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WHOLESALE PRICES: 1890 TO 1899. (a)

BY ROLAND P. FALKNER, PH. D.

In the following pages are presented the results of an inquiry into the course of wholesale prices from January, 1890, to July, 1899. It is the purpose of this inquiry to continue, so far as practicable, the investigation the results of which were contained in the Report on Wholesale Prices, Wages, and Transportation, submitted by Mr. Aldrich, from the Senate Committee on Finance, March 3, 1893. That report contained a study of wholesale prices covering the period from 1840 down to 1891. In its analysis the year 1860 was the starting point and the figures after that date received fuller treatment than those which preceded it. The distinctive feature of the investigation was the inclusion of a large number of articles, manufactured products being presented in larger proportions than in any previous investigation of prices. The series of quotations which formed the basis of the principal analysis numbered 223, and these were combined by various methods in order to show as fully as possible the nature of the changes which had taken place since the year 1860.

It has been thought desirable in many quarters to continue that investigation down to the present time. The project was, however, beset with perplexities arising from the difficulty of obtaining from identical sources a continuation of the price quotations for the large number of articles which figured in that investigation. The rapidly changing conditions of business rendered the task more difficult than would appear to the superficial observer. It was a distinctive feature

^aThe actual prices of the various commodities which are shown in the table at the close of this article, and which are the data on which it is based, were collected under the supervision of Dr. Falkner by the experts of the Department of Labor.

of the Aldrich investigation that the prices quoted were in a great majority of cases derived from the records of actual sales of the commodities concerned. A continuation of the prices, such as would have permitted a comparison of more recent prices with those of 1860 as given in the Aldrich report, could only be had where the article remained identical in kind and quality and where the same sources of information were accessible. The attempt to carry out the new investigation on the same lines as the old one revealed the fact that in many cases the firms and corporations from which the original figures were derived were no longer in existence. Newer firms which had taken their places were often unable to identify the figures quoted in the Aldrich report for the years 1890 and 1891 from material in their possession. This implied that an article of the exact grade and quality which had been quoted by the former firms was not traded in by those to whom subsequent application was made. In many cases the articles were no longer in the market. Changes, as, for instance, in the manufacture of woolens and worsted goods, had made new standards for certain classes of commodities.

In order to avoid giving the impression that the present investigation is in every detail a continuation of the Aldrich report, it has been deemed best to give it a slightly different form. This does not destroy its value as a supplement to that investigation, for, though differing in form, it remains in substance on the same basis. The substantial identity of the new work with the old is exhibited by the following statement, which gives the classes of articles included in the Aldrich report and in the present investigation:

WHOLESALE PRICE QUOTATIONS INCLUDED IN THE ALDRICH REPORT AND IN THE PRESENT INVESTIGATION, BY ARTICLES AND GROUPS OF ARTICLES.

Articles in each group.	Aldrich report.	Present investigation.	
	Series of actual and relative prices.	Series of actual prices.	Series of relative prices.
FOOD.			
Baked beans.....		1	1
Beans.....	1	1	1
Bread.....	8	4	1
Butter.....	1	1	1
Cheese.....	1	1	1
Coffee, Rio, fair.....	1	1	1
Eggs.....	1	1	1
Fish.....	4	2	1
Flour, wheat.....	1	1	1
Flour, rye.....	1	1	1
Fruit.....	3	4	1
Lard.....	2	1	1
Meal, corn, yellow, kiln-dried.....	1	1	1
Meat, bacon.....	1	1	1
Meat, beef.....	2	5	2
Meat, ham, sugar-cured.....	1	1	1
Meat, lamb.....	1		
Meat, mutton.....	1	1	1
Meat, salt.....	2	2	1
Milk, fresh.....	1	1	1
Molasses.....	2	2	1

WHOLESALE PRICE QUOTATIONS INCLUDED IN THE ALDRICH REPORT AND IN THE PRESENT INVESTIGATION, BY ARTICLES AND GROUPS OF ARTICLES—Continued.

Articles in each group.	Aldrich report.	Present investigation.	
	Series of actual and relative prices.	Series of actual prices.	Series of relative prices.
FOOD—concluded.			
Rice.....	1	1	1
Salt.....	5	2	1
Spices, nutmegs.....	1	1	1
Spices, pepper, whole, Sumatra.....	1	1	1
Starch, corn.....	2	1	1
Sugar.....	4	3	1
Tallow.....	1	1	1
Vegetables, potatoes.....	2	.....	.....
Total.....	58	43	28
CLOTHS AND CLOTHING.			
Bags, 2-bushel, Amoskeag.....	.....	1	1
Blankets.....	2	.....	.....
Boots and shoes.....	.....	4	1
Broadcloths.....	2	.....	.....
Calico, Cocheco prints.....	1	1	1
Carpets.....	3	3	1
Cotton, upland middling.....	1	1	1
Cotton thread, 6-cord, 200 yards, J. & P. Coats.....	1	1	1
Denims, Amoskeag.....	1	1	1
Drillings.....	1	1	1
Felts.....	.....	2	1
Flannels, twilled blue, 3-4, Talbot T.....	.....	1	1
Ginghams, Amoskeag.....	.....	1	1
Hides and leather.....	3	3	1
Horse blankets, 6 pounds, all wool.....	1	.....	.....
Print cloths.....	2	1	1
Shawls, standard, 72 by 144 inches, weighing 42 ounces, made of XX Ohio fleece wool.....	1	1	1
Sheetings.....	1	2	1
Shirtings.....	1	4	1
Suitings.....	5	1	1
Tickings, Amoskeag, A. C. A.....	1	1	1
Women's dress goods.....	.....	3	1
Wool.....	2	2	1
Total.....	28	35	20
FUEL AND LIGHTING.			
Candles, best adamantine.....	1	1	1
Coal, anthracite.....	7	2	1
Coal, bituminous.....	1	1	1
Matches.....	1	2	1
Total.....	10	6	4
METALS AND IMPLEMENTS.			
Anvils, domestic.....	1	.....	.....
Bar iron.....	1	1	1
Butts, loose joint, cast, 3 by 3 inches.....	1	1	1
Copper.....	2	2	1
Door knobs, mineral.....	1	1	1
Iron rods, for making common wood screws.....	1	.....	.....
Iron wire, market, No. 10.....	1	.....	.....
Lead.....	4	2	1
Locks.....	2	2	1
Meat cutters, Hale's, No. 12.....	1	.....	.....
Nails.....	1	1	1
Pig iron.....	1	2	1
Pocketknives.....	25	.....	.....
Quicksilver.....	1	1	1
Rope.....	3	2	1
Saws.....	4	1	1
Scythes.....	1	1	1
Shovels, Ames No. 2, cast steel, D-handle, square point, back strap.....	1	1	1
Spelter.....	1	1	1
Steel.....	.....	2	2
Wood screws, 1-inch, No. 10, flat head, iron.....	1	.....	.....
Total.....	54	21	16

WHOLESALE PRICE QUOTATIONS INCLUDED IN THE ALDRICH REPORT AND IN THE PRESENT INVESTIGATION, BY ARTICLES AND GROUPS OF ARTICLES—Continued.

Articles in each group.	Aldrich report.	Present investigation.	
	Series of actual and relative prices.	Series of actual prices.	Series of relative prices.
LUMBER AND BUILDING MATERIALS.			
Brick, common domestic building.....	1	1	1
Carbonate of lead.....	1	1	1
Cement, Rosendale.....	1	1	1
Chestnut lumber, in the log, not sawed.....	1	1	1
Doors, pine, unmolded, 2 ft. 4 in. by 6 ft. 8 in., 1½ inches thick.....	1	1	1
Hemlock.....	2	1	1
Lime, Rockland.....	1	1	1
Maple boards, first quality, 1-inch, rough.....	1	1	1
Oak boards, white, plain, first quality, 1-inch, rough.....	1	1	1
Oxide of zinc, American, dry.....	1		
Pine boards.....	8	3	1
Plate glass.....	6		
Putty.....	1	1	1
Shingles, pine.....	3	1	1
Spruce boards.....	1	1	1
Tar, Wilmington.....	1	1	1
Turpentine.....	1	1	1
Window glass.....	3		
Total.....	35	17	15
DRUGS AND CHEMICALS.			
Alcohol.....	1	1	1
Alum, lump, crystal.....	1		
Bichromate of potash.....	1		
Blue vitriol.....	1		
Brimstone, crude.....	1	1	1
Calomel.....	1		
Copperas.....	1		
Flaxseed.....	1		
Glycerin.....	1	1	1
Linseed oil.....	1	1	1
Mercury.....	1		
Muriatic acid.....	1		
Opium.....	1	1	1
Quinine.....	1	1	1
Soda ash.....	1	1	1
Sugar of lead, brown.....	1		
Sugar of lead, white.....	1		
Sulphuric acid.....	1	1	1
Total.....	18	8	8
HOUSE-FURNISHING GOODS.			
Furniture.....	3	3	1
Glassware.....	5	1	1
Pails, wooden.....	3	1	1
Tubs, wooden.....	4	2	1
Total.....	15	7	4
MISCELLANEOUS.			
Powder, rifle.....	2	1	1
Rubber.....	1	1	1
Soap.....	1	1	1
Starch.....	6	2	1
Total.....	10	5	4

WHOLESALE PRICE QUOTATIONS INCLUDED IN THE ALDRICH REPORT AND IN THE PRESENT INVESTIGATION, BY ARTICLES AND GROUPS OF ARTICLES—Concluded.

SUMMARY.

