlers, etc., would have been obliged to work, irrespective of the running of the cars. According to the returns of the companies, 703 men or 19.26 per cent of all employees would have had to work in any case, so that the total number of men working as a result of the institution of Sunday service was 2,255 or 61.78 per cent.

The investigation of 1885 shows that street-car employees were paid by the day, and it was stated by the companies that the men desired to work 7 days rather than 6, and that it was immaterial to the men whether they took off Sunday or a week day. It was also stated that the men generally preferred to work Sunday, as it was an easier day. The companies asserted that the constant work was not injurious to the men and that none of the men on the lines had "ever been arrested for immoral conduct on Sunday." One employee claimed to have worked 1,107 consecutive days without feeling any ill effects.

The Bureau of Statistics of Labor did not attempt to make an independent investigation of the effects of continuous labor upon the health of the street railway men, though, from the testimony adduced in the investigation, the results do not appear to have been favorable. It is quite clear from this report, however, that the practice of working employees 7 days a week was fairly general in horse-car days, although the exact amount of it can not be arrived at from the statistics of Sunday labor.

The change in street railway transportation from animal to electric motive power has increased rather than decreased the proportion of Sunday labor. As a result of the higher speed of the electric railways, cities have grown to a size undreamed of in 1885, while the enormous increase of holiday traffic, as the result of the speed of the street and interurban railways, has greatly augmented the total volume of Sunday travel. An investigation made by the Massachusetts Bureau of Statistics of Labor in 1898 showed that the number and proportion of persons engaged at work on Sundays was greater in the street railway industry than in any other industry in the Commonwealth.^a While the electric street railways contributed only 22.3 per cent of all the employees engaged in transportation on week days, it furnished 46 per cent of all the employees engaged in transportation on Sundays. Of the steam railroad men, only 23.7 per cent of the men employed on week days were employed on the average on Sundays, whereas, of 10,326 street railway employees 8,282 or 80.2 per cent were employed on Sundays. The report says: "The Sunday service [on street railways] approaches, when average employment only is considered, the

^a Twenty-ninth Annual Report of the Bureau of Statistics of Labor of Massachusetts.

week-day service, in the degree represented by this ratio" of 80 to 100, although this is affected by seasonal conditions.

The Sunday service, like the week-day service, varies according to the seasons, and a considerable variation is to be found between the days of greatest and of least intensity. During the year 1898 the average number of employees on street railways on Sunday was 8,282, but the smallest number employed on the various lines on their Sunday of least employment was 6,697, while the largest number employed on the various lines on the Sunday of their greatest employment was 9,530. In other words, the number employed on the Sunday of greatest employment^(a) was 42 per cent more than the number employed on the Sunday of least employment, and 15 per cent more than the average during the year.

Sunday work falls harder on the conductors and motormen than upon the other employees of the lines. While 80.2 per cent of all men engaged in street railway transportation worked on Sunday, the percentage of the conductors and motormen working on Sunday was 91.2 per cent, there being 6,277 of such employees, of whom 5,724 were employed on the average on Sunday. Of the other male employees, amounting to 4,016, 2,542 or 63.5 per cent were employed on Sunday. The number of female employees on the street railways of Massachusetts was only 33, of whom 6 worked on Sundays.

The motormen and conductors employed in 1898 on Sunday on the Massachusetts street railways worked from 5 to 13 hours, but the great majority of them worked a day of 9 hours. Of the total number of 5,724, 3,939 or 69 per cent worked 9 hours and 606 or 11 per cent worked 8 hours. The average time worked by other male employees on Sundays was 10 hours; 1,240 out of 2,552 or 49 per cent working 10 hours; 350 or 14 per cent working 9½ hours, and 188 or 7 per cent working 9 hours. The average working time of employees other than conductors and motormen was 10 hours on week days, 3,271 or 81 per cent working this time. While the employment was thus, as a rule, about 10 hours, the actual attendance of the employees was frequently much greater. Some of the companies with a 10-hour day required the men to be about the barns for 12 hours in order to be ready for any emergency.

None of the street railways in Massachusetts allowed employees free week days in lieu of Sunday rest, the returns of the companies being unanimous upon this point. In the case of 69 companies out of the 73 electric street railways considered, these 69 companies employing 8,241 men, or 99.50 per cent of all the men employed Sunday, the street cars were run throughout the year. On one small line service

^aBy this is not meant the number employed on all lines on the day when most men were working on all lines combined, but the sum of the number employed by each line on the day it individually employed the most.

lasted only 20 Sundays, and on two small lines 14 Sundays. The service of these small lines did not materially influence the result.

Of the 8,282 employees working on an average on Sundays, 1,301 or 16 per cent were reported from street railways which claimed that Sunday work was optional, 6,726 men or 81 per cent from companies which required Sunday work, and 255 men or 3 per cent of the total from companies where the work was optional for part of the year and compulsory at other times.

The investigation showed that of the 8,282 men working on the street railways, 7,973 or 96.27 per cent could obtain a day of rest without pay during the week if they desired, while in the case of 309 or 3.73 per cent this was not permitted. In the great majority of cases, however, no general arrangement of this nature appears to have been made. The great majority of companies, 68 out of 73, employing 7,230 men, stated that the men could obtain a day off during the week upon application. This indicates an exceptional privilege rather than a settled policy.

The extent to which the work was optional or not was to be gauged by the replies of the street railway companies, which showed that in the case of 38 companies, employing 6,512 men, the employee would be discharged if he refused to work on Sunday without giving proper reasons, and in the case of 5 companies employing 123 men, he would not be discharged if he refused to work but furnished a substitute, while in the case of 29 companies employing 1,647 men, the men would not be discharged for such refusal.

The investigation shows that in a great majority of companies the pay was the same for Sunday as for week days.

REGULARITY OF EMPLOYMENT.

The employment during the year in street railway service is extremely regular. The occupation is in no sense seasonal, and it is absolutely essential to the prosperity of the city that the traffic be uninterrupted. The cars run every day, Sunday and week day, holiday and working day, and the opportunity for work for the men on the regular list is therefore great. The difficulty in most cases lies not in under but in over employment.

The very regularity of street car service has caused a serious unemployment among a large class of men, called extra men. To insure against interruptions as a result of the regular men being absent for sickness or other causes, the companies have been obliged to resort to the employment of extra men who, under such circumstances, can take the places of the absent regulars. The employment of extra men is essential to the regular and continuous use of the line,

and where the number is not more than sufficient to meet these exigencies, no particular hardship is involved. The position of the extra men is, while it lasts, a difficult one, and their earnings are, on the whole, low; but where there is a rapid promotion from the waiting to the regular list this hardship is temporary. In the case of many companies, however, the extra list is unnecessarily extended, and a hundred extra men may be employed at low earnings where the employment of only 50 extra men at double these earnings would meet all the requirements. A large waiting list has the effect of making the extra men clamorous for regular positions and of forcing those already regularly employed to hold their positions with greater tenacity. The result on some lines is to cause the regular men to be overemployed and the extra men underemployed, especially where the rules are stringent against occasional absences and insufficient provision is made for holidays.

Even with the best of will on the part of the management, there is always danger of unduly swelling the extra list. No matter how accurately the average traffic may be determined, it is inevitable that it becomes "bunched" on certain days of the year and at certain hours of the day. A rainy Sunday, an excursion, a storm, a blockade, a crippling of the power from any cause may increase or decrease the number of men necessary to carry on the business. As the company does not pay for the maintenance of the extra men, but merely for the irregular time which they are at work, the temptation exists to employ unduly large numbers of men.

The extra list is in its nature shifting, and it necessarily contains many men who are not capable, so that the general standard of employment is lowered. The system works hardship upon the extra men themselves. They are obliged to report whether or not there is work for them, and they are paid only according to the amount of work which they are permitted to perform. The earnings of these extra men are often very small, and many may be kept for weeks or months, or even longer, on the margin of employment without ever being promoted to a regular run.

The system of extra men seems to bear especially hard upon those lines where the men are worked continuously seven days in the week for ten or twelve or more hours per day. The result is an overexertion of some men and an underemployment of others. The men who are working excessively long hours are stimulated to their utmost by the fear of being supplanted by the extra men, and a conflict of interest is created between the men who overwork and the men who do not find enough work to do.

In some companies this state of affairs has been remedied by giving to the regular employees the opportunity, or forcing upon them the

necessity, of taking off every seventh or eighth day and giving this work to the extra men. This amounts practically to increasing the force and to dividing up the work to be done among a larger number of employees.

ORGANIZATION OF STREET RAILWAY EMPLOYEES.

There are certain characteristics of street railway employment which make it difficult to organize the men into trade unions, and certain other factors, which, on the other hand, tend to make organization simpler and easier. The difficulty of organization is enhanced by the fact that many of the motormen and conductors come from the rural districts and from former occupations in which there has been no organization. The street railway employees include not only unorganized workmen from other trades, but unsuccessful members of the professions, etc. The ranks of street railway men are recruited to only a slight degree from former factory hands or from persons who have been organized in their former trades into labor unions. Another difficulty of organization arises from the fact that street railway men are easily replaced, that the course of training is short, ranging from three days to two weeks, and that street railways are, as a rule, located in populous cities with an abundant labor supply and considerable facilities for obtaining new men. The final difficulty of organization results from the fact of the customary employment of extra men who are anxious to get upon the regular list, and who, by taking the places of men on strike, are enabled to secure larger incomes than those to which they have been accustomed.

On the other hand, organization among street railway men is facilitated by the fact that the occupations are sharply defined and are without considerable subdivision. Over 60 per cent of the men are motormen and conductors, and these occupations are clearly defined, so that there is no possible subdivision among them. All motormen may be considered as approximately equal in position and prospects, and all are engaged upon substantially similar work. The universal prevalence of time payment over payment by piece also facilitates organization. Moreover, the development from the horse railroad to the electric railroad has resulted in the creation of specialized occupations about the shops and power houses and has introduced a factory régime which is promotive of organization. The interrelation of the work of the men in the car barns is of such a nature, and their communication with one another is so constant that an esprit de corps naturally arises. Finally, organization is facilitated by the localization of the industry and by the fact that, unlike in the steam railroad service, all of the men in the system naturally congregate about a center, the car barns.

The character of the street railway industry is such as to lead the

railway men into an industrial, as distinguished from a specifically trade, union. By a trade union, in the narrow sense of the word, is commonly meant an organization of men engaged in a single specific occupation, such as a union of engineers, firemen, stonecutters, or bricklayers. An engineer, as a rule, belongs to the engineers' union, irrespective of the fact whether he works in a brewery or a flat building, a factory or a workshop. The barbers' union consists of those men only who are barbers, and a bakers' union exclusively of those who bake bread, etc.

An industrial union, on the other hand, is one composed not of men engaged in a particular occupation, but of all those employed in an entire industry. Thus, the Mine Workers' Union, an industrial union, includes all men engaged in or about the mines, whether they are engineers or firemen, miners or laborers, pump men or drivers, breaker boys or carpenters. The street railway union is an industrial organization of this sort, comprising all men working on street railways, irrespective of the nature of the particular function which they perform. In this respect street railway service differs from steam railroad service. In the steam railroad service the unions are of the trade variety, the locomotive engineers, the firemen, the conductors, and the maintenance-of-way men each having their separate organization. Largely through the cohesive force of the car barn, the employees on the street railway have been enabled to organize into an industrial union, which comprises all classes of people, and the relative ease with which motormen and conductors can take each other's places and the approximate equality of their earnings, as well as their constant, intimate, and mutual interdependence, tend to place them within the same industrial union.

There can be no doubt that, but for its industrial character, organization among street railway employees would be difficult if not impossible, and that any union upon purely trade lines would be too weak to take effective action, whether offensive or defensive.

The difficulties of organizing workmen are increased in the case of street railway employees by the temporary and tentative character of the occupation. Street railway employment is still looked upon by other workmen as a means of livelihood in times of stress and emergency, as a stepping-stone to something better, as an occupation in which to tide over the emergency of temporary unemployment. That street railway employment is recognized by those engaged in this work as temporary is evidenced by the testimony of most men in the trade, and is acknowledged by the representatives of the union.

The general executive board of the Amalgamated Association says: "The composition of our organization has been singularly different than that of any other industrial association. Our membership has been peculiar to itself. We gain acquisition from all crafts, profes-

sions, and callings known to this world of commerce and industry—merchants, lawyers, doctors, students, ambitious aspirants to business life—in fact, all walks have sought the street railway movement as an emergency to tide themselves over.”^(a)

Men from other classes of society also resort to this means of earning a living, and many men now in business or in professions have during a number of months, or possibly years, performed their work on the front or rear platform of a car.

The Amalgamated Association of Street and Electric Railway Employees of America was created by a convention of delegates which met in Indianapolis in the month of September, 1892. For a long time little progress was made, and nothing but the sacrifices of the leaders enabled the infant organization to survive. Conventions were held at Milwaukee, Detroit, Dayton, and Louisville, and the organization continued in skeleton, although the funds were rarely sufficient to pay even the officers, and they were obliged to contribute part of their salaries to the work of the organization. The rapid growth of the organization dated practically from the Louisville convention of 1899, the local unions growing from 41 to 84 in the two years preceding 1901, and the membership, according to the claims of the union, increasing from 4,000 to 16,000.

No statistics are published by the union as to its membership, and there is no possibility of arriving at any exact determination of its members. The only method of arriving at even an approximation is by calculating upon the basis of the monthly receipts or upon the basis of the votes cast in convention. Neither of these methods, however, is correct and both are liable to result in a considerable underestimate. There are always many men who belong to the union and who pay dues occasionally, but who do not pay regularly to their locals, and in all unions there is some tendency, at least, for the locals to pay to the national organization less than their share. During the two years from April 20, 1901, to March 31, 1903, the total receipts of the organization were \$57,209, which, on the basis of 10 cents per month assessment (not considering any other sources of income), would give an average paying membership during this period of less than 24,000. The receipts during the six months ending April 1, 1903, were \$21,947.80, which, on the same basis of calculation, would make the membership appear to have been about 36,000. The organization claims a membership of 70,000 men.

Even in the absence of official figures it is possible to state that during the last two years the organization has grown rapidly, both in the number of local unions and in the number of actual members. During the two years ending April 1, 1903, 152 divisions were organized, which was almost twice as many as were in existence in 1901.

^a Motorman and Conductor, May, 1903, p. 22.

Of the 84 divisions in existence in 1901, 26 had lapsed by April, 1903, and of the 152 since organized, 32 have lapsed, so that on April 1, 1903, there were 178 divisions and somewhat later in the month 187 divisions in the union.

The general officers of the Amalgamated Association of Street and Electric Railway Employees of America include a president, seven vice-presidents, a treasurer, and an executive board of nine members. These officials hold office for two years from the date of the close of the convention. The duty of the president is similar to that in most trade unions, a considerable part of the power being vested in him; he is also chief organizer and has a large measure of executive control. The vice-presidents perform work in various parts of the field, and in case of the death or resignation of the president are entitled to succeed in rotation. The treasurer performs the ordinary work of that office and gives a bond for the faithful performance of his duty. The president receives an annual salary of \$2,500, with thirty days' leave of absence, and the treasurer receives \$100 a year.

The general executive board of the Amalgamated Association consists of nine members, elected for two years. This board is obliged to hold regular semiannual meetings. At these meetings the president and treasurer attend and are entitled to a voice, but no vote. The executive board audit the books and bills of the offices of president and treasurer, decide upon the grievances and appeals brought to them, and have the power to authorize strikes and to levy assessments in support of strikers or locked-out men, with the condition that such assessment shall not in any month amount to more than 25 cents per member. In case of a vacancy on the executive board, the second vice-president becomes a member. The members of the board receive the sum of \$3.50 a day while in actual service, as well as hotel and traveling expenses.

The election of all general and local officials is by ballot, a majority of all votes cast being necessary to elect an officer. Where there are more than two candidates for the same office and no majority is obtained, the candidate with the least number of votes is dropped after each unsuccessful ballot until one member has an absolute majority. The ordinary safeguards of fair elections, the appointment of tellers, etc., obtain in this organization.

A local division may be formed by any ten street railway employees who make application to the president and pay the sum of \$10 for charter fee, outfit, and seal. No charter is issued in cities where divisions already exist, unless with the expressed consent of the executive board. The by-laws and rules of the local divisions do not become operative until carried by a two-thirds vote and ratified by the international president. No division, once organized, can cease to exist as long as there are ten members of good standing who object to with-

drawing. The local bodies send delegates to the trade council or central labor unions affiliated with the American Federation of Labor, with which organization the national association is also affiliated.

The initiation fee of the Amalgamated Association of Street and Electric Railway Employees of America is \$1, of which 25 cents is sent to the general office in payment of the member's registration fee and certificate of membership, which is filled out by the general officers. The dues are no less than 50 cents per month, of which the sum of 10 cents is paid by the local division to the national organization. Of the amount so received by the national organization, 80 per cent, or 8 cents per month per member, is used as a fund for the general management of the organization, and 20 per cent for the payment of death and disability claims. A defense fund is also established, toward the maintenance of which each member of the organization pays to the national union \$1 per year. These sums, together with special assessments, furnish the revenue of the national organization.

The benefits paid by the national body are death and funeral benefits. A member joining in sound health and not afflicted with disease or subject to a complaint likely to endanger his health or to cause permanent disability is entitled to death and disability benefits under prescribed conditions. The funeral benefit amounts to \$100 for men who have been members for one year or more, and disability benefits amount to the same sum. A member must be in good standing, and must not be in arrears with his dues or assessments; but no member will receive relief whose disability or death is caused by intemperance or his own improper conduct, or by any accident or disease incurred previous to joining the Amalgamated Association of Street and Electric Railway Employees of America, or while on duty as a volunteer or militiaman, or while incurring unusual risks. Permanent disability is conceived to consist of total blindness, the loss of one or both arms, or any disablement resulting from sudden accident not caused through negligence or through the use of alcoholic liquor.

Sick benefits are regulated entirely by the local division, subject to the provisions of the national constitution that "no benefits shall be paid in any division for the first week's sickness."

Any employee of a street or electric railway company who is of good moral character and is a competent workman and is not engaged in the sale of intoxicating liquors may become a member of the organization, but no superintendent or foreman or officer "having the rules of the railway company to enforce" can acquire membership. Where a member is promoted to such a position he must withdraw from the organization; and no one expelled or suspended from, or rejected by, any local division is eligible to membership in any other. To acquire membership the prospective eligible member must fill out a regular

application blank and have the same certified to by two members in good standing as to the applicant's fitness, and must be examined by a committee of three members and must be elected by a three-fourths vote. If rejected, the applicant has the privilege of renewing his application after three months have elapsed, and if then rejected the local secretary must notify the international president, who in turn must notify all the other locals.

TRADE UNION BENEFITS.

During the years ending April 1, 1902, and April 1, 1903, attempts were made by the international president to secure returns from the various local unions upon the amount of sick benefits paid out by them. Reports were obtained from a majority of the divisions, but not from the entire number. The returns showed that during the year ending April 1, 1902, 45 local divisions paid out \$7,085.13, while during the year ending April 1, 1903, 61 divisions paid out \$8,273.22. The amount of these claims appears thus to be slight; the charge upon the divisions paying benefits averaging only \$135.63 a division per year in 1903.

The death and disability benefits granted by the national union also amounted to but a small sum. There were 35 death claims and 4 disability claims, each for \$75, with the exception of one, which was for \$50; the total costs of these claims being \$2,900. Upon the membership claimed by the union, this amounts to a charge of but little over 4 cents a year.^(a)

The Amalgamated Association of Street and Electric Railway Employees of America has devoted the greater part of its energies to the task of reducing the hours of labor and increasing wages. In both of these endeavors it has been largely successful. It is, of course, impossible to ascribe all the advances which have occurred to the sole agency of union activity. Other factors have contributed to the same result. The increased cost of living within recent years, the augmented profits of the companies, the necessity of attracting to the service a higher grade of employees, and the general prosperity of the country within the last few years have all contributed to bring about the improved conditions. The table which follows, compiled from data furnished by the union, shows the former and present rates of pay of carmen, and indicates the increases which that organization ascribes to the unionization of street railway employees throughout the country.

^aFrom the international president's report at the Eighth Convention of the Amalgamated Association of Street and Electric Railway Employees of America, held at Pittsburg, May 4, 1903.

FORMER AND PRESENT RATES OF PAY OF CARMEN IN VARIOUS CITIES OF THE UNITED STATES AND CANADA.

City.	Former wages per hour (cents).	Present wages per hour (cents).	City.	Former wages per hour (cents).	Present wages per hour (cents).
Oakland, Cal.	21 1st 5 yrs. 22 after 5 yrs.	24.	Bay City, Mich.	13, 14, 15, 16..	15, 16, 17.
Sacramento, Cal.	18 1st 2 yrs. 19 next 3 yrs. 20 next 3 yrs. 21 after 8 yrs.	21 1st 2 yrs. 22 next 3 yrs. 23 next 3 yrs. 24 after 8 yrs.	Carrollton, Mich.	18.....	20.
San Francisco, Cal.	22½	25.	Detroit, Mich.	21.....	23½.
San Jose, Cal.	\$1.50, \$1.55, and \$1.65. (a)	\$1.65 and \$1.75. (a)	Jackson, Mich.	15.....	17 1st yr. 17½ 2d yr. 18 3d yr.
Colorado Springs, Colo.	17½ to 22½	20 1st yr. 22½ 2d yr. 25 3d yr.	Mount Clemens, Mich.	20.....	22.
Danbury, Conn.	18.....	20.	Owosso, Mich.	12½	15.
Meriden, Conn.	18½	18 1st yr. 18½ 2d yr. 19 next 3 yrs. 20 after 5 yrs.	Port Huron, Mich.	15.....	17.
Alton, Ill.	15, 12½ (b) ..	18½	Saginaw, Mich.	16½	19.
Aurora, Ill.	16½, 18, and 20	18 and 22.	Ypsilanti, Mich.	15 1st 3 mos. 18 2d 3 mos. 20 2d 6 mos. 21 after 1 yr.	18 1st 3 mos. 20 2d 3 mos. 22½ after 6 mos.
Belleville, Ill.	20.....	21.	Albany, N. Y.	18½ to 20.....	20.
Bloomington, Ill.	\$40 c 1st 6 mos. \$42.50 c 2d 6 mos. \$45 c 2d and 3d yr. \$50 c after 3 yrs.	15 1st 6 mos. 16 2d 6 mos. 17 after 1 yr.	Elmira, N. Y.	18½ to 20.....	20.
Chicago, Ill.	21.....	24.	Glens Falls, N. Y.	15 1st 3 yrs. 17½ after 3 yrs	17 1st 2 yrs. 19 after 2 yrs.
	17½	18 1st 6 mos. 21 after 6 mos.	Ithaca, N. Y.	12½ to 16.....	13 to 18.
	21.....	24.	Lansingburg, N. Y.	18½ to 20.....	20.
	18 1st yr. 19 2d yr. 20 after 2 yrs. 17, 20, 21, and 23.	19 1st yr. 20 2d yr. 21 3d yr. 18.	Oswego, N. Y.	15.....	15 1st yr. 17 after 1 yr. 15.
Elgin, Ill.	16½	18½	Poughkeepsie, N. Y.	12 and 13 (f) .. 15 and 16 (e) ..	16 1st 6 mos. 17½ 2d 6 mos.
Joliet, Ill.	15, 16, and 17	17, 18, and 20.	Rochester, N. Y.	14 1st 3 mos. 16 next 9 mos 18 after 1 yr.	17½ 2d 6 mos. 19 after 1 yr.
Streator, Ill.	15.....	16.	Charlotte, N. C.	8, 9, and 10.....	8, 9, 10, and 11
Venice, Ill.	17½	20.	Akron, Ohio.	16 1st yr. 17 2d yr. 18 3d yr.	18 1st yr. 19 2d yr. 20 3d yr.
Anderson, Ind.	15 and 16 ..	15 1st 6 mos. 17 2d 6 mos. 18 2d yr. 18½ 3d yr. 19 4th yr. 20 after 4 yrs.	Chagrin Falls, Ohio. Cleveland, Ohio...	18 and 20..... 18 1st yr. 20 2d yr. 21 after 2 yrs.	19, 20, and 21. 20 1st yr. 22 2d yr. 23 3d yr.
Marion, Ind.	15 and 16 ..	15 1st 6 mos. 17 2d 6 mos. 18 2d yr. 18½ 3d yr. 19 4th yr. 20 after 4 yrs.	East Liverpool, Ohio.	18 1st yr. 20 after 1 yr.	20 1st yr. 22 after 1 yr.
Muncie, Ind.	16 1st 6 mos.. 17 2d 6 mos.. 18 after 1 yr.	16 1st 6 mos. 17 2d 6 mos. 18 2d yr. 18½ 3d yr. 20 after 4 yrs.	Ironton, Ohio	15.....	16.
Vincennes, Ind.	8.....	10.	Lima, Ohio	12 (f) .. 14 (e) ..	17.
Burlington, Iowa.	11 (b) and 12.	12½-13½ 1st yr. 15 after 1 yr.	New Philadelphia, Ohio.	15 1st yr. 17 after 1 yr.	17 1st yr. 17½ 2d yr. 18 3d yr.
Ottumwa, Iowa	13½ (e) .. 10 (f) ..	15. (e) 12. (f)	Steubenville, Ohio.	19.....	20.
Louisville, Ky.	17½	17½ 1st 2 yrs. 18½ after 2 yrs.	Youngstown, Ohio.	18.....	19 1st yr. 20 after 1 yr.
New Orleans, La.	13½	20.	Zanesville, Ohio...	13½	16½.
Westfield, Mass.	17½	20.	Portland, Oreg.	18½ 1st and 2d yrs.	20 1st and 2d yrs.
Worcester, Mass.	20 1st yr. 22 after 1 yr.	20 1st yr. 21 2d yr. 22 3d and 4th yrs. 23 5th-7th yrs. 24 8th-10th yrs. 25 after 10 yrs.	Bridgeport, Pa.	20 after 2 yrs.	22 after 2 yrs.
			Butler, Pa.	16½	18.
			Easton, Pa.	15.....	15 1st yr. 17½ 2d yr. 18½ after 2 yrs.
				16 1st yr. 17 2d yr. 18 3d yr. 19 4th yr. 20 after 4 yrs.	18 1st yr. 19 2d yr. 20 after 2 yrs.
			Girardville, Pa.	15.....	16½.
			Harrisburg, Pa.	12½ 1st 6 mos. 13½ 2d 6 mos. 15 2d, 3d, and 4th yrs. 16½ after 4 yrs.	15 1st 6 mos. 16½ 2d 6 mos. 17½ 2d and 3d yrs. 18½ after 3 yrs.
			Hazleton, Pa.	15½ to 17½ ..	\$1.70 to \$1.75. a
			Meadville, Pa.	10 1st 3 mos.. 12½ up to 1 yr. 15 after 1 yr.	15 1st 6 mos. 16 2d 6 mos. 17 2d yr. 18 after 2 yrs.

a Per day.

b Extra men.

c Per month.

d On suburban lines.

e Motormen.

f Conductors.

g 11 hours per day.

h 10 hours per day; same pay as for 11 hours.

FORMER AND PRESENT RATES OF PAY OF CARMEN IN VARIOUS CITIES OF THE UNITED STATES AND CANADA—Concluded.

City.	Former wages per hour (cents).	Present wages per hour (cents).	City.	Former wages per hour (cents).	Present wages per hour (cents).
Newcastle, Pa.	15 1st 6 mos. 18 2d 6 mos. 19 after 1 yr.	18 1st 6 mos. 19 2d 6 mos. 20 after 1 yr.	Huntington, W. Va.	15.	17.
Pittsburg, Pa.	20.	22 1st and 2d yrs. 23 3d yr. 24 4th yr.	Wheeling, W. Va. ..	19.	20.
Pottstown, Pa.	14.	16.	New Westminster, B. C.	20 1st yr.	20 1st yr.
Seranton, Pa.	15 1st 6 mos. 16 2d 6 mos. 17 2d yr. 18 3d yr. 19 4th yr. 20 after 4 yrs.	18 1st yr. 19 2d yr. 20 after 2 yrs.		21 2d yr.	22 2d and 3d yrs.
Shamokin, Pa.	12.	14 and 15.	Vancouver, B. C. ...	20 1st yr.	20 1st yr.
Washington, Pa.	15.	17½.		21 2d yr.	22 2d and 3d yrs.
Williamsport, Pa. ..	15.	16½.		23 3d yr.	23 4th yr. 25 after 5 yrs.
Chattanooga, Tenn.	14.	15.	Victoria, B. C.	20 1st yr.	20 1st yr.
El Paso, Tex.	14½.	16.		21 2d yr.	22 2d and 3d yrs.
Houston, Tex.	14 1st yr. 15 2d yr. 16 3d yr. 17 4th yr. 18 after 4 yrs.	18 1st yr. 19 2d yr. 20 after 2 yrs.	Winnipeg, Mani- toba.	22 3d yr.	23 4th yr. 25 after 5 yrs.
San Antonio, Tex. ..	16½.	16½ 1st 6 mos. 18½ 2d 6 mos. 20 after 1 yr.		15 1st yr.	15 1st 6 mos.
Waco, Tex.	12½.	14.		16 2d yr.	17 2d 6 mos.
Montpelier, Vt.	14½.	18.	Hamilton, Ont.	15.	15 1st yr. 16 2d yr. 17 3d yr. 18 after 3 yrs.
W. Rutland, Vt.	14½.	18.			15 1st yr. 16 2d yr. 17 3d yr. 18 after 3 yrs.
Richmond, Va.	16½ (a) 14½ (b)	16½, 17½, 18½.	Toronto, Ont.	15 1st 2 yrs. ... 17 3d to 5th yrs. 18 after 5 yrs.	18 1st yr. 20 after 1 yr.
			Windsor, Ont.	12.	16.

a Motormen.

b Conductors.

INDUSTRIAL CONFLICTS IN THE STREET RAILWAY SERVICE.

Street railway strikes have in a large number of cases been aided to a considerable extent by the sympathy of the public. The street car conductors and motormen are in the public eye, and especially in towns of small size they are personally acquainted with the people who ride on their lines, particularly where these lines run through workingmen's districts. At all times the conductor finds a ready ear for any complaints, whether justified or unjustified, and where a strike or a lockout occurs, the great majority of people in the community are personally acquainted with one or more men involved in the trouble.

The violence which has marked many of the recent street railway strikes is to be attributed in large measure to this fact. The members of the trade unions are less apt to indulge in acts of violence than are irresponsible sympathizers without direct interest in the controversy. The possibility of crippling the line of a street railway by various devices more or less generally known, or of impeding its traffic by obstruction by teamsters and others, render a resort to violence of this sort much easier than in the case of a factory strike, where the

doors may be locked and guarded. In many cases, moreover, violence is induced not merely by sympathy with the men, but also by direct antipathy to the company.

The influence of public sympathy or antipathy upon the success or failure of street railway strikes depends largely upon the size of the city and the conditions under which the street railway franchises are held. Where the city is of moderate or small size, say, of 100,000 inhabitants or less, the boycott of an unpopular road by citizens may lead to the infliction of considerable harm upon the company. In a number of strikes where the community believed that the company was at fault, a boycott of this sort, coupled with an obligation on the part of the company to run its cars, whether full or empty, compelled the company to yield to the strikers. In cities of greater size, however, where the distances are great and the people must ride whether they will or not, such a successful boycott is practically impossible. With the growth of large cities the tendency in street railway transportation is toward a continuous lengthening of the average trip, and it is impossible for the ordinary workingman to walk 4 or 6, or, it may be, 8 miles to his work in order to show his sympathy with striking street car men. As long as the street car service of our cities was in the hands of a number of competing companies, such a boycott might have been effectual, but at the present time, with the amalgamation of formerly competing lines, the only alternative is to ride on the lines of a single company or to walk. The few strikes in large cities during the last ten years have shown the utter inadequacy of any supplementary or alternative means of city transportation. It is only where political or other pressure has been brought to bear upon street railway companies that street car strikes in very large cities have been successful.

Strikes upon street railways differ from industrial conflicts in ordinary manufacturing establishments in the manner in which they affect the public interest. The injury inflicted in an ordinary strike is principally suffered by the direct combatants—the employer and the striking wage-earners. In the case of the street railway, however, the main burden is borne by the community. The loss of wages resulting from a month's shut down of the street and electric railways of New York City would not absolutely impoverish the railway employees, nor would it permanently affect the value of railway securities. The effect of such a shut down, however, upon the prosperity of the city would be almost incalculable. The condition of affairs that would result from a complete cessation of street railway transportation in any large city is almost inconceivable.

As a consequence the public is deeply interested in preventing strikes upon street railways. The larger the city the greater the necessity of peace. In places of 100,000 or less there is always a

possibility of walking or of improvising other means of transportation. The utter impossibility of effective communication in a city of a million inhabitants without the free and uninterrupted use of the cars has brought public sentiment to bear strongly upon the parties to street railway strikes, and has in many cases effected the amicable adjustment of outstanding difficulties.

According to the report of the Amalgamated Association of Street and Electric Railway Employees, the number of strikes in which the organization was involved has decreased in proportion to membership. The policy of the union, it is claimed, is to avoid strikes. "The decrease of strikes in the past two years is due to two causes. One is that a great number of the companies have come to a better understanding as to the aims and objects of our association. The other one is the strict enforcement of our laws and following that policy of letting no strike take place until every other means has been exhausted and arbitration refused by the companies, and, upon the question of strikes I would recommend that we maintain the same policy in the future that we have maintained during the past two years, and that no strike be sanctioned or allowed until after all constitutional requirements have been carried out and arbitration has been rejected by the companies."

ARBITRATION.

The attitude of the national union toward arbitration has within the last year or two been increasingly favorable. Whatever the cause for this, there can be no doubt that the union feels that in the majority of cases it can successfully resort to this method of settling controversies. According to the statement of President Mahon, of the Amalgamated Association of Street and Electric Railway Employees of America, there was a time not many years ago when wages were so low as to be incompatible with the maintenance of a decent standard of living. Until the living wage was obtained the union officials believed that the strike was the only available means of obtaining justice. The union officials now believe, however, that this living wage has been obtained, and therefore "we have passed beyond the point of fixing wages by strikes." The proper method of arbitration is held to be a meeting of representatives of both sides, with a third arbitrator, with a presentation of figures showing the standard of living of the employees of the companies, and of wages and of the earnings of the company.

This favorable attitude of the trade union toward arbitration was illustrated in the case of the Chicago situation. During the early months of 1902 there was considerable friction between the officers of the Chicago Union Traction Company and the Amalgamated Association of Street and Electric Railway Employees on the ground of an

alleged discrimination by the company against members of the organization. As a result an agreement was drawn up and signed by the officials of the company and of the labor organization by which the company agreed not to oppose the further organization of employees, and also agreed to treat with committees of the union on grievances, and, in the case of failure to adjust such grievances satisfactorily, to refer the matter to arbitration. The efficacy of this plan of settling disputes without recourse to strikes was demonstrated in July when a demand was made by the union for a considerable increase in wages. Upon the failure of the parties to the controversy to agree upon a mutually satisfactory basis of settlement the case was referred to arbitrators, each side appointing a well-known lawyer and these two arbitrators appointing a third. The arbitrators, consisting of W. J. Onahan, Clarence S. Darrow, and Wallace Heckman, agreed on November 3 on findings, which increased the wages of motormen, conductors, and gripmen and regulated the wages for most of the men in the service of the company. The arbitrators further found that there had been no discrimination against members of the union and recommended the abolition of the benevolent association of the company, as tending "to create inharmony and dissatisfaction among the men" and as injuriously affecting "the efficiency of the service." It further recommended that as a result of this dissolution the company should be released "from the payment of any death, sickness, or accident benefits on account of any contract with their employees for such society."

Perhaps the most important instance of arbitration in the street railway industry of the United States was that involving wages and hours of labor upon the street car systems of San Francisco. During the years preceding 1902 18 separate street car lines had been incorporated in San Francisco, but these had gradually come together and were finally merged, with the exception of three companies, into the United Railroads of San Francisco. The merger of the companies led at the same time to a combination or unionization of the employees of the former lines. A strike occurred which had for its object the reinstatement of men alleged to have been unjustly discharged, for an increase of wages from 22½ cents to 25 cents an hour, a change in the time cards with the purpose of reducing the normal working day, and the recognition of the union. As a result of the strike, which was won by the men, all these demands except the last were granted, and the recognition of the union was itself subsequently conceded.

During the following year, however, further agitation was carried on, and in March, 1903, new demands were made upon the company, and a strike was threatened. Neither the street-car company nor the men, however, desired to submit their differences to the arbitrament of a strike, and as a consequence arbitration was resorted to. Repre-

sentatives of both sides met and settled all questions except those of wages and hours of labor, and these were referred to representatives of both parties and to Mr. Oscar S. Straus, of New York, second vice-chairman of the National Civic Federation. The interests involved were large and important, and it was felt by both sides that the arbitration would in all probability set a precedent for the settlement of future controversies. The utmost pains were taken to present the case of both sides with the greatest fullness, and large sums of money were spent in the collection and collation of testimony and of statistical evidence.^(a)

EMPLOYEES' BENEFIT ASSOCIATIONS.

One of the most interesting developments in the relations between employers and employed in the street railway industry is the growth of benevolent associations. The primary object of these organizations appears to be the building up of relations of friendship and mutual confidence between the officers of the railroads and the men under their charge. As a general rule the street railway companies themselves contribute a certain proportion of the necessary capital, or pay for the services of an official, or grant free use of rooms in stations or elsewhere for the use of the employees. The amount contributed by the street railway companies varies in different cities, though it is almost always much smaller than that contributed by the men. There is also a considerable variance in the amount of control exercised by the company over the work of the association as well as in the amount of direct active interest in the work of the men. In some cases the attempt is made to have the officials and workmen mingle on equal terms at the meetings of the association, while in other cases it is felt by the officials of certain companies that the presence of officers of the road tends to embarrass the men and prevent them from holding meetings as they will.

These employees' associations, even when formed at the instance of the officials of the companies, seem to meet with approval among certain sections of the men. Many men, on the other hand, oppose associations in which the employers take part, in the belief that they are aimed directly at the organization of employees into labor unions, and are intended to prevent the growth of the latter. The attitude of

^aThe evidence so obtained, as presented in the testimony and as summarized in the briefs of the attorneys for the men and the company, respectively, furnishes a fund of information superior both in quality and greater in quantity than that of any other nonofficial investigation on street railway labor. The statistics included investigations of the cost of living and rates of pay upon other lines, the system and methods of payments, and a great variety of other matter. This testimony furnishes, therefore, a vast amount of information to anyone who desires to know the street railway conditions not only of the city of San Francisco but of the entire country.

these opponents of associations outside of the labor union is based upon a conviction that organizations among workingmen should grow up spontaneously and without the assistance, participation, or encouragement of the employers. They feel that the acceptance of gratuities by the employees, either individually or collectively, tends to bind them unduly and prevent their taking independent action when necessary.

One of the typical employees' associations is that existing among the wage-earners of the Brooklyn Rapid Transit Company. Upon the formation of this company by the consolidation of formerly existing street railways, an attempt was made to bring together the men from the different lines and to make them acquainted with one another. Baseball teams were organized from different parts of the new system, and several of the stations were equipped with billiard and pool tables, shuffleboards, bowling alleys, and reading rooms, in order to permit the men to entertain themselves during the period when they are obliged to remain about the station during their leisure time. This installation was partly at the instance of the company and partly at that of several directors. Under the guidance and advice of the officials of the company, an organization was then formed intended to provide recreation for the men and the payment of benefits. The benefits are either medical attendance, a reduced price on medicines, a sick benefit amounting to \$1 per day, and a death benefit of \$150. The initiation fee was fixed at \$1 and the annual dues at \$6.

Upon the organization of the association, the Brooklyn Rapid Transit Company contributed the sum of \$2,000, and agreed permanently to pay the salary of the secretary. The company further agreed to equip local clubrooms in the various depots and terminals and to maintain them for the use of the members.

The membership of this association rapidly rose, and within six months of organization it had 3,000 members. At the close of the first six months there was a cash balance in the treasury of \$4,000 after deducting the expenses of organization, the current charges, as well as the sums devoted to the payment of sick and death benefits.

According to the third annual report of the International Railway Employees Association, of Buffalo, dated November 1, 1903, the membership of that organization had increased by 190 members during the 13 months from October 1, 1902, to November 1, 1903. What strikes one as peculiar in these figures is the fluctuating character of the membership. During this period of 13 months, 727 new members were admitted and 537 members left. Of these, 10 died, and 527 were dropped from the roll.

The total income during the year was \$9,873, of which about 7 per cent was from the net proceeds of a ball, 1 per cent from interest and from the use of toilet supplies, and the rest from dues and initiations.

The principal disbursement of the organization was for sickness. The total disbursements were \$9,931, or \$58 over the income. Of these disbursements, 64 per cent was paid in sick benefits, 14 per cent for death benefits, and 2 per cent for printing and stationery.

The board of trustees of the association believe that these figures are abnormal, owing to the prevalent sickness during the year, and they point also to what is considered a high death rate of 10 persons in 13 months. As this represents merely a death rate of less than 8 per thousand per year, and this death rate is apt to increase with the increasing age of the members, there would appear to be no good reason to believe that the future death benefits would make smaller inroads upon the income than did those of the past year.

The Louisville Railway Relief Association was organized on February 10, 1900, for the purpose of assisting members who by sickness or other disability become incapacitated, and for the payment of death benefits. All employees of the Louisville Railway Company over 16 and under 45 years of age were made eligible for membership, and all men under 60 years of age employed by the street railway company at the time of the organization of the association were also held to be eligible. It was provided that no employee of the company might become a member unless his daily wages amounted to at least \$1.50 per day.

The benefits paid by this organization amount to 90 cents per day for each day after the first seven days of illness, but after six months of total disability this rate of payment is reduced to 50 cents per day. The payment is only made upon the certificate of the association's physician, and it is not continued when the member receiving the sick benefit frequents saloons or uses intoxicating liquors or when the sickness or disability arises from the doing of unlawful acts or from immorality or from the intemperate use of stimulants or narcotics. In the case of death not due to immoral acts or at the hands of justice, the heirs of the member receive the sum of \$150. For the death of a member's wife the sum of \$50 is paid, and for the death of a member's child the benefit is \$25.

The annual reports of the Louisville Railway Relief Association show an excess of income over expenditure. In 1900 the receipts were \$3,522, including gifts of \$1,500, and the total disbursements \$1,581.55. In 1901 the total receipts were \$2,788.30 and the total disbursements \$2,305. The balance on hand on January 1, 1902, amounted to \$2,423.75.

During the year 1901, the death benefits amounted to \$600, payments being made for the death of 1 member, 3 wives of members, and for 12 children of members. The sick benefits ranged from \$160.80 in the case of one man to 90 cents in the case of others.

The table of sickness presents certain interesting features. Payment is not made for the first 7 days of sickness, but for the time thereafter. There were 3 members receiving benefits for 1 sick day, 13 for 2 days, 4 for 3 days, 6 for 4 days, 6 for 5 days, 7 for 6 days, 9 for 7 days, 2 for 8 days, 7 for 9 days, 6 for 10 days, 3 for 11 days, 1 for 12 days, 1 for 14 days, 3 for 15 days, 2 for 16 days, 1 for 19 days, 1 for 20 days, 5 for from 21 to 30 days, 4 for from 31 to 40 days, 3 for from 41 to 60 days, 6 for from 61 to 80 days, and only 1 member for over 80 days. In the year 1900 there was only 1 member who was sick over 80 days, and only 6 members who were sick 30 days or over.

Other relief associations have organized upon a similar basis. Thus the Cincinnati, Newport and Covington Mutual Aid Association has the same object and practically the same officers as the other organizations. The initiation fee is \$1; the monthly dues 25 cents. A special assessment of \$1 is made for the death of each member, and the dues are supplemented by fines. Members in good standing receive \$5 a week in case of sickness or disability for each week after the first two weeks from the day of notifying the association of illness. In case of the death of a member, his heirs receive \$1 from each member of the organization, \$50 of this being paid to the legal heirs immediately upon proof of death, while the remainder is paid thirty days after notification. The organization is open to any white person between the ages of 21 and 45 in the employ of the Cincinnati, Newport and Covington Street Railway Company, provided he passes a physical examination by a physician designated by the association. A proposed member may be blackballed for sufficient reasons.

The Metropolitan Mutual Aid Association of the Boston Elevated Railway Company, organized in 1882, also differs but slightly from the ordinary organizations of this sort. This association is incorporated under the laws of the State of Massachusetts. It pays to persons disabled or sick, after the expiration of one week from the date of the beginning of such sickness or disability, the sum of \$7 a week, but does not pay any member for a longer period than 10 weeks in any one year. The beneficiary of a deceased member receives the sum of \$1,000. Upon the death of a member the association furnishes a hack, and the president is authorized to procure flowers. The funds of the organization are raised by assessments of 50 cents each. Of these assessments as many shall be made as the board of directors may deem necessary, with a proviso that not more than three assessments for the expense fund shall be called in any one year.

The Boston Elevated Mutual Aid Association is a mutual aid organization of the employees of the Boston Elevated Railway Company, in which members are united for protection against sickness or disability. It is conducted by the employees, but its running expenses are paid by the company. The dues of the association are 10 cents

per calendar week, and the benefits amount, in case of illness not due to vicious habits, to \$7 per week, provided the illness is not one which the applicant had at the time of joining the association. No member may receive a benefit for the first week of his illness, nor for more than 14 weeks' benefit in any 12 months, nor more than \$98 for any one illness. Illness is held not to be terminated until a member can return to work and is able to labor for 2 full consecutive days without a relapse. Sick committees are appointed to prevent fraud. The initiation fee is \$1.

During the year 1900 the receipts of the association from all sources were \$16,221 and the expenses \$14,648, of which \$9,470 were in the form of benefits. Of the receipts \$2,108, or a little over one-eighth, were contributed by the Boston Elevated Railway Company.

The Fitchburg and Leominster Street Railway Relief Association of Fitchburg, Mass., admits all regular employees of the company to membership. It charges 50 cents per month dues, pays \$5 per week for sickness or bodily injury for the first week and \$10 for each succeeding week, but limits the entire liability to \$50. In case of sudden death the family or beneficiaries of the deceased receive the sum of 5 weeks' benefit. A special assessment of one month's dues is made when the fund amounts to less than \$100.

The Scranton Railway Beneficial Association pays to members, who are totally unable to work by reason of injuries, \$4 for each week, and after 6 months the payment is reduced to one-half, and after 1 year the payment ceases. For sickness it pays \$4 a week after the first week, provided the sickness entirely incapacitates the member for work. No member may receive benefits for more than 13 weeks in any one year. The association further pays \$50 for the death of a member, and \$25 for the death of the wife of a member, and \$25 for the death of the mother of an unmarried member. Contributions, assessments, and dues of members are paid in advance and are deducted by the Scranton Railway Company from the wages due members. The dues of members are 25 cents per month, but an assessment of 25 cents is levied on the death of each member and one of 25 cents upon the death of the wife of a member or of the mother of an unmarried member. No assessments are made when the unexpended balance in the treasury amounts to \$4 per member.

The dues of the Street Railway Employees' Mutual Protective Association of Cincinnati, Ohio, organized in 1887, are \$3 per year, payable in three installments. The initiation fee is \$1, together with \$1 advance death benefit and regular dues in advance. The sick benefits amount to \$7.50 a week for the first 16 weeks, provided the sick person has been a member in good standing for 3 months. After 16 weeks the sum of \$3.75 a week is paid for a further 16 weeks, and \$2 per week thereafter. Great care is exercised to prevent abuses

of this privilege, many safeguards being placed upon the expenditure of the funds. The secretaries and treasurer receive \$2 per meeting, and the trustees \$12 per year for their work. The total assessment equals \$1 per member. The death benefit amounts to \$800, to be paid out of the \$1 assessment, and at no time shall the amount in the treasury be less than \$800.

Among the employees' benefit associations may be reckoned the Young Men's Christian Association among street railway men. This organization has spread widely among steam railroad employees and has exerted a strong influence in raising the moral tone of the men and in providing them with sane and wholesome amusements. It is only within the last 2 years that the association has begun its work among the street railway employees, but its supporters already claim for it a fair degree of success.

The Young Men's Christian Association of the Rochester Street Railway was inaugurated in the year 1902. During the spring of that year it was the intention of the directors of the street railway to equip rooms in the city with the idea of keeping the motormen and conductors, when not at work, away from saloons, gambling houses, etc. Upon the instance of the Young Men's Christian Association it was decided to open the rooms and to organize a Street Railway Young Men's Christian Association, which was done on the 4th of August, 1902. This was the first Young Men's Christian Association organized among street railway employees.

The first annual report of this association describes in detail the rooms, with photographs of the offices, game rooms, bowling alleys, barber shops, etc., and gives statistics of the building and of its uses. During the year there was an average daily attendance of 200 members. There were held 43 religious services with an average attendance of 25, while 6 concerts were given, 1,406 baths taken, \$600 obtained from the use of the billiard rooms (at 1½ cents a cue), and \$472 from the pool rooms. The company appropriated \$500 toward the maintenance of the rooms, and lighted and cleaned them at its own expense.

According to the rules of the organization, any employee of the Rochester Street Railway Company, irrespective of religious belief, may join the association. There is no initiation fee and the dues are \$1 per year, which may be paid in ten weekly installments. The membership ticket is honored, and serves as an introduction to any one of the 200 railroad Young Men's Christian Associations throughout the United States. The privileges of the rooms are under certain conditions extended to outsiders.

The greater proportion of the expenses of this organization appears to be borne by the company, especially if interest on the original investment be taken into account.

The Young Men's Christian Association of the Brooklyn Rapid Transit Company opened on July 7, 1903, a building which cost the company \$40,000. The plan to construct this building was first advanced in 1898, and received the support of the company. The building is 60 by 170 feet, has three stories in front and two in the rear, and contains bowling alleys, tub and shower baths, lockers, lavatories, auditorium, gymnasium, billiard room, reading room, secretary's office, and three class rooms. The auditorium has a capacity of 400, which may be increased to 1,000 by the opening of sliding doors.

A physical culture director supervises the gymnasium, and instruction is given in the class rooms in English, penmanship, arithmetic, electricity, mechanical drawing, and music. The Brooklyn Public Library has placed 1,000 books in the building, and 15 small portable libraries are sent from there to the various power houses, shops, and depots of the system.

ACCIDENTS.

The statistics of accidents on street railways, according to an investigation made by the Census Bureau for the year 1902, show that in that year 1,218 persons were killed and 47,429 persons injured on the street railways of the United States. Of the total number of persons killed 265 were passengers, 122 employees, and 831 "others," the persons included under "others" being pedestrians, people on wagons, bicycles, or other vehicles, and all other persons except those employed by the company or riding on its cars. Of the total number of persons injured, 26,690 were passengers, 3,699 employees, and 17,040 "others."

The statistics of persons injured may be entirely disregarded. No uniform basis was established according to which it would be possible to determine what was to constitute an injury, and each company seems to have adopted its own method of reporting injuries. An injury which would be reported for a passenger would not be reported for an employee, and injuries to employees were reported by some companies which by other companies would not be considered as injuries. To indicate this discrepancy it is only necessary to show that, according to the statistics, 101 passengers were injured to each passenger killed, 30 employees injured to each employee killed, and 21 "others" injured to 1 "other" killed. Even for employees themselves there was no uniformity. Thus the New York street railways report less than 2.4 employees injured to 1 employee killed, while the Missouri street railways report 61.2 employees injured per 1 employee killed. In other words, the ratio of injuries to deaths is reported as being 25 times as large on the street railways of Missouri as on the street railways of New York, and a single company in the

city of St. Louis reported injuries to almost 6 times as many employees as all of the street railways of New York combined.

If we disregard the statistics of injuries as being too inexact and inconclusive, and limit ourselves to statistics of fatal injuries, we will find that in many respects street railways are peculiar. Since as a rule the street railway has not its own roadbed, but operates upon public highways, not employees nor passengers but outside persons incur most danger. Of the total number of persons killed by the street railways in 1902, 68 per cent, or over two-thirds, were persons who were neither passengers nor employees, while in the case of the steam railroads the proportion, despite the greater speed at which the trains are operated, is smaller, amounting in 1902 to 61.4 per cent. The number of employees killed also bears a small percentage to the number of passengers. Unlike the steam railroad, the street railway does not endanger the employees much more than the persons riding within the car. While in 1902, 8.6 employees were killed to each passenger killed on steam railroads, but one street railway employee was killed to each 2.2 passengers. In other words, the ratio of fatalities among employees to fatalities among passengers was nearly 19 times as great on steam as on street railways. In the year 1902, the number of employees killed on street railways was one-tenth of the total number of all persons killed.

It can hardly be stated that the death rate from accidents upon street railways is unduly high and the occupation can not be ranked as exceedingly dangerous. The danger to life on the street railways is small as compared with that on steam railroads. In the year 1902, one out of every 401 steam railroad employees and one out of every 135 trainmen were killed, while on street railways the death rate is still only one out of every 1,095, even on the assumption that none of the accidents occurred to clerks or salaried officials. In other words, the chances of being killed is 173 per cent greater for a steam railroad employee than for an employee upon a street railway, and the chance of death for the trainmen employed on the steam railroad is 711 per cent greater than for the average wage-earner employed on the street railways. (^a)

This greater immunity of street car men from fatal or disabling accidents is reflected in the lower rates of insurance which they are enabled to pay. The insurance companies of the United States, as elsewhere, make a special charge for what are termed extra-hazardous risks, among whom are steam railroad men. Brakemen and conductors are considered exceptionally hazardous risks. Thus the brakeman is obliged to pay \$20 per thousand extra, owing to the large risk of accident which he runs. Street car men, on the contrary, according

^a This latter comparison is not entirely unfair, since 60 per cent of the entire body of wage-earners on street railways are either motormen or conductors.

to the testimony of accident insurance men, are considered as first-class risks by the insurance companies, and as a consequence do not pay extra rates. (^a)

LEGAL STATUS OF STREET RAILWAY EMPLOYEES.

The legal protection of street railway employees has usually taken the form of provisions for vestibuling the cars or providing seats for drivers and motormen, for a reduction in the number of hours of work per day, or for the licensing of street railway employees. Laws have also been passed providing for the examination of street railway employees, and for the payment of overtime. The rights and legal remedies open to employees upon street railways have also been secured by laws.

In the following States, Colorado, Connecticut, Illinois, Indiana, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin, laws have been passed providing for the protection of street railway employees. These laws usually take the form of a requirement that the companies provide vestibules or inclosed platforms of a given material, and constructed in a given manner, so as to protect the motormen during the winter months, prohibiting the use during such winter months of cars not built according to the stipulations of these laws, and prescribing a fine or imprisonment for a failure to comply with the law.

The following law, passed February 11, 1901, by the legislature of the State of West Virginia, and approved February 18, 1901, by the executive, is a fair type of the laws passed in the twenty-five States before cited:

Protection of street railway employees—Inclosed platforms.

SECTION 1. From and after the first of January in the year of our Lord 1902, it shall be unlawful for any person, partnership or corporation, owning or operating a street railway in this State, or for any officer or agent thereof having charge or control of the management of such line of railway, or the cars thereof, operating electric, cable or other cars propelled either by steam, cable or electricity, which require the constant services, care or attention of any person or persons upon the platforms of any such car, to require or permit such services, attention or care of any of its employees, or any other person or persons, between the first day of November and the first day of April thereafter of each year, unless such person, partnership or corporation, its officers or superintending or managing agents, have first provided the platforms of said car or cars with a proper and sufficient inclosure constructed of wood, iron and glass, or similar suitable material, sufficient to protect such employees from exposure to the winds and inclemencies of the weather: *Provided,*

^a The rates of insurance of street railway companies may be seen from the classifications issued by the accident insurance companies. Evidence bearing on the rates of insurance of street railway men was adduced by Frederick Bennon and C. B. Sloane, both of whom were engaged in life-insurance business, and who testified in behalf of the United Railroads of San Francisco in their arbitration case.

That such inclosure shall be constructed so as not to obstruct the vision of the person operating such car, or to endanger or interfere with its safe management by the operator.

Sec. 2. From and after January first in the year of our Lord 1902, it shall be unlawful for any person, partnership or corporation, so owning or operating street railways using steam, electric or cable cars, or any managing officer or agent thereof, to cause or permit to be used upon such line of railway, between said November first and April first of each and every year thereafter, any car or cars upon which the services of any employee, such as specified in section one of this act, is required, unless said car or cars shall be provided with the inclosure required by section one of this act.

Sec. 3. Any person, partnership or corporation, owning, operating, superintending or managing any such line of street railway, or managing or superintending officer or agent thereof, who shall be found guilty of a violation of the provisions of section one or two of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty dollars nor more than one hundred dollars; and in default of payment of the same, imprisonment in the county jail in which such conviction is had until such fine shall be paid. Each day that any said person or persons, partnership or corporation, cause or permit any of their said employees to operate such car or cars in violation of the provisions of sections one and two of this act, or cause or permit a car or cars to be used or operated in violation of said section two of this act, shall be deemed a separate offense: *Provided*, That the provisions of this act shall not apply to cars used and known as trailing cars.

It is made the duty of the prosecuting attorney of any county to prosecute upon information.

In ten States, namely, California, Louisiana, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, South Carolina, and Washington, laws have been passed regulating the hours of labor of street railway employees. These laws usually take the form of prescribing a maximum number of hours to be worked and a maximum number of hours within which the hours of work shall be included. They also provide for unexpected contingencies or for legal holidays, when, as a result of unavoidable circumstances, extra work may be required, extra compensation being paid for such work.

In these States it is a misdemeanor for any officer of a street railway company to exact more than a given number of hours from his employees. In some States it was at first held that the right should be conceded to the employee to work a greater number of hours if he so desired, while the law merely fixed the number of hours to be worked in the absence of a definite agreement to the contrary.^(a) The following is the text of act No. 122 of the law of Louisiana as passed in 1886 and amended in 1902 and of part of chapter 1004 of the law of Rhode Island as passed in the year 1902.

LOUISIANA—ACTS OF 1902.

ACT No. 122.—*Hours of labor on street railways.*

SECTION 1. Act No. 95 of the session of 1886, approved July 8, 1886, * * * (shall be) amended and reenacted as follows:

Ten hours labor in twenty-four shall constitute a day's labor in the operation of all street railroads owned or operated by corporations incorporated under the laws of this State, whatever motive power may be used in the operation of such railroads; the said ten hours to be embraced within twelve consecutive hours.

^aThis interpretation, however, which arose in the case of the Rhode Island law of 1902, was subsequently overruled by a decision of the Supreme Court.

Sec. 2. It shall be a misdemeanor for any officer or agent of any street railroad company to exact from any of its employees more than ten hours' labor in the twenty-four, constituting a day and embraced within twelve consecutive hours: *Provided, however,* That in cases of accident, unavoidable delay, or emergency extra labor may be permitted for extra compensation, with the consent of the employee.

Sec. 3. Any officer or agent of any of the said street railroads, who shall have been convicted of violating the provisions of this act, shall be fined not more than fifty dollars, or suffer imprisonment in the parish prison or jail, as the case may be, for not more than two months, or both, at the discretion of the court; said fine to go to the benefit of the public schools as other fines and forfeitures.

Approved, July 8th, A. D. 1902.

RHODE ISLAND—ACTS OF 1902.

CHAPTER 1004.—*Hours of labor of employees on street railways.*

SECTION 1. A day's work for all conductors, gripmen, and motormen now employed or who may hereafter be employed in the operation of all street railways, of whatever motive power, in this State shall not exceed ten hours' work to be performed within twelve consecutive hours. No officer or agent of any corporation operating street cars, of whatever motive power, in this State shall on any day exact from any of its said employees more than the said ten hours' work within the twenty-four hours of the natural day, and within twelve consecutive hours: *Provided, however,* That on all legal holidays, and on occasions when an unexpected contingency arises demanding more than the usual service by such street railway corporation to the public, or from such employees to the corporation, and in case of accident or unavoidable delay, extra labor may be performed for extra compensation; and that nothing herein contained shall affect existing written contracts.

Sec. 2 (as amended by chapter 1045). The true intent and purpose of this act is hereby declared to be to limit the usual hours of labor of the above-mentioned employees of street railway corporations, in the absence of agreement as to such hours between such employees and their employer, to ten hours' actual work a day, to be performed within a period of twelve consecutive hours, whether such employees be employed by the trip or trips, the job, the hour, the day, the week, the month, or in any other manner. But nothing in this act contained shall be construed to forbid or prevent any such employee, being of the age of twenty-one years or upwards, from laboring a greater or lesser number of hours a day, in accordance with his contract so to do; nor to impose any penalty upon any person or corporation for permitting such employees to labor such greater or lesser number of hours in the performance of such contract.

Sec. 3. Any street railway corporation violating any of the provisions of the preceding sections of this act shall be fined not less than one hundred dollars nor more than five hundred dollars, one-half thereof to the use of the complainant and the other half to the use of the State.

Sec. 4. This act shall take effect on the first day of June, A. D. 1902.

Passed April 4, 1902.

Two methods have been used to influence by legislation the nature and conditions of street railway employment. One method has been by direct legislation, covering the hours of labor and the protection of street railway employees. The other has been the insertion of labor clauses in the grants to street railways. This latter method has been used to a greater or lesser extent on European street railways. Thus the franchise for the Paris suburban was given only upon condition that the employees should never be paid less than 100 francs (\$19.30) per month, or less than 5 francs (\$0.97) per day where the work was temporary, that the hours of labor should not exceed ten, that there should be one complete day of rest each week, that a vacation of at least ten days should be conceded each year with full pay, that wages should not cease during the temporary incapacitation of employees through illness nor during the period of recovery from the effects of injuries sustained in the course of employment. The franchise further stipulates that gra-

tuitous medical services and free drugs shall be given to employees, and that the fund required to meet these expenses shall be controlled by representatives chosen by the employees.

American franchises have in no case carried so large a number of conditions or involved the beneficiary in so complex a labor policy. In fact, the majority of franchises in American cities have been granted without the imposition of any obligations toward employees whatsoever.

"A careful though not exhaustive research" by R. V. Ingersoll reveals the granting of but few franchises with labor stipulations. One of these exceptions is that of Detroit, which has a street railway grant containing a ten-hour clause, while a labor clause providing for compulsory arbitration was inserted in a Cleveland franchise. The arbitration clause inserted in the franchise reads as follows:

Whenever any controversy arises between the grantee under this franchise and his employees which interferes or threatens to interfere with the operation of the road, each side of the controversy shall appoint two persons as its representatives, who shall constitute a board of arbitration, whose actions shall be final. If said board fails to agree within 3 days, then the mayor shall become the fifth member of the board, and a majority vote of said board consisting of five members shall be final. No motorman or conductor shall work more than 10 hours within the limits of 14 hours in any 24 hours, except in case of emergency causing obstruction of traffic.

It shall be the duty of the city council to incorporate in every franchise or amended franchise efficient provisions for the compulsory arbitration of all disputes arising between the grantee therein and his, its, or their employees as to any matter of employment or wages, unless upon submission to the electors of the city, a majority of the electors voting upon the question submitted, shall assent to the granting of such franchise without such provision.

There has been some contention in the courts as to whether the labor clauses and franchise grants would be held constitutional by the courts. In a number of cases decisions have been made against the legality of such clauses, but according to Mr. Ingersoll "the courts in most States have said emphatically that any specifications will be upheld whose reasonable effect is to insure greater safety, comfort, or continuity in the transit service."

In several States laws have been passed providing for the exercise of discretion and judgment in the selection of applicants for employment and for their preparatory training. These laws usually provide that the applicants accepted should be capable and shall receive such training as is necessary to protect the lives of the public. Typical of laws of this character is the New York statute (page 2943, Revised Statutes of 1901, third edition), which reads as follows:

Any railroad corporation may employ any inhabitant of the State, of the age of twenty-one years, not addicted to the use of intoxicating

liquors, as a cardriver, conductor, motorman or gripman, or in any other capacity, if fit and competent therefor. All applicants for positions as motormen or gripmen on any street surface railroad in this State shall be subjected to a thorough examination by the officers of the corporation as to their habits, physical ability and intelligence. If this examination is satisfactory, the applicant shall be placed in the shop or power house where he can be made familiar with the power and machinery he is about to control. He shall then be placed on a car with an instructor, and when the latter is satisfied as to the applicant's capability for the position of motorman or gripman, he shall so certify to the officers of the company, and, if appointed, the applicant shall first serve on the lines of least travel. Any violation of the provisions of this section shall be a misdemeanor.

Other laws provide for the recovery by employees on railroad corporations in case of accidents in which the injury has been due to the negligence of a fellow-employee, which laws have in many cases been held to apply to street railway corporations, even though these have not been specifically named. Thus in 1883 the Massachusetts legislature passed "an act fixing the responsibility of railroad corporations for negligently causing death of employees." This act amended the previously existing law so that "if an employee of a railroad corporation being in the exercise of due care, is killed under such circumstances as would have entitled him to maintain an action for damages against such corporation if death had not resulted, the corporation shall be liable in the same manner and to the same extent as it would have been if the deceased had not been an employee." This act, which was approved June 16, 1883, gave to the employee not only the right to sue when the negligence was the act of a fellow-servant, but also confirmed the right of his legal representatives to sue, even though death supervened as a result of the accident.

CONSTITUTIONALITY OF PROTECTIVE LEGISLATION.

The constitutionality of laws regulating the hours of labor of men employed on street railways has been tested at various times, but the opinion at the present time, especially in view of the decision of the United States Supreme Court in the case of *Holden v. Hardy*, referring to the hours of labor in the mines of Utah, seems now to uphold the constitutionality of such measures. In the year 1902 the legislature of the State of Rhode Island enacted a law limiting the number of hours of certain street railway employees to 10 per day, these 10 hours of actual work to be performed within a period of 12 consecutive hours. Thereupon the governor of the State submitted to the supreme court of the State the question as to whether the law was constitutional, with the result that the law was sustained by that body, one judge dissenting.

It was held by the supreme court of the State that such a law relates to the exercise of public franchises on public streets for public accommodation, and that laws made in this manner to affect corporations created by and subject to legislative authority, were amendments to the several charters and could be sustained on those grounds, and were therefore not in conflict with the constitutional provisions of the United States or of the State, providing that no law should be passed impairing the obligation of contracts.

The court further sustained the constitutionality of the law as an exercise of the police power of the State, which it defined as the right inherent in the legislature to control "in all matters affecting public safety, health, and welfare." "It is indefinable," continues the court, "because none can foresee the ever-changing conditions which may call for its exercise, and it is unquestioned because it is a necessary function of government to provide for the safety and welfare of the people." The inevitable sacrifice of private rights in the exercise of the police power is therefore considered by this court as not constituting the ground for declaring the law invalid or unconstitutional.

To support the constitutionality of the law regulating hours of labor of street railway employees, the Rhode Island court referred to the recent decision of the United States Supreme Court in the Utah case (*Holden v. Hardy*, 169 U. S. 18, Sup. Ct., 383), by which the hours of labor in mines were limited to eight hours per day in exercise of the police power of the State. It was decided in this case that this exercise of the police power was not in violation of the fourteenth amendment of the Constitution. The constitutionality of the Rhode Island law was held to be even clearer, because in the case of the Utah mines the law affected cases primarily based on private contracts. "The law," continues the Rhode Island court, "has more clearly such power for the triple reason that it deals with public corporations, the use of a public franchise, and the provision for public safety." It has been held in many cases that any one of these grounds is sufficient to sustain an exercise of the police power.