Group.	Aldrich report.	Present investigation.	
	Series of actual and relative prices.	Series of actual prices.	Series of relative prices.
Food	53	43	28
Cloths and clothing	28	35	20
Fuel and lighting	10	6	4
Metals and implements	54	21	16
Lumber and building materials	35	17	15
Drugs and chemicals	18	8	8
House-furnishing goods	15	7	4
Miscellaneous	10	5	4
Total	223	142	99

The purpose of maintaining in the present investigation as nearly as possible the class of articles which figured in the former report has been fairly well attained. Exceptions to the rule are most conspicuous in the groups "Cloths and clothing," "Metals and implements," and "Drugs and chemicals." In the first group named a number of articles have been included in the present investigation for which in the earlier report it was impracticable to secure data covering the whole period from 1860, but which appeared as incomplete series. In this list, as compared with the previous investigation, additions are more conspicuous than omissions. In the group "Metals and implements" there are some omissions, which, however, do not affect the more important articles in the group. In the group "Drugs and chemicals" the omissions are more numerous. The group was more numerously represented in the preceding investigation than its importance would justify. To avoid an undue weight to this group in the final average it was deemed advisable to confine the quotations to the most important articles.

There has also been a considerable reduction in the number of series of price quotations. This has been effected by reducing the number of articles and by giving as a rule a single quotation only for each article. Still more conspicuous has been the reduction in the number of relative prices used in calculating the average relative prices for the groups and for all commodities. While in the Aldrich report each price quotation has the same weight or importance in reaching the average for the group under which it is classed, in this report, where relative prices are given for two or more articles of the same kind, their average is taken and this represents only a single item in calculating the average for the group. For instance, the relative prices of four kinds of bread, viz, Boston crackers, navy ship bread, oyster crackers, and soda crackers, are shown in this report (page 244),

but only one item under the head of bread, the average of the four, is used in computing the average for the group "Food" at a given date. This method has been used in all such cases, except the two important ones of beef and steel, and also applies in calculating the general average for all commodities.

The difference is here not so much one of scope as of emphasis. By increasing the number of articles for which relative prices are given an undue emphasis is attached to unimportant articles. It is perfectly obvious that if all prices followed the same or approximately the same tendencies it would be immaterial whether few or many commodities were included in the computation of relative prices. Now, a study of various price investigations shows that prices in general exhibit certain characteristics, but that individual prices do not all show them in the same degree. The more important the article in the world's trade the more subject it is to changes in price arising from general economic conditions. Hence average relative prices, based upon quotations for a few leading articles, like those of the Economist, show greater fluctuations from year to year than those based upon a larger number of price quotations. They are more subject to the influence of general causes, less to that of individual causes. On the other hand, the more restricted the demand for the article the more slowly does it conform to the price changes which are in operation. If the relative price computation contains many such articles, the general course of prices will show a more deliberate change. No hard and fast rules can be laid down for the selection of a happy mean between too many and too few quotations. The ideal is not attained by increasing the number of articles. The articles which are really fundamentally important in the world's markets are comparatively few in number, and the larger the number of articles selected the more probable it is that some of them are of minor moment, comparatively stable in price and less subject to the general influences of the market which fix what it has been agreed to call general prices. The present analysis does not attempt to solve this question, but an effort has at least been made to avoid a multitude of prices for the same article, giving to it an undue importance. It should, however, be remarked that these doubts as to the number of articles are partially overcome by various methods of averaging the results. The novel feature of the Aldrich report was the attempt to indicate the changes in prices with reference to the cost of living by averaging the prices according to importance measured by this standard. This dictated in large measure the choice of articles and permitted the inclusion of many which were not especially significant in themselves, because when reduced to their importance in consumption, they could not greatly influence the result.

On the other hand, under the method of the simple average greater care must be used in the selection of the articles. As in the present

investigation it is intended to lay greater weight upon this mode of combining the results, some departure from the methods of the Aldrich report seems justified.

A further difference between the methods of the present investigation and those of the Aldrich report lies in the choice of the basis with which prices are compared. In the former investigation the figures for January, 1860, were, for reasons fully explained in that document, taken as a basis. The selection of a single price quotation as a basis for subsequent calculations was not made without certain misgivings, and only finally decided upon as the best thing which could be done under the circumstances. A single price, even though it be normal to all outward appearances, has never been regarded as the ideal basis for a calculation of relative prices. The criteria whether a price is normal are not found in the prices themselves, but in all the surrounding circumstances, and even in the most favorable case there always remains a doubt whether all the conditions which are pertinent have been thoroughly scanned and investigated. In the present investigation, therefore, a somewhat broader basis has been taken—namely, the average of the 9 quarterly prices from January, 1890, to January, 1892, inclusive, of which January, 1891, the conclusion of the former report, is the exact center. By thus including a larger number of prices it has been sought to obviate the irregularity which might arise from possible abnormal prices in January, 1891. It is, moreover, to be observed that the averages thus obtained correspond fairly well with the actual position of prices in January, 1891, since the relative price of all articles for this date, which is the average of the relative prices of 99 articles or groups of articles, is 100.6, while if January, 1891, were taken as the base, the relative price would have been 100. The divergence is not marked, and the difference in the results of the two methods is insignificant. A further reason for the enlargement of the basis of calculation lay in the desire to exhibit the prices in their quarterly movements, and in so far as prices are affected by seasonal variations any criticism of having selected a time of the year as a basis when the prices for a given commodity might be particularly low or particularly high has been avoided.

The results of the investigation into prices are embodied in the tables of actual prices annexed to this report. In order to bring out the tendencies of the changes they have been reduced to series of relative prices. The following table shows the relative prices for each article and group of articles at each quarterly period from January, 1890, to July, 1899.

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES.

FOOD.

Date.	Baked beans, Old South brand.	Beans, pea, York State, mar- row, choice, H. P.	Bread.					Butter, cream- ery, West- ern, extra, firsts.	Cheese, New York, extra.	Coffee, Rio, fair.	Eggs, West- ern, firsts, choice, fresh.
			Boston crack- ers.	Navy ship bread.	Oyster crack- ers.	Soda crack- ers.	Aver- age.				
Jan., 1890..	100.9	86.9	92.0	98.3	98.2	100.0	97.1	106.0	107.1	101.8	107.4
Apr., 1890..	100.9	85.7	92.0	98.3	98.2	100.0	97.1	91.2	115.9	105.8	62.8
July, 1890..	93.1	91.7	102.3	98.3	98.2	100.0	99.7	66.6	78.1	103.1	70.7
Oct., 1890..	97.0	121.9	102.3	98.3	98.2	100.0	99.7	98.6	95.7	108.5	104.7
Jan., 1891..	104.7	105.0	102.3	98.3	98.2	100.0	99.7	115.9	99.5	101.8	149.3
Apr., 1891..	104.7	106.2	102.3	98.3	98.2	100.0	99.7	125.7	120.9	105.8	112.6
July, 1891..	104.7	114.6	92.0	98.3	98.2	100.0	97.1	85.1	81.9	100.4	85.1
Oct., 1891..	97.0	98.9	112.5	112.4	114.5	100.0	109.9	110.9	100.8	85.7	107.4
Jan., 1892..	97.0	89.3	102.3	98.3	98.2	100.0	99.7	130.7	115.9	87.1	130.9
Apr., 1892..	97.0	85.7	102.3	98.3	98.2	100.0	99.7	106.0	123.5	92.4	75.9
July, 1892..	97.0	89.3	102.3	84.3	98.2	100.0	96.2	98.6	88.2	91.1	82.5
Oct., 1892..	104.7	96.5	102.3	84.3	98.2	100.0	96.2	110.9	104.6	97.1	110.0
Jan., 1893..	104.7	94.1	102.3	98.3	98.2	100.0	99.7	140.5	114.6	100.4	157.1
Apr., 1893..	104.7	101.3	102.3	84.3	98.2	100.0	96.2	135.6	115.9	100.4	87.7
July, 1893..	100.9	96.5	92.0	84.3	98.2	100.0	98.6	98.6	86.9	101.8	81.2
Oct., 1893..	100.9	91.7	92.0	84.3	98.2	100.0	98.6	130.7	112.1	104.5	115.2
Jan., 1894..	100.9	85.7	102.3	84.3	98.2	100.0	96.2	125.7	115.9	105.8	120.5
Apr., 1894..	97.0	80.8	102.3	84.3	98.2	100.0	96.2	96.1	122.2	103.1	57.6
July, 1894..	97.0	94.1	102.3	84.3	98.2	100.0	96.2	83.8	85.7	100.4	66.8
Oct., 1894..	97.0	83.2	92.0	84.3	81.8	91.7	87.5	110.9	110.9	100.4	99.5
Jan., 1895..	97.0	82.0	81.8	84.3	90.0	91.7	87.0	110.9	114.6	96.4	120.5
Apr., 1895..	97.0	106.2	89.8	84.3	90.0	91.7	89.0	88.8	114.6	103.1	70.7
July, 1895..	89.2	103.8	89.8	98.3	90.0	100.0	94.5	81.4	84.4	96.4	65.5
Oct., 1895..	89.2	72.4	89.8	84.3	90.0	91.7	89.0	88.8	88.2	100.4	90.3
Jan., 1896..	89.2	62.7	81.8	84.3	90.0	91.7	87.0	106.0	103.3	95.1	112.6
Apr., 1896..	89.2	55.5	89.8	84.3	81.8	91.7	86.9	91.2	95.7	93.8	60.2
July, 1896..	85.3	49.5	92.0	84.3	81.8	91.7	87.5	70.3	73.1	88.4	61.5
Oct., 1896..	85.3	56.7	81.8	84.3	81.8	91.7	84.9	71.5	98.2	79.0	90.3
Jan., 1897..	85.3	45.8	102.3	84.3	98.2	100.0	96.2	88.8	109.6	76.3	96.9
Apr., 1897..	85.3	41.0	92.0	84.3	90.0	91.7	89.5	96.1	123.5	64.3	52.4
July, 1897..	85.3	41.0	81.8	84.3	81.8	91.7	84.9	71.5	73.1	64.3	55.0
Oct., 1897..	85.3	53.1	81.8	84.3	90.0	91.7	87.0	93.7	93.2	53.6	87.7
Jan., 1898..	77.6	54.3	81.8	84.3	81.8	91.7	84.9	98.6	98.2	42.9	117.8
Apr., 1898..	77.6	51.9	112.5	98.3	98.2	91.7	100.2	101.1	83.1	38.8	52.4
July, 1898..	77.6	56.7	112.5	112.4	98.2	108.3	107.9	78.9	74.3	41.5	64.2
Oct., 1898..	77.6	60.3	92.0	101.1	98.2	100.0	97.8	91.2	98.2	40.8	87.7
Jan., 1899..	77.6	61.5	92.0	101.1	98.2	100.0	97.8	87.5	109.6	41.5	96.9
Apr., 1899..	85.3	65.1	92.0	101.1	98.2	100.0	97.8	94.9	124.7	38.2	68.1
July, 1899..	85.3	64.5	92.0	101.1	98.2	100.0	97.8	87.5	86.9	36.2	75.9

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

FOOD—Continued.