The objection that such a law, limiting the number of hours which street railway employees may work and restricting the right of the employees to work a longer number of hours if they so desire, infringes the right of contract is also held to be invalid, upon the authority of the United States Supreme Court decision above cited, on the ground that the police power stands above private rights in matters affecting public welfare.

The Rhode Island case being in harmony with the decision of the Supreme Court in *Holden v. Hardy*, seems to establish the legality and constitutionality of such measures, regulating the hours of labor which street railway employees may work, upon the basis of the police power of the State. The law is held to be enacted not merely

nor primarily in the interest of street railway employees, but principally as a necessary protection to the public.

Another phase of the Rhode Island law affecting the hours of labor of street railway employees was also brought up by the letter of the governor to the supreme court. The law provides that "nothing in this act contained shall be considered to forbid or prevent any such employee, being of the age of 21 or upward, of laboring a greater or lesser number of hours a day, in accordance with his contract so to do," nor impose a penalty upon the corporation for permitting him to do so. The governor, therefore, asked whether "there was anything in the provisions of the law" to make it illegal for a street railway corporation to make a contract with its employees to labor more than 10 hours within the 24 hours of the natural day and within 12 consecutive hours, except as provided in said chapter. The court, however, held that such a contract would be illegal.

"The true intent and purpose of this act is to limit the usual hours of labor of the employees of street railway corporations, as aforesaid, to 10 hours of actual work per day, to be performed within a period of 12 consecutive hours." In the face of this expressed intention of the legislature the court holds that no such contract, even if entered upon voluntarily, would be legal.

It is not possible to describe with exactness the legal status of street railway employees owing to the fact that there are many laws applying to employees of steam railroads which in some cases have been held by the court to apply equally to street railway employees, while in other cases a contrary decision has been rendered. It is frequently difficult, if not entirely impossible, to state in advance of, or in the absence of, specific legal decisions, whether a law applying generally to railroad employees applies specifically to street railway employees. There are numerous State decisions upon various laws of this category, but these decisions vary in the different States, the question depending upon the intent of the legislature. A characteristic treatment of this subject is to be found in the decision of the Supreme Court of Georgia in the *Savannah Thunderbolt and Isle of Hope Railway v. Williams*, 43 S. W. Reporter, page 751. In this case, appeal was made by the railway company from an award of damages to a man named Williams, and under certain sections of the Civil Code of 1895 damages were recovered from the street railway under a law which made "railroad" companies liable to one servant for injuries inflicted by a fellow-servant. The sole question at issue was whether a street railway is a railroad within the meaning of the law. The court found that according to the constitution, and the statutes and decisions of the State of Georgia, the word "railroad" was generic and included street railways, narrow gauge railroads, horse car companies, dummy lines, and street railways operated by electricity. The decision as to whether a particular

statute included street railways under the term railroads was, according to the court, to be based upon the language of the statute, from the context, or from the intent of the legislature. In this particular clause it was held, that as in many cases street railroads frequently used steam, that as in many cases they used a motive power capable of generating a speed greater than that of steam, that as the law was used to prevent injuries by the operation of moving trains, and as the law was reenacted at a time when street railways were in use, the well-known conclusion was irresistible that the legislature was satisfied "with the construction which had been placed on the meaning of this word by the courts and was willing to reenact these sections in the right of the expressed or implied definition of the word 'railroad.'" The court therefore held that in obedience to the statute, an employee of a street railway company could recover for injuries inflicted upon him by reason of the negligence of a fellow-employee.

The constitutionality of the law, protecting street railway men in the matter of vestibules, was tested in the Missouri courts in the year 1901.^(a) The street railway companies had urged in several cases, as, for instance, in that of the Albany Street Car Company,^(b) that vestibuling was dangerous to all parties, including motormen, passengers, and conductors, and several reasons were assigned as proof of the impracticability of the plan. The Missouri court, however, declared that the law of March 5, 1897, requiring a screen during winter months, "is not so indefinite as to be inoperative," that the title of the act did not insufficiently indicate the subject matter, that the act "is not special legislation," that the fine of from \$25 to \$100 for each day of disobedience of the law, does not impose "cruel or unusual punishment," that the law does not countervene or conflict with the constitutional provision that "no person shall be deprived of liberty or property without due process of law," these being the grounds upon which the constitutionality of the measure was assailed.

^aState v. Whitaker, 60 S. W. Rep., 1068.

^bStreet Railway Journal, March 16, 1901, pp. 349, 350.

THE STATE COOPERATIVE ACCIDENT INSURANCE FUND OF MARYLAND.

The determination last year by the Baltimore court of common pleas of the unconstitutionality of the act entitled "Employers and employees' cooperative insurance and liability," passed by the Maryland legislature at its session in 1902, terminated the operation of a law which was unique in its provisions, so far as this country is concerned, while its resemblance to laws of European countries of similar intent was hardly more than suggestive. This statute extended the liability of certain classes of employers to cases where employees were injured by the negligence of a fellow-servant, and to cases where the injured employee negligently contributed to his own injury. Its main feature, however, was the establishment of an insurance fund to be paid into the hands of the State insurance commissioner and administered by him.^(a)

The statute was restricted in its application to mining, quarrying, steam and street railway service, and to municipalities engaged in the construction of sewers or other excavations or physical structures.

After a reference to the existing provisions of law for the recovery of damages for injuries or for the death of an employee, the act then added the liabilities mentioned above. The next section provided that any employer or employing company might be exempt from the liabilities mentioned by making certain annual payments in monthly installments for the maintenance of an insurance fund. The amount of this installment varied with the industry, being \$3 per year for each employee of a steam railroad, \$1.80 per year for each employee in a mine or quarry, and 60 cents per year for each employee of a street railway or trolley road. The amounts payable by municipalities were to be fixed by the insurance commissioner. The commissioner also had plenary power to settle disputes arising in connection with the administration of this law, and to regulate from year to year the amounts of the premiums to be paid in order to maintain the fund and make the payments indicated. An amount not exceeding one half the premiums might, after notice to the employees affected, be deducted by the employer from their wages.

^aFor a copy of the law in full see Bulletin of the Department of Labor, No. 45, pp. 406-408.

Exemption from liability for damages for injuries to employees could also be procured by an employer or employing company on a showing, satisfactory to the insurance commissioner, that better provisions for the compensation of injured workmen were otherwise arranged for.

From the fund formed as above, the sum of \$1,000 was to be paid to the heirs or personal representatives of any employee whose death resulted from accident in the course of his employment, after the commissioner had satisfied himself that the case was within the provisions of this law. No provision was made for nonfatal injuries, nor for a review by any court of the action of the commissioner.

The law was in operation from July, 1902, to April, 1904, when it was declared unconstitutional.^(a) Immediately following this action by the court, the insurance commissioner notified the companies which had been making payments to the fund that he could receive no further sums on that account, and presented a report to the governor of the State, in which he said: "This law was in operation for nearly two years. We received \$5,313.90, and paid five death losses amounting to \$5,000, and the entire expense was only \$300, about 6 per cent of the amount paid in. It can be readily seen what an advantage it had over ordinary insurance companies, where the expenses are scarcely ever below 50 per cent of the premium receipts." In another part of the report he says, "I believe the law was a good one, both for the company and the employee."

But 9 companies availed themselves of the provisions of the law, as shown in the following table, which presents the number of months during which each company contributed, the average number of employees for the same period, and the total payments made:

NUMBER OF MONTHS CONTRIBUTIONS WERE MADE, AVERAGE NUMBER OF EMPLOYEES, AND TOTAL PAYMENTS MADE BY EACH COMPANY.

Name of company.	Number of months.	Average number of employees.	Total payments.
United Railways and Electric Co., Baltimore, Md.	22	2,891.6	\$3,180.80
Cumberland and Westernport Electric Rwy. Co., Cumberland, Md.	12	57.7	34.60
Schwind Quarry Co., Baltimore, Md.	16	104.3	250.20
McClenathan Granite Co., Port Deposit, Md.	22	349.3	1,152.60
Cardiff Peach Bottom Slate Co., Cardiff, Md.	21	33.1	104.40
Peach Bottom Slate Co., Delta, Pa. (a)	22	79.6	262.80
Excelstor Slate Co., Delta, Pa. (a)	21	35.3	111.15
Peerless Slate Co., Delta, Pa. (a)	22	27.7	91.50
Proctor Slate Co., Delta, Pa. (a)	15	55.9	125.85

^a Delta is on the State line, the quarries being on the Maryland side, while the post-office of the village is in Pennsylvania.

From this table it appears that 4 of the companies were contributors during the entire 22 months of the existence of the fund. Of the

^a For a presentation of the case see pp. 689 and 690, below.

others, 2 began payments in the second month, 1 in the third, 1 in the seventh, and 1 in the eighth. But 1 company, the Cumberland and Westernport Electric Railway Company, withdrew from the plan, it making its last payment in August, 1903.

In view of the discretionary power conferred upon the commissioner to regulate rates, it may be of interest to note that the statutory rate of 5 cents per month for street railway employees and of 15 cents per month for quarry employees maintained the fund in the face of the various benefit payments made as follows:

STATEMENT OF THE INSURANCE FUND BEFORE AND AFTER PAYMENT OF BENEFITS.

Date of payment of benefit.	Amount of fund.	Balance after payment.
November 10, 1902.....	\$1,124.05	\$124.05
July 13, 1903.....	2,098.75	1,098.75
August 5, 1903.....	1,365.25	865.25
March 13, 1904.....	2,084.85	1,084.85
April 15, 1904.....	1,311.90	311.90

No note is taken of administrative expenses, as they are reported only in gross. Obviously, however, the fund was not at any time exhausted, as the total cost of administration was but \$300. The remainder here shown is \$2 less than the amount reported elsewhere, but is in agreement with the detailed statement of contributions.

Of the amounts distributed, \$3,000 were paid to heirs of employees of the United Railways and Electric Company, the largest contributor to the fund. It will be observed that these payments practically offset the amount paid in by that company. The company reports that it made the entire payment out of its own funds, making no deduction from the wages of its employees, as under the law it might have done to the extent of one-half the payments. The practice of the other companies in this regard is not reported.

In the two other cases of benefits paid quarrymen were the beneficiaries. One of these was an employee of the Peach Bottom Slate Company, one of the smaller companies in the fund. Of the other nothing further can be reported.

The liability of the employing companies in the above cases, under other laws than the one in accordance with which the benefits were paid, can not, of course, be positively determined apart from legal proceedings, which were not had in these cases. An official of the United Railways and Electric Company stated, however, that in his opinion the company would have probably been successful in defending the suits in two of the cases on the ground that the injured employees were guilty of contributory negligence, while in the third case the plaintiffs would have probably won their suit. In the case of the

quarryman, as to which information was obtained, it would appear that the circumstances of the accident causing his death were such that there would have been no ground for recovery of damages under any other law than the act in question.

It is obviously in such cases as this, where the employee is held to have so assumed the risk that the liability of the employer does not under present laws extend thereto, that the need of some system of industrial insurance, cooperative or otherwise, is most felt.

RECENT REPORTS OF STATE BUREAUS OF LABOR STATISTICS.

NEW YORK.

Twentieth Annual Report of the Bureau of Labor Statistics, for the year ended September 30, 1902. Transmitted to the legislature February 23, 1903. John McMackin, Commissioner. viii, 1,172 pp.

The six chapters of this report are devoted to the following subjects: Wages in the clothing trades, 35 pages; earnings in home industries, 253 pages; trade unions, 89 pages; employment and earnings of organized wageworkers, 591 pages; changes in rates of wages, 163 pages; changes in hours of labor, 32 pages.

WAGES IN THE CLOTHING TRADES.—For the purpose of supplementing the statistics of earnings in home industries in New York City, which constitutes the second subject presented in this report, the labor bureau investigated the wages paid to all classes of employees by manufacturers in the clothing trades, which trades are the predominating ones carried on by home workers. The branches of the clothing industry covered by the inquiry are men's and boys' clothing, women's suits and cloaks, shirts, collars, etc., women's white goods, and neckties. The data were secured from establishments in New York City and Syracuse, and a summary of the same is presented in the table following:

WEEKLY WAGES OF EMPLOYEES IN THE CLOTHING TRADES, 1902.

Trade.	Typical busy week.		Typical dull week.		Six months (January-June, 1902).		
	Employees.	Average wages.	Employees.	Average wages.	Weeks' work.	Total paid in wages.	Average weekly wages.
CUTTERS.							
Men's and boys' clothing.....	224	\$19.08	184	\$17.62	5,561	\$108,750	\$18.66
Women's suits and cloaks.....	64	24.69	54	24.46	2,424	56,365	23.25
Shirts, collars, etc.....	41	19.45	27	21.13	1,766	34,141	19.44
Women's white goods.....	24	17.54	23	18.43	2,005	31,606	15.76
Neckties.....	26	19.83	15	18.38	783	12,756	16.29
Total	379	20.00	303	19.25	12,529	238,618	19.04
INSIDE WORKERS.							
Men's and boys' clothing	1,391	10.01	1,163	8.42	36,954	327,293	8.86
Women's suits and cloaks.....	1,496	9.16	975	6.32	46,425	391,861	8.44
Shirts, collars, etc.....	872	7.66	481	6.10	27,829	222,510	8.00
Women's white goods.....	665	7.36	579	6.98	45,293	334,669	7.39
Neckties.....	48	6.51	32	6.33	2,484	14,239	5.73
Total	4,472	8.84	3,230	7.16	158,985	1,290,572	8.12
OUTSIDE WORKERS.							
Men's and boys' clothing.....	98	8.20	98	8.20	4,874	35,116	7.20
Women's white goods.....	60	6.72	46	6.63	2,009	12,220	6.03
Neckties.....	145	7.59	50	7.80	4,348	35,214	8.10
Total	303	7.63	194	7.74	11,231	82,550	7.35

EARNINGS IN HOME INDUSTRIES.—This is an investigation relating to the economic condition of the home workers in the tenements of New York City. The results of the investigation as presented in the report are supplemented by a historical review of tenement-house work or the sweating system. The period covered by the inquiry comprised the first six months of 1902, except in the case of artificial flower makers. This six months period included the busy season of the spring and also its proportion of the slack season, so that the income received during the period may fairly be considered as equivalent to one-half the average annual income of the home workers or licensees.

Schedules were received from 1,010 licensees (158 males and 852 females), representing the following occupations: Custom tailors, 52 (48 males and 4 females); tailors, 59 (49 males and 10 females); home finishers, 798 (50 males and 748 females); artificial-flower makers, 63 (2 males and 61 females); miscellaneous, 38 (9 males and 29 females). The table following shows the class of employers for which the home workers or licensees work:

NUMBER OF HOME WORKERS WORKING FOR EACH CLASS OF EMPLOYERS.

Occupations.	Licensees who work for—				Total.
	Their own cus- tomers.	Manu- facturers.	Con- tractors.	Custom tailors.	
MALES.					
Custom tailors.....	12	25	.....	11	48
Tailors	1	39	9	.....	49
Finishers	1	18	31	.....	50
Artificial-flower makers .....	.....	2	.....	.....	2
Miscellaneous	4	5	.....	.....	9
Total	18	89	40	11	158
FEMALES.					
Custom tailors.....	1	3	.....	.....	4
Tailors .....	.....	6	4	.....	10
Finishers .....	.....	69	664	1	748
Artificial-flower makers .....	.....	61	.....	.....	61
Miscellaneous .....	.....	24	5	.....	29
Total	1	163	673	1	852

^aIncluding 14 not reporting class of employers.

From the table it appears that the tailors usually work for their private customers or for manufacturers or merchant tailors, while most of the finishers work for contractors, the so-called "sweaters" or middlemen. The artificial-flower makers take work exclusively from the manufacturers.

Of the 1,010 licensees reporting, 154 were American born, but this proportion, it is believed, vastly exceeds the proportion in the entire home industry. Of these 154 Americans, all but 13 were children of foreign mothers. Of the 158 male licensees, 69 were Germans and 25 Italians, and of the 852 female licensees, 166 were Germans and 515

Italians. Each of the other 15 nationalities in the canvass was not largely represented.

The income of the home workers or licensees reporting that item during the first six months of 1902 is shown in the table following:

INCOME OF HOME WORKERS, JANUARY TO JUNE, 1902.

Occupation.	Male licensees.					Female licensees.				
	Number of—		Average earnings in six months.	Average weeks worked.	Average earnings per week.	Number of—		Average earnings in six months.	Average weeks worked.	Average earnings per week.
	Licenses.	Helpers.				Licenses.	Helpers.			
Custom tailoring.	48	18	\$317.93	22½	\$13.97	4	2	\$175.75	22½	\$7.73
Tailoring	48	48	339.62	22½	15.09	10	7	181.14	22½	7.99
Finishing	50	56	213.33	23½	9.08	722	195	78.71	22½	3.46
Making artificial flowers	2	4	104.00	26	4.00	60	57	70.32	19½	3.56
Miscellaneous ...	9	8	335.22	21½	13.63	27	13	161.63	22	7.35
Total.....	157	134	289.51	22½	12.73	823	274	82.53	22½	3.67

In addition to the income of the home workers, the outside earnings of other members of the families (adults and children), and the income per family from all sources are shown in the table following:

INCOME OF HOME AND OUTSIDE WORKERS, JANUARY TO JUNE, 1902.

Occupation of licensees.	Average earnings from home work.	Outside work.				Average number in family.	Average earnings per family.	Average income per family from all sources.
		Adults.		Children.				
		Num-ber.	Average earnings.	Num-ber.	Average earnings.			
MALE LICENSEES.								
Custom tailoring.....	\$317.93	2	\$134.50	3	\$112.67	4.4	\$330.57	\$346.47
Tailoring	339.62	7	222.31	11	131.86	4.2	402.24	432.57
Finishing	213.33	7	135.14	13	98.15	4.1	257.77	273.95
Making artificial flowers ...	104.00	1	90.00	2	163.00	6.0	312.00	312.00
Miscellaneous	335.22	2	51.00	1	130.00	3.3	361.00	392.78
Total.....	289.51	19	155.92	30	117.35	4.2	330.81	351.91
FEMALE LICENSEES.								
Custom tailoring.....	175.75	2	260.00	.....	.....	3.2	305.75	305.75
Tailoring	181.14	4	230.50	.....	.....	4.1	273.34	291.54
Finishing	78.71	578	174.82	212	103.89	4.0	249.17	260.56
Making artificial flowers ...	70.32	64	174.78	17	99.82	5.6	285.03	288.60
Miscellaneous	161.68	17	215.47	7	193.57	4.3	348.83	368.68
Total.....	82.53	665	176.45	236	106.40	4.2	255.62	266.75

The income per family, according to nationality represented in the canvass, for the six months, January to June, 1902, is shown in the table below. No nationality has been included in the table unless it had more than one representative.

INCOME OF FAMILIES OF EACH NATIONALITY, JANUARY TO JUNE, 1902.

Nationality.	Number of licensees.	Income from home work.	Average persons in family.	Average earnings per family.	Total family income (average).
MALE LICENSEES.					
American, native parents.....	2	\$263.00	5.0	\$263.00	\$263.00
American, German parents.....	16	284.02	3.8	301.83	306.52
Austrian.....	9	327.78	4.2	327.78	356.67
German.....	68	301.46	3.9	334.85	363.27
Italian.....	25	220.71	5.0	232.59	309.43
Norwegian.....	2	343.00	4.5	456.00	456.00
Roumanian Hebrew.....	2	365.00	3.5	365.00	365.00
Russian.....	11	235.64	4.1	255.64	279.27
Russian Hebrew.....	7	377.57	3.9	493.00	493.00
Swede.....	3	349.67	5.0	445.67	445.67
Turk (Syrian).....	3	204.67	6.3	239.33	239.33
FEMALE LICENSEES.					
American.....	133	84.66	(a)	272.19	285.00
Austrian.....	2	74.50	4.5	124.50	124.50
English.....	3	84.73	1.6	84.73	84.73
German.....	160	79.62	3.4	233.52	246.98
Hungarian.....	3	358.94	6.3	432.94	432.94
Irish.....	3	76.30	1.7	162.97	164.96
Italian.....	500	80.95	4.5	259.14	268.33
Russian.....	4	130.84	5.5	347.34	347.34
Russian Hebrew.....	9	80.17	4.1	214.50	292.50
Swiss.....	2	105.00	7.0	445.00	445.00

(a) Not reported.

TRADE UNIONS.—On September 30, 1902, there existed in the State 2,229 local trade unions and similar labor organizations, the aggregate membership of which was 329,101 working men and women. In the table following is shown the number of organizations and the membership, by sex, in each year from 1894 to 1902:

NUMBER OF TRADE UNIONS AND MEMBERSHIP, BY SEX, 1894 TO 1902.

Date.	Number of unions.	Membership.		
		Men.	Women.	Total.
July 1, 1894.....	860	149,709	7,488	157,197
July 1, 1895.....	927	170,129	10,102	180,231
October 31, 1896.....	962	(a)	(a)	170,296
September 30, 1897.....	1,009	162,690	5,764	168,454
September 30, 1898.....	1,087	163,562	7,505	171,067
September 30, 1899.....	1,320	200,932	8,088	209,020
September 30, 1900.....	1,635	233,553	11,828	245,381
September 30, 1901.....	1,871	261,523	14,618	276,141
September 30, 1902.....	2,229	313,592	15,509	329,101

(a) Not separately reported.

Of the 2,229 trade unions in existence on September 30, 1902, 579 were located in New York City and 1,650 in other cities of the State, while of the 329,101 members, 198,055 belonged to New York City unions and 131,046 to unions in other places. The female members in all trade unions numbered 15,509, of whom 9,615 were in unions in the clothing and textile industries, 2,501 in unions in the tobacco industry, and 1,243 in unions pertaining to theaters and music.

The membership of trade unions, by industries, on July 1 for the

years 1894 and 1895, on October 31 for the year 1896, and on September 30 for the years 1897 to 1902 is shown in the table following:

MEMBERSHIP OF TRADE UNIONS, BY INDUSTRIES, 1894 TO 1902.

Industries.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Building, stone working, etc.	49,056	53,613	56,294	53,273	59,641	71,067	80,441	85,401	91,184
Clothing and textiles	39,162	51,921	30,093	32,147	26,433	29,714	28,866	41,883	46,984
Metals, machinery, and shipbuilding	9,860	11,376	13,010	13,991	16,236	24,014	31,271	35,562	51,749
Transportation	18,197	18,191	23,031	23,014	18,090	24,668	30,854	34,371	36,901
Printing, etc.	11,059	11,998	13,848	13,313	15,045	16,023	17,117	17,986	21,110
Tobacco	8,722	9,089	9,799	9,097	8,889	8,886	12,349	10,210	11,633
Food and liquors	5,661	6,541	7,603	6,995	6,812	8,391	9,430	9,451	13,371
Theaters and music	5,388	7,327	7,306	6,920	9,316	9,518	9,698	11,688	11,588
Wood working and furniture	5,329	4,652	4,218	4,205	4,584	6,683	8,176	8,260	11,823
Restaurants and retail trade	1,243	1,529	2,087	1,843	2,174	3,207	5,303	6,804	8,503
Public employment	1,964	1,964	993	1,667	1,880	3,727	7,148	8,142	9,160
Miscellaneous	1,266	2,030	2,114	1,989	1,937	3,122	4,728	6,388	15,096
Total	157,197	180,231	170,296	168,454	171,067	209,020	245,381	276,141	329,101

EMPLOYMENT AND EARNINGS OF ORGANIZED WAGEWORKERS.—This chapter embraces reports collected in 1902 from more than 2,000 workingmen's organizations and shows the rates of wages, hours of labor, duration of employment, and amount of earnings of a body of artisans and laborers numbering between 250,000 and 300,000. The trade-union reports on employment for the first three months of 1902 covered 270,735 working men and women, of whom 16,776, or 6.2 per cent, were idle the entire quarter, while the remainder (253,959) worked for at least one day. The exact number of days of employment was ascertained for 251,694 members, and it was found that, including overtime work, they averaged 67.43 days of employment each, the full number of working days in the quarter being 77. In the third quarter of 1902 all but 1.9 per cent of the members reporting had some employment, the average number of days of which was 71.1.

The proportion of members idle, by causes of idleness, at four selected periods (January, July, September, and December) during the year, is shown in the table below:

MEMBERS OF TRADE UNIONS IDLE, BY CAUSES OF IDLENESS, IN 1902.

Cause of idleness.	January.		July.		September.		December.	
	Number idle.	Per cent.	Number idle.	Per cent.	Number idle.	Per cent.	Number idle.	Per cent.
Lack of work	9,269	46.1	5,501	34.7	3,720	60.3	12,882	58.5
Weather or lack of material.	8,755	43.5	1,780	11.2	692	11.2	6,314	28.7
Strike or lockout	131	.7	6,690	42.3	246	4.0	497	2.3
Sickness, accident, or old age	1,456	7.2	1,281	8.1	1,193	19.3	1,860	8.4
Other reasons	504	2.5	480	3.0	313	5.1	406	1.8
Cause not stated			104	.7	2	.1	77	.3
Total	20,115	100.0	15,836	100.0	6,166	100.0	22,036	100.0

During the first quarter of 1902, 239,492 organized workingmen reported average earnings of \$2.73 for each of the 67 days of employ-

ment; during the third quarter, 293,013 workingmen reported average earnings of \$2.77 for each of the 71 days of employment. The total average earnings for the first quarter were \$184.12, and for the third quarter \$197.22. The number of organized women employed was 12,202 and 14,193 for the two quarters, and their average earnings were \$145 and \$127. The average earnings of the organized men and women, by industries, for six months of 1902, are set forth in the following table:

AVERAGE EARNINGS OF ORGANIZED WORKING PEOPLE, BY INDUSTRIES, FOR SIX MONTHS OF 1902.

Industries.	Average earnings of men, 1902.			Average earnings of women, 1902.		
	First quarter.	Third quarter.	Six months.	First quarter.	Third quarter.	Six months.
Building, stone working, etc.....	\$182	\$235	\$417			
Clothing and textiles.....	140	147	287	\$89	\$84	\$173
Metals, machinery, and shipbuilding.....	204	200	404	130	94	224
Transportation.....	174	170	344			
Printing, binding, etc.....	226	217	443	109	102	211
Tobacco.....	135	146	281	132	127	259
Food and liquors.....	180	189	369		65	
Theaters and music.....	347	344	691	461	496	957
Woodworking and furniture.....	188	180	368	101	111	212
Restaurants and retail trade.....	152	153	305	74	89	163
Public employment.....	208	206	414	144	162	306
Miscellaneous.....	155	138	288		73	
All industries.....	184	197	381	145	127	272

CHANGES IN RATES OF WAGES.—This chapter presents changes in rates of wages reported by manufacturers and by members of labor organizations, and the number of working people affected by these changes for the year ending September 30, 1902. The changes reported by labor organizations and number of members affected follow:

CHANGES IN WAGES OF MEMBERS OF LABOR ORGANIZATIONS AND MEMBERS AFFECTED, YEAR ENDING SEPTEMBER 30, 1902.

Industries.	Increases.		Decreases.		Net changes.		
	Members affected.	Average weekly gain.	Members affected.	Average weekly loss.	Members affected.	Aggregate weekly increase.	Average weekly gain.
Building, stone working, etc.....	50,855	\$1.83	2,761	\$0.85	53,616	\$90,735.71	\$1.69
Clothing and textiles.....	4,797	1.82	90	.56	4,887	8,692.95	1.78
Metals, machinery, and shipbuilding.....	13,008	1.77	158	.60	13,166	22,872.40	1.74
Transportation.....	6,844	1.71	64	1.91	6,908	11,607.19	1.68
Printing, binding, etc.....	4,489	1.75			4,489	7,876.27	1.75
Tobacco.....	164	1.07			164	176.10	1.07
Food and liquors.....	1,386	.97			1,386	1,339.09	.97
Theaters and music.....	199	1.31			199	260.00	1.31
Woodworking and furniture.....	6,026	2.24			6,026	13,516.65	2.24
Restaurants and retail trade.....	204	1.42	221	1.33	425	a 5.20	a .01
Public employment.....	1,112	.50			1,112	553.23	.50
Miscellaneous.....	4,141	1.22	35	1.80	4,176	5,009.16	1.20
Total.....	93,225	1.78	3,329	.89	96,554	162,633.55	1.68

a Decrease.

Included in the above, there were 649 female members who received an aggregate weekly increase in wages of \$668.78, or an average weekly gain of \$1.03.

An average weekly gain in wages of \$1.17, affecting 34,708 employees, was reported by 847 manufacturing firms, while 24 employees suffered an average weekly loss of \$0.78. Included in the foregoing were 3,441 female employees who received an average weekly gain in wages of \$0.78.

CHANGES IN HOURS OF LABOR.—During the year ending September 30, 1902, the normal working time of 67,087 organized wage-earners was changed. The changes were nearly all in the nature of reductions in the weekly hours of labor, but there were some cases of an increase. An average reduction of 4.7 hours in the weekly schedule affected 61,853 of the working people, while the remaining 5,234 had their weekly schedule increased an average of 7.1 hours. The following table shows, by industries, the changes in hours and the number of organized workers affected:

CHANGES IN HOURS OF LABOR OF MEMBERS OF LABOR ORGANIZATIONS AND MEMBERS AFFECTED, YEAR ENDING SEPTEMBER 30, 1902.

Industries.	Decreases.			Increases.			Net decreases.		
	Members affected.	Total hours.	Average hours	Members affected.	Total hours.	Average hours	Members affected.	Total hours.	Average hours
Building, stoneworking, etc.....	20,328	83,083	4.1	979	3,047	3.1	21,307	79,986	3.8
Clothing and textiles.....	16,872	49,173	2.9	136	636	4.7	17,008	48,587	2.9
Metals, machinery, and shipbuilding.....	7,076	33,310	4.7	1,032	5,420	5.3	8,108	27,890	3.4
Transportation.....	513	5,366	10.5	725	13,850	19.1	1,238	8,484	6.9
Printing, binding, etc.....	1,465	17,987	12.2	.....	.....	.....	1,465	17,987	12.2
Tobacco.....	1,633	12,886	7.8	.....	.....	.....	1,633	12,886	7.9
Food and liquors.....	1,498	16,820	11.2	.....	.....	.....	1,498	16,820	11.2
Theaters and music.....	.....	.....	.....	21	63	3.0	21	63	3.0
Woodworking and furniture.....	4,610	10,256	4.2	1,073	6,680	6.2	5,683	12,576	2.2
Restaurants and retail trade.....	1,218	10,819	8.9	430	3,095	7.2	1,648	7,724	4.7
Public employment.....	3,126	21,191	6.8	10	160	16.0	3,136	21,031	6.7
Miscellaneous.....	3,514	20,631	5.9	823	4,328	5.2	4,342	16,303	3.8
Total.....	61,853	290,422	4.7	5,234	37,279	7.1	67,087	253,143	3.8

a Increase.

A large proportion of the gains were made in New York City, four movements being especially conspicuous, viz, (1) the extension of the Saturday half holiday (reduction of hours from 48 to 44 per week) from masons and carpenters to the other building trades, the movement affecting 15,188 workmen; (2) the reduction of hours from 59 to 56 per week for 15,674 garment makers; (3) the establishment of the 9-hour day for 2,900 piano and organ workers, 480 machine woodworkers, and 925 upholsterers; (4) the establishment of the 8-hour day for 2,000 dock builders and 1,050 post-office clerks.

OHIO.

Twenty-seventh Annual Report of the Bureau of Labor Statistics of the State of Ohio for the year 1903. M. D. Ratchford, Commissioner. 725 pp.

The subjects presented in this report are as follows: Laws governing the labor bureau, and recent Ohio laws and court decisions relating to labor, 64 pages; manufactures, 385 pages; mineral productions, 233 pages; free public employment offices, 20 pages; list of bureaus of labor in the United States, 2 pages.

MANUFACTURES.—Statistics for 1902 are given, showing, by industries, the number of establishments reported, capital invested, value of goods manufactured, amount paid for rent, taxes, and insurance, amount paid in wages, number employed and salaries of office help, number of males and females employed each month, and monthly average of males and females; also, by occupations, the number employed, average number of days worked, average daily wages, average yearly earnings, and average hours of daily labor. Other tables show, by industries, the number in each occupation affected by a change in wages during the year. These statistics are shown for each of the five principal cities, for the remaining cities and villages, and by totals for the State. Comparisons between summaries for 1901 and 1902 are also made.

The 5,865 manufacturing establishments from which returns were received for 1902 had an invested capital of \$364,609,905, and produced or manufactured goods to the value of \$714,822,131. Wages to the amount of \$156,572,177 were paid to 313,434 employees—267,025 males and 46,409 females. During the year there were 96,257 persons who received an average advance in wages of 9.1 per cent, while 895 persons suffered an average reduction of 6.6 per cent.

The summary following presents, for 1902, the principal data for ten of the leading industries:

STATISTICS OF MANUFACTURES, 1902.

Industries.	Estab-lish-ments.	Capital invested.	Value of product.	Em-ploy-ees.	Wages paid.
Agricultural implements.....	45	\$7,555,396	\$16,690,193	5,917	\$3,266,906
Boots and shoes	58	4,633,923	20,723,765	13,660	4,593,603
Brick and tile	259	12,604,185	11,406,724	9,933	4,339,856
Carriages and wagons.....	260	4,811,850	15,432,463	7,457	3,598,964
Cigars	323	1,214,103	7,156,949	6,643	2,154,778
Clothing	278	3,273,213	24,809,915	11,667	5,147,906
Flouring mill products.....	199	5,308,672	28,881,068	2,522	1,181,607
Foundry and machine shop products, and machinery.....	492	35,228,392	87,486,375	45,519	25,170,710
Liquors (malt and distilled)	125	27,740,203	26,100,372	4,391	2,909,743
Printing and binding	375	11,730,542	12,775,763	8,614	4,016,539

The steel, iron, and tin industries, comprising 90 establishments, are given a separate presentation. The capital invested in these industries in 1902 aggregated \$39,628,909, and the value of goods manufactured \$123,928,782. To the 37,813 employees there was paid a total in wages of \$24,948,055. The average days worked per employee during the year were 286, the average hours of daily labor 10.2, the average daily wages \$2.43, and the average yearly earnings \$694.98. There were 17,034 employees who received an average advance in wages of 8 per cent, while 361 suffered an average reduction of 3 per cent.