Date.	Fish.			Flour, rye.	Flour, wheat.	Fruit.					Lard, prime, steam.
	Cod, entirely boned.	Mackerel, salt, XXXX, No. 2.	Average.			Apples, evaporated.	Currents, new, in barrels.	Prunes, California, in boxes, 60s to 70s.	Raisins, California, London layer, new.	Average.	
Jan., 1890..	96.0	103.7	99.9	79.0	92.7	73.7	109.7	73.8	117.9	93.8	92.6
Apr., 1890..	96.0	103.7	99.9	71.7	101.1	99.8	113.9	121.0	120.5	113.8	98.9
July, 1890..	96.0	99.0	97.5	74.2	101.1	84.6	112.5	121.0	117.9	109.0	92.0
Oct., 1890..	100.0	108.4	104.2	94.8	104.5	138.8	108.3	121.0	114.1	120.6	102.2
Jan., 1891..	100.0	108.7	101.9	104.6	98.6	130.1	90.0	117.3	105.1	110.6	94.4
Apr., 1891..	104.0	103.7	103.9	122.8	106.2	130.1	106.9	107.7	103.8	112.1	107.3
July, 1891..	100.0	94.2	97.1	114.3	101.1	112.8	94.2	84.7	74.4	91.5	102.2
Oct., 1891..	104.0	99.5	96.8	122.8	100.3	69.4	87.2	71.4	74.4	75.6	113.5
Jan., 1892..	104.0	94.2	99.1	115.9	94.4	60.7	77.3	82.3	71.8	73.0	96.9
Apr., 1892..	104.0	113.1	108.6	102.7	86.0	52.0	60.5	80.4	71.8	66.2	100.3
July, 1892..	88.0	113.1	100.6	93.4	86.0	52.0	61.9	78.6	64.1	64.2	114.9
Oct., 1892..	88.0	84.8	86.4	83.9	84.3	69.4	71.7	99.8	73.1	78.5	131.8
Jan., 1893..	88.0	94.2	91.1	79.3	84.3	78.1	90.2	121.0	88.5	92.0	164.6
Apr., 1893..	88.0	99.0	93.5	77.6	81.7	93.3	74.5	118.5	96.2	95.6	161.5
July, 1893..	88.0	99.0	93.5	78.5	80.1	75.9	60.5	104.0	88.5	82.2	154.3
Oct., 1893..	88.0	89.5	88.8	80.5	80.9	88.9	46.4	87.7	80.8	76.0	161.5
Jan., 1894..	88.0	84.8	86.4	68.6	74.2	99.8	36.6	71.4	64.1	63.0	129.8
Apr., 1894..	80.0	70.7	75.4	71.0	71.6	95.4	29.5	58.1	50.0	58.3	112.0
July, 1894..	80.0	61.3	70.7	71.7	73.3	121.4	45.0	72.6	55.1	73.5	107.9
Oct., 1894..	88.0	75.4	81.7	69.1	69.9	69.4	47.8	70.2	53.8	60.3	130.8
Jan., 1895..	88.0	84.8	86.4	72.7	70.8	65.1	53.4	75.0	75.6	67.3	109.6
Apr., 1895..	88.0	99.0	93.5	97.3	69.1	68.3	77.3	69.0	76.9	72.9	112.8
July, 1895..	72.0	91.9	82.0	77.6	81.7	60.7	43.6	58.1	73.1	58.9	103.8
Oct., 1895..	72.0	101.3	86.7	65.6	72.5	62.3	50.6	61.7	78.2	63.2	94.0
Jan., 1896..	76.0	108.4	92.2	65.6	71.6	64.0	63.3	61.7	55.1	61.0	85.9
Apr., 1896..	76.0	103.7	89.9	65.6	74.2	55.3	63.3	50.8	43.6	53.3	80.9
July, 1896..	76.0	84.8	80.4	71.1	74.2	54.2	71.7	52.0	51.3	57.3	59.7
Oct., 1896..	76.0	75.4	76.7	75.6	75.8	46.1	88.6	46.0	57.7	59.6	65.4
Jan., 1897..	76.0	70.7	73.4	66.4	90.2	33.0	84.4	56.9	75.6	63.7	60.1
Apr., 1897..	76.0	51.8	63.9	59.6	81.7	39.0	90.0	50.8	69.2	62.3	65.0
July, 1897..	76.0	51.8	63.9	73.4	78.4	39.0	113.9	42.3	70.5	66.4	63.4
Oct., 1897..	80.0	32.5	81.3	74.9	96.9	73.7	130.8	62.9	71.8	84.8	71.1
Jan., 1898..	80.0	37.2	33.6	72.9	94.4	75.9	146.3	49.6	71.8	85.9	75.6
Apr., 1898..	80.0	89.5	84.8	85.1	96.9	75.9	140.6	49.6	67.9	83.5	84.2
July, 1898..	80.0	84.8	82.4	68.9	90.2	83.5	133.6	50.8	69.2	84.3	81.8
Oct., 1898..	80.0	99.0	89.5	78.5	78.4	73.7	116.7	55.6	75.6	80.4	74.4
Jan., 1899..	80.0	101.3	90.7	83.2	72.5	78.1	105.5	56.9	65.4	76.5	88.3
Apr., 1899..	88.0	101.3	94.7	80.2	75.8	84.6	98.4	56.9	55.1	73.8	83.0
July, 1899..	80.0	101.3	90.7	79.8	75.8	80.2	99.8	53.2	59.0	73.1	80.5

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

FOOD—Continued.

Date.	Meal, corn, yellow, kiln dried.	Meat.									
		Beef on the hoof.				Beef.			Salt meat.		
		Good, 1,200 to 1,550 pound beeves.	Choice, 1,350 to 1,500 pound beeves.	1,200 to 1,500 pound beeves.	Average.	Loins.	Ribs.	Average.	Beef, salt, family.	Pork, salt, mess, old to new.	Average.
Jan., 1890..	82.0	90.4	92.2	93.9	92.2	97.7	97.3	97.5	97.4	90.1	98.8
Apr., 1890..	75.8	98.7	97.0	102.1	99.3	97.7	97.3	97.5	85.2	101.1	98.2
July, 1890..	75.8	95.7	92.2	97.4	95.1	97.7	97.3	97.5	86.9	118.7	102.8
Oct., 1890..	99.0	91.0	90.7	92.8	91.5	97.7	97.3	97.5	104.9	103.3	104.1
Jan., 1891..	100.5	99.5	100.6	100.9	100.3	97.7	97.3	97.5	92.5	98.7	94.6
Apr., 1891..	116.0	120.0	115.3	116.0	117.1	102.9	109.4	103.2	102.2	109.9	106.1
July, 1891..	116.0	117.3	116.6	106.7	113.5	102.9	103.4	103.2	129.0	98.7	112.9
Oct., 1891..	125.3	96.2	100.4	95.1	97.2	102.9	103.4	103.2	107.1	100.0	108.6
Jan., 1892..	109.8	91.0	94.9	95.1	93.7	102.9	103.4	103.2	94.9	83.5	89.2
Apr., 1892..	91.2	94.6	83.5	98.9	92.3	97.7	97.3	97.5	103.4	85.7	94.6
July, 1892..	97.4	109.2	105.5	100.9	105.2	97.7	97.3	97.5	100.5	101.1	100.8
Oct., 1892..	95.9	96.3	95.4	99.7	97.1	97.7	97.3	97.5	90.1	104.4	97.3
Jan., 1893..	83.1	105.7	105.0	112.5	107.7	97.7	97.3	97.5	119.3	139.6	129.5
Apr., 1893..	83.5	113.4	110.3	116.0	113.2	108.0	103.4	105.7	119.3	160.4	139.9
July, 1893..	83.5	101.0	94.4	98.6	98.0	108.0	103.4	105.7	107.1	169.2	138.2
Oct., 1893..	86.6	102.2	98.6	103.2	101.3	108.0	103.4	105.7	126.6	159.3	143.0
Jan., 1894..	83.5	95.1	92.8	97.4	95.1	113.1	109.5	111.3	143.6	124.2	133.9
Apr., 1894..	82.0	92.8	86.4	96.3	91.8	108.0	103.4	105.7	126.6	115.4	121.0
July, 1894..	86.6	92.8	91.7	93.9	92.8	102.9	97.3	100.1	99.8	122.0	110.9
Oct., 1894..	95.9	106.9	105.5	111.3	107.9	108.0	103.4	105.7	107.1	133.0	120.1
Jan., 1895..	89.7	99.3	94.9	99.7	98.0	108.0	103.4	105.7	112.0	114.3	113.2
Apr., 1895..	80.4	123.3	119.8	127.6	123.6	113.1	109.5	111.3	113.2	120.9	117.1
July, 1895..	88.1	108.1	105.0	111.3	108.1	108.0	103.4	105.7	116.8	119.3	118.3
Oct., 1895..	73.9	102.2	95.4	99.7	99.1	113.1	109.5	111.3	107.1	90.1	98.6
Jan., 1896..	69.6	94.0	88.0	92.3	91.6	108.0	103.4	105.7	107.1	80.2	93.7
Apr., 1896..	66.5	83.1	84.3	83.1	86.8	102.9	103.4	103.2	107.1	80.2	93.7
July, 1896..	63.4	91.6	85.4	95.1	90.7	102.9	97.3	100.1	85.2	71.4	78.3
Oct., 1896..	68.4	89.3	91.7	102.1	97.7	108.0	103.4	105.7	82.7	72.5	77.6
Jan., 1897..	61.9	106.3	98.6	103.2	102.7	108.0	103.4	105.7	90.1	74.7	82.4
Apr., 1897..	52.6	106.9	100.2	105.5	104.2	108.0	103.4	105.7	93.7	81.3	87.5
July, 1897..	54.1	103.4	97.5	105.5	102.1	108.0	103.4	105.7	87.6	74.7	81.2
Oct., 1897..	55.7	109.8	99.1	110.2	106.4	108.0	103.4	105.7	93.0	83.5	88.3
Jan., 1898..	61.9	103.1	99.7	110.2	106.0	102.9	97.3	100.1	80.3	79.1	79.7
Apr., 1898..	63.4	116.3	101.3	107.9	108.5	102.9	97.3	100.1	94.9	84.6	89.8
July, 1898..	66.5	115.1	104.4	113.7	111.1	102.9	97.3	100.1	99.8	90.1	95.0
Oct., 1898..	63.4	114.5	106.6	117.1	112.8	108.0	103.4	105.7	77.9	75.8	76.9
Jan., 1899..	66.5	113.6	112.4	124.1	118.4	108.0	103.4	105.7	85.2	87.9	86.6
Apr., 1899..	64.9	115.1	107.6	117.1	113.3	108.0	103.4	105.7	87.6	81.3	84.5
July, 1899..	66.5	123.3	114.0	125.3	120.9	108.0	103.4	105.7	87.6	73.0	82.8

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

FOOD—Continued.

Date.	Meat.			Milk, fresh.	Molasses.			Rice, Carolina, good.
	Bacon, short rib sides.	Ham, sugar cured.	Mutton, racks and saddles.		New Orleans, prime.	Puerto Rico, best.	Average.	
January, 1890.....	89.5	100.5	104.7	105.5	115.6	113.5	114.6	94.0
April, 1890.....	93.5	104.2	104.7	93.8	110.1	102.7	106.4	96.3
July, 1890.....	87.9	103.0	104.7	93.8	110.1	102.7	106.4	103.4
October, 1890.....	96.0	105.4	104.7	105.5	104.6	102.7	103.7	105.7
January, 1891.....	91.7	92.0	94.2	105.5	99.1	97.3	98.2	105.7
April, 1891.....	104.2	94.4	94.2	93.8	82.6	94.6	88.6	101.0
July, 1891.....	106.2	103.0	104.7	93.8	88.1	94.6	91.4	105.7
October, 1891.....	131.0	107.9	94.2	105.5	88.1	94.6	91.4	98.7
January, 1892.....	100.2	89.5	94.2	102.6	101.8	97.3	99.6	89.3
April, 1892.....	99.2	96.9	99.4	83.0	95.6	91.9	92.8	86.9
July, 1892.....	133.1	120.2	115.1	88.0	90.8	89.2	90.0	86.9
October, 1892.....	139.8	106.7	104.7	102.6	88.1	86.5	87.3	79.9
January, 1893.....	148.8	120.2	83.7	102.6	99.1	94.6	96.9	70.5
April, 1893.....	165.6	133.6	83.7	88.0	96.3	91.9	94.1	68.1
July, 1893.....	161.7	122.6	94.2	88.0	90.8	91.9	91.4	51.7
October, 1893.....	182.5	122.6	78.5	102.6	85.3	86.5	85.9	62.3
January, 1894.....	107.1	93.2	68.0	102.6	96.3	102.7	99.5	72.8
April, 1894.....	109.1	94.4	68.0	88.0	85.3	100.0	92.7	82.2
July, 1894.....	117.1	109.1	78.5	88.0	82.6	100.0	91.3	84.6
October, 1894.....	127.0	116.5	68.0	102.6	79.8	97.3	88.6	82.2
January, 1895.....	103.2	92.0	52.3	102.6	90.8	105.4	98.1	77.5
April, 1895.....	107.1	95.6	83.7	88.0	85.3	100.0	92.7	75.2
July, 1895.....	109.1	101.8	73.3	88.0	79.8	97.3	88.6	84.6
October, 1895.....	99.2	99.3	73.3	102.6	82.6	91.9	87.3	75.2
January, 1896.....	81.3	96.9	62.8	96.7	93.6	97.3	95.5	72.8
April, 1896.....	83.3	96.9	62.8	88.0	90.8	94.6	92.7	70.5
July, 1896.....	69.4	96.9	65.0	88.0	88.1	91.9	90.0	75.2
October, 1896.....	68.5	103.0	75.3	96.7	85.3	91.9	88.6	79.9
January, 1897.....	68.5	99.3	57.6	96.7	79.8	91.9	85.9	77.5
April, 1897.....	83.3	100.5	73.3	88.0	79.8	89.2	84.5	84.6
July, 1897.....	81.3	100.5	73.3	88.0	77.1	83.8	80.5	89.3
October, 1897.....	97.2	95.6	68.0	96.7	77.1	81.1	79.1	86.9
January, 1898.....	79.4	87.1	73.3	96.7	88.1	91.9	90.0	86.9
April, 1898.....	88.9	83.4	73.5	88.0	82.6	89.2	85.9	94.0
July, 1898.....	95.2	87.1	73.5	88.0	90.8	89.2	90.0	112.8
October, 1898.....	97.2	85.8	73.5	96.7	96.3	86.5	91.4	96.3
January, 1899.....	85.3	84.6	73.5	96.7	96.3	97.3	96.8	98.7
April, 1899.....	82.5	84.6	73.5	88.0	99.1	97.3	98.2	103.1
July, 1899.....	82.5	101.8	73.5	88.0	99.1	100.0	99.6	105.7

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

FOOD—Concluded.

Date.	Salt.			Spices, nutmegs, 110 nuts per pound.	Spices, pepper, whole, Sumatra.	Starch, corn.	Sugar.				Tallow.
	Fine, boiled.	Turks Island.	Average.				Centrifugal, 96-degree test.	Fair refining, 89-degree test.	Granulated.	Average.	
Jan., 1890..	100.0	88.5	94.3	100.5	137.6	94.3	110.3	120.2	120.6	117.0	94.0
Apr., 1890..	100.0	100.0	100.0	102.2	126.6	94.3	102.0	118.7	112.5	111.1	94.7
July, 1890..	100.0	111.5	105.8	105.4	115.6	94.3	102.0	117.1	116.0	111.7	94.0
Oct., 1890..	100.0	88.5	94.3	102.2	99.1	102.2	114.0	132.5	122.9	123.1	106.0
Jan., 1891..	100.0	96.2	98.1	102.2	98.6	110.0	128.5	112.5	110.2	117.1	96.0
Apr., 1891..	100.0	107.7	103.9	97.3	98.6	102.2	90.6	78.6	83.5	84.2	107.3
July, 1891..	100.0	107.7	103.9	97.3	82.6	102.2	82.8	74.0	78.3	78.5	100.0
Oct., 1891..	100.0	100.0	100.0	97.3	79.8	102.2	82.8	70.9	81.2	78.8	106.0
Jan., 1892..	100.0	100.0	100.0	95.7	71.6	98.3	84.4	75.5	75.0	78.3	102.0
Apr., 1892..	100.0	96.2	98.1	84.3	74.3	98.3	78.1	67.8	79.4	75.1	99.3
July, 1892..	100.0	103.8	101.9	82.7	63.8	98.3	78.1	67.8	73.3	74.7	92.7
Oct., 1892..	100.0	115.4	107.7	81.1	74.3	98.3	87.5	67.8	73.3	74.7	92.7
Jan., 1893..	100.0	96.2	98.1	77.8	71.6	98.3	87.5	74.0	90.9	84.1	95.4
Apr., 1893..	100.0	100.0	100.0	76.2	60.6	98.3	86.0	74.0	85.3	81.8	111.3
July, 1893..	100.0	92.3	96.2	71.3	52.3	98.3	93.8	80.1	89.8	87.9	116.6
Oct., 1893..	100.0	88.5	94.3	69.7	55.0	98.3	84.4	92.5	97.8	91.6	99.3
Jan., 1894..	100.0	88.5	94.3	68.1	55.0	98.3	96.9	85.2	94.4	91.5	111.3
Apr., 1894..	100.0	96.2	98.1	68.2	52.3	98.3	71.9	64.7	69.4	68.7	107.9
July, 1894..	100.0	88.5	94.3	60.0	49.5	102.2	78.1	66.3	73.8	69.1	101.3
Oct., 1894..	100.0	80.8	90.4	64.9	52.3	102.2	93.8	77.1	81.8	84.2	103.3
Jan., 1895..	100.0	103.8	101.9	64.9	44.0	98.3	95.0	67.8	69.4	70.7	100.7
Apr., 1895..	100.0	80.8	90.4	64.9	46.8	98.3	75.0	66.3	71.6	71.0	100.7
July, 1895..	100.0	80.8	90.4	64.9	52.3	98.3	81.3	70.9	80.7	77.6	92.7
Oct., 1895..	100.0	80.8	90.4	64.9	49.5	98.3	89.1	77.1	81.8	82.7	92.7
Jan., 1896..	100.0	80.8	90.4	68.2	46.8	98.3	93.8	85.2	85.2	87.4	79.5
Apr., 1896..	100.0	80.8	90.4	56.3	49.5	94.3	104.7	92.5	90.7	96.0	77.5
July, 1896..	100.0	84.6	92.3	55.1	52.3	94.3	87.5	74.0	85.3	82.3	68.9
Oct., 1896..	100.0	88.5	94.3	53.5	52.3	94.3	76.6	66.3	78.5	73.8	79.5
Jan., 1897..	100.0	76.9	88.5	51.9	55.0	94.3	79.7	69.3	76.1	75.0	72.2
Apr., 1897..	100.0	80.8	90.4	51.9	52.3	94.3	84.4	74.0	82.9	80.4	71.5
July, 1897..	100.0	80.8	90.4	55.1	63.3	94.3	87.5	74.0	82.9	81.5	66.2
Oct., 1897..	100.0	84.6	92.3	53.5	79.8	94.3	98.4	81.7	89.3	90.0	74.2
Jan., 1898..	100.0	76.9	88.5	51.9	82.6	94.3	106.3	89.4	92.0	95.9	78.1
Apr., 1898..	100.0	80.8	90.4	55.1	90.8	94.3	103.1	89.4	89.8	94.1	76.8
July, 1898..	100.0	80.8	90.4	51.9	96.3	94.3	106.3	89.4	94.4	96.7	66.2
Oct., 1898..	100.0	84.6	92.3	47.0	99.1	94.3	106.3	92.5	92.0	96.9	74.2
Jan., 1899..	100.0	88.5	94.3	48.6	110.1	94.3	107.3	94.0	87.6	96.5	79.5
Apr., 1899..	100.0	92.3	96.2	43.8	115.6	94.3	110.9	97.1	89.8	99.3	99.3
July, 1899..	100.0	80.8	90.4	43.8	115.6	94.3	112.5	98.6	96.7	102.6	92.1