MINERAL PRODUCTIONS.—Under this head are presented, for 1902, statistics relative to the production of coal, fire clay and iron ore, lime and sandstone, and crude oil or petroleum. The reports received from these industries are summarized in the table following:

STATISTICS OF MINERAL PRODUCTION, 1902.

Items.	Coal.	Fire clay and iron ore.	Lime and sandstone.	Crude oil or petroleum.
Establishments reporting	533	20	139	123
Capital invested	\$23,167,573	\$73,550	\$2,448,376	\$7,275,996
Value of product	\$23,711,858	\$32,398	\$2,153,473	\$6,661,818
Number of work people	30,580	150	2,556	2,226
Amount paid in wages	\$15,767,637	\$50,272	\$1,104,423	\$1,517,281
Average days worked during year	197	203	204	264
Average hours worked per day	8.0	9.5	9.5	10.1
Average yearly earnings	\$441.28	\$302.47	\$328.44	\$483.12
Average daily wages	\$2.24	\$1.49	\$1.61	\$1.83
Number receiving advance in wages .....	.....	67	1,193	29
Average per cent of advance in wages .....	.....	11.1	12.2	9.4

FREE PUBLIC EMPLOYMENT OFFICES.—Brief text reports from the superintendents of the five offices, tables showing the work done by each office from the date of its organization, and reports of the operations of each office for each of the first ten months of 1903, with totals for the ten months, are found under this head.

The following table shows the operations of the five free public employment offices of the State for the ten months ending October 31, 1903:

OPERATIONS OF FREE PUBLIC EMPLOYMENT OFFICES, TEN MONTHS ENDING OCTOBER 31, 1903.

City.	Situations wanted.		Help wanted.		Positions secured.	
	Males.	Females.	Males.	Females.	Males.	Females.
Cleveland	2,930	2,082	4,010	2,616	2,441	1,926
Columbus	1,654	1,198	1,922	2,351	1,576	1,100
Cincinnati	3,343	1,583	2,923	2,572	2,776	1,315
Dayton	3,015	1,793	3,392	6,270	2,602	1,651
Toledo	3,428	1,640	3,699	2,084	2,570	1,501
Total	14,370	8,296	15,946	15,893	11,965	7,493

Since the organization in 1890 of the five free public employment offices there has been a total of 364,345 applications for situations wanted, 303,288 applications for help wanted, and 204,862 positions secured. Of applications for situations 56.2 per cent were filled, and of applications for help wanted 67.5 per cent were filled.

The expenses of the five offices for the ten months ending October 31, 1903, were \$1,919.88, of which the expenses of the Cleveland office were \$392.76, the Columbus office \$371.60, the Cincinnati office \$443.67, the Dayton office \$322.90, and the Toledo office \$388.95.

STATISTICS OF MANUFACTURES IN MASSACHUSETTS: SEVENTEENTH ANNUAL REPORT.

The Annual Statistics of Manufactures, 1902. Seventeenth Report, iii, 122 pp. (Issued by the Bureau of Statistics of Labor, Charles F. Pidgin, Chief.)

This report consists of two parts, as follows: Part I, Industrial Chronology for the year ending September 30, 1902, 39 pages; Part II, Statistics of Manufactures, 1901, 1902, 79 pages.

INDUSTRIAL CHRONOLOGY.—The industrial chronology of the State for the year ending September 30, 1902, embraces facts relating (1) to the establishment of new firms and corporations, new industries, and changes from private firms to corporations; (2) to changes in firms, corporations, location of plants, etc.; (3) to the construction of new buildings, the addition of new machinery, new classes of products, etc.

The statement following summarizes the facts presented for the year, together with similar facts for the nine months ending September 30, 1901:

INDUSTRIAL CHRONOLOGY, 1901, 1902.

Items.	Number of instances.	
	1901 (9 months).	1902 (12 months).
New establishments, firms, etc	109	219
Buildings constructed during the period	78	163
Machinery added to plants	112	132
Other additions to plants	63	38
Addition of new class of product to manufacture	9	9
Rebuilding of burned factories, etc.	7	11
Changes from private firms to corporations	15	.....
Changes in firms, firm names, etc	39	70
Consolidation of firms and corporations	4	8
Removals of firms and industries to State from other States	2	6
Removals of firms and industries from State to other States	9	8
Removals from one town to another	11	20
Permanent shut downs	12	23
Introduction of electric lighting and power into factories, etc	9	10
Sales of plants in whole or in part	66	95
Sales of plants to industrial combinations	8	16
New corporations	44	132
Amount of authorized capital	\$8, 018, 600	\$25, 779, 500
Reorganization of established corporations .....	.....	19
Amount of reorganized capital .....	.....	\$18, 445, 000
Increases in capital stock	11	27
Amount of increase	\$1, 697, 000	\$5, 415, 000
Decreases in capital stock	3	3
Amount of decrease	\$104, 500	\$390, 000
Net increase in capital stock	\$1, 592, 500	\$5, 025, 000
Amount (net) of new capital stock authorized	\$9, 611, 100	\$49, 249, 500

MANUFACTURES.—Statistics are presented for 4,658 identical establishments covering each of the years 1901 and 1902, and include the number of private firms, corporations, and industrial combinations;

number of partners in firms, and stockholders in corporations, by sex, etc.; capital invested, cost of material, value of product, highest, lowest, and average number of persons employed, and aggregates by months; total wages paid during each year, and average yearly earnings; classified weekly wages in selected industries, by sex and age, and days in operation during each year, and proportion of business done. Eighty classified industries are represented.

In the table following the principal facts as to ownership appear:

FIRMS, CORPORATIONS, AND INDUSTRIAL COMBINATIONS, AND PARTNERS AND STOCKHOLDERS IN 4,658 IDENTICAL ESTABLISHMENTS, 1901 AND 1902.

Year.	Firms.	Corporations.	Industrial combinations.	Partners.	Stockholders.	Average partners to a firm.	Average stockholders to a corporation.
1901.....	3,217	1,282	17	5,020	50,807	1.56	39.68
1902.....	3,139	1,347	19	4,846	55,649	1.54	41.31

The point of greatest interest shown by the above table is the taking over of establishments from control by firms to control by corporations and the consequent decrease of partners and increase of stockholders.

The table following presents statistics separately for 9 principal industries, in aggregate for 71 other industries, and totals for the 80 industries reported on for the years 1901 and 1902:

STATISTICS OF MANUFACTURES, 1901 AND 1902.

Industries.	Establishments.	Capital invested.			Stock used.		
		1901.	1902.	Per cent of increase.	1901.	1902.	Per cent of increase.
Boots and shoes	661	\$26,406,295	\$28,150,214	6.60	\$87,689,796	\$90,380,233	3.07
Carpetings	10	5,958,557	6,471,782	8.61	4,708,264	6,525,898	38.74
Cotton goods	158	125,938,505	127,877,980	1.50	69,307,173	72,623,827	4.79
Leather	94	8,526,364	8,629,068	1.20	18,541,218	18,005,012	α 2.89
Machines and machinery	360	39,990,855	41,521,821	3.83	17,804,567	19,709,898	10.70
Metals and metallic goods	377	27,022,491	27,551,283	1.96	25,454,330	26,221,911	3.02
Paper	75	20,708,652	21,747,744	5.02	14,080,401	15,802,400	12.23
Woolen goods	149	25,986,880	27,817,893	7.05	24,099,153	28,268,950	17.28
Worsted goods	39	16,080,609	18,026,729	12.10	25,093,568	28,069,781	11.86
Other Industries.....	2,735	176,908,421	184,531,004	4.33	210,525,924	232,535,413	10.45
Total	4,658	473,577,629	492,355,468	3.97	497,299,389	538,137,823	8.21

Industries.	Establishments.	Goods made and work done.			Wages paid.		
		1901.	1902.	Per cent of increase.	1901.	1902.	Per cent of increase.
Boots and shoes	661	\$138,010,800	\$143,556,265	4.02	\$29,008,218	\$30,090,845	3.73
Carpetings	10	8,214,183	10,573,886	28.73	1,808,952	2,235,944	24.11
Cotton goods	158	117,015,196	129,544,308	10.71	32,685,625	35,853,378	9.69
Leather	94	25,410,837	28,558,991	α 7.29	3,141,710	2,987,527	α 4.91
Machines and machinery	360	49,359,957	52,820,803	7.01	15,063,944	16,452,960	9.22
Metals and metallic goods	377	47,394,460	49,419,924	4.27	12,493,553	12,808,669	2.52
Paper	75	25,048,945	28,228,294	12.69	4,202,607	4,775,405	13.63
Woolen goods	149	42,317,936	49,792,584	17.66	8,857,867	10,200,089	15.15
Worsted goods	39	40,213,217	47,909,654	19.14	6,433,538	7,576,602	17.77
Other Industries.....	2,735	376,886,582	409,789,230	8.73	64,043,285	70,567,756	10.19
Total	4,658	869,872,113	945,193,889	8.66	177,734,299	193,552,175	8.90

α Decrease.

In the above table, comparing the figures for 1902 with those for 1901, an increase is shown in each of the 9 leading industries except leather, which shows a decrease in stock used, goods made and work done, and wages paid.

The table following presents data relative to employees, earnings, and days in operation, the establishments considered being the same as in the table preceding:

AVERAGE NUMBER OF EMPLOYEES, AVERAGE YEARLY EARNINGS, AND AVERAGE DAYS IN OPERATION IN 9 PRINCIPAL INDUSTRIES, OTHER INDUSTRIES, AND IN ALL INDUSTRIES, 1901 AND 1902.

Industries.	Average number of employees.			Average yearly earnings.			Average days in operation.		
	1901.	1902.	Per cent of increase.	1901.	1902.	Per cent of increase.	1901.	1902.	Per cent of increase.
Boots and shoes	59,782	61,224	2.41	\$485.23	\$491.49	1.29	292.39	291.70	α 0.24
Carpetings	4,578	5,206	13.72	394.05	430.07	9.14	300.35	302.29	.65
Cotton goods	89,914	93,802	4.32	363.52	382.22	5.14	297.13	302.70	1.87
Leather	6,517	6,367	α 2.30	482.08	469.22	α 2.67	301.30	292.79	α 2.82
Machines and machinery ..	27,384	29,528	7.88	550.10	557.20	1.29	297.51	297.85	.11
Metals and metallic goods..	22,252	23,052	3.60	561.46	555.64	α 1.04	296.79	296.94	.05
Paper	9,591	10,391	8.34	438.18	459.57	4.88	287.29	288.94	4.06
Woolen goods	21,946	24,519	11.72	408.62	416.01	3.07	293.51	299.70	2.11
Worsted goods	16,502	19,048	15.43	389.86	397.76	2.03	291.03	291.07	.01
Other industries	136,768	147,644	7.95	468.26	477.96	2.07	290.20	292.99	.96
All industries	395,234	420,781	6.46	449.69	459.98	2.29	293.43	296.09	.91

α Decrease.

This table shows that in each of the principal industries, except leather, there was an increase in the average number of employees in 1902 as compared with 1901. The largest increases were in carpetings, woolen goods, and worsted goods, being, respectively, 13.72 per cent, 11.72 per cent, and 15.43 per cent. Comparing average yearly earnings in 1902 with those in 1901, increases appear in each of the principal industries, except leather and metals and metallic goods, in which decreases of 2.67 per cent and 1.04 per cent are seen. Under average days in operation, the averages for boots and shoes and leather show slight decreases in 1902 as compared with 1901, the decreases being 0.24 per cent and 2.82 per cent. For all industries, each average in 1902 shows an increase over that for 1901.

The following tables show the number and per cent of employees earning the indicated weekly wages. Employees are divided into three groups, namely, adult males, adult females, and young persons of both sexes under 21 years of age. The number of employees given is the number reported in each industry for the week showing the largest number of employees, and does not, therefore, agree with the number shown in the preceding table.

NUMBER OF MALE AND FEMALE ADULTS AND OF YOUNG PERSONS IN 80 INDUSTRIES,
BY CLASSIFIED WEEKLY WAGES, 1901 AND 1902.

Weekly wages.	1901.				1902.			
	Adults.		Young persons (under 21).	Total.	Adults.		Young persons (under 21).	Total.
	Male.	Female.			Male.	Female.		
Under \$5.....	8,931	17,371	28,178	54,480	8,743	16,668	27,703	53,114
\$5 or under \$6.....	9,693	17,369	14,033	41,095	9,180	16,595	15,185	40,960
\$6 or under \$7.....	18,250	22,971	9,349	50,570	17,315	22,843	11,105	51,263
\$7 or under \$8.....	26,039	18,159	4,168	48,366	25,927	18,739	5,300	49,966
\$8 or under \$9.....	25,970	14,359	1,898	42,227	26,557	15,198	2,349	44,104
\$9 or under \$10.....	39,467	10,910	1,200	51,577	40,638	12,364	1,549	54,551
\$10 or under \$12.....	43,936	7,940	466	52,342	47,826	10,502	777	59,105
\$12 or under \$15.....	50,524	3,777	190	54,491	53,944	4,291	372	58,607
\$15 or under \$20.....	33,720	1,129	46	39,895	42,408	1,153	83	43,644
\$20 or over.....	12,585	150	7	12,742	13,823	164	2	13,994
Total.....	274,115	114,135	59,535	447,785	286,366	118,517	64,425	469,308

PER CENT OF MALE AND FEMALE ADULTS AND OF YOUNG PERSONS OF TOTAL NUMBER
EMPLOYED IN 80 INDUSTRIES, BY CLASSIFIED WEEKLY WAGES, 1901 AND 1902.

Weekly wages.	1901.				1902.			
	Adults.		Young persons (under 21).	Total.	Adults.		Young persons (under 21).	Total.
	Male.	Female.			Male.	Female.		
Under \$5.....	3.26	15.22	47.33	12.17	3.05	14.07	43.00	11.32
\$5 or under \$6.....	3.54	15.22	23.57	9.18	3.21	14.00	23.57	8.73
\$6 or under \$7.....	6.66	20.12	15.70	11.29	6.05	19.28	17.24	10.92
\$7 or under \$8.....	9.50	15.91	7.00	10.80	9.05	15.81	8.23	10.65
\$8 or under \$9.....	9.47	12.58	3.19	9.43	9.27	12.82	3.64	9.40
\$9 or under \$10.....	14.40	9.56	2.02	11.52	14.19	10.43	2.40	11.62
\$10 or under \$12.....	16.03	6.96	.78	11.69	16.70	8.86	1.20	12.59
\$12 or under \$15.....	18.43	3.31	.32	12.17	18.84	3.62	.58	12.49
\$15 or under \$20.....	14.12	.99	.08	8.91	14.81	.97	.13	9.30
\$20 or over.....	4.59	.13	.01	2.84	4.83	.14	.01	2.98
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

From the above tables it appears that in the 80 industries considered there were 21,523 more wage-earners employed in 1902 than in 1901. Under each wage class there was an increase in the number employed, except the first two, or lowest classes, where there was a decrease. Of the total number of wage-earners employed 48.98 per cent in 1902 received \$9 or over per week, as compared with 47.13 per cent in 1901. In 1901 the young persons employed at wages under \$5 per week were 47.33 per cent of the total of young persons employed, while the number in 1902 employed at wages under \$5 per week was 43 per cent of the total. Of the total adult females 73.39 per cent in 1901 were employed at wages of \$5 or under \$10 per week, while in 1902 in this wage class 72.34 per cent were employed. In 1901 the adult males who received \$9 or over per week were 67.57 per cent of the total adult males, while in 1902 the percentage was 69.37.

In the tables previously presented value of goods made or work done has included not only the added value resulting from the processes of the industry considered, but the original cost of material as

well. In order to show the actual result of the productive forces of the industry, the element of cost of material must be deducted from the total value of product; the remainder will show only the industry product, or the new values created. This has been done in the case of the nine leading industries, and the amount of industry product per \$1,000 of capital and per employee has been computed; also the division of industry product between the wage fund and the fund devoted to other expenses, as freight, insurance, interest, rent, commissions, salaries, etc., and to profit, these last items being grouped as "Profit and minor expenses." The results appear in the table following:

INDUSTRY PRODUCT, WAGES, AND PROFIT AND EXPENSES IN NINE SPECIFIED INDUSTRIES, 1902.

Industries.	Industry product.	Wages.	Profit and minor expenses.	Industry product.		Per cent of industry product—	
				Per \$1,000 of capital.	Average per employee.	Paid in wages.	Devoted to profit and minor expenses.
Boots and shoes	\$53, 176, 032	\$30, 090, 845	\$23, 085, 187	\$1, 889. 01	\$868. 55	43. 41	56. 59
Carpetings	4, 048, 438	2, 238, 944	1, 809, 494	625. 55	777. 65	44. 70	55. 30
Cotton goods	56, 920, 481	35, 858, 378	21, 067, 108.	446. 12	606. 82	37. 01	62. 99
Leather	5, 553, 979	2, 987, 527	2, 566, 452	643. 64	872. 31	46. 21	53. 79
Machines and machinery ..	33, 110, 905	16, 452, 960	16, 657, 945	797. 43	1, 121. 34	50. 31	49. 69
Metals and metallic goods.	23, 198, 013	12, 808, 669	10, 389, 344	841. 99	1, 006. 33	44. 79	55. 21
Paper	12, 425, 894	4, 775, 405	7, 650, 489	571. 36	1, 195. 83	61. 57	38. 43
Woolen goods	21, 528, 634	10, 200, 089	11, 328, 545	773. 91	878. 04	52. 62	47. 38
Worsted goods	19, 839, 873	7, 576, 602	12, 263, 271	1, 100. 58	1, 041. 57	61. 81	38. 19

Of the nine industries here shown it appears that the boot and shoe industry requires the least capitalization to secure a given value of product, and cotton goods the greatest. The product per employee is also least in the cotton goods industry, while the greatest product appears in the paper and machines and machinery industries. In four of the industries more than one-half of the industry product was paid out in wages, the largest showing being in paper and worsted goods, where 61.57 per cent and 61.81 per cent went to that item.

RECENT FOREIGN STATISTICAL PUBLICATIONS.

AUSTRIA.

Die Wohlfahrts-Einrichtungen der Arbeitgeber zu Gunsten ihrer Angestellten und Arbeiter in Oesterreich. Herausgegeben vom k. k. arbeitsstatistischen Amte im Handelsministerium. I. Theil. Wohlfahrts-Einrichtungen der Eisenbahnen. II. Heft: Die bei den k. k. österr. Staatsbahnen bestehenden Wohlfahrts-Einrichtungen. 1903. vi, 118 pp. II. Theil. Wohlfahrts-Einrichtungen der gewerblichen und Handelsbetriebe. 1904. ix, 414 pp.

These are the second and third of a series of three volumes issued by the Austrian bureau of labor statistics, giving the results of the investigation of various institutions founded or assisted by employers for the welfare of their employees. A digest of the first volume, which relates to employees of private steam railways and steam tramways, appeared in Bulletin of the Bureau of Labor, No. 55.

The two present volumes deal, respectively, with employees of railways operated under government control and employees in the manufacturing industries and the steamboat service.

RAILWAYS OPERATED UNDER GOVERNMENT MANAGEMENT.—This volume contains twelve chapters treating, respectively, of the following subjects: Mileage and number of persons employed in the government railway service; systems of salary and wage payments; regulations governing railway employees while performing military service; hours of labor, night work, leave of absence, and disposition of employees during periods of reduced traffic; contractual relations between the Government and its railway employees; loan and savings institutions; sick benefit, accident insurance, and other relief institutions; arrangements for the cheap supply of commodities to employees; housing of employees, prevention of accidents, and hygiene; education and apprenticeship; spiritual, ethical, and social improvement of employees. An appendix gives copies of regulations governing the employees on railways and in railway workshops; regulations regarding apprentices in railway workshops; regulations prescribing the hours of labor of railway employees, and pension regulations for the various classes of railway employees.

The following table shows the aggregate mileage of railways operated under government control and the number of employees in 1898,

1899, 1900, and 1901 arranged according to the classification adopted by the Austrian department of railways:

AGGREGATE MILEAGE AND NUMBER OF EMPLOYEES ON RAILWAYS OPERATED UNDER GOVERNMENT CONTROL IN AUSTRIA, 1898 TO 1901.

Year.	Mileage.			Number of employees.						
	State rail-ways.	Private rail-ways.	Total.	Officials (Beam-te).	Inferior officials (Unter-beamte).	Other perma-nent em-ployees (Diener und Wäch-ter).	Temporary salaried employees (Proviso-rische Be-dienstete, Aushilfs-unter-beamte und Die-ner).	Female office em-ployees.	Work-men en-gaged by the day (Tag-lohn-arbeiter).	Total.
1898	4,729	1,680	6,409	7,006	5,143	26,538	6,962	391	43,946	89,981
1899	4,775	2,020	6,795	6,881	5,530	28,237	6,235	424	50,125	97,432
1900	4,823	2,160	6,983	7,253	6,092	30,243	6,950	478	53,627	104,543
1901	4,834	2,290	7,124	7,487	6,454	32,250	7,167	515	51,749	105,622

The terms "Beamte," "Unterbeamte," and "Diener" are not clearly defined. The first class probably includes higher officials, including station masters in cities and others holding responsible administrative positions. The second class probably includes inferior officials, such as station agents, baggage masters, locomotive engineers, conductors, etc. The terms "Diener" and "Wächter" are applied to all other permanent railway employees in the regular classified railway service.

SALARY AND WAGE PAYMENTS.—The employees on the regular rolls receive fixed salaries or wages. The day laborers are paid by the day, their rates varying according to the character of their work. In addition to the regular salaries, allowances for quarters are made to certain classes of employees, such allowances being rated according to the grade of the employees and the locality where stationed. Provision is also made for extra allowances for night work, overtime work, extra mileage, etc.; for increased pay for long-continued service; for premiums for meritorious service in handling trains, facilitating transportation, etc.; for rewards for discovering dangerous defects in rolling stock or in the roadbed, and for prizes for economy in the use of fuel, oil, and other materials.

The sums paid during the year 1901 for rewards amounted to 423,661 kronen (\$86,003), and for service premiums, prizes for economy, and premiums for proper care of locomotives to 2,047,558 kronen (\$415,654).

The following table shows the highest and lowest salaries, wages, and allowances for quarters paid to certain classes of employees on the government railways in Austria in 1901:

HIGHEST AND LOWEST YEARLY SALARIES AND DAILY WAGES PAID CERTAIN EMPLOYEES OF THE GOVERNMENT RAILWAYS IN AUSTRIA, 1901.

Class of employees.	Salaries and wages per year.		Allowances for quarters in Vienna. ^a	
	Highest.	Lowest.	Highest.	Lowest.
Officials (Beamte).....	\$1,542.80	\$284.20	\$324.80	\$121.80
Inferior officials (Unterbeamte)	527.80	223.30	162.40	81.20
Watchmen (Wächter).....	182.70	116.93	121.80	60.90
Other permanent employees (Diener)	324.80	142.10	121.80	60.90
Female office employees.....	^b 22.33	^b 14.21	.....	.....
Wageworkers	^c 1.02	^c .16	.....	.....

^a For other localities the allowances for quarters range from 40 to 80 per cent of the amounts quoted for Vienna.

^b Per month.

^c Per day.

The aggregate amounts paid to all classes of employees for salaries, wages, and other allowances from 1898 to 1901 were as follows: 1898, 99,534,634 kronen (\$20,205,531); 1899, 111,798,251 kronen (\$22,695,045); 1900, 122,240,711 kronen (\$24,814,864); 1901, 126,483,724 kronen (\$25,676,196).

MILITARY SERVICE.—The same regulations governing the treatment of railway employees on private railways called to perform military service also apply to employees on railways operated under government control. A digest of these regulations was published in Bulletin of the Bureau of Labor, No. 55, pages 1656 and 1657.

HOURS OF LABOR, LEAVES OF ABSENCE, ETC.—The hours of continuous duty of employees in the transportation service under normal conditions range from 12 to 18, and the periods of rest following labor, from 6 to 24 hours, according to the character of the service and the nature of the employment.

For train dispatchers, telegraph operators, signal men, switchmen, and other employees engaged in the moving of trains, the hours usually range from 12 to 16, and are followed, as a rule, by a number of hours for rest, with a minimum period of uninterrupted rest of at least 8 hours. In cases of especially arduous service the hours are limited to 12, and are followed by a period of rest extended to 24 hours. On lines with light traffic and limited night service, the hours may be extended to 18, provided they are interrupted by frequent periods of rest and provided the uninterrupted night rest amounts to at least 6 hours.

The maximum hours of track walkers is limited to 16, followed by a period of rest of not less than 8 hours.

For locomotive engineers, firemen, and other train men the average number of hours in any one month does not exceed 11 hours per day, the maximum number of hours of continuous uninterrupted service on

regular transportation lines being limited to 14 hours. On local passenger and freight trains the service may be extended to 18 hours, provided such service permits of sufficient intervals for rest. On passenger trains the trips are limited to 9 hours; on freight trains to 12 hours of schedule time. The minimum period of rest at the home of the employees is 10 hours; at other points 6 hours.

For machinists, stationary firemen, yardmen, and other stationary employees in the transportation department on lines running day and night, the hours range from 12 to 16, followed by a corresponding number of hours of rest. In cases of less arduous day service the hours may be extended to 24, to be followed by the same number of hours of rest, if intermissions for rest of several hours duration during the night have been provided for.

For day laborers in all branches of the service the normal hours on working days are 10 per day.

For the workshops at Vienna the hours of labor have been fixed at 9½ per day.

Office employees at central stations are employed 7 hours per day on week days and 3 hours on holidays, and they are exempt from all work on Sundays and high days. Female office employees are also exempt from work on all holidays.

Annual leave of absence, with full pay, is granted to all permanent employees, the length of such leave varying with the character of employment and length of service, according to the following schedule:

SCHEDULE OF ANNUAL LEAVE OF ABSENCE FOR VARIOUS CLASSES OF EMPLOYEES.

Classes of employees.	Number of days of annual leave for—		
	Less than 10 years' service.	10 to 20 years' service.	Over 20 years' service.
Officials	14	21	28
Assistants and female office employees.....	14	14	14
Inferior officials and other permanent employees.....	8	10	14

Day laborers are given leave of absence, but without pay, except in cases when performing the duties of the class of employees designated as "Diener."

Employees who have been chosen delegates to the Railway Employees' Accident Relief Association are granted leave of absence, with full pay, for the purpose of attending to the duties devolving upon them as such delegates.

Reductions in the force of employees, if necessary, are made in the reverse order of their employment. Extensive reductions, however, occur regularly only in the force employed on the maintenance of roadway at the beginning of the winter season.

RELATIONS BETWEEN THE GOVERNMENT AND ITS RAILWAY EMPLOYEES.—The relations between the Government and its railway

employees are governed by a set of rules and regulations which describe in detail the conditions and methods of entering the government railway service; the duties and privileges of the employees; the penalties for offenses committed by employees; the conditions for their retirement from active service; their status while performing military service, and their separation from the railway service.

In the employment of women, preference is given to dependents of deceased employees. They are employed either at light office work, at flag or signal stations, or as charwomen. Female office employees hold their places subject to one month's notice. Their entrance salary is 70 kronen (\$14.21) per month, which is gradually increased in the course of ten years until it amounts to 110 kronen (\$22.33) per month. They also receive extra pay for work in excess of the regular 7 hours per day.

All regulations placing certain restrictions upon the marriage of employees formerly in force have been revoked, and all employees of whatever grade may now marry without first obtaining the consent of the Government.

LOAN AND SAVINGS INSTITUTIONS.—There are four loan and savings institutions for the accommodation of the employees, one organized by the State, the other three by the employees. Deposits may be made subject to call or subject to previous notice, interest being allowed accordingly. Loans made to employees are usually limited to the maximum of 80 per cent of their salaries and are repaid in monthly installments with interest at rates ranging from 5 to 7 per cent.

RELIEF AND INSURANCE.—Under the system of compulsory insurance in Austria, all railway employees are insured against sickness in the Sick Benefit Fund for the Austrian State Railway Employees (*Krankencasse für das Personal der k. k. österreichischen Staatsbahnen*) upon the payment of a fee equal to 2 per cent of their annual salary and against accident in the Accident Insurance Institution for Austrian Railway Employees (*Berufsgenossenschaftliche Unfallversicherungsanstalt der österreichischen Eisenbahnen*), the State assuming the entire burden of accident insurance.

In addition to the relief required by law allowances are made for medical attendance, hospital treatment, funeral expenses, etc., to the wives and children of the beneficiaries of the sick relief fund.

Two institutions, the pension fund, founded in 1882, and the provident fund, founded in 1873, provide old age and disability pension to employees, their widows, and their orphans. Both institutions are supported by contributions in part from the State and in part by the employees. Membership in either of these institutions is obligatory upon all permanent employees and is also open to persons employed by the day upon certain conditions.

The following two tables show the receipts and the expenditures of the sick benefit fund from 1898 to 1901:

RECEIPTS AND EXPENDITURES OF THE SICK BENEFIT FUND FOR THE AUSTRIAN STATE
RAILWAY EMPLOYEES, 1898 to 1901.

Year.	Average membership.	Contributions.			Expenditures.			Assets at the close of year.
		From members.	From the State.	Total.	Forsick relief, medicines, etc.	For physicians' fees.	Total.	
1893 ...	85,062	\$250,947.79	\$157,800.42	\$408,748.21	\$261,675.93	\$98,743.78	\$355,419.71	\$284,974.65
1899 ...	96,155	230,225.26	176,154.47	456,379.73	326,605.48	101,884.48	428,489.96	312,864.41
1900 ...	101,242	311,367.29	195,444.54	506,811.83	373,564.66	112,567.66	486,132.22	333,543.82
1901 ...	100,380	311,928.58	201,168.46	513,092.04	378,397.89	120,458.37	498,856.26	347,779.80

**SPECIAL ALLOWANCES FROM THE SICK BENEFIT FUND FOR THE AUSTRIAN STATE
RAILWAY EMPLOYEES, 1898 TO 1901.**

Year.	Medical treatment and medicines for dependents of members.	Extra sick relief.	Accouche-ments.	Funeral expenses.		Other allowances (health re-sorts, hospi-tal treat-ment, etc.)	Total.
				For members.	For de-pendents of members.		
1898.....	\$73,486.00	\$12,752.46	\$34,717.87	\$2,842.00	\$18,423.06	\$1,075.90	\$143,297.29
1899.....	83,551.75	16,341.50	39,483.50	3,091.69	20,391.76	1,710.48	164,570.68
1900.....	96,678.75	18,834.54	42,777.18	2,551.71	21,902.28	2,649.15	185,393.61
1901.....	100,938.70	20,249.66	44,579.61	2,431.94	22,320.46	3,364.12	193,884.49

The following table shows the contributions to the accident insurance institution and the relief payments made by the latter from 1898 to 1901:

CONTRIBUTIONS TO THE ACCIDENT INSURANCE INSTITUTION AND THE RELIEF PAYMENTS MADE BY THIS INSTITUTION, 1898 TO 1901.

Year.	Contributions by the State.	Payments for—							Final settle-ments.	Funeral expenses.
		Relief during temporary disability.	Permanent pensions.							
			Disabled em- ployees.	Widows.	Children.	Parents.	Total.			
1898...	\$484, 982. 49	\$97, 699. 84	\$45, 791. 93	\$13, 297. 51	\$13, 889. 26	\$644. 93	\$73, 623. 63	\$2, 166. 21	\$1, 026. 98	
1899...	680, 851. 24	146, 816. 71	70, 229. 88	17, 288. 56	20, 654. 84	1, 300. 82	109, 424. 10	492. 88	981. 30	
1900...	868, 520. 07	182, 132. 41	109, 352. 24	23, 221. 37	25, 673. 00	1, 460. 59	159, 707. 20	1, 643. 89	1, 049. 71	
1901...	1, 014, 209. 72	198, 473. 30	157, 410. 46	29, 002. 41	30, 465. 63	2, 056. 39	218, 934. 89	1, 948. 80	964. 25	

The table which follows shows the membership and the financial operations of the pension and provident funds of the Austrian State railways from 1898 to 1901:

MEMBERSHIP AND BENEFICIARIES OF THE PENSION AND PROVIDENT FUNDS OF THE AUSTRIAN STATE RAILWAYS, 1898 TO 1901.

Year.	Pension fund.					Provident fund.				
	Average mem- bers.	Number of pensioners.			Children receiving educa- tional aid.	Average mem- bers.	Number of pensioners.			Children receiving educa- tional aid.
		Mem- bers.	Wid- ows.	Or- phans.			Mem- bers.	Wid- ows.	Or- phans.	
1898	12, 264	2, 433	2, 515	175	1, 781	35, 675	737	671	112	827
1899	12, 326	2, 503	2, 650	197	1, 846	39, 341	895	804	118	1, 058
1900	12, 617	2, 689	2, 783	200	1, 836	46, 861	1, 111	1, 000	131	1, 338
1901	12, 638	2, 871	2, 924	234	2, 005	53, 322	1, 490	1, 292	149	1, 850

FINANCIAL OPERATIONS OF THE PENSION AND PROVIDENT FUNDS OF THE AUSTRIAN STATE RAILWAYS, 1898 TO 1901.

PENSION FUND.