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

CLOTHS AND CLOTHING.

Date.	Bags, 2-bushel, Amos-keag.	Boots and shoes.				Average.	Calico, Cochecho prints.
		Women's shoes, solid leather, grain, polish or polka.	Men's brogans.	Men's calf, bal. shoes, Goodyear welt, dongola top.	Men's split boots, kip top, 16-inch, † double sole.		
January, 1890	100.0	100.0	100.0	100.0	100.0	100.0	105.4
April, 1890	100.0	100.0	100.0	100.0	100.0	100.0	105.4
July, 1890	101.6	100.0	100.0	100.0	100.0	100.0	105.4
October, 1890	103.2	100.0	100.0	100.0	100.0	100.0	105.4
January, 1891	100.0	100.0	100.0	100.0	100.0	100.0	97.3
April, 1891	98.4	100.0	100.0	100.0	100.0	100.0	81.1
July, 1891	98.4	100.0	100.0	100.0	100.0	100.0	97.3
October, 1891	100.0	100.0	100.0	100.0	100.0	100.0	97.3
January, 1892	98.4	100.0	100.0	100.0	100.0	100.0	105.4
April, 1892	98.4	100.0	100.0	100.0	100.0	100.0	105.4
July, 1892	98.4	100.0	97.6	100.0	100.0	99.4	105.4
October, 1892	98.4	100.0	97.6	100.0	100.0	99.4	105.4
January, 1893	98.4	100.0	97.6	100.0	97.1	98.7	105.4
April, 1893	98.4	100.0	97.6	100.0	97.1	98.7	105.4
July, 1893	98.4	100.0	95.2	100.0	97.1	98.1	97.3
October, 1893	84.1	100.0	95.2	100.0	97.1	98.1	97.3
January, 1894	85.7	100.0	95.2	100.0	94.1	97.3	89.2
April, 1894	85.7	100.0	95.2	100.0	94.1	97.3	89.2
July, 1894	74.6	100.0	90.5	100.0	94.1	96.2	89.2
October, 1894	77.8	100.0	88.1	100.0	94.1	95.6	89.2
January, 1895	66.7	100.0	88.1	100.0	88.2	94.1	81.1
April, 1895	69.8	100.0	90.5	100.0	88.2	94.7	81.1
July, 1895	73.0	100.0	100.0	100.0	88.2	97.1	89.2
October, 1895	82.5	100.0	95.2	100.0	88.2	95.9	89.2
January, 1896	85.7	100.0	95.2	100.0	91.2	96.6	89.2
April, 1896	77.8	100.0	95.2	100.0	91.2	96.6	89.2
July, 1896	79.4	100.0	95.2	100.0	91.2	96.6	81.1
October, 1896	82.5	100.0	92.9	100.0	91.2	96.0	81.1
January, 1897	82.5	100.0	90.5	100.0	94.1	96.2	81.1
April, 1897	82.5	100.0	90.5	100.0	94.1	96.2	81.1
July, 1897	79.4	100.0	90.5	100.0	94.1	96.2	81.1
October, 1897	85.7	100.0	90.5	100.0	94.1	96.2	81.1
January, 1898	79.4	100.0	85.7	100.0	97.1	95.7	73.0
April, 1898	79.4	100.0	85.7	100.0	97.1	95.7	73.0
July, 1898	88.9	100.0	88.1	93.3	97.1	94.6	73.0
October, 1898	92.1	100.0	88.1	93.3	97.1	94.6	73.0
January, 1899	88.9	100.0	88.1	93.3	100.0	95.4	73.0
April, 1899	92.1	100.0	88.1	93.3	100.0	95.4	73.0
July, 1899	92.1	100.0	90.5	93.3	100.0	96.0	81.1

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

CLOTHS AND CLOTHING—Continued.

Date.	Carpets.				Cotton thread, 6-cord, 200 yards, J. & P. Coats.	Cotton, upland, mid-ling.	Denims, Amos-keag.	Drillings, Stark A.
	Brussels, 5-frame, Bigelow.	Ingrain, 2-ply, Lowell.	Wilton, 5-frame, Bigelow.	Average.				
January, 1890.....	95.1	102.0	97.8	98.3	101.4	106.0	101.7	100.3
April, 1890.....	95.1	92.8	97.8	95.2	101.4	118.2	101.7	102.6
July, 1890.....	95.1	96.7	97.8	96.5	99.6	124.0	99.5	109.6
October, 1890.....	95.1	97.3	97.8	96.7	99.6	107.3	103.8	105.9
January, 1891.....	103.9	106.6	102.7	104.4	99.6	96.3	101.7	105.1
April, 1891.....	103.9	103.3	102.7	103.3	99.6	93.0	99.5	100.2
July, 1891.....	103.9	106.7	102.7	104.4	99.6	86.6	97.4	96.9
October, 1891.....	103.9	97.9	102.7	101.5	99.6	89.8	97.4	88.6
January, 1892.....	103.9	96.7	97.8	99.5	99.6	78.8	97.4	90.2
April, 1892.....	95.1	96.3	97.8	96.4	99.6	69.1	99.5	86.8
July, 1892.....	90.7	96.7	97.8	95.1	99.6	76.2	99.5	86.3
October, 1892.....	90.7	97.8	97.8	95.4	99.6	79.5	99.5	84.3
January, 1893.....	90.7	101.6	97.8	96.7	99.6	102.1	99.5	91.4
April, 1893.....	90.7	100.1	97.8	96.2	99.6	87.9	99.5	94.3
July, 1893.....	90.7	101.9	97.8	96.8	99.6	82.7	103.8	97.1
October, 1893.....	90.7	93.4	97.8	94.0	99.6	83.3	103.8	89.2
January, 1894.....	86.2	92.2	97.8	92.1	99.6	82.1	95.2	86.6
April, 1894.....	86.2	89.1	97.8	91.0	99.6	80.1	95.2	81.2
July, 1894.....	86.2	87.3	97.8	90.4	99.6	74.9	95.2	78.8
October, 1894.....	86.2	79.0	97.8	87.7	99.6	64.6	95.2	80.1
January, 1895.....	86.2	82.7	85.6	84.8	99.6	58.8	86.5	76.8
April, 1895.....	86.2	78.4	85.6	83.4	99.6	66.5	84.4	75.9
July, 1895.....	86.2	78.9	85.6	83.6	99.6	73.7	84.4	73.4
October, 1895.....	86.2	73.5	85.6	81.8	99.6	93.7	86.5	91.2
January, 1896.....	86.2	78.3	85.6	83.4	99.6	85.9	90.9	87.8
April, 1896.....	86.2	73.6	85.6	81.8	99.6	81.4	82.2	85.5
July, 1896.....	86.2	79.3	85.6	83.7	97.3	76.9	82.2	84.8
October, 1896.....	86.2	72.9	85.6	81.6	97.3	86.6	86.5	83.2
January, 1897.....	86.2	78.7	85.6	83.5	97.3	72.4	86.5	78.8
April, 1897.....	86.2	76.0	85.6	82.6	97.3	75.6	80.0	76.5
July, 1897.....	90.7	82.8	90.5	88.0	97.3	81.4	77.9	74.4
October, 1897.....	90.7	86.3	90.5	89.2	97.3	67.2	77.9	78.6
January, 1898.....	95.1	95.0	92.9	94.3	97.3	61.4	77.9	67.9
April, 1898.....	95.1	88.4	92.9	92.1	97.3	64.0	77.9	72.3
July, 1898.....	95.1	92.9	92.9	93.6	97.3	64.6	77.9	72.6
October, 1898.....	95.1	78.5	92.9	88.8	97.3	55.6	76.8	68.8
January, 1899.....	95.1	90.2	92.9	89.4	97.3	60.7	71.4	69.3
April, 1899.....	95.1	76.9	92.9	88.3	97.3	64.6	77.9	73.9
July, 1899.....	95.1	82.5	92.9	90.2	97.3	63.3	80.0	75.9

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

CLOTHS AND CLOTHING—Continued.