Year.	Receipts.				Expenditures.					Assets at the close of year.
	From mem- bers.	From the State.	Other.	Total.	Pensions.	Final settle- ments.	Educa- tion of chil- dren.	Other.	Total.	
1898 ..	\$244, 075	\$122, 385	\$250, 148	\$616, 608	\$889, 110	\$5, 312	\$37, 413	\$1, 418	\$933, 253	\$5, 668, 947
1899 ..	281, 103	140, 422	250, 844	672, 369	947, 970	4, 740	40, 784	4, 189	997, 683	5, 616, 032
1900 ..	414, 400	207, 441	247, 582	869, 423	1, 015, 858	5, 056	44, 257	11, 427	1, 076, 598	5, 553, 759
1901 ..	390, 335	195, 374	242, 688	828, 397	1, 131, 578	4, 604	42, 028	11, 877	1, 190, 087	5, 553, 301

PROVIDENT FUND.

1898 ..	\$310, 205	\$155, 102	\$145, 748	\$611, 055	\$86, 572	\$10, 709	\$8, 373	\$5, 297	\$110, 951	\$3, 510, 507
1899 ..	324, 253	162, 126	195, 354	681, 733	114, 784	11, 633	12, 015	3, 926	142, 358	3, 978, 291
1900 ..	381, 063	190, 532	193, 179	764, 774	148, 486	11, 524	16, 298	4, 695	180, 998	4, 478, 303
1901 ..	396, 990	198, 495	204, 802	800, 287	207, 954	9, 666	20, 514	5, 961	244, 095	5, 030, 582

COOPERATIVE STORES, ETC.—Cooperative stores, established at seven of the principal stations, afford employees, especially those who are located at points more remote from the business centers, opportunities to purchase commodities at less than the customary rates.

Purchases may be made either for cash or on credit, the maximum amount of purchases being limited to a certain per cent of the purchaser's earnings. The stores are under the management of trustees selected by the employees. Assistance is rendered by the Government in the way of reduced freight charges and by making collections on credit sales by deductions from the salaries or wages of the purchasers. The total sales of the cooperative stores during 1901 amounted to 4,446,267 kronen (\$902,592).

The purchase of commodities at reasonable prices is also facilitated in other ways, for instance, by giving free transportation to near-by markets twice a month to a member of the employee's household in

cases where employees are stationed at localities where commodities can be procured only with difficulty or at excessively high figures.

Employees are furnished fuel and coal oil for lighting purposes either at cost or at greatly reduced prices. Station dining-room keepers are under contract to furnish all railway employees with meals at a reduction of 25 per cent from regular rates.

At most of the workshops, dining rooms provided with heating apparatus have been furnished for the accommodation of employees whose homes are too remote from the shops to enable them to go home for their dinners during the noon hour.

HOUSING OF EMPLOYEES.—The Government has expended considerable sums of money for the erection of suitable dwelling houses for its railway employees. In 1901 there were 714 of these houses and in the same year the Government appropriated the sum of 3,389,000 kronen (\$687,967), covering the period to 1905, for the purpose of building additional dwelling houses for the use of its employees. In the same year there were also 151 workmen's houses, for the accommodation of 617 families, mostly established in colonies in localities where large numbers of persons are employed, especially in the vicinity of workshops. Quarters are also provided for persons connected with the railway stations and whose presence is constantly required, also for locomotive engineers, conductors, and other trainmen, for their accommodation while away from their regular domicile. At the larger stations, furnished rooms are reserved for the use of higher officials when traveling on business connected with the railway service. Building and loan associations, organized by employees, are in successful operation at Vienna and other localities. The Government encourages the organization of these institutions by granting them loans and by giving them greatly reduced rates on transportation of building material.

PREVENTION OF ACCIDENTS AND HYGIENE.—All employees are required to make themselves thoroughly familiar with the rules and regulations governing their employment, and are subjected to frequent examinations on the subjects pertaining to their duties. The danger from accidents on the Austrian State railways has been lessened by the introduction of the block-signal system on part of the lines.

Modern appliances have generally been introduced on rolling stock, bridges, and tunnels for the protection of passengers and trainmen, and for their relief in cases of accident. Among these may be mentioned cabs for locomotive engineers, vestibule cars, inclosed shelters for brakemen, guards on machinery, and sanitary arrangements, such as bath houses and commodious wash rooms, proper light, heat, and ventilation in workshops. A regular medical corps of 78 physicians is in charge of the medicine department. These physicians are placed in the class of higher officials, and are entitled to membership in the

pension fund under the same conditions that are applicable to other railway officials. Emergency corps, composed of the most intelligent office, station, and shop employees, are organized at 46 of the principal stations. All trainmen and station employees receive theoretical and practical instruction on measures for the first relief of the injured. All stations and large workshops are supplied with rescue appliances, bandages, stretchers, and fire extinguishers.

EDUCATION.—The Government generally contributes to the support of public and private schools which are largely attended by children of railway employees. A school exclusively for children of railway employees, however, has been established by the Government at Lemberg. The cost of its maintenance in 1901 was about \$5,000, of which the State contributed 21,324 kronen (\$4,328.77), the balance having been made up by tuition at the rate of 2 kronen (\$0.41) per month for children of officials and 1 krone (\$0.20) for children of other employees. In the same year the continuation school at Vienna for the technical education of certain classes of railway employees received a contribution from the State amounting to 7,800 kronen (\$1,583.40), and the Commercial School at Linz, a preparatory school for entrance into the railway service, the sum of 6,000 kronen (\$1,218). Provision is also made by the State and two associations, “Der Schulfondsverein für Bedienstete der staatlichen Eisenbahnverwaltung” and Der Kaiserjubiläums-Wohlthätigkeitsverein für Töchter von Bediensteten der Staatseisenbahnverwaltung,” for free tuition and free scholarships in certain educational institutions in aid of children of employees of limited means. The sum expended by the State and the two associations for this purpose in 1901 amounted to 111,234 kronen (\$22,580.50).

Boys are apprenticed in all workshops of the Austrian State railways, preference being given to the sons of employees. They must be physically sound, at least 14 years of age, and must have completed the course of studies prescribed for the common schools.

RELIGIOUS, ETHICAL, AND SOCIAL IMPROVEMENT.—All employees in the executive branches of the service are allowed at least one Sunday or holiday each month to attend divine service. A chapel has been erected by the State at the colony at Neu-Sandez at an expenditure of 94,000 kronen (\$19,082) for the use of the employees residing at the colony. At the larger stations employees have organized societies for social purposes, for amusement, and for instruction. The organization of these societies is encouraged by the State by rendering them substantial aid in procuring books, instruments, etc.

COST OF BETTERMENT INSTITUTIONS.—The following summary shows the aggregate expenditures by the State for the various institutions enumerated above, in 1901, in addition to the regular salaries, wages, and allowances for rent:

Extra pay and allowances.....	\$350, 581. 00
Rewards.....	86, 003. 18
Premiums	415, 654. 28
Relief of needy employees	25, 984. 00
Age and invalidity funds	821, 953. 29
Sick-benefit fund	215, 180. 00
Accident insurance	1, 014, 209. 72
Fuel for employees	153, 500. 68
Dwellings and workmen's houses.....	132, 929. 07
Sanitation	55, 013. 00
Education	21, 606. 71
Administration of the age and invalidity funds, sick-benefit fund, etc.	134, 755. 46
Total	3, 427, 370. 39

MANUFACTURING, ETC., INDUSTRIES.—This volume, which is the third of the series, covers the following industries: Stone, glass, china, and earthen ware, metals and metallic goods, machinery and instruments, leather and hides, brushes and feathers, textiles, paper, food products, chemical products, and the steamboat service.

The investigation was conducted by means of schedules of inquiry sent to establishments designated by chambers of commerce and industry and manufacturers' associations in Austria, some information being also obtained from reports of factory inspectors and other publications. The report deals with returns from 721 undertakings covering 943 establishments employing 350,000 employees. The data mostly relate to the year 1900, although some information for the years 1901 to 1903 was used.

The information is presented in ten chapters, dealing respectively with the following subjects: Supplementary wage allowances; rewards and premiums; vacations and time allowances; workmen's committees; loan and savings institutions; sickness, accident, and other relief institutions; arrangements for the cheap supply of commodities to employees; housing of employees; the care and education of children and young persons; prevention of accidents and hygiene; and spiritual, ethical, and social improvement of employees. An index to the undertakings considered in the report is also given, together with the address, date of founding, and approximate number of employees of each.

SUPPLEMENTARY WAGE ALLOWANCES, ETC.—Fourteen undertakings, most of which were engaged in the food products group of industries, had introduced the system of profit sharing. Seventy-three granted regular supplementary allowances to wageworkers and 5 to officials, in the form of regular gratuities for long-continued service, allowances for house rent, school tuitions, and the payment by employers of the employees' income taxes.

Gratuities in the form of presents to employees on special occasions,

such as Christmas, New Year, anniversaries, etc., were given to officials by 82 and to wageworkers by 59 undertakings. Forty-six gave occasional gratuities to officials and 169 to wageworkers in the form of rewards for thrift, diligence, meritorious work, prevention of accidents, rescue of the injured, etc.

VACATIONS AND TIME ALLOWANCES.—One hundred and fifteen undertakings permitted women regularly to leave the establishments a little earlier at noon each day, in order to enable them to prepare the mid-day meal, and 50 additional undertakings gave this privilege only in exceptional instances. Sixty-three undertakings regularly permitted women to leave earlier on Saturday evenings, and 38 undertakings permitted this in exceptional cases. Fifty-three undertakings regularly granted employees leave of absence for recreation, 35 of which allowed them full pay and 5 part pay during such absence. In exceptional cases, as when employees were in poor health or when convalescent, 285 undertakings granted their employees leave of absence, 91 with full pay and 97 with part pay.

WORKINGMEN'S COMMITTEES.—Forty-six undertakings reported the existence of separate workingmen's committees. These are committees elected by the wageworkers in an establishment for the purpose of representing them in their relations with their employers, by presenting grievances, suggesting reforms or improvements, watching over the enforcement of the laws for the protection of the working people (labor contract, factory regulation, insurance, etc.), giving advice with regard to changes in the working rules, etc. They also settle trade disputes among the employees, and in some cases supervise the education of the children and look after the school attendance, the training of apprentices, and the management of betterment institutions. The committees here considered are only such as are elected for individual undertakings with the consent and advice of the employers. Committees of trade unions or other independent labor organizations are not included in this class.

LOAN AND SAVINGS INSTITUTIONS.—Loan funds, either as company funds or employees' institutions, were reported for officials by 9 undertakings, and for wageworkers by 25 undertakings; savings banks for officials by 12 undertakings, and for wageworkers by 21 undertakings. Special savings deposit stations for wageworkers were maintained by 16 undertakings. Prizes for savings were granted to officials by 2 and to wageworkers by 13 undertakings.

RELIEF.—Permanent systems of relief, including aid societies, relief funds, bequests, etc., were reported by 224 undertakings, in 87 cases for officials and in 214 for wageworkers. There were 335 separate relief institutions reported by these undertakings, of which 39 were only for officials, 226 for wageworkers, and 70 for both wage-

workers and officials. Where no such permanent relief institutions existed, the granting of relief in cases of distress was entirely at the option of the employers. There was a great variety of these relief institutions, their functions depending in a measure upon the character of the relief given and the industry in which they were organized. This chapter takes no account of the compulsory sickness and accident insurance systems in Austria.

CHEAP SUPPLY OF COMMODITIES.—In a number of establishments the employees have organized cooperative distributive societies, which in some cases received encouragement from employers in the form of noninterest-bearing loans of capital or the furnishing of the necessary quarters free of rent. Sometimes these societies had cooperative stores, while in other cases they simply made purchases in large lots at wholesale and distributed them at cost. In a few cases factory bakeries and abattoirs have been established the products of which are furnished at cost price to the employees.

Most of the undertakings furnished wood and coal to their employees at cost price, some furnished it at the actual purchase price, while a few undertakings supplied their employees with free fuel, especially where the latter lived in company houses. Ground for cultivation was often furnished employees, sometimes free and sometimes for a rental. Where employees lived in company houses they were usually given the free use of ground for vegetable gardens.

Two hundred and thirty undertakings had dining rooms, where employees could obtain wholesome, nutritious food at reasonable prices. In some cases these institutions were leased to caterers who contracted to furnish food at a fixed list price and under the supervision of the establishment. In 220 cases kitchens were provided, where the employees could cook or heat the food which they brought with them. Usually the rooms needed for this purpose were furnished free of charge by the employers, who also bore the expense of heating, lighting, and service. Sometimes the employees had a voice in the management of these institutions. In a few cases the employers furnished free lunches either to all or certain classes of employees, such as young persons and apprentices. Sometimes employees were furnished refreshments free of cost, such as coffee, cognac, etc., in summer, and tea or soup in winter.

HOUSING OF EMPLOYEES.—This is the most common form of betterment institution inaugurated by the employers in Austria. The employers have either built houses expressly for their employees, have adapted existing buildings for dwelling purposes, or have leased buildings for their employees. Such dwellings are either rented to employees at a low rental or are furnished them free of rent. In some cases the subletting of portions of such dwellings was permitted,

in others it was expressly forbidden. Most of these dwellings had small gardens for the free use of the tenants. In some cases where employers could not furnish dwelling houses for their employees they gave them allowances for quarters in addition to their wages.

Some employers had dormitories for employees whose places of residence were too far from the establishment to enable them to return to their homes every night. This was particularly the case in the food-product industry, in which during the busy season many nonresidents are temporarily employed. The sleeping accommodations in such cases were either given free of charge or were furnished at very small cost to the lodgers.

In a few instances employers have instituted schemes for encouraging employees to acquire their own homes, either by building the houses and selling them at cost, payable in installments, by furnishing the land on which to build, or by making loans to employees desiring to purchase or build their own houses.

EDUCATION.—Many employers reported institutions for the care and education of children and young persons. Thirty-nine undertakings reported day nurseries and kindergartens; 25, primary and grammar schools for children of employees, and 25 reported continuation schools, trade schools, and schools for housekeeping, cooking, sewing, knitting, etc., for young persons in their employ and for children of employees. These institutions were either founded by employers and were being maintained by them, or they were encouraged and assisted by subsidies from the employers.

Twelve undertakings paid tuitions for children of their employees, four furnished books and school supplies, and a number of employers endowed free scholarships for children of their employees. Three undertakings furnished lunches to the school children of their employees and three others provided vehicles for taking the children to and from school. Thirty-three undertakings gave Christmas presents to the children of their employees.

PREVENTION OF ACCIDENTS, AND HYGIENE.—Many employers of labor have established hospitals and dispensaries for the care of the sick or injured. In five undertakings there were special convalescent homes for employees. In a number of establishments certain employees have been organized into emergency corps and trained in giving first aid to the sick and the injured.

Most of the employers reporting have provided bath houses, the use of which was usually free to employees. Several employers furnished free working clothes to certain classes of their employees. In most of the establishments there were wash rooms and dressing rooms, and in some cases laundries and drying and ironing rooms for use of the employees.

RELIGIOUS, ETHICAL, AND SOCIAL IMPROVEMENT.—A number of establishments have special churches and chapels for the use of the employees. Among other institutions reported were libraries and reading rooms for the free use of employees, lecture courses, etc. One establishment had erected a theater. Forty-five undertakings reported the existence of singing societies, and 33, company bands and other amateur theatrical societies, social clubs, and excursion parties, which in many cases received financial assistance from the employers.

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.

COMBINATIONS—MALICIOUS INJURY TO BUSINESS—CONSTITUTIONALITY OF STATUTE—*Aikens v. Wisconsin, United States Supreme Court, 25 Supreme Court Reporter, page 3.*—This case was twice before the supreme court of Wisconsin, and was twice argued before the United States Supreme Court, the decision of which upheld the conclusions of the State court in its interpretation of the statute of Wisconsin (sec. 4466a) which imposes imprisonment or fine on “any two or more persons who shall combine * * * for the purpose of willfully or maliciously injuring another in his reputation, trade, business, or profession, by any means whatever,” etc. The case, therefore, while not involving labor, is here presented as affording an authoritative discussion of the principles of the Wisconsin statute on combinations.

It appears that the Journal Company was a corporation publishing a newspaper in the city of Milwaukee, and that it had given notice of an increase of about 25 per cent in its charges for advertising. Thereupon the managers of other newspapers in the city met and agreed that if anyone should pay the increased rate to the Journal Company he should not be permitted to advertise in their papers except at a corresponding increase; but if he should refuse to pay the rate charged by the Journal he might advertise in the other papers at the rate previously charged, which agreement was carried out greatly to the damage of the business of the Journal Company, and informations were brought against the combining managers resulting in convictions.

The contention of the defendants was that the statute in question was in conflict with the fourteenth amendment, and was therefore unconstitutional. The Supreme Court, Justice White dissenting, upheld the statute and affirmed the judgment of the court below. From the remarks of Justice Holmes, who announced the opinion of the court, the following is reproduced:

The statute, it will be observed, punishes combining for the purpose of willfully or maliciously injuring another in his business. If it should

be construed literally, the word "willfully" would embrace all injuries intended to follow from the parties' acts, although they were intended only as the necessary means to ulterior gain for the parties themselves. Taken in that way the word would hit making a new partnership, if it was intended thereby to hurt someone's else business by competition. We shall not consider whether that branch of the statute, so construed, could be sustained, and express no opinion about it. The supreme court of Wisconsin has intimated that a narrower interpretation will be adopted, and in the present case we have to deal only with the other branch, depending on the word "maliciously," as we shall explain in a moment. The last-quoted word we must take as intended to add something to the word "willfully," and we can do so only by taking it in its true sense. We interpret "maliciously injuring" to import doing a harm malevolently, for the sake of the harm as an end in itself, and not merely as a means to some further end legitimately desired. Otherwise the phrase would be tautologous, since a willful injury is malicious in the sense familiar to declarations and indictments, where, indeed, the word means no more than foreseen, or even less than that. A death is caused of malice aforethought if, under the circumstances, known to the actor, the probability of its ensuing from the act done is great and manifest according to common experience.

The informations alleged a combination for the purpose of willfully and maliciously injuring others, and therefore brought the case within the latter branch of the statute, if there are two, and if "or" in the act is not taken to mean "and." A purely malevolent act may be done even in trade competition.

We come, then, to the question whether there is any constitutional objection to so much of the act as applies to this case. It has been thought by other courts as well as the supreme court of Wisconsin that such a combination, followed by damage, would be actionable even at common law. It has been considered that, *prima facie*, the intentional infliction of temporal damages is a cause of action, which, as a matter of substantive law, whatever may be the form of pleading, requires a justification if the defendant is to escape. If this is the correct mode of approach, it is obvious that justifications may vary in extent, according to the principle of policy upon which they are founded, and that while some—for instance, at common law, those affecting the use of land—are absolute, others may depend upon the end for which the act is done. [Cases cited.] It is no sufficient answer to this line of thought that motives are not actionable, and that the standards of the law are external. That is true in determining what a man is bound to foresee, but not necessarily in determining the extent to which he can justify harm which he has foreseen.

However these things may be, we have said enough to show that there is no anomaly in a statute, at least which punishes a combination such as is charged here. It has been held that even the free use of land by a single owner for purely malevolent purposes may be restrained constitutionally, although the only immediate injury is to a neighboring landowner. Whether this decision was right or not, when it comes to the freedom of the individual, malicious mischief is a familiar and proper subject for legislative repression. (*Com. v. Walden*, 3 Cush. 558.) Still more are combinations for the purpose of inflicting it. It would be impossible to hold that the liberty to combine to inflict such mischief, even upon such intangibles as busi-

ness or reputation, was among the rights which the 14th amendment was intended to preserve. The statute was assumed to be constitutional in *Arthur v. Oakes*, 25 L. R. A. 414, 24 U. S. App. 239, 63 Fed. 310, 325, 326.

But if all these general considerations be admitted, it is urged, nevertheless, that the means intended to be used by this particular combination were simply the abstinence from making contracts; that a man's right so to abstain can not be infringed on the ground of motives; and further, that it carries with it the right to communicate that intent to abstain to others, and to abstain in common with them. It is said that if the statute extends to such a case it must be unconstitutional. The fallacy of this argument lies in the assumption that the statute stands no better than if directed against the pure nonfeasance of singly omitting to contract. The statute is directed against a series of acts, and acts of several,—the acts of combining, with intent to do other acts. "The very plot is an act in itself." (*Mulcahy v. Queen*, L. R. 3 H. L. 306, 317.) But an act which, in itself, is merely a voluntary muscular contraction, derives all its character from the consequences which will follow it under the circumstances in which it was done. When the acts consist of making a combination calculated to cause temporal damage, the power to punish such acts, when done maliciously, can not be denied because they are to be followed and worked out by conduct which might have been lawful if not preceded by the acts. No conduct has such an absolute privilege as to justify all possible schemes of which it may be a part. The most innocent and constitutionally protected of acts or omissions may be made a step in a criminal plot, and if it is a step in a plot, neither its innocence nor the Constitution is sufficient to prevent the punishment of the plot by law.

It was urged farther that to make a right depend upon motives is to make it depend upon the whim of a jury, and to deny the right. But it must be assumed that the constitutional tribunal does its duty, and finds facts only because they are proved. The power of the legislature to make the fact of malice material we think sufficiently appears from what we already have said.

Finally, it is argued that the supreme court of Wisconsin would hold that the statute extends to acts of which the motives were mixed, and which were done partly from disinterested malevolence and partly from a hope of gain. If so, it is said, the statute would be open to all the objections at which we have hinted in dealing with the word "willfully." The supreme court did use some language which looked that way, but we consider it to have decided that the statute would be confined to combinations with intent to do wrongful harm. (110 Wis. 193, 260, 62 L. R. A. 700, 85 N. W. 1046.) Thus limited, on whatever ground, the statute would punish only combinations of a kind for which no justification could be offered and those which were taken out of the justification by the motive with which they were made. We see no sufficient reason to believe that the court will go farther, or construe the act in such a way as to raise questions which we need not go into here. Therefore it is unnecessary to consider whether, on a more literal construction, the portion dealing with malicious intent could be separated from that which deals with the purpose of merely willful injury, and saved, even if the latter were held to go too far. Probably the two phrases will be read together and the statute made unquestionable as a whole.

CONSPIRACY—CONTRACTS TO EMPLOY NONE BUT MEMBERS OF UNIONS—STRIKES—UNLAWFUL MEANS—EVIDENCE—*State v. Stockford et al.*, *Supreme Court of Errors of Connecticut*, 58 *Atlantic Reporter*, page 769.—In the superior court of New Haven County, Orrin J. Stockford and others were convicted of criminal conspiracy. An appeal was taken on the ground of the improper admission of evidence, with the result that the judgment of the lower court was affirmed.

The charges were that the defendants, who were the officers and agents of certain labor unions composed of teamsters and drivers, were guilty of conspiring together and with their associates to cause all the employees of various trucking companies and liverymen to leave their service; also to so picket the places of business of these companies as to prevent the employment of other workmen; and to cut off the patronage and destroy the business of these companies and persons by the use of such threats and intimidation as would debar the public and all over whom the defendants had influence from becoming or continuing as patrons. The object of this strike and boycott was to procure the signing of an agreement drawn up by the unions to the effect that none but members of the union teamsters and drivers should be employed, and fixing the rates of wages, hours of labor, and holidays to be observed.

Inasmuch as the appeal was based on the nature of the evidence, a summary of the same, as given by Judge Hall of the supreme court, is here reproduced:

The State having offered evidence that the defendants and other members of the unions had, after the commencement of the strike, endeavored, by threats, to prevent customers from further patronizing said team owners and liverymen, one Norton, an employee of the Peck & Bishop Company, and familiar with its business, and one Donnelly, secretary of the Smedley Company, were permitted to testify as to the number of customers lost by said companies, respectively, after the strike, against the objection of the defendants that it did not appear how said customers were lost. Alfred Coolman, a teamster of the Peck & Bishop Company, testified that he ceased work the first week of the strike, and then resumed work; that afterwards he saw twenty-five or thirty teamsters wearing the union button, some of whom insulted and threatened him; that on one occasion a crowd of twenty or more teamsters hooted and yelled at him as he was driving a team of the Peck & Bishop Company, and three of them, who wore the union button, stopped him, and talked of "pulling him off the wagon and smashing him," and told him that they would get even with him; that on another occasion while the witness was driving a wagon for said company one Taylor, a teamster, who, it had been shown, belonged to the union, and had worked for the Peck & Bishop Company, and had at least on one other occasion interfered with the teams of the company, said to the witness, "If I had you out of the wagon here, I would break your bloody head, and I will do it yet;" that one night while the witness was acting as a watchman for the Peck & Bishop Company, about a week after said remark of Taylor, some one

shot at him, and that "he felt the wind of it," and one of the bullets struck a wire on a bale of hay against which the witness was leaning. This testimony was received against the objection of the defendants that the shooting had not been connected with any union man.

William Talmadge, one of the defendants, having testified on behalf of the defendants that he was president of Local 340, and assisted in preparing the form of said agreement; that he was the business agent of the union, and presided at its meetings; and that the men were instructed not to interfere with or annoy any one—was asked on cross-examination, after he had testified that he was present at the meeting when the strike was ordered, if he did not understand that the purpose of calling out the men from those concerns and individuals who had refused to sign the agreement, was to cripple them in their business. The witness answered: "I knew that if they did not sign that agreement the men would be called out. That was the object of calling the men out, naturally." This evidence was admitted against the defendants' objection that it was immaterial and improper and called for the witness' construction of an act of the union. The same witness was asked whether it was not the purpose, as he understood it, that his branch of the union should be in absolute control of all the teamsters employed in New Haven. He answered that he could not state they controlled them all. The defendants' general objection to this question and answer was overruled.

Peter Flynn, one of the defendants, having testified in behalf of the defendants that he was secretary of Local 340, that he appointed pickets, and instructed them as to their duties, and that they should use no violence, and that they were so instructed at the meetings of the union, but that instances of violence had come to the knowledge of himself and other officers of the union, and having testified on cross-examination that as secretary he had employed counsel to defend men who had been arrested for using violence, was asked on cross-examination who paid such counsel. The witness answered, "The union." Defendants' objection to said question and answer were overruled by the court.

The defendant Cornelius testified upon direct examination as to instructions given to union men to use no violence, and on cross-examination that he had no knowledge of any one interfering with one Joseph Kinney by insulting or abusive language or otherwise, excepting as he had read of it; and that he did not so interfere with him and insult him. He was thereupon asked by the state's attorney if he was not the person convicted in the court of common pleas of having on the 17th of May, 1903, committed a breach of the peace in New Haven streets upon said Kinney. In connection with this inquiry the State offered the record of such conviction, the defendants having before objected to the question whether the witness had been convicted of using violence during the strike, upon the ground that the record was the best evidence. The court admitted said inquiry against the defendants' objection.

After this statement Judge Hall said:

The agreements which the defendants sought to have signed contain no provisions which are contrary to the criminal law of this State, and, if the only purpose of the combination was to procure these agreements to be entered into in order to advance the legitimate inter-

ests of the employees of the team owners and liverymen, without the view of injuring the business and property of their employers, such purpose was not criminal.

If the alleged purpose of the combination was not criminal, were the methods to be pursued criminal? It is alleged that the defendants maliciously conspired to compel the employers to sign the agreements. It is not alleged that it was intended to directly threaten the employers to induce them to sign the agreements, nor does it appear that they were directly threatened. The information states how they were to be compelled, and we think it is, in effect, alleged that they were to be compelled only by the particular methods described in the information, the first of which is by inducing the workmen, by concerted action, to strike, and leave the employment of the employers named. Such a strike may be lawful or it may be unlawful and criminal. Whether it is lawful or not depends upon its object and the manner in which it is conducted. Workmen may lawfully combine to accomplish their withdrawal in a body from the service of their employers, for the purpose of obtaining an advance in wages, a reduction of the hours of labor, or any other legitimate advantage, even though they may know that such action will necessarily cause injury to the business of their employers, provided such abandonment of work is not in violation of any continuing contract, and is conducted in a lawful manner, and not under such circumstances as to wantonly or maliciously inflict injury to person or property. A combination to compel workmen and others, by threats and intimidation, to refrain from doing that which they have a legal right to do, is criminal. The use of such means is made a criminal offense by section 1296 of the General Statutes of 1902, which provides that: "Every person who shall threaten or use any means to intimidate any person to compel such person against his will, to do or abstain from doing any act which such person has a legal right to do, or shall persistently follow such person in a disorderly manner, or injure or threaten to injure his property with intent to intimidate him, shall be fined not more than one hundred dollars, or imprisoned not more than six months."

Upon the trial of the present case the contest appears to have been upon questions of fact, rather than of law; upon the question of whether violence, threats, and intimidation were the means used and directed by the defendants to be used, rather than whether proof of those facts was necessary in order to convict. The evidence is not before us, but the record shows that the witnesses testified that pickets were instructed in open meetings by several of the defendants to use violence to prevent workmen from continuing in the employ of the team owners and liverymen, and that such instructions were obeyed. Judge Hall here reviewed the charge to the jury in the court below, and concluded: Upon an examination of the entire charge we are satisfied that the defendants have no just cause of complaint, either upon the ground that the court failed to instruct the jury sufficiently full upon the subjects embraced in their requests, or to fairly and properly present the case to the jury. Evidence of acts of the accused and of their agents in endeavoring to accomplish the purpose of the conspiracy was admissible as evidence of the manner in which it was designed to be accomplished; and, after *prima facie* proof of the alleged conspiracy, evidence of the acts and declarations of the individual conspirators was admissible. (*State v. Thompson*, 69 Conn. 720-726, 38 Atl. 868.)

The testimony of the witnesses Norton and Donnelly was properly admitted. To render their testimony admissible, the State was not required to first prove by direct evidence that the customers referred to had been solicited by the defendants or their associates to refrain from giving their patronage to the team owners. Whether the losses of custom were occasioned by such alleged acts were questions for the jury upon all the evidence. For similar reasons the testimony of Coolman that he was shot at was admissible. The question was one of the weight and effect of his testimony in connection with the circumstances proved, as showing that the shooting was by a union man. The facts testified to were sufficient to warrant the court in leaving that question to the jury. The questions asked the defendant Talmadge were proper in cross-examining him upon his testimony as to the purpose of the strike and the manner in which it was to be conducted. The defendant Flynn having testified that the union instructed pickets to use no violence, it was proper cross-examination for the State to show the action of the union when informed that violence had been used by their men, and for that purpose to show that the union had paid counsel to defend union men arrested for using violence. The question asked the defendant Cornelius, in connection with the offer of the record of his conviction, was not for the purpose of proving the averments of the information, but to contradict, upon cross-examination, a material statement of one of the defendants' witnesses. It was clearly admissible for that purpose. Other rulings complained of in the reasons of appeal require no discussion.

CONTRACTS OF EMPLOYMENT—ENFORCEMENT—CONSTITUTIONALITY OF STATUTE.—*Toney v. State, Supreme Court of Alabama, 37 Southern Reporter, page 332.*—This case was before the supreme court on an appeal from the probate court of Russell County, in which Columbus Toney was found guilty of an offense against a law (page 1208, Acts of 1900–1901) forbidding any person who has made a contract in writing, either as employee or lessee of lands, to make a second contract of any form of a similar nature or character to the first without the consent of the other party to the prior contract before the expiration of the same, unless for a reason that shall be adjudged sufficient by the court. The penalty affixed was fine or imprisonment, or both.

The appeal was based on the claim that the law in question was unconstitutional, which claim was upheld by the court, and the petitioner was ordered to be released.

In announcing the decision of the court, Judge Sharp, who delivered the opinion, used in part the following language:

This enactment can not operate consistently with the guaranties of equality, liberty, and property made by the Federal and also by the State constitution. In the State constitution as it existed when this act was passed, and as it now exists, "life, liberty, and property" are enumerated as being among the inalienable rights of all men, and to protect the citizen in the enjoyment of "life, liberty, and property" is declared to be the sole object and only legitimate end of government.

The constitutional provisions referred to were not designed to interfere with the State's public powers; and within the limits set by the constitution, State and Federal, the legislature is free to determine what subjects are proper to be legislated upon in conservation of order, morals, health, and safety; but a constitutional right "can not be imposed on or destroyed under the guise or device of being regulated."

The act in question purports to prohibit the employee and renter to make contracts of the kind he may have abandoned except under one of three alternative conditions. The first of these, the employer in the case of the employee, or the landlord in the case of the renter, could, by withholding his consent, render unavailable; the second—the existence of an excuse for the abandonment, to be judged of by the court—could never be known to be available except at the risk of, and at the end of, a criminal prosecution; the third—that of giving notice of the existing contract—would tend to prevent the making of a similar contract with a new employer or landlord, and this for reasons which are obvious, if regard be had to the risk of prosecution to which such new employer or landlord would be subject under another act in *pari materia* with this, and approved on the day before the approval of this act. (Acts 1900-1901, p. 1215.) If the conditions prescribed by this act can be validly imposed, the door is open for the imposition of others more onerous. "Questions of power do not depend on the degree to which it may be exercised. If it may be exercised at all, it must be exercised at the will of those in whose hands it is placed." (*Brown v. Maryland*, 12 Wheat. 419, 6 L. Ed. 678.) Because of the restrictions it purports to place on the right to make contracts for employment and concerning the use and cultivation of land, this act is wholly invalid. Whether a like conclusion might be reached upon other considerations urged in the brief for petitioner, it is unnecessary to consider.

A forceful opinion opposed to the constitutionality of this act was recently rendered by Judge Jones, and is reported in 123 Fed. 671 (D. C.; Peonage Cases). [See Bulletin of the Bureau of Labor, No. 50, p. 175.]

The act for which petitioner is held was not a criminal offense, and therefore the judgment appealed from will be reversed, and it will here be ordered that the petitioner be discharged from custody.

EIGHT-HOUR LAW—CITY ORDINANCE—CONSTITUTIONALITY—*In re Broad, Supreme Court of Washington, 78 Pacific Reporter, page 1004.*—The city of Spokane provided by ordinance that, except in cases of emergency, eight hours should constitute a day's work for all laborers employed on municipal work which is being done by contract or subcontract, and fixing the minimum compensation therefor.