Date.	Felts.			Flannels, twilled blue, 3-4, Talbot T.	Ginghams, Amoskeag.	Leather.			
	Press, 12 by 54 feet, fine Four-dins.	Wet, 24 by 54 feet, fine Four-dins.	Average.			Harness.	Hides, dry, Buenos Ayres.	Sole, first quality, medium weight, Buenos Ayres.	Average.
January, 1890.....	107.0	100.5	103.8	102.9	97.8	101.1	103.2	101.7	102.0
April, 1890.....	107.0	100.5	103.8	108.4	97.8	97.8	103.2	101.7	100.9
July, 1890.....	107.0	100.5	103.8	86.7	97.8	97.8	103.2	101.7	100.9
October, 1890.....	107.0	100.5	103.8	100.2	97.8	104.5	103.2	101.7	103.1
January, 1891.....	94.4	99.6	97.0	100.2	101.7	101.1	98.0	99.1	99.4
April, 1891.....	94.4	99.6	97.0	100.2	101.7	104.5	98.0	99.1	100.5
July, 1891.....	94.4	99.6	97.0	100.2	101.7	94.4	98.0	99.1	97.2
October, 1891.....	94.4	99.6	97.0	100.2	101.7	97.8	98.0	99.1	98.3
January, 1892.....	94.4	99.6	97.0	100.8	101.7	101.1	95.0	96.4	97.5
April, 1892.....	94.4	99.6	97.0	100.8	101.7	97.8	93.2	93.7	94.9
July, 1892.....	94.4	99.6	97.0	100.8	101.7	91.0	89.5	96.4	92.3
October, 1892.....	94.4	99.6	97.0	100.8	101.7	87.6	93.2	96.4	92.4
January, 1893.....	94.4	99.6	97.0	93.0	101.7	84.3	93.2	93.7	90.4
April, 1893.....	94.4	99.6	97.0	100.8	97.8	84.3	91.4	101.7	92.5
July, 1893.....	94.4	99.6	97.0	100.8	97.8	84.3	84.1	101.7	90.0
October, 1893.....	94.4	99.6	97.0	100.8	97.8	80.9	80.4	101.7	87.7
January, 1894.....	94.4	99.6	97.0	93.0	80.2	80.9	76.8	99.0	85.6
April, 1894.....	94.4	99.6	97.0	83.3	74.3	80.9	80.4	99.0	86.8
July, 1894.....	94.4	99.6	97.0	83.3	74.3	80.9	76.8	91.0	82.9
October, 1894.....	86.6	89.5	88.1	83.3	74.3	84.3	76.8	88.3	83.1
January, 1895.....	86.6	89.5	88.1	80.3	72.4	84.3	87.7	88.3	86.8
April, 1895.....	86.6	89.5	88.1	75.5	66.5	86.0	98.7	91.0	91.9
July, 1895.....	86.6	89.5	88.1	76.7	74.3	97.8	153.5	123.1	124.8
October, 1895.....	86.6	89.5	88.1	76.7	78.3	101.1	175.4	128.5	135.0
January, 1896.....	86.6	89.5	88.1	70.4	80.2	104.5	131.6	117.8	118.0
April, 1896.....	86.6	89.5	88.1	71.5	74.3	101.1	124.3	96.4	107.3
July, 1896.....	86.6	89.5	88.1	71.5	66.5	97.8	117.0	99.0	104.6
October, 1896.....	86.6	89.5	88.1	71.5	74.3	101.1	117.0	99.0	105.7
January, 1897.....	86.6	89.5	88.1	72.8	70.4	107.9	131.6	107.1	115.5
April, 1897.....	86.6	89.5	88.1	72.8	66.5	111.2	135.2	117.8	121.4
July, 1897.....	86.6	89.5	88.1	72.8	66.5	114.6	135.2	107.1	119.0
October, 1897.....	86.6	89.5	88.1	80.9	70.4	107.9	146.2	117.8	124.0
January, 1898.....	86.6	89.5	88.1	80.9	66.5	97.8	146.2	112.4	118.8
April, 1898.....	86.6	89.5	88.1	80.9	70.4	101.1	146.2	112.4	119.9
July, 1898.....	86.6	89.5	88.1	80.9	66.5	104.5	146.2	112.4	121.0
October, 1898.....	86.6	89.5	88.1	84.1	66.5	104.5	153.5	107.1	121.7
January, 1899.....	86.6	89.5	88.1	84.1	70.4	101.1	146.2	112.4	119.9
April, 1899.....	86.6	89.5	88.1	77.6	74.3	104.5	138.9	117.8	120.4
July, 1899.....	86.6	89.5	88.1	77.6	78.3	111.2	153.5	117.8	127.5

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

CLOTHS AND CLOTHING—Continued.

Date.	Print cloths, 28-inch, 64 by 64, Metacomet.	Shawls, standard, 72 by 144 inches, weighing 42 ounces, made of XX Ohio fleece wool.	Sheetings.			Shirtings, bleached.				
			Brown, 4-4, Atlantic.	36-inch, Stark A.A.	Average.	4-4, Fruit of the Loom.	4-4, Hope.	4-4, Lonsdale.	4-4, New York Mills.	Average.
January, 1890....	110.8	100.8	101.0	105.0	103.0	100.2	100.7	100.6	100.3	100.5
April, 1890.....	102.9	100.8	101.0	101.3	101.2	100.2	100.7	100.6	100.3	100.5
July, 1890.....	106.8	100.8	101.0	108.2	104.6	103.1	104.1	103.5	102.6	103.3
October, 1890....	104.8	100.8	104.8	107.5	106.2	103.1	104.1	103.5	102.6	103.3
January, 1891....	94.9	99.7	103.6	106.1	104.9	100.2	100.7	97.8	102.6	100.3
April, 1891.....	94.9	99.7	102.1	98.7	100.4	100.2	100.7	100.6	100.3	100.5
July, 1891.....	93.0	99.7	100.6	95.3	98.0	97.7	97.5	97.8	97.9	97.7
October, 1891....	94.9	99.7	96.0	86.8	91.4	100.2	97.5	97.8	97.9	98.4
January, 1892....	96.9	97.9	90.1	90.9	90.5	94.9	94.1	97.8	95.5	95.6
April, 1892.....	96.9	97.9	92.0	87.8	89.9	94.9	94.1	97.8	95.5	95.6
July, 1892.....	106.8	97.9	88.4	85.7	87.1	95.4	90.7	97.8	95.5	94.9
October, 1892....	110.8	97.9	85.3	82.7	84.0	95.4	94.1	97.8	95.5	95.7
January, 1893....	126.6	97.9	89.9	94.7	92.3	101.0	100.8	103.5	95.5	100.2
April, 1893.....	122.6	97.9	85.3	90.4	87.9	101.0	100.8	103.5	95.5	100.2
July, 1893.....	102.9	97.9	95.2	87.5	91.4	95.4	94.1	97.8	93.0	95.1
October, 1893....	87.0	97.9	93.3	88.0	90.7	95.4	94.1	97.8	88.6	94.0
January, 1894....	93.0	93.1	91.4	84.9	88.2	88.9	89.4	89.7	88.6	89.2
April, 1894.....	89.0	93.1	85.7	80.4	83.1	85.7	87.4	89.1	88.6	87.7
July, 1894.....	85.1	93.1	85.7	79.0	82.4	87.0	87.4	89.1	88.6	88.0
October, 1894....	94.9	93.1	78.1	80.7	79.4	84.2	87.4	86.3	88.6	86.6
January, 1895....	85.1	78.1	76.1	85.9	81.0	84.2	77.2	74.8	88.6	81.2
April, 1895.....	79.1	78.1	76.1	74.2	75.2	76.8	77.2	77.6	84.2	79.0
July, 1895.....	91.0	78.1	76.1	75.0	75.6	78.6	84.0	83.4	84.2	82.6
October, 1895....	102.9	78.1	87.6	90.9	89.3	89.8	97.5	94.9	84.2	91.6
January, 1896....	93.0	80.3	87.6	87.0	87.3	95.4	100.8	97.8	88.6	95.7
April, 1896.....	79.1	80.3	83.8	84.3	84.1	87.0	84.0	80.5	88.6	85.0
July, 1896.....	79.0	80.3	80.0	83.3	81.7	73.9	80.6	74.8	88.6	79.5
October, 1896....	81.2	80.3	80.0	81.4	80.7	76.6	87.4	80.5	88.6	83.3
January, 1897....	79.1	80.3	83.8	79.0	81.4	76.8	87.4	80.5	83.5	82.1
April, 1897.....	81.1	80.3	72.4	72.7	72.6	73.9	80.6	74.0	83.5	78.0
July, 1897.....	77.1	80.3	74.3	78.0	73.7	67.9	80.6	76.5	88.6	78.4
October, 1897....	79.1	80.3	74.3	68.2	71.3	67.9	80.6	77.6	88.6	78.7
January, 1898....	71.2	81.3	72.4	63.7	68.1	70.9	75.4	71.2	78.6	74.0
April, 1898.....	63.3	81.3	68.6	69.3	69.2	70.9	75.4	71.2	78.6	74.0
July, 1898.....	61.3	81.3	66.7	71.9	69.3	67.9	72.0	67.9	78.6	71.6
October, 1898....	63.3	81.3	68.6	64.5	66.6	67.9	72.0	67.9	78.6	71.6
January, 1899....	75.2	81.3	64.8	66.9	65.9	65.0	63.7	65.1	78.6	69.4
April, 1899.....	87.0	81.3	70.5	69.3	69.9	76.8	74.0	70.8	78.6	75.1
July, 1899.....	87.0	81.3	72.4	72.2	72.3	76.8	77.2	76.9	86.4	79.3

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

CLOTHS AND CLOTHING—Concluded.