This case was before the supreme court on the application of James C. Broad, held as an offender under this ordinance, for a writ of habeas corpus, on appeal from the superior court of Spokane County. The writ was denied in each court, the point at issue being the constitutionality of the ordinance.

In asserting such constitutionality, Judge Dunbar, speaking for the supreme court, used in part the following language:

The principal contention of the appellant is that the ordinance is in violation of the fourteenth amendment to the Constitution of the United States, and of similar provisions of the State constitution. It is earnestly contended, and such is undoubtedly the general statement of the law by the reported cases, that the right to contract labor is a valuable right, and that any law that takes that right away is obnoxious to the constitutional provision prohibiting the taking of property without due process of law. These elementary propositions have been so often discussed that it is not necessary to again enter into their discussion here. In the case at bar the ordinance which was violated was substantially identical with the act of the legislature, Laws 1899, p. 163, c. 101, which provides:

"Section 1. Hereafter eight hours in any calendar day shall constitute a day's work on any work done for the State or any county or municipality within the State subject to the conditions hereinafter provided."

* * * * *

It is insisted by the respondent that it would be unconscionable to allow the contractor, after having entered into this contract and based his bid upon the provisions of the ordinance with reference to the number of hours that laborers under the contract should be allowed to work, to appropriate to himself the benefits accruing from a violation of his own contract; and there seems to be some justice in this criticism, although in an action of this character it may not be a pertinent argument. The Supreme Court of the United States in the recent case of *Atkin v. Kansas* (decided May 1, 1903) 24 Sup. Ct. 124, 48 L. Ed. 148, [see Bulletin of the Bureau of Labor, No. 50, p. 177] have passed with no uncertain sound upon the identical question which is presented in this case, and have held the law to be valid. An examination of the Kansas statute upon which the defendant *Atkin* was indicted shows it to be in substance the same as our statute and the ordinance in question. But the decision was based upon an entirely new theory of the law, namely, that it was a public work upon which the contractor was engaged, and with reference to which he contracted; that the State, or the municipalities through delegated power from the State, had a right to do their work in any manner in which they saw fit, and that they had the same right to compel those with whom they contracted to perform the public work in the same manner, and that there was no question of violation of private right involved. It is a notable fact in this connection that the alleged constitutional right of the laborer to contract his labor at any price which seems to him desirable is not in this or any other reported case a claim urged by the laborer, but the earnest contention in his behalf is made by the contractors who are reaping the benefits of the violation of that contract in paying the laborer a less remuneration than he is entitled to under the statute. But inasmuch as this is a case which is susceptible of being appealed to the Supreme Court of the United States, and inasmuch as that tribunal has passed squarely upon the questions involved in this case in favor of sustaining the judgment herein, this court feels it its duty to yield allegiance to the doctrine announced by the Supreme Court of the United States.

There seems to us to be no virtue in any of the other contentions made by the appellant. The title to the act is sufficient; the ordinance was made under the authority of the law, and, not being obnoxious to any constitutional provision either of the United States or of the State, the judgment will be sustained.

EIGHT-HOUR LAW—PUBLIC CONTRACTS—CONSTITUTIONALITY OF STATUTE—*People ex rel. Cossey v. Grout, Court of Appeals of New York, 72 Northeastern Reporter, page 464.*—Harry Cossey had agreed to construct and deliver to the city of New York 10 scows at a fixed price, the terms of the contract being controlled by the provisions of the third section of chapter 415, Laws of 1897, known as the "labor law," which limits the hours of labor of employees of contractors for public works to eight per day, except in cases of emergency, in so far as such law was constitutional and applicable.

Six scows were made, delivered, and accepted, but payment thereon was refused on the ground that Cossey had permitted the workmen employed thereon to work more than the statutory number of hours. This ruling of the comptroller had been upheld in special term and by the appellate division of the supreme court of the State, but was, on appeal to the court of appeals, reversed, and the sum claimed ordered paid, that court holding that the provisions of the law mentioned were unconstitutional, Judge Haight dissenting.

Chief Justice Cullen, who delivered the opinion of the court, reviewed the controlling principles and cases at some length. From his remarks the following is quoted:

The earliest case under the labor law which came before us was that of *People ex rel. Rodgers v. Coler*, 166 N. Y. 1, 59 N. E. 716, 52 L. R. A. 814, 82 Am. St. Rep. 605. [See Bulletin of the Department of Labor, No. 35, p. 805.] That was an application by a contractor with the city to compel the payment of his claim. It was resisted on the ground that the contractor had failed to comply with the labor law so far as it required payment by him to his employees of the prevailing rate of wages. It was held that the labor law, so far as it required that in contracts with the municipality the contractor should agree to pay his employees the prevailing rate of wages, was unconstitutional and void, and that the contractor was entitled to payment, though he had failed to comply with that provision. That case differs from the one now before us in but one respect. There the contractor had failed to pay the prevailing rate of wages; here the contractor permitted daily labor in excess of eight hours. This difference in circumstances would not justify a distinction in principle, and therefore the decision in the *Rodgers* case must control the disposition of the present case, unless the *Rodgers* case has been overthrown by the subsequent cases in this court or in the Supreme Court of the United States.

Judge Cullen then reviewed the cases of *People v. Orange County Road Construction Company*, 175 N. Y. 84, 67 N. E. 129, 65 L. R. A. 33 [see Bulletin of the Bureau of Labor, No. 50, p. 181]; *Atkin v. Kansas*, 191 U. S. 207, 24 Sup. Ct. 124, 48 L. Ed. 148 [see Bulletin of the Bureau of Labor, No. 50, p. 177]; and *Ryan v. City of New York*, 177 N. Y. 271, 69 N. E. 599 [see Bulletin of the Bureau of Labor, No. 55, p. 1672]. Each of these cases was distinguished from the case at bar, and the conclusion reached that "the authority of the *Rodgers* case still obtains;" whereupon the orders of the lower courts were reversed and the mandamus directing payment was granted, the provision of the law on which the comptroller relied being held to be unconstitutional and void.

EMIGRANT AGENTS—TAXATION—LICENSES—CONSTITUTIONALITY OF STATUTE—*State v. Roberson*, *Supreme Court of North Carolina*, 48 *Southeastern Reporter*, page 595.—In this case J. W. Roberson had been convicted in the superior court of Franklin County of engaging in the business of procuring laborers for employment outside the State without prior payment of the license tax required by law. Section 74, chapter 247 of the laws of 1903, the revenue law of the State, requires the securing of a license for such business and the payment of a tax of \$100 for the State and a similar sum for each county in which the business is carried on.

The only exception considered by the court was the one that contended that the tax imposed is "unreasonable, excessive, restrictive, and prohibitive." The court held the statute to be constitutional, Judge Connor, speaking for the court, using in part the following language:

We would have no difficulty in holding that, in the absence of any evidence or finding in the special verdict as to the number of persons who might be employed as laborers, the extent of the business, or the profits to be made, the tax imposed was not unreasonable or excessive. We do not wish to be understood as intimating that this court has any power to declare a revenue measure otherwise constitutional invalid because of the amount of tax levied. When the constitution confers upon the legislature the power to levy taxes, the amount of the tax to be levied is committed to that department of the government, and not open to review by the judicial department. We may inquire into the question of power, but not as to the manner of its exercise. In an exhaustive and very able opinion written by Mr. Justice White in *McCray v. The United States*, 195 U. S. 27, 24 Sup. Ct. 769, he says: "Since the taxing power conferred by the constitution knows no limit except those expressly stated in that instrument, it must follow, if a tax be within the lawful power, the exertion of that power may not be judicially restrained because of the result to arise from its exercise."

For the reasons stated, there is no error, and the judgment must be affirmed.

EMPLOYERS' LIABILITY—COOPERATIVE INSURANCE—CONSTITUTIONALITY OF STATUTE.—*Franklin v. The United Railways and Electric Company of Baltimore, Court of Common Pleas of Baltimore, Opinion filed April 27, 1904.* (Copied from court records.)—This case was before the court of common pleas on an action of Andrew J. Franklin, an employee of the company above named, to recover damages for injuries received while in its service. The case itself is of no special interest apart from the fact that the defendant company plead as a defense that it was a contributor, under the cooperative insurance law of Maryland, chapter 139 of the Acts of 1902, to the fund therein provided for, and was therefore exempt from further liability. To this plea the plaintiff, Franklin, demurred, on the ground that the law named was unconstitutional, and it was so held by the court. Though not a superior court, this ruling has been accepted as final, and is for that reason here reproduced.

The act provided for the creation and maintenance of a fund in the hands of the State insurance commissioner for the benefit of employees in certain lines of employment, such fund to be maintained by payments made by the employers at rates fixed by law, or by the insurance commissioner under its provisions. From this fund the sum of \$1,000 was to be paid to the heirs of employees whose death resulted from accident, if the insurance commissioner was satisfied on inquiry that such proceeding was in accord with the evidence and the provisions of this law. Besides the cases of liability existing under previous laws, the statute provided for recovery in cases where the death resulted from the negligence of a fellow-servant, and for a proportionate compensation where the death was the result of negligence to which the deceased employee contributed. (For the law in full, see Bulletin of the Department of Labor, No. 45, pp. 406-408. See also pp. 645-648 above.)

After stating the above, Judge Stockbridge, for the court, spoke as follows:

For the handling and disbursement of this entire fund "plenary power" was lodged in the hands of the insurance commissioner, thus investing him with judicial or quasi judicial power, and that without any provision for a trial by jury, or any right of appeal from his conclusions. Had the act stopped here, it might well have been argued that inasmuch as it provided for a fund for the benefit of certain widows and orphans who would otherwise be remediless, it was within the power of the legislature to place the administration of that fund in the hands of such officials as it might see fit. But the act did not stop with the provisions already referred to, but also embraced cases where the death had been caused by the negligence of the employer, cases where there would be a clear right of action in the courts under existing law. It also enacted that the employers who made the payments provided in the act should by such payments be exempted from further liability.

The effect of the act was, therefore, not only to vest in the insurance commissioner powers and functions essentially judicial in their character, but to take away from citizens a legal right which they had theretofore enjoyed, and which could be enforced by them in the courts, and also to deny to them the right to have their cases heard before a jury. It is only necessary to clearly understand the provisions of this act to see that they are in direct conflict with several of the provisions of the constitution of the State. Thus, article 5 of the declaration of rights assures to the people the right of a trial by jury. Article 19 gives to every one for injury done to him in his person or property a remedy by the course of the law of the land. Yet both of these guarantees are completely ignored by the act in question.

Without prolonging the matter, therefore, it is so clearly evident that the act in question is framed in total disregard of the provisions of the constitution that the act must be declared void, and the demurrer sustained.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—FELLOW-SERVANTS—CONSTITUTIONALITY OF STATUTE—*Kane v. Erie Railroad Company, United States Circuit Court of Appeals, Sixth Circuit, 133 Federal Reporter, page 681.*—Thomas M. Kane, a fireman in the employ of the above-named railroad company, met his death, as was alleged, through the negligence of an engineer on another locomotive than that on which he was serving, and an action was brought by his administratrix to recover damages for such death. The right to recover was based on section 3365-22 of the Revised Statutes of Ohio, which provides that the alleged negligent engineer should be held to be the superior and not the fellow-servant of the deceased fireman.

In the United States circuit court for the northern district of Ohio, eastern division, this section was held to be unconstitutional (see Bulletin of the Bureau of Labor, No. 56, p. 297), from which finding this appeal was taken, with the result of a reversal of the court below and orders for a new trial.

The grounds for the maintenance of the constitutionality of the statute appear in the following extracts from the opinion of Judge Richards, who delivered the opinion of the court:

The suit could not have been maintained under the law as it stood in Ohio prior to the passage of the act of April 2, 1890 (87 Ohio Laws, p. 149), for under that law the negligence relied on was that of a fellow-servant, for which the company was not liable. The suit, therefore, was based upon section 3 (page 150) of the act referred to [section 3365-22 Ohio Rev. St.], which reads as follows:

"SEC. 3. In all actions against the railroad company for personal injury to, or death resulting from personal injury, of any person, while in the employ of such company, arising from the negligence of such company or any of its officers or employees, it shall be held in addition to the liability now existing by law, that every person in the employ of such company, actually having power or authority to direct or control any other employee of such company, is not the fellow-

servant, but superior of such other employee, also that every person in the employ of such company having charge or control of employees in any separate branch or department, shall be held to be the superior and not fellow-servant of employees in any other branch or department who have no power to direct or control in the branch or department in which they are employed."

We approach the consideration of the validity, under the constitution of Ohio, of an Ohio law, with some reluctance; for the question is one whose determination properly belongs to the supreme court of Ohio. Unfortunately, although the law has been in force for fourteen years, and several times before the supreme court of Ohio, the validity of the provisions now assailed has yet to be determined by that tribunal. The lower courts of Ohio are divided on the question, the weight of authority being in favor of the constitutionality of the act. Under these circumstances, the well-settled rule that, where the constitutionality of a law is involved, every possible presumption is in favor of its validity, and continues until the contrary is shown beyond a reasonable doubt, laid down by the Supreme Court of the United States and the supreme court of Ohio, is peculiarly applicable. [Cases cited.]

Prior to the passage of this act the general rule in Ohio was that a railroad company was not responsible to an employee for injuries resulting from the negligence of a fellow-servant, with the qualification, however, that where one employee was put under the control of another, the company was liable to the former for injuries caused by the negligence of the latter, when both were acting in the common service. (*Little Miami R. R. Co. v. Stevens*, 20 Ohio, 416; *Railroad Co. v. Kcary*, 3 Ohio St. 201.) In the latter case Judge Ranney pointed out that the risk assumed on entering the employment of a railroad company is only that resulting from the carelessness of those engaged in a common employment, and said, (page 211): "No service is common that does not admit a common participation, and no servants are fellow-servants when one is placed in control over the other." So important was this Ohio rule, rendering a railroad company liable to a subordinate for injuries caused by the negligence of his superior, deemed to be, that it was held in the case of *Railway Co. v. Spangler*, 44 Ohio St. 471, 8 N. E. 467, 58 Am. St. Rep. 833, that it was not competent for a company to stipulate with its employees that this liability should not attach. It was pointed out that the liability was not created for the protection of the employees simply, but had its reason and foundation in a public necessity and policy.

So it appears that, under the Ohio rule as it existed when this act was passed, the relation of the negligent to the injured employee determined the liability of the company. If the negligent employee was in control of the injured one, the company was held liable, because then the two were not deemed fellow-servants, engaged in a common employment, but one was regarded as the superior of the other. Recognizing this ground of distinction as existing in Ohio, section three not only gives it statutory force, but extends the liability of the company by broadening the class of superiors in the service and narrowing that of fellow-servants. It provides that in all actions against the railroad company, for personal injury or wrongful death, it shall be held, "in addition to the liability now existing by law"—

(1) "That every person in the employ of such company, actually

having power or authority to direct or control any other employee of such company, is not the fellow-servant, but superior, of such other employee;" and,

(2) "Also that every person in the employ of such company having charge or control of employees in any separate branch or department shall be held to be the superior and not fellow-servant of employees in any other branch or department who have no power to direct or control in the branch or department in which they are employed."

The exercise of authority by one employee over another is thus made the test. Any employee who exercises authority over another is "not the fellow-servant, but superior," of such other, and every employee who exercises authority over another in his own branch or department is "the superior, and not fellow-servant," of an employee in a separate branch or department who exercises no authority there. If the negligent employee is, by virtue of this enactment, the superior, and not fellow-servant, of the injured employee, the latter did not assume the risk of his negligence, and the company is responsible.

It is to be observed that the basis of the new classification made by the legislature is none other than that of the old made by the supreme court of Ohio. The class is merely broadened by a logical extension of the rule. Under the old, the company was liable for the negligence of one who exercised authority over the employee injured through his negligence; under the new, it is liable not only for the negligence of one who exercises authority over the employee injured, but of one who, exercising authority in one branch or department, by his negligence causes the injury of an employee in another who exercises no authority there.

The contention is that the act violates the second section of the bill of rights of the constitution of Ohio, which provides that "all political power is inherent in the people; government is instituted for their equal protection and benefit;" and which, as held in the case of the State ex rel. v. Ferris, 53 Ohio St. 314, 41 N. E. 579, 30 L. R. A. 218, is not less broad than that clause of the fourteenth amendment, which provides that no State shall "deny to any person within its jurisdiction the equal protection of the law." It is strongly urged that the statute, by conferring upon some employees a right to recover which is denied others, unjustly discriminates among those engaged in the same occupation, creating a favored class, and denying to those outside of it the equal protection of the law.

The doctrine is well settled that the general assembly, in the absence of an applicable prohibition, has power to classify subjects of legislation, conferring rights or imposing burdens on the created classes, according to its views of what is just and expedient and will promote the general welfare, subject only to the limitation that there must be some reasonable ground for the classification made. [Cases cited.] The sole question in the case, therefore, is whether the exercise of authority in the service affords a reasonable ground for the classification of railroad employees. A valid classification for legislative purposes "must always rest upon some difference which bears a reasonable and just relation to the act in respect to which the classification is proposed, and can never be made arbitrarily and without any such basis." It must be grounded upon "a reason of a public nature," and "the act must affect all who are within the reason for its enactment."

The court below based its holding that the act is unconstitutional upon

the ground that the classification was wholly arbitrary; that there is no real distinction in the railroad service between an employee who exercises authority and one who does not—for instance, between an engineer and a fireman—yet, under the law, if both, while running a train, were injured through the negligence of the engineer of another train, the fireman, having no one under him, would have a right to recover, while the engineer, being in control of the fireman, would not. The court thought this placed the power of classification in the hands of the company, and suggested that it could substantially relieve itself from all liability by placing on each train a boy who, by its rules, would be in the charge or control of every other employee on the train. As to the suggestion, obviously the company could do nothing of the kind. By no trick of that sort could it evade the law and escape liability. The court would look through the sham to the real grades of the service. (*B. & O. R. R. Co. v. Baugh*, 149 U. S. 368, 380, 13 Sup. Ct. 914, 37 L. Ed. 772.) But passing this, the court in its supposed case lost sight of the positions, relative to one another, occupied in the service by an engineer and a fireman. Under the old law the engineer was deemed the superior, and not the fellow-servant, of the fireman if both were on the same engine. Now, this was a reasonable distinction, because the supreme court of Ohio itself made it. Is it any less reasonable to say that an engineer is the superior of a fireman, although they are on different engines? This is what the new law says. If the distinction made by the old law is reasonable, why call that made by the new arbitrary? In each case there was an attempt to define who should be regarded as fellow-servants by a process of exclusion. The old law excluded the direct superior of the injured employee; the new excludes in addition the indirect superior. The ground is the same, that they are not in a common service. We hold that the provisions of section three involved in this case do not violate the constitution of Ohio.

EMPLOYMENT OFFICES—LIMITING CHARGES—CONSTITUTIONALITY OF STATUTE—*Ex parte Dickey*, Supreme Court of California, 77 Pacific Reporter, page 924.—C. E. Dickey had been found guilty of violating chapter 11, Laws of 1903 (see Bulletin of the Bureau of Labor, No. 48, p. 1126), regulating employment offices, and applied to the supreme court for a writ of habeas corpus, claiming that the provision of the law under which he was held was unconstitutional. The reference was to section 4 of this act, which limits the fee of an employment office to 10 per cent of the first month's earnings in the position secured, or to 10 per cent of the earnings if the employment is for less than a month.

The court declared this provision unconstitutional, Judge Shaw dissenting, and ordered the release of Dickey.

Judge Henshaw, who delivered the opinion of the court, spoke in part as follows:

As to the scope of the legislative exercise of the police power, the Supreme Court of the United States, in the recent case of *Holden v. Hardy*, 169 U. S. 366, 18 Sup. Ct. 383, 42 L. Ed. 780 [see Bulletin of

the Department of Labor, No. 17, p. 625], discussing the question of the right of one to pursue an ordinary and legitimate vocation, to acquire property, and to make contracts to that end, says: "This right of contract, however, is itself subject to certain limitations which the State may lawfully impose in the exercise of its police powers. While this court has held that the police power can not be put forward as an excuse for oppressive and unjust legislation, it may be lawfully resorted to for the purpose of preserving the public health, safety, or morals, or the abatement of public nuisances, and a large discretion, is necessarily vested in the legislature to determine not only what the interests of the public require, but what measures are necessary for the protection of such interests." And Judge Cooley—Constitutional Limitations (7th Ed.) p. 837—declares: "The limit to the exercise of the police power in these cases must be this: The regulation must have reference to the comfort, safety, or welfare of society." In the same connection this court has said (*Sonora v. Curtin*, 137 Cal. 583, 70 Pac. 674): "A police regulation or restraint is for the purpose of preventing damage to the public or to third persons. There are certain lines of business and certain occupations which require police regulation because of their peculiar character, in order that harm may not come to the public, or that the threatened danger may be averted. Where the profession or business is not dangerous to the public, either directly or indirectly, it can not be subjected to any police regulation whatever which does not fall within the power of taxation for revenue." The business in which this defendant is engaged is not only innocent and innocuous, but is highly beneficial, as tending the more quickly to secure labor for the unemployed. There is nothing in the nature of the business, therefore, that in any way threatens or endangers the public health, safety, or morals. Nor, indeed, is the purpose of this statute to regulate in these regards, or in any of them. The declared purpose and the plain effect of the above-quoted section is to limit the right of an employment agent in making contracts—a right free to those who follow other vocations—and arbitrarily to fix the compensation which he may receive for the services which he renders.

Here, then, is laid down a most drastic rule governing the conduct of a man in the prosecution of a harmless, legitimate, and beneficial business. Under the Constitution of the United States and of this State, the protection guaranteed in the possession of property and in the pursuit of happiness is extended, as of necessity it must be, to cover the right to acquire property, and the right to acquire property must and does include the employment of proper means to that end. [Cases cited.]

The application of these principles to the statute under consideration leads to the following irresistible conclusion. The petitioner is engaged in a harmless and beneficial business. As part of his "property" in that business are the services that he renders in obtaining employment for those seeking it. It is not compulsory upon any one to employ him, and who so seeks to avail himself of his services is at liberty to reject them if the terms of the contract for compensation are not satisfactory to him. This right of contract common to all legitimate occupations is an asset of the petitioner in his chosen occupation, and, as has been said, is a part of the property in the enjoyment of which he is guaranteed protection by the Constitution. By the act in question he is arbitrarily stripped of this right of contract,

and deprived of his property, and left, in following his vocation and in pursuit of his livelihood, circumscribed and hampered by a law not applicable to his fellow-men in other occupations. Where, it may be asked, could the line be drawn, if the legislature, under the guise of the exercise of its police power, should thus be permitted to encroach upon the rights of one class of citizens? Why should not the butcher and the baker, dealing in the necessities of life, be restricted in their right of contract, and consequently in their profits, to 10, 5, or 1 per cent? Why should not the contractor, the merchant, the professional man, be likewise subjected to such paternal laws, and why might not the legislature fix the price and value of the services of labor? The law is clearly one of those, the danger of whose enactment was foreshadowed by this court in *Ex parte Jentzsch*, 112 Cal. 468, 44 Pac. 803, 32 L. R. A. 664, when it said: "So, while the police power is one whose proper use makes most potently for good, in its undefined scope and inordinate exercise lurk no small danger to the republic. For the difficulty which is experienced in defining its just limits and bounds affords a temptation to the legislature to encroach upon the rights of citizens with experimental laws, none the less dangerous because well meant."

For the foregoing reasons, the provision of the act under consideration is declared void, and the prisoner is discharged from custody.

From the dissenting opinion of Judge Shaw the following is quoted as showing his reasons for upholding the law:

In considering the validity of laws which have no specific relation to health or comfort, but which are enacted in the exercise of the police power, for the general welfare of society, many of the same principles are applicable as in those involving health or comfort. The people can usually be trusted to look after the preservation of their own health in their own way. But owing to their necessitous circumstances, they are sometimes unable to do so properly, and in such instances the legislature has the power to determine for them what shall be done for that purpose. So, also, people generally may be depended on to make such contracts as their several interests demand, and under all ordinary conditions the right freely to do this can not be interfered with or controlled by the legislative power. But under some circumstances, a class of persons may be so situated with respect to another class that they are subject to oppression, and, though nominally free and at liberty to do as they please, they are in reality compelled to act at the dictation of others, whose self-interest leads them to take an undue advantage; and in such cases the legislature may, in the exercise of police powers, declare that certain contracts, which, in its judgment, it deems injurious to the general welfare and prosperity of the people, shall not be made, and, if made, shall not be enforceable. In this connection the observations of the United States Supreme Court in the case last cited [*Holden v. Hardy*] concerning the validity of a law prescribing the hours of labor in certain exceptional occupations are pertinent. Speaking of the miners and the mine owners, the court says: "The proprietors of these establishments and their operatives do not stand upon an equality, and their interests are, to a certain extent, conflicting. The former naturally desire to obtain as much labor as possible from their employees, while the latter are often induced

by the fear of discharge to conform to regulations which their judgment, fairly exercised, would pronounce detrimental to their health or strength. In other words, the proprietors lay down the rules, and the laborers are practically constrained to obey them. In such cases self-interest is often an unsafe guide, and the legislature may interpose its authority."

It is, of course, not to be denied that there are just limitations to the exercise of the power for the protection of the unfortunate and weak. It is not absolutely free from the supervision of the courts. But we can not hold the law void because we think it may prove ineffectual for the purpose intended, owing to the refusal of those to whom it is directed, or for whose benefit it was designed, to obey the mandates. The validity of a law is to be determined upon the assumption that it will be obeyed. The possibility of its enforcement is a matter solely for the legislature to consider when the law is enacted. Nor can we place our own judgment against that of the legislature in respect to the necessity for the protection which the legislature has seen fit to provide, unless we can clearly see that there can be no such necessity. "Though reasonable doubts may exist as to the power of the legislature to pass a law, or as to whether a law is calculated or adapted to promote the health, safety, or comfort of the people, or to secure good order, or promote the general welfare, we must resolve them in favor of that department of the government." (*Holden v. Hardy*, supra.) To quote further from the same case: "The question in each case is whether the legislature has adopted the statute in the exercise of a reasonable discretion, or whether its action be a mere excuse for an unjust discrimination, or the oppression or spoliation of a particular class."

With these rules for our guidance, there can be but one answer to the question as to the constitutionality of this law. In the light of history, and even in the face of present conditions, we can not say that the law was not passed in the exercise of a reasonable discretion, nor that there may not exist a reasonable necessity for the protection of those classes which are peculiarly liable to be thrown out of employment at every check to the current of industrial progress, from the possible rapacious demands of those to whom they are generally compelled to apply for another opportunity to earn subsistence by their toil.

EXAMINATION AND LICENSING OF BARBERS—BARBERS' SCHOOLS—
DELEGATED POWERS—CONSTITUTIONALITY OF STATUTE—*State v. Briggs*, *Supreme Court of Oregon*, 77 *Pacific Reporter*, page 750.—This case came before the supreme court of Oregon on an appeal from the circuit court of Multnomah County, in which H. L. Briggs had been convicted of conducting a barber school without the license required by the laws of 1899, page 237, as amended by the laws of 1903, page 27. (For full law see Bulletins of the Bureau of Labor, No. 25, pp. 919-921, and No. 56, pp. 329-332.) On motion in arrest of judgment, however, the court ruled that the act in question was unconstitutional and void in that it delegated to the board of examiners provided for therein legislative authority, and vested in them power to issue or withhold licenses arbitrarily and at pleasure.

From this order the State appealed, and obtained in the supreme court a reversal of the order of the lower court.

From the remarks of Judge Bean, who delivered the opinion of the court, the following is quoted:

While the law defines what shall constitute a barber, it does not prescribe the standard or degree of knowledge, learning, experience, or qualification which shall be required before applicants shall be licensed or authorized to practice or follow the trade or calling, but leaves that matter to be determined by the board of examiners. This, it is argued, renders the act void, because it is a delegation of legislative authority, and vests in the board arbitrary and unregulative powers. The position of the defendant is that, while the legislature may lawfully regulate the trade or calling of a barber, and require all persons following it to register, or obtain certificates from the board of examiners, it must provide in the act the standard of qualification required, leaving to the board the mere duty of ascertaining whether the applicant possesses such qualification. Legislative power can not be delegated, and the legislature can not confer upon any person, officer, or tribunal the right to determine what the law shall be. This is a function which the legislature alone is authorized under the constitution to exercise. The constitutional inhibition, however, can not be extended so as to prevent the legislature from conferring authority upon an administrative board to adopt suitable rules, by-laws, regulations, and requirements to aid in the successful carrying out and execution of a law it has passed. The doctrine on this subject is admirably stated by Mr. Justice Agnew in *Locke's Appeal*, 72 Pa. 491, 13 Am. Rep. 716, as follows: "Then the true distinction, I conceive, is this: The legislature can not delegate its power to make a law, but it can make a law to delegate a power to determine some fact or state of things upon which the law makes, or intends to make, its own action depend. To deny this would be to stop the wheels of government. There are many things upon which wise and useful legislation must depend, which can not be known to the lawmaking power, and must, therefore, be a subject of inquiry and determination outside of the halls of legislation.

Judge Bean recited a number of cases, and continuing, said:

These authorities are directly to the purpose that in the regulation and licensing of trades, occupations, callings, and professions which affect the public welfare the legislature must enact the law necessary to accomplish the object in view; but it may be carried into execution by some officer or board appointed for that purpose, and such officer or board may be authorized to prescribe the qualifications of those desiring to follow such callings or professions.

Now, is the law in question open to the objection that it confers upon the board of barber examiners power to prescribe varying standards of qualifications for different applicants, or arbitrarily to grant or refuse a license at will? The authority to prescribe the qualifications of a barber is a general grant of power, and does not vest in the board the absolute discretion to grant or withhold licenses. The board is required to exercise the power conferred by prescribing fair and reasonable qualifications appropriate to the calling intended to be regulated, operating generally and impartially upon all in like situa-

tions; and there is no pretense that it has not done so. If it should act arbitrarily or oppressively, its conduct might call for a remedy against the members of the board, but it would not furnish a ground for declaring the act invalid. [Cases cited.] The constitutionality of a law is to be determined by its provisions, and not by the manner in which it may be administered; and, unless it conflicts with the constitution, the law is valid. The law here in question provides for the appointment of a board, made up of persons skilled in the calling, to which the duties imposed are intrusted for performance, and to which is committed the power of prescribing such qualifications for applicants applying for licenses desiring to practice the trade or calling of a barber as may be just and reasonable, and it must be presumed that the board will exercise fairly and impartially the powers conferred.

It follows that the judgment of the court below must be reversed, and it is so ordered.

HOURS OF LABOR—BAKERIES—POLICE POWER—CONSTITUTIONALITY OF STATUTE—*People v. Lochner*, *Court of Appeals of New York*, 69 *Northeastern Reporter*, page 373.—This was an appeal from the appellate division of the supreme court, fourth department, by Joseph Lochner, convicted of violation of the statute regulating the hours of labor in bakeries, section 110, article 8, chapter 415, of the Laws of 1897. Conviction was first had in the city court of New York, and was affirmed in the appellate division, from which this appeal was taken. The court of appeals likewise affirmed the judgment, the sole question being as to the constitutionality of the section referred to. The constitutionality was upheld by a divided court on the grounds that the limitation of hours was properly a health regulation, three dissenting judges holding that such a restriction was not warranted as a health regulation and that it was an interference with the right of contract as guaranteed by the fourteenth amendment to the Constitution of the United States. Besides two dissenting opinions, two concurring opinions were filed, setting forth in particular the authorities and grounds for maintaining that the provision may properly be classed as a health law. From the remarks of Chief Justice Parker, who delivered the opinion of the court, the following is quoted:

Is there room to doubt that the sole purpose of the legislature in prohibiting the use of cellars for bakeries unless the occupant first complies with the sanitary provisions of this article is to protect the public from the use of the food made dangerous by the germs that thrive in darkness and uncleanness? Is it possible that any one can question that the sole purpose of the legislature is the safeguarding of the public health when it provides for floors, ceilings, and side walls of such material as that they may be readily cleansed; compels the keeping of flour or meal food products in dry and airy rooms, so arranged that the storing facilities can be properly cleaned, and prohibits the keeping of domestic animals within such rooms? And will any one question the motive which induced the prohibition of a "water-

closet, earth-closet, privy or ashpit * * * within or connected directly with the bake-room of any bakery, hotel or public restaurant"? If not, why should any one question the object of the legislature in providing in the same article, and as a part of the scheme, that "No employee shall be required or permitted to work" in such establishment "more than sixty hours in any one week," an average of 10 hours for each working day. It is but reasonable to assume from this statute as a whole that the legislature had in mind that the health and cleanliness of the workers, as well as the cleanliness of the workrooms, was of the utmost importance, and that a man is more likely to be careful and cleanly when well, and not overworked, than when exhausted by fatigue, which makes for careless and slovenly habits, and tends to dirt and disease. If there is opportunity—and who can doubt it?—for this view, then the legislature had the power to enact as it did, and the courts are bound to sustain its action as justified by the police power, as we see from the authorities referred to earlier in this opinion.

I hear but one argument advanced for the purpose of convincing the mind that the object of this statute is not to protect the public, and that argument is that article 8 is to be found in the labor law. Therefore it is said it is a labor law, not a health law. The question presented by that argument is, does the label or the body of the statute prevail? Does calling a statute names deprive it of its intended and real character? If a statute relating principally to banking happens, in the course of codification, to be incorporated as an article in the general corporation law, does it cease to operate on the banking business? I submit without argument that the questions answer themselves. Assuming, however, for the purpose of argument only, that the label is of such substantial importance that it may be accepted as against the obvious meaning of the statute, then I say that article 8 bears its own title, which is "Bakeries and Confectionery Establishments." All that is contained in that article relates to bakeries and confectionery establishments and their conduct, and to no other subject whatever. Therefore it is fully, appropriately, and harmoniously entitled.

Again, inasmuch as it is obvious, as we have seen, from a mere reading of the statute, that the legislative purpose is to benefit the public, we must assume—even if the object of the legislature in limiting the hours of work of employees is not to protect the health of the general public who take the wares made by such employees—that the legislature intends to protect the health of the employees in such establishments; that, for some reason sufficient to it, it has reached the conclusion that in work of this character men ought not to be employed more than an average of 10 hours a day. Now, that being so—and certainly no more restricted view of that statute can be taken by those who would destroy it—we find that the action of the legislature is within the police power, not only under the authorities of the United States, but of this State, and of this court.

Again, many medical authorities classify workers in bakers' or confectioners' establishments with potters, stonecutters, file grinders, and other workers whose occupation necessitates the inhalation of dust particles, and hence predisposes its members to consumption. The published medical opinions and vital statistics bearing upon that subject standing alone fully justify the section under review as one to protect the health of the employees in such establishments, and it is the duty of this court to assume that the section was framed not only

in the light of, but also with full appreciation of the force of the medical authority bearing upon, the subject—authority which reasonably challenges the attention and stimulates the helpfulness of the philanthropist.

The conclusion necessarily follows, therefore, from an examination of the statute in the light of the authorities cited, that the purpose of article 8, and every part of it, including the provision in question, is to benefit the public; that it has a just and reasonable relation to the public welfare, and hence is within the police power possessed by the legislature.

INJUNCTIONS—PARTIES NOT DEFENDANTS TO ORIGINAL BILL—CONTEMPTS—ANSWERS OF DEFENDANTS—PROCESS—*Anderson et al. v. Indianapolis Drop Forging Company et al.*, *Appellate Court of Indiana*, 72 *Northeastern Reporter*, page 277.—James Anderson and others had been found guilty of contempt by the superior court of Marion County, and prosecuted an appeal to the appellate court, resulting in an affirmation of the judgment of the lower court.

The defendant company had, on November 8, 1902, applied for an injunction against an association of machinists and certain other persons, which injunction was in due course issued, restraining the parties named and “all persons now or hereafter aiding or abetting them or confederating or conspiring with them, or either of them,” from interfering with the business of the company, and “from molesting, compelling, inducing, or attempting to induce, by threats, intimidation, violence, or force, any of its employees to refuse or fail to do their work or discharge their duties as such employees, or to leave its service.”

In June following, assaults and arrests on false charges were complained of by the company as being in violation of the injunction. The parties cited plead that they could not be held, as not being parties to the original bill. The court held, however, that if they had actual notice of the injunction, they were amenable, though not originally named, citing *Ex parte Lennon*, 166 U. S. 548, 17 Sup. Ct. 658. The appellants further claimed that they were entitled to a reversal of the judgment against them under the provisions of the Indiana statute regulating contempts. On this point and the question of process, Judge Roby, speaking for the court, ruled as follows:

Neither section was intended to apply to cases in chancery, where it has always been the rule that “the truth of the defendants’ statements in reply to interrogatories filed may be controverted on the other side, and the whole matter inquired into and ascertained by the court * * *.” Without the power to enforce these decrees by punishing disobedience in violation of them, a court of chancery would be worse than useless, and for this reason the practice on the point we are considering differs from that of a court of common law. For, if the answer of defendant in questions of contempt were conclusive, a

decree might lose all its vitality and not be enforced at all. The temptation in many cases to defeat the efficacy of the decree by sturdy denial of the imputed contempt might be too strong for the virtue of the party. The rule therefore is regarded as well settled in England and in this country that, in chancery, testimony will be heard to contradict as well as to support the truth of a statement made by one against whom proceedings for contempt have been instituted. It is not, therefore, necessary to refer to the inherent power of the courts to enforce their decrees and command respect for their processes. The existence of such powers is essential to the maintenance of our system of government. No legislature can abridge, limit, or take away such power, either directly or indirectly, by attempting to define the offense or undertaking to regulate procedure. The legislature of Indiana has not attempted to do so. It follows that appellants were not entitled to be discharged upon their verified answer.

The appellants appeared to the proceeding. They can not, therefore, complain of lack of process. The evidence supports the finding. The learned judge of the superior court was constrained to the action taken by the appellants themselves.

DECISIONS UNDER COMMON LAW.

EMPLOYERS' LIABILITY—INSURANCE—NOTICE—*Deer Trail Consolidated Mining Company et al. v. Maryland Casualty Company, Supreme Court of Washington, 78 Pacific Reporter, page 135.*—Yarwood Brothers and the mining company above named were operating a mine in partnership in the years 1900–1901, the former being in immediate charge of the undertaking, the proceeds being equally shared between the partners. On March 20, 1900, the mining company took out an insurance policy with the casualty company named to indemnify itself and Yarwood Brothers against loss from statutory and common-law liability for damages on account of bodily injury suffered by any employee of the insured for a period of one year. This policy was duly delivered to the Deer Trail company and the premium paid, but Yarwood Brothers were not informed nor had they any knowledge thereof. On the 19th of May, 1900, an employee in the mine was injured through the negligence of his employers, but did not inform the management of any intention to sue for damages at that time, nor until January of the following year. On the day on which notice was served on the mining company the local representatives of the insurance company were requested to defend the action, which they refused to do. The suit proceeded to judgment, damages being awarded and paid.

The mining company then sought to recover from the insurance company on its policy, and secured judgment in the superior court of Spokane County. From this judgment an appeal was taken, with the result that the lower court was reversed, the supreme court ruling that the contract of the insurance company was not observed. Among

the provisions of the policy was one requiring immediate notice of the occurrence of an accident; another declared that no change of terms or waiver of provisions would be valid unless by written indorsement, signed at the home office by the president or secretary of the company, which step had not been taken.

On the subject of notice, Judge Mount, speaking for the court, said:

It is conceded that the accident occurred on May 19, 1900, and that no notice thereof was given to the appellant until January 21, 1901. The excuse offered in the complaint and by the witnesses for this failure to give notice was that the Yarwood Bros., who had charge of the mine and the men working therein, had no knowledge or notice of the policy. The Deer Trail Consolidated Mining Company, which procured the policy, had no notice of the accident. This condition of affairs was brought about solely by the neglect of one of the insured to notify the others of the contract, and, as a matter of course, is no excuse for failure to notify the appellant of the accident according to the terms of the policy. This court has heretofore held that "immediate notice" in policies of this kind means notice within a reasonable time. Under this rule we think the lower court properly held that eight months was not within a reasonable time, and that respondents did not comply with this requirement of the policy, which was a reasonable one for appellant's protection and benefit.

LAWS OF VARIOUS STATES RELATING TO LABOR ENACTED SINCE JANUARY 1, 1904.

[The Tenth 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, 1904. Later enactments are reproduced in successive issues of the Bulletin from time to time as published.]

HAWAII.

ACTS OF UNITED STATES CONGRESS, 1903-4.

CHAPTER 948.—*Collection of statistics.*

Section seventy-six of an act entitled "An Act to provide a government for the Territory of Hawaii," approved April thirtieth, nineteen hundred, is hereby amended to read as follows:

SECTION 76.

* * * * *

It shall be the duty of the United States Commissioner of Labor to collect, assort, arrange, and present in reports, in nineteen hundred and five, and every five years thereafter, statistical details relating to all departments of labor in the Territory of Hawaii, especially in relation to the commercial, industrial, social, educational, and sanitary condition of the laboring classes, and to all such other subjects as Congress may by law direct. The said Commissioner is especially charged to ascertain the highest, lowest, and average number of employees engaged in the various industries in the Territory, to be classified as to nativity, sex, hours of labor, and conditions of employment, and to report the same to Congress.

Approved, April 8, 1904.

LOUISIANA.

ACTS OF 1904.

Act No. 49.—*Peddlers' license—Exemption of mechanics.*

SECTION 1. Section 12 of act No. 103 of the General Assembly of the State of Louisiana, approved July 10th, 1900, * * * [shall] be amended and reenacted so as to read as follows:

SECTION 12.

* * * * *

The provisions of this section governing peddlers shall not be construed to apply * * * to persons selling their own work or productions.

Approved June 28, A. D. 1904.

Act No. 81.—*Protection of employees on street railways—Inclosed platforms.*

SECTION 1. It shall be unlawful for any corporation, person, or receiver operating a line of electric street railways in the State of Louisiana, to require or permit the operation upon its lines of any electric car, during the period beginning November 15th, and ending March 15th, of each year, unless the forward end of such car is provided with a screen or vestibule, which shall fully protect the motorman or other person operating the motive power, by which such car is propelled, and such passengers as may be compelled to stand on the platform, from wind and storm.

SEC. 2. Any corporation, person or receiver, operating a line of street railways in the State of Louisiana, who shall in any manner violate any of the provisions of this act, shall be deemed guilty of a misdemeanor, and on conviction thereof, before any

court of competent jurisdiction, shall be fined not more than three hundred dollars, or imprisonment not more than six months, or both, at the discretion of the court having jurisdiction, "Provided, that each day upon which said act shall be violated shall constitute a separate offense and shall be punishable as such."

SEC. 3. This act shall take effect from and after January 15th, 1905.

Approved July 4, A. D. 1904.

Act No. 165.—Exemption of wages from garnishment.

SECTION 1. Wages earned out of this State and payable out of this State shall be exempt from attachment of garnishment in all cases where the cause of action arose out of this State, and it shall be the duty of garnishees in such cases to plead such exemption unless the defendant is actually served with the process.

Approved July 5, A. D. 1904.

Act No. 182.—Combinations to fix wages.

SECTION 1. It shall be unlawful for any corporation, not domiciled in the State of Louisiana, to enter into any combination or agreement with another corporation to prevent its legally authorized representatives in Louisiana from accepting a higher compensation than the corporations, parties to the aforesaid agreement, pay.

SEC. 2. Any violation of this act shall be punished by revocation of the license of any and all corporations parties to the unlawful agreement hereinbefore mentioned for the year for which said license, or licenses, shall have been granted and for 12 months succeeding the year for which said license, or licenses, shall have been revoked.

Approved July 7, A. D. 1904.

Act No. 195.—Time for meals for employees in mercantile establishments.

SECTION 1. It shall be unlawful for any proprietor or proprietors, firm or corporation doing business in this State, in cities of more than fifty thousand inhabitants, engaged in the retail business, or conducting retail department stores or retail establishments, not to allow their clerks at least one hour of the day, between the hours of 10:00 a. m. and 3:00 p. m. for their midday meal, lunch or recreation.

SEC. 2. Any proprietor or proprietors, firm or corporation found guilty of, or evading, the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not less than twenty-five dollars (\$25) nor more than one hundred dollars, (\$100), and in default of payment thereof be imprisoned not less than fifteen days (15) nor more than six months (6).

Approved July 7, A. D. 1904.

MARYLAND.

ACTS OF 1904.

CHAPTER 37.—Payment of wages—Semimonthly pay day—Garrett County.

SECTION 1. All corporations hereafter engaged in mining coal or fire clay in Garrett County are hereby required to pay each and all of their employees their wages earned in said employment semimonthly, that is to say, all wages earned on and before the 15th of each month shall be paid not later than upon the 25th day of said month; and all wages earned from the 16th to the end of each month, shall be paid not later than the 10th day of the succeeding month, unless said 25th day or 10th day of any month shall fall on Sunday or a legal holiday, in which case the time for payment shall be extended to the next day.

SEC. 2. Any such corporation, refusing to make said payment of wages at the time hereinbefore specified, or willfully withholding said wages from said employees beyond said times, shall be deemed guilty of a misdemeanor, and upon indictment and conviction thereof, shall be fined not less than fifty dollars nor more than three hundred dollars, in the discretion of the court.

Approved March 9, 1904.

CHAPTER 93.—Payment of wages—Semimonthly pay day.

SECTION 1. From and after a period of one month subsequent to the first day of April, in the year 1904, every association or corporation doing business in the State of Maryland employing wageworkers, whether skilled or ordinary laborers, engaged

in manual or clerical work, in the business of mining, manufacturing, operating a steam or electric railroad, street railway, telegraph, telephone or express company, shall make payments in lawful money of the United States semimonthly to said employees, laborers and wageworkers, or to their authorized agents, at their respective places of employment, at intervals of not more than sixteen days and not more [less?] than fourteen days.

SEC. 2. In case of any said corporations or associations mentioned in section 1 of this act, and doing business as aforesaid, or any of their officers, shall refuse to make payment at the times set forth in section 1 of this act to their wageworkers, laborers or other employees the wages due them, or any of them, said association, corporation or officer so refusing shall be guilty of a misdemeanor, and be liable to indictment therefor, and, upon conviction, shall be fined a sum not exceeding two hundred dollars for each offense.

Approved March 17, 1904.

CHAPTER 226.—*Examination and licensing of barbers.*

SECTION 1. Within thirty days after the passage of this act the governor shall appoint a board of barber examiners for the State of Maryland. The board shall consist of three members, two of whom shall be journeymen barbers and one of whom shall be a master barber, and each of whom shall serve for a term of two years from the date when his appointment shall take effect, except in the case of an appointment to fill a vacancy. No person shall be eligible to appointment as a member of said board unless he has been continuously for five years last past engaged in the occupation of a barber within this State.

SEC. 2. Said board so appointed and its successors shall be known by the name "Board of Barber Examiners of the State of Maryland." Every person so appointed to serve on said board shall receive a certificate of his appointment from the governor of the State of Maryland, and within ten days after receiving such certificate shall take, subscribe and file in the office of the secretary of state the constitutional oath of office.

SEC. 3. Each member of such board shall receive as compensation the sum of five dollars for each day necessarily and actually engaged in the performance of his duty as a member of said board, and three cents for each mile necessary and actually traveled by him in attending the meetings of said board, which sum or sums shall be paid out of any moneys in the hands of the treasurer of said board.

SEC. 4. The first meeting of said board shall be held within thirty days after their appointment as aforesaid at a time and place to be fixed by a majority thereof, who shall give suitable notice thereof to all the members of said board. At such meeting the board may adopt a common seal, and shall elect from its members a president, a secretary and treasurer. The treasurer shall receive all fees paid for licenses or certificates, and shall keep a record thereof and of all disbursements of said board in a book to be kept for that purpose. The treasurer shall not pay out or disburse any of the moneys received by him except upon the order of the board. Before entering upon the performance of his duties, the treasurer shall file with the State comptroller a bond, with sufficient sureties, to the people of the State of Maryland, in the penal sum of five thousand dollars, to be approved by the State comptroller, conditioned that he will well and truly pay over all moneys received by him, according to law and in compliance with the provisions of this act, and that he will otherwise faithfully discharge the duties of his office.

SEC. 5. The board of examiners shall have power to appoint subboards of examiners in such cities and villages of this State as they in their judgment shall deem necessary, said subboards shall each consist of one master barber and one journeyman barber, and shall possess the same qualifications, receive the same compensation, and have the same power as the said board of examiners of the State of Maryland, while conducting the examinations hereinafter provided for; said subboards shall be subject at all times to the jurisdiction and control of the "Board of Barber Examiners of the State of Maryland," and shall serve during the pleasure of said State board. The subboards shall report the result of their examinations without delay to the State board of examiners, and the latter shall issue certificates of qualification to the persons who have qualified in said examinations.

SEC. 6. No person shall hereafter practice the occupation of a barber in this State unless such person shall have first received a certificate of qualification from the board of examiners provided for in section 1 of this act for the purpose of examining applicants for certificates of qualification as barbers. The said board of examiners shall appoint the time and places for holding examinations. Such appointment

shall be made with due regard to the convenience of the applicants and the public service. Said board of examiners shall prescribe the mode and manner of conducting such examinations, said State board to conduct examinations, or said board may designate a subboard to conduct such examinations. Said board of examiners is authorized to incur all expense necessary to carry out, in a prompt and efficient manner, the provisions of this act, and to pay the same out of any money in the hands of the treasurer of said board; except, however, said board of examiners shall not incur any expense or obligation for which the State of Maryland shall be liable.

SEC. 7. Each person filing his application for examination shall pay to the treasurer of the said board of examiners the sum of five dollars, which sum shall be returned in case said applicant shall fail to pass said examination. Such payment shall constitute a part of the fund to pay the compensation and expenses of said board. The board shall keep a list of the names and places of business of all persons to whom certificates of qualifications are granted under the provisions of this act in a book provided for that purpose, with the names arranged in alphabetical order, and said book shall at all times be open to public inspection.

SEC. 8. Every person now engaged in the business of a barber in this State shall, within three months after the passage of this act, file an affidavit with the secretary of said board setting forth his name, place of business, post-office address, the length of time he has been engaged in the business of a barber, and pay to the treasurer the sum of one dollar for the certificate provided for in this act.

SEC. 9. Said board shall furnish to each person to whom a certificate of registration is issued, a card or insignia bearing the seal of the board and the signatures of its president and secretary, certifying that the holder thereof is entitled to practice the occupation of a barber in this State; and it shall be the duty of the holder of such card or insignia to post the same in a conspicuous place in the shop where he is working, where it may be readily seen by all persons whom he may serve.

SEC. 10. Said board of examiners shall have power to revoke any certificate of registration granted [by] it under this act for (a) conviction of felony, (b) habitual drunkenness of six months immediately preceding a charge duly made, (c) gross incompetence, or (d) the use of unclean towels, cups, or any other unclean utensils used by barbers which are liable to spread contagious or infectious diseases: *Provided*, That before any certificate shall be so revoked the holder thereof shall have notice in writing of the charge or charges against him, and shall, at a day and place specified in said notice, at least ten days after the service thereof, be given a public hearing and full opportunity to produce testimony in his behalf or to confront the witnesses against him. Any person whose certificate has been so revoked may, after the expiration of three months, apply to have the same regranted, and the same shall be regranted to him upon a satisfactory showing that the disqualification has ceased.

SEC. 11. The board shall cause to be made and filed with the State comptroller, on or before the first day of December of each year, a report showing the receipts and disbursements of said board and the balance in the hands of the treasurer of said board, together with a statement of the amount of such balance necessary to be held in the hands of the said treasurer to meet the expenses of the ensuing year. The comptroller shall thereupon make and file in his office an estimate of the amount of such balance necessary to be held by said board for the purpose hereinbefore stated, which sum may be retained by said board for said purposes, and the balance of said surplus paid by the treasurer of said board into the State treasury.

SEC. 12. Upon the report of a member of the State board of examiners, duly appointed as herein provided, or a member of a subboard of examiners in a city or village of the State, that a barber shop is in an unsanitary condition, said State board of examiners shall be empowered to call upon the State or local board of health to declare such shop a public nuisance, and should the proprietor of said shop fail to abolish said nuisance within a period of thirty days after a notice to do so by either the State or local board of health, the board of examiners provided for in this act shall be empowered to call upon the aforesaid board to abolish the aforesaid public nuisance.

SEC. 13. To shave, to trim the beard, or cut the hair of any person for hire or reward, received by the person performing such service, or any other person, shall be construed as practicing the occupation of a barber within the meaning of this act. This act shall not in any way apply to or affect any person who is now occupied or working as a barber in this State, nor any person employed in a barber shop, or an apprentice, except that a person so employed less than three years prior to the passage of this act, shall be considered an apprentice, and at the expiration of such three years of such employment shall be subject to the provisions of this act.

SEC. 14. Any person violating any of the provisions of this act shall be deemed

guilty of misdemeanor, and upon conviction thereof shall be punished by a fine of not less than ten dollars or imprisonment in the county jail for a period of not less than thirty days or by both such fine and imprisonment.

Approved, April 1, 1904.

CHAPTER 287.—*Seats for female employees.*

SECTION 1. Article 27, section 147A, of the Code of Public General Laws, is hereby repealed and reenacted with amendments to [so] as to read as follows:

147A. All proprietors or owners of any retail, jobbing or wholesale dry goods store, notion, millinery or any other business where any female salespeople or other female help are employed for the purpose of serving the public, shall provide a chair or stool for each one of such female help, in order that when they are not actively engaged in making sales or taking stock or in performing such other duties as they may have been engaged to perform, they shall have an opportunity to rest, and they shall not be forbidden to avail themselves of such opportunity. Any such owner or proprietor who shall neglect or refuse to obey the provisions of this section shall be considered to have committed a misdemeanor, and shall, upon conviction thereof, be fined in an amount not less than ten dollars nor more than one hundred dollars for the first offense; and in the event that such proprietor or owner shall continue to disobey the provisions of this section, he shall be subject to a fine at the rate of one dollar a day, daily, for every chair or stool he fails to so furnish his said employees. It shall be the duty of the board or department of health or health commissioner or commissioners of the cities and towns in the State to cause this section to be enforced, and whenever any of its provisions are violated, to cause all violators thereof to be prosecuted, and for that purpose the health commissioner or commissioners and the officer or officers of the board of health of every city and town in the State, or the inspectors thereof, or any other persons designated by such board of health or health commissioner or commissioners are authorized and empowered to visit and inspect at all reasonable hours and as often as shall be practicable and necessary all mercantile establishments in the city or town in which the office of the said board or department of health or health commissioner or commissioners is situated, and it shall be unlawful for any person to interfere with or obstruct any such inspecting official while in performance of his or her duties or to refuse to properly and truthfully answer questions made pertinent by this section when asked by such inspecting official.

Approved, April 7, 1904.

CHAPTER 671.—*Arbitration of labor disputes.*

SECTION 1. Upon information furnished by an employer of labor, whether person, firm or corporation, or by a committee of employees, or from any other reliable source, that a controversy or dispute has arisen between employer and employees, involving ten or more persons, which controversy may result in a strike or lock-out, the chief of the Bureau of Industrial Statistics of Maryland, or such person officially connected with said Bureau of Industrial Statistics as may be deputized in writing by the said chief of said Bureau of Industrial Statistics, shall at once visit the place of controversy or dispute and seek to mediate between the parties, if in his discretion it is necessary so to do.

SEC. 2. If mediation can not be effected as provided for in section 1 of this article, the chief of the Bureau of Industrial Statistics, or such person officially connected with said Bureau as may be by him deputized in writing, may, at his discretion, endeavor to secure the consent of the parties to the controversy or dispute to the formation of a board of arbitration, which board shall be composed of one employer and one employee engaged in the same or similar occupation to the one in which the dispute exists, but who are not parties to the controversy or dispute, and to be selected by the respective parties to the controversy; the third arbitrator may be selected by the two first-named arbitrators, and said third arbitrator so selected shall be president of the board of arbitration; and upon the failure of the two first-named arbitrators, as aforesaid, to agree upon the third arbitrator, then the chief of said Bureau of Industrial Statistics shall act as third arbitrator, or he may deputize, in writing, some person officially connected with said Bureau to so act, and the said chief, or the person who may be so deputized by him, shall act as president of said board.

SEC. 3. The president of the said board, provided in section 2 of this article, shall have power to summon witnesses, enforce their attendance and administer oaths and hear and determine the matter in dispute, and within three days after the investiga-

tion render a decision thereon, a copy of which shall be furnished each party to the dispute, and shall be final.

SEC. 4. In all such cases of dispute, as aforesaid, as in all other cases, if the parties mutually agree that the matter in dispute shall be arbitrated and determined in a mode different from the one hereby prescribed, such agreement shall be valid, and the award and determination thereon by either mode of arbitration shall be final and conclusive between the parties. It shall be lawful in all cases for an employer or an employee, by writing under his hand, to authorize any person to act for him in submitting to arbitration and attending the same.

SEC. 5. The board of arbitration shall employ a clerk at each session of the board, who shall receive three dollars per day for his services, to be paid, upon the approval of the chief of the Bureau of Industrial Statistics, out of the funds appropriated for the expenses of the Bureau of Industrial Statistics.

SEC. 6. Should the chief of the Bureau of Industrial Statistics or the person deputized by him, as aforesaid, fail to mediate or secure the consent of the parties to the controversy or dispute to submit the matter to arbitration, then the said chief of the Bureau of Industrial Statistics or the person deputized by him, as aforesaid, shall proceed to thoroughly investigate the cause of the dispute or controversy; he shall have the authority to summons both parties to appear before him and take their statements, in writing or under oath, and having ascertained which party is, in his judgment, mainly responsible and blameworthy for the continuance of said controversy or dispute, shall publish a report in some daily newspaper, assigning such responsibility or blame, over his official signature.

SEC. 7. For the purposes of the investigation, as aforesaid, the chief of said Bureau of Industrial Statistics or such person as he may deputize in writing, as aforesaid, shall have power to administer oaths, to issue summons for the attendance of witnesses, to enforce the attendance of witnesses, production of papers and books, to the same extent that power is possessed by courts of record or judges thereof in this State.

SEC. 8. All information of a personal character or pertaining to the private business of any person, firm or corporation, or which might have a tendency to expose the profits or methods of doing business by any person, firm or corporation, coming to the knowledge of the chief of said Bureau or person deputized by him, or to the arbitrators selected under the aforesaid provisions, shall be deemed confidential and so treated, and all documents and testimony taken shall be filed in the office of the Bureau of Industrial Statistics.

Approved April 12, 1904.

MASSACHUSETTS.

ACTS OF 1904.

CHAPTER 311.—*Preference of citizens for employment on public works.*

Chapter one hundred and six of the Revised Laws is hereby amended by striking out section fourteen and inserting in place thereof the following: Section 14. In the employment of mechanics and laborers in the construction of public works by the Commonwealth, or by a county, city or town, or by persons contracting therewith, preference shall be given to citizens of the Commonwealth, and, if they can not be had in sufficient numbers, then to citizens of the United States; and every contract for such works shall contain a provision to this effect. Any contractor who knowingly and willfully violates the provisions of this section shall be punished by a fine of not more than one hundred dollars for each offense.

Approved May 9, 1904.

CHAPTER 313.—*Arbitration of labor disputes—State board.*

SECTION 1. Section two of chapter one hundred and six of the Revised Laws is hereby amended so as to read as follows: Section 2. If it appears to the mayor of a city or to the selectmen of a town that a strike or lockout described in this section is seriously threatened or actually occurs, he or they shall at once notify the State board; and such notification may be given by the employer or by the employees concerned in the strike or lockout. If, when the State board has knowledge that a strike or lockout, which involves an employer and his present or former employees, is seriously threatened or has actually occurred, such employer, at that time, is employing, or upon the occurrence of the strike or lockout, was employing, not less than twenty-five persons in the same general line of business in any city or town in

the Commonwealth, the State board shall, as soon as may be, communicate with such employer and employees and endeavor by mediation to obtain an amicable settlement or endeavor to persuade them, if a strike or lockout has not actually occurred or is not then continuing, to submit the controversy to a local board of conciliation and arbitration or to the State board. Said State board shall investigate the cause of such controversy and ascertain which party thereto is mainly responsible or blameworthy for the existence or continuance of the same, and may make and publish a report finding such cause and assigning such responsibility or blame. Said board shall, upon the request of the governor, investigate and report upon a controversy if in his opinion it seriously affects, or threatens seriously to affect, the public welfare. The board shall have the same powers for the foregoing purposes as are given to it by the provisions of the following four sections.

Sec. 2. Section three of said chapter one hundred and six is hereby amended so as to read as follows: Sec. 3. If a controversy which does not involve questions which may be the subject of an action at law or suit in equity exists between an employer, whether an individual, a partnership or corporation employing not less than twenty-five persons in the same general line of business, and his employees, the board shall, upon application as hereinafter provided, and as soon as practicable, visit the place where the controversy exists and make careful inquiry into its cause, and may, with the consent of the governor, conduct such inquiry beyond the limits of the Commonwealth. The board shall hear all persons interested who come before it, advise the respective parties what ought to be done or submitted to by either or both to adjust said controversy, and make a written decision thereof which shall at once be made public, shall be open to public inspection and shall be recorded by the secretary of said board. A short statement thereof shall, in the discretion of the board, be published in the annual report, and the board shall cause a copy thereof to be filed with the clerk of the city or town in which said business is carried on. Said decisions shall, for six months, be binding upon the parties who join in said application, or until the expiration of sixty days after either party has given notice in writing to the other party and to the board of his intention not to be bound thereby. Such notice may be given to said employees by posting it in three conspicuous places in the shop or factory where they work.

Sec. 3. Section four of said chapter one hundred and six is hereby amended so as to read as follows: Sec. 4. Said application shall be signed by the employer or by a majority of his employees in the department of the business in which the controversy exists, or by their duly authorized agent, or by both parties, and if signed by an agent claiming to represent a majority of the employees, the board shall satisfy itself that he is duly authorized so to do; but the names of the employees giving the authority shall be kept secret. The application shall contain a concise statement of the existing controversy and a promise to continue in business or at work without any lockout or strike until the decision of the board, if made within three weeks after the date of filing the application. The secretary of the board shall forthwith, after such filing, cause public notice to be given of the time and place for a hearing on the application, unless both parties join in the application and present therewith a written request that no public notice be given. If such request is made, notice of the hearings shall be given to the parties in such manner as the board may order, and the board may give public notice thereof notwithstanding such request. If the petitioner or petitioners fail to perform the promise made in the application, the board shall proceed no further thereon without the written consent of the adverse party.

Sec. 4. Section five of said chapter one hundred and six is hereby amended so as to read as follows: Sec. 5. In all controversies between an employer and his employees in which application is made under the provisions of the preceding section, each party may, in writing, nominate fit persons to act in the case as expert assistants to the board and the board may appoint one from among the persons so nominated by each party. Said experts shall be skilled in and conversant with the business or trade concerning which the controversy exists, they shall be sworn by a member of the board to the faithful performance of their official duties and a record of their oath shall be made in the case. Said experts shall, if required, attend the sessions of the board, and shall, under direction of the board, obtain and report information concerning the wages paid and the methods and grades of work prevailing in establishments within the Commonwealth similar to that in which the controversy exists, and they may submit to the board at any time before a final decision any facts, advice, arguments or suggestions which they may consider applicable to the case. No decision of said board shall be announced in a case in which said experts have acted without notice to them of a time and place for a final conference on the matters included in the proposed decision. Such experts shall receive from the Common-

wealth seven dollars each for every day of actual service and their necessary traveling expenses. The board may appoint such other additional experts as it considers necessary, who shall be qualified in like manner and, under the direction of the board, shall perform like duties and be paid the same fees as the experts who are nominated by the parties.

Approved May 9, 1904.

CHAPTER 334.—*Time to vote to be allowed employees.*

SECTION 1. Chapter eleven of the Revised Laws is hereby amended by striking out section five as amended by section one of chapter three hundred and eighty-four of the acts of the year nineteen hundred and two, and inserting in place thereof the following: Section 5. No person entitled to vote at an election shall, upon the day of any such election, be employed in any manufacturing, mechanical or mercantile establishment, except such as may lawfully conduct its business on Sunday, during the period of two hours after the opening of the polls in the voting precinct or town in which he is entitled to vote, if he shall make application for leave of absence during such period.

Approved, May 13, 1904.

CHAPTER 335.—*Registration of badges, etc., of labor organizations.*

SECTION 1. The insignia, ribbons, badges, rosettes, buttons and emblems of any society, association or labor union may be registered in the office of the secretary of the Commonwealth in the manner and subject to the provisions, so far as they are applicable, set forth in section seven of chapter seventy-two of the Revised Laws in regard to labels; and the secretary is hereby authorized to make regulations and prescribe forms for such registration.

SEC. 2. Whoever, not being a member of a society, association or labor union, for the purpose of representing that he is a member thereof, willfully wears or uses the insignia, ribbon, badge, rosette, button or emblem thereof, if the same has been registered in the office of the secretary of the Commonwealth, shall be punished by a fine of not more than twenty dollars, or by imprisonment for not more than thirty days, or by both such fine and imprisonment.

SEC. 3. Chapter four hundred and thirty of the acts of the year nineteen hundred and two and chapter two hundred and seventy-five of the acts of the year nineteen hundred and three are hereby repealed.

Approved, May 13, 1904.

CHAPTER 343.—*Bribery, corruption, etc., of employees.*

SECTION 1. Whoever corruptly gives, offers or promises to an agent, employee or servant, any gift or gratuity whatever, with intent to influence his action in relation to his principal's, employer's or master's business; or an agent, employee or servant who corruptly requests or accepts a gift or gratuity or a promise to make a gift or to do an act beneficial to himself, under an agreement or with an understanding that he shall act in any particular manner in relation to his principal's, employer's or master's business; or an agent, employee or servant, who, being authorized to procure materials, supplies or other articles either by purchase or contract for his principal, employer or master, or to employ service or labor for his principal, employer or master, receives directly or indirectly, for himself or for another, a commission, discount or bonus from the person who makes such sale or contract, or furnishes such materials, supplies or other articles, or from a person who renders such service or labor; and any person who gives or offers such an agent, employee or servant such commission, discount or bonus, shall be punished by a fine of not less than ten dollars nor more than five hundred dollars, or by such fine and by imprisonment for not more than one year.

SEC. 2. No person shall be excused from attending, testifying or producing books, papers, contracts, agreements and documents before any court or in obedience to the subpoena of any court having jurisdiction of the misdemeanor on the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him may tend to criminate him or subject him to a penalty or forfeiture. But no person shall be liable to any suit or prosecution, civil or criminal, for or on account of any transaction, matter or thing concerning which he may testify or produce evidence, documentary or otherwise, before said court or in obedience to its subpoena or in any such case or proceeding.

Approved, May 14, 1904.

CHAPTER 347.—*Inspection of factories—Loom guards.*

SECTION 1. It shall be the duty of all persons owning, managing or operating factories in this Commonwealth in which looms are employed, to equip the looms with such guards or other devices as will prevent injury to employees from shuttles falling or being thrown from the looms.

SEC. 2. Such guards or other devices shall be made of such material and placed in such manner as shall be approved by the inspection department of the district police, who are hereby directed to enforce the provisions of this act.

SEC. 3. Any person, firm or corporation violating any provision of this act shall be punished by a fine of not more than one hundred dollars for every week during which such violation continues.

SEC. 4. This act shall take effect on the first day of January in the year nineteen hundred and five.

Approved, May 16, 1904.