Date.	Suitsings, all wool, indigo-blue, 54-inch, 14-ounce, Middlesex standard.	Tickings, Amoskeag, A. C. A.	Women's dress goods.				Wool.		
			Cotton warp alpaca, 22-inch, Hamilton.	Cotton warp cashmere, 22-inch, Hamilton.	Cotton warp cashmere, 27-inch, Hamilton.	Average.	Ohio, fine fleece, scoured.	Ohio, medium fleece, scoured.	Average.
January, 1890	100.0	101.4	100.0	100.0	100.0	100.0	102.8	102.3	102.6
April, 1890	100.0	101.4	100.0	100.0	100.0	100.0	102.8	99.3	101.1
July, 1890	100.0	99.3	100.0	100.0	100.0	100.0	102.8	102.3	102.6
October, 1890	100.0	103.5	100.0	100.0	100.0	100.0	102.8	102.3	102.6
January, 1891	100.0	101.4	100.0	100.0	100.0	100.0	102.8	102.3	102.6
April, 1891	100.0	99.3	100.0	100.0	100.0	100.0	99.6	102.3	101.0
July, 1891	100.0	97.2	100.0	100.0	100.0	100.0	96.5	96.3	96.4
October, 1891	100.0	99.3	100.0	100.0	100.0	100.0	96.5	96.3	96.4
January, 1892	100.0	97.2	100.0	100.0	100.0	100.0	93.3	96.3	94.8
April, 1892	100.0	97.2	100.0	100.0	100.0	100.0	90.2	93.8	92.0
July, 1892	100.0	97.2	96.7	97.1	97.5	97.1	87.4	93.8	90.6
October, 1892	100.0	97.2	96.7	97.1	97.5	97.1	90.2	91.2	90.7
January, 1893	100.0	99.3	96.7	97.1	97.5	97.1	90.2	91.2	90.7
April, 1893	100.0	101.4	96.7	97.1	95.0	96.3	93.3	88.2	90.8
July, 1893	95.0	101.4	96.7	97.1	95.0	96.3	74.7	71.9	73.3
October, 1893	95.0	97.2	96.7	97.1	95.0	96.3	71.6	65.5	68.6
January, 1894	95.0	96.1	93.3	91.2	92.5	92.3	71.6	65.5	68.6
April, 1894	95.0	90.8	93.3	91.2	92.5	92.3	65.6	63.4	64.5
July, 1894	95.0	90.8	93.3	91.2	92.5	92.3	62.5	58.2	60.4
October, 1894	95.0	88.7	93.3	91.2	92.5	92.3	59.3	58.2	58.8
January, 1895	75.4	80.3	86.7	88.2	87.5	87.5	54.5	55.2	54.9
April, 1895	75.4	82.4	86.7	88.2	87.5	87.5	51.4	55.2	53.3
July, 1895	73.5	88.7	86.7	88.2	85.0	86.6	56.1	58.2	57.2
October, 1895	73.5	88.7	86.7	88.2	85.0	86.6	56.1	58.2	57.2
January, 1896	73.5	93.0	86.7	88.2	85.0	86.6	59.3	59.3	59.3
April, 1896	73.5	82.4	86.7	88.2	85.0	86.6	59.3	58.2	58.8
July, 1896	73.5	84.5	86.7	82.4	85.0	84.7	53.0	49.7	51.4
October, 1896	73.5	84.5	86.7	82.4	80.0	83.0	56.1	52.7	54.4
January, 1897	67.6	88.7	86.7	82.4	80.0	83.0	59.3	58.2	58.8
April, 1897	67.6	80.3	86.7	82.4	80.0	83.0	65.6	62.0	63.8
July, 1897	67.6	80.3	86.7	82.4	80.0	83.0	66.9	65.1	66.0
October, 1897	67.6	80.3	86.7	82.4	80.0	83.0	64.2	60.1	62.2
January, 1898	73.5	76.1	86.7	82.4	80.0	83.0	90.2	83.1	86.7
April, 1898	73.5	76.1	86.7	82.4	80.0	83.0	90.2	81.4	85.8
July, 1898	73.5	76.1	86.7	82.4	80.0	83.0	87.4	80.1	83.8
October, 1898	73.5	73.9	86.7	82.4	80.0	83.0	88.8	83.1	86.0
January, 1899	73.5	76.1	86.7	82.4	80.0	85.0	82.5	80.1	81.3
April, 1899	73.5	73.2	86.7	82.4	85.0	84.7	77.5	77.1	77.3
July, 1899	73.5	73.2	86.7	82.4	85.0	84.7	88.8	85.6	87.2

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

FUEL AND LIGHTING.

Date.	Candles, best adamantine.	Coal, anthracite.			Coal, bituminous.	Matches.		
		Pen.	Stove.	Average.		8-card.	Parlor.	Average.
January, 1890.....	94.7	90.8	105.7	98.3	103.1	99.4	100.0	99.7
April, 1890.....	102.6	107.3	86.9	97.1	98.4	99.4	100.0	99.7
July, 1890.....	102.6	107.3	96.9	102.1	98.4	99.4	100.0	99.7
October, 1890.....	102.6	99.1	104.5	101.8	98.4	99.4	100.0	99.7
January, 1891.....	102.6	99.1	107.0	103.1	96.9	99.4	100.0	99.7
April, 1891.....	102.6	99.1	90.6	94.9	101.6	99.4	100.0	99.7
July, 1891.....	102.6	99.1	98.2	98.7	101.6	99.4	100.0	99.7
October, 1891.....	94.7	99.1	107.0	103.1	101.6	99.4	100.0	99.7
January, 1892.....	94.7	99.1	103.2	101.2	100.0	104.8	100.0	102.4
April, 1892.....	94.7	90.8	98.2	94.5	100.0	104.8	100.0	102.4
July, 1892.....	94.7	90.8	109.5	100.2	98.4	104.8	100.0	102.4
October, 1892.....	94.7	90.8	115.8	103.3	96.9	104.8	100.0	102.4
January, 1893.....	102.6	90.8	115.8	103.3	100.0	120.9	100.0	110.5
April, 1893.....	102.6	90.8	100.7	95.8	98.4	133.0	100.0	116.5
July, 1893.....	102.6	94.1	112.0	103.1	98.4	133.0	100.0	116.5
October, 1893.....	102.6	94.1	112.0	103.1	98.4	133.0	100.0	116.5
January, 1894.....	102.6	99.1	112.0	105.6	98.4	133.0	100.0	116.5
April, 1894.....	102.6	99.1	90.6	94.9	89.1	133.0*	100.0	116.5
July, 1894.....	102.6	99.1	100.7	99.9	89.1	133.0	100.0	116.5
October, 1894.....	102.6	99.1	96.9	98.0	89.1	133.0	100.0	116.5
January, 1895.....	102.6	99.1	90.6	94.9	89.1	133.0	100.0	116.5
April, 1895.....	94.7	94.1	83.1	88.6	85.9	133.0	100.0	116.5
July, 1895.....	94.7	94.1	83.1	88.6	85.9	133.0	100.0	116.5
October, 1895.....	94.7	94.1	100.7	97.4	85.9	133.0	100.0	116.5
January, 1896.....	94.7	94.1	91.9	93.0	85.9	133.0	100.0	116.5
April, 1896.....	94.7	87.5	90.6	89.1	90.6	133.0	100.0	116.5
July, 1896.....	94.7	94.1	103.2	98.7	90.6	133.0	100.0	116.5
October, 1896.....	94.7	94.1	109.5	101.8	90.6	133.0	100.0	116.5
January, 1897.....	94.7	87.5	103.2	95.4	90.6	133.0	100.0	116.5
April, 1897.....	94.7	94.1	103.2	98.7	81.3	133.0	100.0	116.5
July, 1897.....	94.7	87.5	109.5	98.5	81.3	133.0	100.0	116.5
October, 1897.....	94.7	87.5	109.5	98.5	81.3	133.0	100.0	116.5
January, 1898.....	94.7	87.5	93.1	90.3	82.8	133.0	100.0	116.5
April, 1898.....	94.7	90.8	96.9	93.9	82.8	133.0	78.9	106.0
July, 1898.....	94.7	94.1	96.9	95.5	85.9	133.0	78.9	106.0
October, 1898.....	94.7	90.8	96.9	93.9	79.7	133.0	78.9	106.0
January, 1899.....	94.7	90.8	90.6	90.7	71.9	133.0	78.9	106.0
April, 1899.....	94.7	90.8	90.6	90.7	73.4	133.0	78.9	106.0
July, 1899.....	94.7	82.6	96.9	89.3	68.8	133.0	78.9	106.0

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

METALS AND IMPLEMENTS.