CHAPTER 349.—*Protection of wages, etc.—Contractors' bonds.*

SECTION 1. Officers or agents who contract in behalf of any county, city or town for the construction or repair of public buildings or other public works shall obtain sufficient security, by bond or otherwise, for payment by the contractor and sub-contractors for labor performed or furnished and for materials used in such construction or repair; but in order to obtain the benefit of such security the claimant shall file with such officers or agents a sworn statement of his claim within sixty days after the completion of the work.

Approved, May 19, 1904.

CHAPTER 397.—*Employment of women and children—Hours of labor.*

The first sentence of section twenty-three of chapter one hundred and six of the Revised Laws is hereby amended by striking out all after the word "week," in the third line, to and including the word "retail," in the fifth line, so that the sentence will read as follows: Section 23. No child under eighteen years of age and no woman shall be employed in laboring in a mercantile establishment more than fifty-eight hours in a week.

Approved, June 2, 1904.

CHAPTER 432.—*Employment of children—Certificates.*

SECTION 1. Section thirty-one of chapter one hundred and six of the Revised Laws is hereby amended by striking out the section and inserting in place thereof the following: Section 31. An age and schooling certificate shall not be approved unless satisfactory evidence is furnished by the last school census, the certificate of birth or baptism of such minor, or the register of birth of such minor with a city or town clerk, that such minor is of the age stated in the certificate, except that other evidence may be accepted in case the superintendent or person authorized by the school committee, as provided in the preceding section, decides that neither the last school census, nor the certificate of birth or baptism, nor the register of birth is available for the purpose.

Approved, June 4, 1904.

CHAPTER 460.—*Sunday labor.*

SECTION 2. Chapter ninety-eight [of the Revised Laws] is hereby amended by striking out section two and inserting in place thereof the following: Section 2. Whoever, on the Lord's day, keeps open his shop, warehouse or workhouse, or does any manner of labor, business or work, except works of necessity and charity, or takes part in any sport, game, play or public diversion, except a concert of sacred music or an entertainment given in good faith by a religious or charitable society in aid of a religious or charitable purpose, the entire proceeds of which, if any, less only the necessary and reasonable expenses, not to exceed twenty-five per cent of such proceeds, are to be devoted exclusively to a religious or charitable purpose, shall be punished by a fine of not more than fifty dollars for each offense; and the proprietor, manager or person in charge of such game, sport, play or public diversion, except as aforesaid, shall be punished by a fine of not less than fifty nor more than five hundred dollars for each offense.

Approved, June 9, 1904.

MISSISSIPPI.**ACTS OF 1904.****CHAPTER 88.—*Labor day.***

SECTION 1. The first Monday in September of each year, commonly known as labor day, shall be a legal holiday in this State.

Approved, March 4, 1904.

CHAPTER 144.—*Hiring out children to support parents in idleness.*

SECTION 1. Sections 1322, * * * of the Code of 1892, are hereby repealed, and the following act adopted, viz:

The following persons are and shall be punished as vagrants, viz.:

* * * * *

(m) All persons who are able to work and do not work, but hire out their minor children or allow them to be hired out, and live upon their wages.

Approved, February 29, 1904.

NEW YORK.**ACTS OF 1904.****CHAPTER 77.—*Assignments of wages—Copies to be filed.***

SECTION 1. Any person or persons, firm, corporation or company, who shall after the passage of this act make to any employee an advance of money, or loan, on account of salary or wages due or to be earned in the future by such individual upon an assignment or note covering such loans or advances, shall not acquire any right to collect or attach the same while in the possession or control of the employer, unless within a period of three days after the execution of such assignment or notes and the making of such loan or loans, the party making such loan and taking such assignment shall have filed with the employer or employers of the individual so assigning his present or prospective salary or wages, a duly authenticated copy of such agreement or assignment or notes under which the claim is made.

SEC. 2. No action shall be maintained in any of the courts of this State, brought by the holder of any such contract, assignment or notes, given by an employee for moneys loaned on account of salary or wages, in which it is sought to charge in any manner the employer or employers, unless it shall appear to the satisfaction of the court that a copy of such agreement, assignment or notes, together with a notice of lien, was duly filed with the employer or employers of the person making such agreement, assignment or notes, by the person or persons, corporation or company making said loan within three days after the said loan was made and the said agreement, assignment or notes were given.

Became a law March 18, 1904.

CHAPTER 291.—*Inspection of factories—Guards for dangerous machinery.*

SECTION 1. Section eighty-one of chapter four hundred and fifteen of the laws of eighteen hundred and ninety-seven, is hereby amended to read as follows:

SECTION 81. The owner or person in charge of a factory where machinery is used, shall provide, in the discretion of the commissioner of labor, belt shifters or other mechanical contrivances for the purpose of throwing on or off belts on pulleys. Whenever practicable, all machinery shall be provided with loose pulleys. All vats, pans, saws, planers, cogs, gearing, belting, shafting, set-screws and machinery, of every description, shall be properly guarded. No person shall remove or make ineffective any safeguard around or attached to machinery, vats or pans, while the same are in use, unless for the purpose of immediately making repairs thereto, and all such safeguards so removed shall be promptly replaced. Exhaust fans of sufficient power shall be provided for the purpose of carrying off dust from emery wheels, grind stones and other machinery creating dust. If a machine or any part thereof is in a dangerous condition or is not properly guarded, the use thereof may be prohibited by the commissioner of labor and a notice to that effect shall be attached thereto. Such notice shall not be removed until the machine is made safe and the required safeguards are provided, and in the meantime such unsafe or dangerous machinery

shall not be used. When in the opinion of the commissioner of labor it is necessary, the workrooms, halls and stairs leading to the workrooms shall be properly lighted, and in cities of the first class, if deemed necessary by the commissioner of labor, a proper light shall be kept burning by the owner or lessee in the public hallways near the stairs upon the entrance floor and upon the other floors on every work day in the year, from the time when the building is opened for use in the morning until the time it is closed in the evening, except at times when the influx of natural light shall make artificial light unnecessary. Such lights to be independent of the motive power of such factory. No male person under eighteen years or woman under twenty-one years of age shall be permitted or directed to clean machinery while in motion. Children under sixteen years of age shall not be permitted to operate or assist in operating dangerous machines of any kind.

Became a law April 13, 1904.

CHAPTER 432.—*Employment offices.*

SECTION 1. The term person when used in this act, means and includes any individual, company, association, or corporation, or their agents, and the term employment agency means and includes the business of keeping an intelligence office, employment bureau, or other agency or office for procuring work or employment for persons seeking employment where a fee or privilege is exacted, charged or received directly or indirectly for procuring or assisting to procure employment, work, or a situation of any kind, or for procuring or providing help for any person, whether such fee is collected from the applicant for employment or the applicant for help, excepting agencies for procuring employment for school teachers exclusively. The term fee as used in this act means money or a written promise to pay money.

SEC. 2. No person shall open, keep or carry on any such employment agency in the cities of the first and second class, unless every such person shall procure a license therefor from the mayor of the city in which such person intends to conduct such agency. Any person who shall open or conduct such an employment agency without first procuring said license shall be punishable by a fine not exceeding two hundred and fifty dollars, or, on failure to pay such fine, by imprisonment not exceeding thirty days. Such license shall be granted upon the payment to said mayor of a fee of twenty-five dollars annually for such employment agencies in cities of the first and second class. Every license shall contain the name of the person licensed, a designation of the city, street and number of the house in which the person licensed is authorized to carry on the said employment agency, and the number and date of such license. Said license shall not be valid to protect any other than the person to whom it is issued or any place other than that designated in the license unless consent is obtained from the mayor. No such agency shall be located in rooms used for living purposes, where boarders or lodgers are kept, or on premises where intoxicating liquors are sold, excepting cafes and restaurants in office buildings. If said licensed person shall conduct a lodging house for the unemployed, separate and apart from such agency, it shall be so designated in the license. The application for such license shall be filed not less than one month prior to the granting of said license and shall be accompanied by the affidavits of two persons who have known the applicant or the chief officers thereof, if a corporation for five years, stating that the said applicant is a person of good moral character. The license shall run to the first Tuesday of May next ensuing the date thereof and no longer unless sooner revoked by the mayor.

SEC. 3. The mayor of said city shall require such person to file with his application for a license a bond in due form to the people of the said city in the penal sum of one thousand dollars in cities of the first and second class, with two or more sufficient sureties, and conditioned that the obligor will not violate any of the duties, terms, conditions, provisions or requirements of this act. If any person shall be aggrieved by the misconduct of any such licensed person, and shall recover judgment against him therefor, such person may, after the return unsatisfied, either in whole or in part, of any execution issued upon said judgment, maintain an action in his own name upon the bond of said employment agent in any court having jurisdiction of the amount claimed provided such court shall, upon application made for the purpose, grant such leave to prosecute.

SEC. 4. It shall be the duty of every such licensed person to keep a register, approved by the mayor, in which shall be entered, in the English language, the date of every application for employment; the name and address of the applicant; the amount of the fee received, and whenever possible, the names and addresses of former employers or persons to whom such applicant is known. Such licensed person shall also enter in a separate register approved by the mayor in the English language, the name and

address of every applicant for help, the date of such application, the kind of help requested, the names of the persons sent, with the designation of the one employed, the amount of the fee received and the rate of wages agreed upon. The aforesaid registers of applicants for employment and for help shall be open during office hours to inspection by the mayor. No such licensed person, his agent or employees, shall make any false entry in such registers. It shall be the duty of every licensed person, whenever possible, to communicate orally or in writing with at least one of the persons mentioned as references for every applicant for work in private families, or employed in a fiduciary capacity, and the result of such investigation shall be kept on file in such agency.

SEC. 5. The fees charged applicants for employment as lumbermen, agricultural hands, coachmen, grooms, hostlers, seamstresses, cooks, waiters, waitresses, scrub-women, laundresses, maids, nurses (except professional) and all domestics and servants, unskilled workers and general laborers, shall not in any case exceed ten per centum of the first month's wages, and for all other applicants for employment, shall not exceed the amount of the first week's wages or salary or five per centum of the first year's salary. In case the applicant shall not accept or obtain help or employment, through such agency, then such licensed person shall on demand, repay the full amount of the said fee, allowing five days' time to determine the fact of the applicant's failure to obtain help or employment; except when it appears that the said licensed person has in good faith, attempted to procure help or employment for said applicant, then he shall be entitled to retain of such fee paid, an amount not exceeding fifty cents. If an employee furnished fails to remain one week in the situation, a new employee shall be furnished or three-fifths of the fee returned, within four days of demand; if the employee is discharged within one week without said applicant's fault another position shall be furnished or three-fifths of the fee returned. Failure of said applicant for help to notify said licensed person that such help has been obtained through means other than said agency shall entitle said licensed person to retain or collect the three-fifths of the said fee. It shall be the duty of such licensed person to give to every applicant for employment from whom a fee shall be received a receipt in which shall be stated, the name of said applicant, the date and amount of the fee, and the purpose for which it is paid, and to every applicant for help a receipt stating the name and address of said applicant, the date and amount of the fee, and the kind of help to be provided. Every such receipt shall have printed on the back thereof a copy of this section in the English language and in languages which persons commonly doing business with such office can understand. No such licensed person shall receive or accept any valuable thing or gift as a fee or in lieu thereof and no fee shall be accepted by such licensed person for any other purpose except as herein provided. No such licensed person shall divide fees with contractors or other employers to whom applicants for employment are sent. Every such licensed person shall give to each applicant for employment a card containing the name and address of such employment agency and the written name and address of the person to whom the applicant is sent for employment. Every such licensed person shall post in a conspicuous place in each room of such agency a plain and legible copy of this act, which shall be printed in languages, which persons commonly doing business with such office can understand.

SEC. 6. No such person shall induce or attempt to induce any employee to leave his employment with a view to obtaining other employment through such agency. Whenever such licensed person or any other acting for him, agrees to send one or more persons to work as contract laborers in any one place outside the city in which such agency is located, the said licensed person shall file with the mayor within five days after the contract is made, a statement containing the following items: name and address of the employer, name and address of the employee; nature of the work to be performed, hours of labor; wages offered, designation of the persons employed, and terms of transportation. A duplicate copy of this statement shall be given to the applicant for employment in a language which he is able to understand.

SEC. 7. No such licensed person shall send or cause to be sent any female help as servants or inmates to any questionable place, or place of bad repute, house of ill fame, or assignation house, or to any house or place of amusement kept for immoral purposes, the character of which such licensed person could have ascertained upon reasonable inquiry. No such licensed person shall knowingly permit questionable character[s] or procurers to frequent such agency. No such licensed person shall publish or cause to be published any false or fraudulent notice or advertisement; all advertisements of such employment agency by means of cards, circulars, or signs and in newspapers and other publications, and all letterheads, receipts, and blanks shall contain the name and address of such employment agency and no such licensed person shall give any false information, or make any false promise concerning employment to any applicant who shall register for employment or help.

SEC. 8. In cities of the first class the enforcement of this act shall be entrusted to a commissioner to be known as a commissioner of licenses, who shall be appointed by the mayor, and whose salary together with those of inspectors to be appointed by him shall be fixed by the board of estimate and apportionment. He shall appoint inspectors who shall make at least bimonthly visits to every such agency excepting agencies exclusively for procuring executive, clerical, and technical positions for men only, which shall be inspected on complaint made to said commissioner. Such inspectors shall see that all the provisions of this act are complied with, and shall have no other duties. Complaints against any such licensed person shall be made orally or in writing to the commissioner and notice of such complaints shall be made orally or otherwise as the commissioner may direct to said licensed person and upon such complaint a hearing shall be had before him within three days. Said commissioner shall keep a record of all such complaints and hearings. The said commissioner shall revoke any license for any good cause shown, but reasonable opportunity shall be given said licensed person to defend himself. Whenever for any cause such license is revoked, said commissioner shall not issue another license to said licensed person or his representative. In cities of the second class the duties of said commissioner may be performed by the mayor, or an officer appointed by him. Any violation of the provisions of this act shall constitute a misdemeanor punishable by a fine or [of] not more than two hundred and fifty dollars or imprisonment for not more than one year, except as provided in section two, and the commissioner shall institute criminal proceedings for its enforcement before any court of competent jurisdiction.

Became a law April 27, 1904.

CHAPTER 523.—*Trade marks of trade unions.*

SECTION 1. Section sixteen of chapter four hundred and fifteen of the laws of eighteen hundred and ninety-seven is hereby amended to read as follows:

Section 16. A person who, (1) shall in any way use or display the label, brand, mark, name or other character, adopted by any such union or association as provided in the preceding section, without the consent or authority of such union or association; or (2) shall counterfeit or imitate any such label, brand, mark, name or other character, or knowingly, sells or disposes or keeps or has in his possession with intent to sell or dispose of, any goods, wares, merchandise or other products of labor, upon which any such counterfeit or imitation is attached, affixed, printed, stamped or impressed, or knowingly sells or disposes of, or keeps or has in his possession with intent to sell, or dispose of any goods, wares, merchandise or other products of labor contained in any box, case, can, or package, to which, or on which any such counterfeit or imitation is attached, affixed, printed, painted, stamped or impressed, is guilty of a misdemeanor, and shall be punished by a fine of not less than one hundred dollars, nor more than five hundred dollars, or by imprisonment for not less than three months nor more than one year, or by both such fine and imprisonment. After filing copies of such device, such union or association may also maintain an action to enjoin the manufacture, use, display or sale of counterfeit or colorable imitations of such device, or of goods bearing the same, or the unauthorized use or display of such device, or of goods bearing the same, and the court may restrain such wrongful manufacture, use, display or sale, and every unauthorized use or display by others of the genuine devices so registered and filed, if such use or display is not authorized by the owner thereof, and may award to the plaintiff such damages resulting from such wrongful manufacture, use, display or sale as may be proved, together with the profits derived therefrom.

Became a law April 29, 1904.

CHAPTER 550.—*Factories and workshops—Sweat shops.*

SECTION 1. Section two of article one of chapter four hundred and fifteen of the laws of eighteen hundred and ninety-seven is hereby amended to read as follows:

Section 2. The term employee, when used in this chapter, means a mechanic, workingman or laborer who works for another for hire. The person, employing any such mechanic, workingman or laborer, whether the owner, proprietor, agent, superintendent, foreman or other subordinate, is designated in this chapter as an employer. The term factory, when used in this chapter, shall be construed to include also any mill, workshop, or other manufacturing or business establishment where one or more persons are employed at labor. The term mercantile establishment, when used in this chapter, means any place where goods, wares or merchandise are offered for sale. The term tenement house, when used in this chapter, means any house or

building, or portion thereof, which is rented, leased, let or hired out, to be occupied, or is occupied as the home or residence of three families or more living independently of each other, and doing their cooking upon the premises, and having a common right in the halls, stairways, yards, water-closets or privies, or some of them, and for the purposes of this act shall be construed to include any building on the same lot with any dwelling house and which is used for any of the purposes specified in section one hundred of this act. Whenever, in this chapter, authority is conferred upon the commissioner of labor, it shall also be deemed to include his assistant or a deputy acting under his direction.

Sec. 2. Section one hundred of article seven of said act is hereby amended to read as follows:

Sec. 100. No tenement house nor any part thereof shall be used for the purpose of manufacturing, altering, repairing or finishing therein, any coats, vests, knee pants, trousers, overalls, cloaks, hats, caps, suspenders, jerseys, blouses, dresses, waists, waistbands, underwear, neckwear, furs, fur trimmings, fur garments, skirts, shirts, aprons, purses, pocketbooks, slippers, paper boxes, paper bags, feathers, artificial flowers, cigarettes, cigars or umbrellas, without a license therefor as provided in this article. But nothing herein contained shall apply to collars, cuffs, shirts or shirt waists made of cotton or linen fabrics that are subjected to the laundrying process before being offered for sale. Application for such a license shall be made to the commissioner of labor by the owner of such tenement house, or by his duly authorized agent. Such application shall describe the house by street number or otherwise, as the case may be, in such manner as will enable the commissioner of labor easily to find the same; it shall also state the number of apartments in such house; it shall contain the full name and address of the owner of the said house, and shall be in such form as the commissioner of labor may determine. Blank applications shall be prepared and furnished by the commissioner of labor. Upon receipt of such application the commissioner of labor shall consult the records of the local health department or board, or other appropriate local authority charged with the duty of sanitary inspection of such houses; if such records show the presence of any infectious, contagious or communicable disease, or the existence of any uncomplished with orders or violations which indicate the presence of unsanitary conditions in such house, the commissioner of labor, may, without making an inspection of the building, deny such application for a license, and may continue to deny such application until such time as the records of said department, board or other local authority show that the said tenement house is free from the presence of infectious, contagious or communicable disease, and from all unsanitary conditions. Before, however, any such license is granted, an inspection of the building sought to be licensed must be made by the commissioner of labor, and a statement must be filed by him as a matter of public record, to the effect that the records of the local health department or board or other appropriate authority charged with the duty of sanitary inspection of such houses, show the existence of no infectious, contagious or communicable disease nor of any unsanitary conditions in the said house; such statement must be dated and signed in ink with the full name of the employee responsible therefor. A similar statement similarly signed, showing the results of the inspection of the said building must also be filed in the office of the commissioner of labor before any license is granted. If the commissioner of labor ascertain that such building is free from infectious, contagious or communicable disease, that there are no defects of plumbing that will permit the free entrance of sewer air, that such building is in a clean and proper sanitary condition and that the articles specified in this section may be manufactured therein under clean and healthful conditions, he shall grant a license permitting the use of such building, for the purpose of manufacturing, altering, repairing or finishing such articles. Such license shall be framed, such frame to be furnished by the commissioner of labor upon receipt by him of one dollar for which a receipt in writing shall be given, and shall be posted by the owner in a conspicuous place in the public hallway on the entrance floor of the building to which it relates. It may be revoked by the commissioner of labor if the health of the community or of the employees requires it, or if the owner of the said tenement house, or his duly authorized agent fails to comply with the orders of the commissioner of labor within ten days after the receipt of such orders, or if it appears that the building to which such license relates is not in a healthy and proper sanitary condition. In every case where a license is revoked or denied by the commissioner of labor the reasons therefor shall be stated in writing, and the records of such revocation or denial shall be deemed public records. Where a license is revoked, before such tenement house can again be used for the purposes specified in this section, a new license must be obtained, as if no license had previously existed. Every tenement house and all the parts thereof in which any of the articles named in this section are manufactured, altered, repaired or finished shall be kept

in a clean and sanitary condition and shall be subject to inspection and examination by the commissioner of labor, for the purpose [of] ascertaining whether said garments or articles or part or parts thereof, are clean and free from vermin and every matter of an infectious or contagious nature. An inspection shall be made by the commissioner of labor of each licensed tenement house not less than once in every six months, to determine its sanitary condition, and shall include all parts of such house and the plumbing thereof. Before making such inspection the commissioner of labor may consult the records of the local department or board charged with the duty of sanitary inspection of tenement houses, to determine the frequency of orders issued by such department or board in relation to the said tenement house, since the last inspection of such building was made by the commissioner of labor. Whenever the commissioner of labor finds any unsanitary condition in a tenement house for which a license has been issued as provided in this section, he shall at once issue an order to the owner thereof directing him to remedy such condition forthwith. Whenever the commissioner of labor finds any of the articles specified in this section manufactured, altered, repaired or finished, or in process thereof, in a room or apartment of a tenement house, and such room or apartment is in a filthy condition, he shall notify the tenants thereof to immediately clean the same, and to maintain it in a cleanly condition at all times; where the commissioner of labor finds such room or apartment to be habitually kept in a filthy condition, he may in his discretion cause to be affixed to the entrance door of such apartment a placard calling attention to such facts and prohibiting the manufacture, alteration, repair or finishing of said articles therein. No person, except the commissioner of labor, shall remove or deface any such placard so affixed. None of the articles specified in this section shall be manufactured, altered, repaired or finished in any room or apartment of a tenement house, where there is or has been a case of infectious, contagious or communicable disease in such room or apartment, until such time as the local department or board of health shall certify to the commissioner of labor that such disease has terminated, and that the said room or apartment has been properly disinfected, if disinfection after such disease is required by the local ordinances, or by the rules or regulations of such a department or board. None of the articles specified in this section shall be manufactured, altered, repaired, or finished in a part of a cellar or basement of a tenement house, which is more than one-half of its height below the level of the curb or ground outside of or adjoining the same. No person shall hire, employ or contract with and [any] person to manufacture, alter, repair or finish any of the articles named in this section in any room or apartment in any tenement house not having a license therefor issued as aforesaid. None of the articles specified in this section shall be manufactured, altered, repaired or finished in any room or apartment of a tenement house by any person other than the members of the family living therein, which shall include a husband and wife and their children, or the children of either. Nothing in this section contained shall prevent the employment of a tailor or seamstress by any person or family for the purpose of making, altering, repairing or finishing any article of wearing apparel for the use of such person or family.

Sec. 3. Section one hundred and one of said act is hereby amended to read as follows:

Sec. 101. Persons contracting for the manufacturing, altering, repairing or finishing of any of the articles mentioned in section one hundred of this act or giving out material from which they or any part of them are to be manufactured, altered, repaired or finished, shall keep a register of the names and addresses plainly written in English of the persons to whom such articles or materials are given to be so manufactured, altered, repaired or finished or with whom they have contracted to do the same. It shall be incumbent upon all persons contracting for the manufacturing, altering, repairing or finishing of any of the articles specified in section one hundred of this act, or giving out material from which they or any part of them are to be manufactured, altered, repaired or finished, before giving out the same to ascertain from the office of the commissioner of labor whether the tenement house in which such articles or materials are to be manufactured, altered, repaired or finished, is licensed as provided in this act, and also to ascertain from the local department or board of health the names and addresses of all persons then sick of any infectious, contagious or communicable disease, and residing in tenement houses; and none of the said articles nor any material from which they or any part of them are to be manufactured, altered, repaired or finished shall be given out or sent to any person residing in a tenement house that is not licensed as provided in this act, or to any person residing in a room or apartment in which there exists any infectious, contagious or communicable disease. The register mentioned in this section shall be subject to inspection by the commissioner of labor, and a copy thereof shall be furnished on his demand as well as such other information as he may require.

SEC. 4. Section one hundred and three of said act is hereby amended to read as follows:

Sec. 103. If the commissioner of labor finds evidence of disease present in a workshop or in a room or apartment in a tenement house or dwelling house, in which any of the articles named in section one hundred of this chapter are manufactured, altered, repaired or finished or in process thereof, he shall affix to such articles the label prescribed in the preceding section, and immediately report to the local board of health, who shall disinfect such articles, if necessary, and thereupon remove such label. If the commissioner of labor finds that infectious or contagious diseases exist in a workshop, room or apartment of a tenement or dwelling house in which any of the articles specified in section one hundred of this chapter, are being manufactured, altered, repaired or finished, or that articles manufactured or in process of manufacture therein are infected or that goods used therein are unfit for use, he shall report to the local board of health. The local health department or board in every city, town and village whenever there is any infectious, contagious or communicable disease in a tenement house shall cause an inspection of such tenement house to be made within forty-eight hours. If any of the articles specified in section one hundred of this act are found to be manufactured, altered, repaired or finished, or in process thereof in an apartment in which such disease exists, such board shall issue such order as the public health may require, and shall at once report such facts to the commissioner of labor, furnishing such further information as he may require. Such board may condemn and destroy all such infected article or articles manufactured or in the process of manufacture under unclean or unhealthful conditions. The local health department or board or other appropriate authority charged with the duty or sanitary inspection of such houses, in every city, town and village shall, when so requested by the commissioner of labor, furnish copies of its records as to the presence of infectious, contagious or communicable disease, or of unsanitary conditions in said houses; and shall furnish such other information as may be necessary to enable the commissioner of labor to carry out the provisions of this act.

SEC. 5. Section one hundred and five of said act is hereby amended to read as follows:

Sec. 105. The owner or agent of a tenement house or dwelling house shall not permit the use thereof for the manufacture, repair, alteration or finishing of any of the articles mentioned in this article contrary to its provisions. If a room or apartment in such tenement house or dwelling house be so unlawfully used, the commissioner of labor shall serve a notice thereof upon such owner or agent. Unless such owner or agent shall cause such unlawful manufacture to be discontinued within ten days after the service of such notice, or within fifteen days thereafter institutes and faithfully prosecutes proceedings for the dispossession of the occupant of a tenement house, or dwelling house who unlawfully manufactures, repairs, alters or finishes such articles therein, he shall be deemed guilty of a violation of this article, as if he, himself, was engaged in such unlawful manufacture, repair, alteration or finishing. The unlawful manufacture, repair, alteration or finishing of any of such articles by the occupant of a room or apartment of a tenement house, or dwelling shall be a cause for dispossessing such occupant by summary proceedings to recover possession of real property, as provided in the code of civil procedure.

SEC. 6. This act shall take effect October first, nineteen hundred and four.

CHAPTER 659.—*Labor organizations—Bribery of representatives.*

SECTION 1. Title twelve of the penal code is hereby amended by adding at the end thereof a new section to be section four hundred and forty-seven-f and to read as follows:

SECTION 447-f. A person who gives or offers to give any money or other things of value to any duly appointed representative of a labor organization with intent to influence him in respect to any of his acts, decisions, or other duties as such representative, or to induce him to prevent or cause a strike by the employees of any person or corporation, is guilty of a misdemeanor; and no person shall be excused from attending and testifying, or producing any books, papers or other documents before any court or magistrate, upon any investigation, proceeding or trial, for a violation of this section, upon the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him may tend to convict him of a crime or subject him to a penalty or forfeiture; but no person shall be prosecuted or subjected to any penalty or forfeiture for or on account of any transaction, matter or thing concerning which he may so testify or produce evidence, documentary or otherwise, and no testimony so given or produced shall be received against him upon any criminal investigation or proceeding.

SEC. 2. This act shall take effect September first, nineteen hundred and four.

UNITED STATES.

ACTS OF 1903-4.

CHAPTER 716.—*Bureau of Labor.*

* * * The Department of Labor transferred to the Department of Commerce and Labor by the Act approved February fourteenth, nineteen hundred and three, shall hereafter be known as the Bureau of Labor in said Department.

Approved, March 18, 1904.

CHAPTER 1140.—*Seamen—Shipping commissioners.*

So much of the act approved February eighteenth, eighteen hundred and ninety-five, entitled "An Act to amend an Act entitled 'An Act to amend the laws relative to shipping commissioners,' approved August nineteenth, eighteen hundred and ninety, and for other purposes" [page 3065, Compiled Statutes, 1901] as reads "shall be liable to a penalty of not exceeding one hundred dollars" is hereby amended to read "shall be deemed guilty of a misdemeanor, and shall be imprisoned not more than six months or fined not more than five hundred dollars, or both."

Approved, April 11, 1904.

CHAPTER 1252.—*Sailors' lodging houses.*

Section forty-six hundred and seven [Revised Statutes] is hereby amended by adding thereto the following:

"This section shall apply to vessels of the United States engaged in the foreign trade and to foreign vessels."

Approved, April 13, 1904.

CHAPTER 1603.—*Seamen—Accepting fees for furnishing employment.*

So much of paragraph (a) of section twenty-four of the act approved December twenty-first, eighteen hundred and ninety-eight, entitled "An Act to amend the laws relating to American seamen, for the protection of such seamen, and to promote commerce" [page 3079, Compiled Statutes], as reads: "If any person shall demand or receive, either directly or indirectly, from any seaman or other person seeking employment as seaman, or from any person on his behalf, any remuneration whatever for providing him with employment, he shall for every such offense be liable to a penalty of not more than one hundred dollars," is hereby amended to read "If any person shall demand or receive, either directly or indirectly, from any seaman or other person seeking employment as seaman, or from any person on his behalf, any remuneration whatever for providing him with employment, he shall for every such offense be deemed guilty of a misdemeanor and shall be imprisoned not more than six months or fined not more than five hundred dollars."

Approved, April 26, 1904.

CHAPTER 1630.—*Exclusion, etc., of Chinese laborers.*

SECTION 5. Section one of the act of Congress approved April twenty-ninth, nineteen hundred and two, entitled "An Act to prohibit the coming into and to regulate the residence within the United States, its Territories, and all territory under its jurisdiction, and the District of Columbia, of Chinese and persons of Chinese descent," is hereby amended so as to read as follows:

"All laws in force on the twenty-ninth day of April, nineteen hundred and two, regulating, suspending, or prohibiting the coming of Chinese persons or persons of Chinese descent into the United States, and the residence of such persons therein, including sections five, six, seven, eight, nine, ten, eleven, thirteen, and fourteen of the act entitled 'An Act to prohibit the coming of Chinese laborers into the United States,' approved September thirteenth, eighteen hundred and eighty-eight, be, and the same are hereby, reenacted, extended, and continued, without modification, limitation, or condition; and said laws shall also apply to the island territory under the jurisdiction of the United States, and prohibit the immigration of Chinese laborers, not citizens of the United States, from such island territory to the mainland ter-

ritory of the United States, whether in such island territory at the time of cession or not, and from one portion of the island territory of the United States to another portion of said island territory: *Provided, however,* That said laws shall not apply to the transit of Chinese laborers from one island to another island of the same group; and any islands within the jurisdiction of any State or the District of Alaska shall be considered a part of the mainland under this section."

Approved April 27, 1904.

JOINT RESOLUTION No. 34.—*Regulation of immigration.*

The words "Secretary of the Treasury," wherever used in the act entitled "An Act to regulate the immigration of aliens into the United States," approved March third, nineteen hundred and three [chapter 1012, Acts of 1902-3], or in amendments thereto, or in prior acts in relation to alien immigration, [shall] be stricken out, and the words "Secretary of Commerce and Labor" inserted in lieu thereof.

Approved, April 28, 1904.

LEADING ARTICLES IN PAST NUMBERS OF THE BULLETIN.

- No. 1. Private and public debt in the United States, by George K. Holmes.
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 Blanzy, by W. F. Willoughby.
The sweating system, by Henry White.
- No. 5. Convict labor.
Industrial communities: Krupp Iron and Steel Works, by W. F. Willoughby.
- No. 6. Industrial communities: Familistère Society of Guise, by W. F. Willoughby.
Cooperative distribution, by Edward W. Bemis, Ph. D.
- No. 7. Industrial communities: Various communities, by W. F. Willoughby.
Rates of wages paid under public and private contract, by Ethelbert Stewart.
- 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.
The Dutch Society for General Welfare, by J. Howard Gore, Ph. D.
- No. 10. Condition of the Negro in various cities.
Building and loan associations.
- No. 11. Workers at gainful occupations at censuses of 1870, 1880, and 1890, by W. C. Hunt.
Public baths in Europe, by Edward Mussey Hartwell, Ph. D., M. D.
- No. 12. The inspection of factories and workshops in the U. S., by W. F. Willoughby.
Mutual rights and duties of parents and children, guardianship, etc., under the law, by F. J. Stimson.
The municipal or cooperative restaurant of Grenoble, France, by C. O. Ward.
- 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.
- No. 15. Incomes, wages, and rents in Montreal, by Herbert Brown Ames, B. A.
Boarding homes and clubs for working women, by Mary S. Fergusson.
The trade-union label, by John Graham Brooks.
- 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, Ph. D.
The nations of Antwerp, by J. Howard Gore, Ph. D.
- No. 18. Wages in the United States and Europe, 1870 to 1898.
- No. 19. Alaskan gold fields and opportunities for capital and labor, by S. C. Dunham.
Mutual relief and benefit associations in the printing trade, by W. S. Waudby.
- 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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Wages in Lyon, France, 1870 to 1896.
- No. 23. Attitude of women's clubs, etc., toward social economics, by Ellen M. Henriotin.
The production of paper and pulp in the U. S. from January 1 to June 30, 1898.
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- No. 26. Protection of workmen in their employment, by Stephen D. Fessenden.
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Labor Day, by Miss M. C. de Graffenried.

- No. 30. Trend of wages from 1891 to 1900.
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