Date.	Bar iron, best refined, rolled, all muck iron.	Butts, loose joint, cast, 3 by 3 inch.	Copper.			Door-knobs, mineral.	Lead.		
			Sheet.	Wire, No. 8, B. and S. Ga. and heavier.	Average.		Pig.	Pipe.	Average.
January, 1890 ...	106.9	102.0	108.2	101.9	105.1	100.0	89.4	87.1	88.3
April, 1890	104.1	102.0	108.2	101.9	105.1	100.0	89.4	87.1	88.3
July, 1890	101.2	102.0	123.0	116.5	119.8	100.0	102.8	101.6	102.2
October, 1890	104.1	104.5	108.2	116.5	112.4	100.0	116.1	116.1	115.1
January, 1891	101.2	102.0	108.2	104.9	106.6	100.0	94.1	105.2	99.7
April, 1891	95.6	96.9	108.2	99.0	103.6	100.0	100.5	105.2	102.9
July, 1891	95.6	96.9	78.7	98.2	86.0	100.0	103.4	101.6	102.5
October, 1891	95.6	96.9	78.7	87.4	83.1	100.0	105.7	101.6	103.7
January, 1892	95.6	96.9	78.7	78.6	78.7	100.0	98.7	94.4	95.6
April, 1892	90.0	96.9	78.7	87.4	83.1	100.0	98.1	94.4	96.3
July, 1892	95.6	96.9	78.7	87.4	83.1	100.0	97.5	94.4	96.0
October, 1892	93.9	96.9	78.7	81.6	80.2	100.0	91.7	94.4	93.1
January, 1893	89.4	96.9	78.7	81.6	80.2	100.0	87.1	90.7	88.9
April, 1893	87.2	96.9	78.7	81.6	80.2	100.0	91.7	90.7	91.2
July, 1893	85.5	96.9	68.9	78.6	73.8	100.0	79.0	90.7	84.9
October, 1893	78.7	96.9	68.9	72.8	70.9	100.0	84.8	90.7	87.8
January, 1894	73.1	96.9	73.8	69.9	71.9	100.0	74.3	90.7	87.5
April, 1894	67.5	96.9	68.9	69.9	69.4	100.0	76.6	83.5	80.1
July, 1894	67.5	89.2	68.9	64.1	66.5	100.0	72.0	76.2	74.1
October, 1894	64.7	89.2	68.9	65.5	67.2	100.0	70.8	76.2	73.5
January, 1895	61.9	84.1	68.9	65.5	67.2	100.0	69.7	76.2	73.0
April, 1895	61.9	84.1	68.9	65.5	67.2	100.0	70.8	76.2	73.5
July, 1895	74.2	84.1	68.9	74.3	71.6	110.0	72.6	76.2	74.4
October, 1895	79.9	89.2	73.8	88.0	78.4	110.0	73.2	76.2	74.7
January, 1896	70.3	84.1	66.4	77.2	71.8	100.0	69.7	76.2	73.0
April, 1896	67.5	84.1	66.4	78.6	72.5	100.0	69.7	76.2	73.0
July, 1896	67.5	84.1	73.8	81.6	77.7	100.0	69.7	68.0	68.9
October, 1896	67.5	84.1	73.8	78.6	76.2	100.0	60.4	63.5	62.0
January, 1897	68.6	89.2	73.8	81.6	77.7	100.0	67.4	65.3	66.4
April, 1897	64.1	89.2	76.2	81.6	78.9	100.0	74.3	76.2	75.3
July, 1897	53.4	89.2	68.9	78.6	73.8	100.0	77.8	76.2	77.0
October, 1897	64.7	89.2	68.9	78.6	73.8	100.0	92.9	90.7	91.8
January, 1898	64.7	89.2	68.9	75.7	72.3	100.0	82.5	79.8	81.2
April, 1898	59.1	89.2	68.9	81.6	75.3	100.0	81.3	79.8	80.6
July, 1898	59.1	84.1	68.9	81.6	75.3	100.0	88.3	87.1	87.7
October, 1898	61.9	84.1	68.9	81.6	75.3	100.0	88.8	87.1	88.0
January, 1899	63.0	84.1	81.1	87.4	84.3	100.0	85.9	87.1	86.5
April, 1899	92.8	89.2	105.7	116.5	111.1	100.0	96.4	98.0	97.2
July, 1899	112.5	102.0	110.7	110.7	110.7	130.0	98.7	98.0	98.4

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

METALS AND IMPLEMENTS—Continued.

Date.	Locks.			Nails, wire, base price.	Pig iron.			Quick- silver
	Com- mon mor- tise.	Com- mon rim.	Aver- age.		Besse- mer.	No. 1, antha- cite, found- ry.	Aver- age.	
January, 1890.....	100.0	100.0	100.0	129.0	135.1	110.6	123.0	100.8
April, 1890.....	100.0	100.0	100.0	106.8	102.4	101.5	102.0	100.8
July, 1890.....	100.0	100.0	100.0	106.8	106.8	100.1	103.5	111.2
October, 1890.....	100.0	100.0	100.0	106.8	99.5	100.1	99.8	117.1
January, 1891.....	100.0	100.0	100.0	98.8	91.5	97.3	94.4	103.8
April, 1891.....	100.0	100.0	100.0	94.3	92.4	97.3	94.9	91.9
July, 1891.....	100.0	100.0	100.0	92.1	93.2	97.3	95.3	90.4
October, 1891.....	100.0	100.0	100.0	84.5	88.9	98.7	93.8	89.0
January, 1892.....	100.0	100.0	100.0	81.0	89.8	97.3	93.6	94.9
April, 1892.....	100.0	100.0	100.0	77.9	83.2	88.9	86.1	86.7
July, 1892.....	100.0	100.0	100.0	75.6	80.3	83.7	82.0	81.5
October, 1892.....	100.0	100.0	100.0	69.8	79.7	83.4	81.6	78.6
January, 1893.....	100.0	100.0	100.0	69.8	78.0	82.3	80.2	77.1
April, 1893.....	100.0	100.0	100.0	73.4	79.5	81.0	80.3	77.1
July, 1893.....	100.0	100.0	100.0	65.4	75.8	83.4	79.6	80.1
October, 1893.....	100.0	100.0	100.0	62.3	66.6	78.9	72.8	77.1
January, 1894.....	100.0	100.0	100.0	52.1	62.5	74.3	68.4	66.7
April, 1894.....	100.0	100.0	100.0	44.5	60.2	70.0	65.1	67.5
July, 1894.....	100.0	100.0	100.0	53.4	72.3	69.5	70.9	71.9
October, 1894.....	100.0	100.0	100.0	46.7	63.2	69.5	66.4	73.4
January, 1895.....	100.0	100.0	100.0	42.3	57.7	67.2	62.5	71.2
April, 1895.....	100.0	100.0	100.0	42.3	61.3	66.7	64.0	70.4
July, 1895.....	110.8	111.1	111.0	36.8	81.1	76.7	78.9	80.1
October, 1895.....	110.8	111.1	111.0	106.8	90.5	80.6	85.6	75.6
January, 1896.....	100.0	100.0	100.0	107.7	67.8	75.4	71.6	78.6
April, 1896.....	100.0	100.0	100.0	113.4	76.4	73.7	75.1	74.1
July, 1896.....	100.0	100.0	100.0	120.1	69.5	70.9	70.2	73.4
October, 1896.....	100.0	100.0	100.0	120.1	67.2	69.8	68.5	72.7
January, 1897.....	100.0	100.0	100.0	65.4	61.8	70.9	66.4	72.5
April, 1897.....	100.0	100.0	100.0	65.4	56.9	67.4	62.2	79.3
July, 1897.....	100.0	100.0	100.0	60.1	53.9	65.3	59.6	78.6
October, 1897.....	100.0	100.0	100.0	68.5	61.4	66.7	64.1	74.1
January, 1898.....	100.0	100.0	100.0	69.0	57.4	66.7	62.1	76.4
April, 1898.....	100.0	100.0	100.0	65.4	59.4	65.3	62.4	78.6
July, 1898.....	100.0	100.0	100.0	60.5	59.2	62.5	60.9	84.5
October, 1898.....	100.0	100.0	100.0	65.0	59.7	65.0	62.4	78.5
January, 1899.....	100.0	100.0	100.0	70.7	63.1	67.4	65.3	81.5
April, 1899.....	114.5	113.3	113.9	100.1	86.4	91.7	89.1	86.0
July, 1899.....	114.5	113.3	113.9	120.1	117.3	113.2	115.3	86.7

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

METALS AND IMPLEMENTS—Concluded.

Date.	Rope.			Saws, hand, standard, Disston's.	Scythes.	Shovels, Ames No. 2, cast steel, D handle, square point, back strap.	Spelter, domestic.	Steel billets.	Steel rails, Bessemer.
	Manila.	Tarred, American.	Average.						
January, 1890	111.4	98.8	105.1	97.1	105.9	100.0	107.9	124.7	113.6
April, 1890	126.4	98.8	112.6	97.1	105.9	100.0	103.9	120.0	108.0
July, 1890	124.3	98.8	111.6	97.1	105.9	100.0	109.9	112.6	101.5
October, 1890	117.9	98.8	108.4	97.1	105.9	100.0	117.9	103.9	96.7
January, 1891	94.3	98.8	96.6	103.6	95.3	100.0	84.9	88.9	93.5
April, 1891	87.9	98.8	98.4	103.6	95.3	100.0	102.4	87.8	96.7
July, 1891	77.1	98.8	88.0	103.6	95.3	100.0	89.9	89.4	96.7
October, 1891	72.9	98.8	86.9	103.6	95.3	100.0	89.9	86.1	96.7
January, 1892	87.9	109.8	98.9	97.1	95.3	100.0	92.9	86.6	96.7
April, 1892	92.1	107.0	99.6	97.1	95.3	100.0	91.9	79.2	96.7
July, 1892	92.1	107.0	99.6	97.1	95.3	100.0	95.9	80.7	96.7
October, 1892	87.9	104.3	96.1	97.1	95.3	100.0	89.9	81.6	96.7
January, 1893	81.4	101.5	91.5	97.1	95.3	100.0	87.4	75.4	93.5
April, 1893	81.4	104.3	92.9	97.1	95.3	100.0	85.9	78.7	93.5
July, 1893	79.3	104.3	91.8	97.1	95.3	100.0	83.0	74.0	93.5
October, 1893	66.4	104.3	85.4	97.1	95.3	100.0	75.0	62.2	88.6
January, 1894	62.1	104.3	83.2	97.1	95.3	94.7	70.0	55.8	77.3
April, 1894	60.0	98.8	79.4	97.1	95.3	94.7	74.0	54.4	77.3
July, 1894	64.3	98.8	81.6	97.1	95.3	94.7	69.5	61.5	77.3
October, 1894	64.3	98.8	81.6	97.1	95.3	94.7	68.5	55.4	77.3
January, 1895	64.3	96.0	80.2	97.1	95.3	94.7	65.5	51.2	70.9
April, 1895	53.6	96.0	74.8	97.1	95.3	94.7	64.2	53.4	70.9
July, 1895	53.6	96.0	74.8	97.1	95.3	94.7	72.2	73.0	77.3
October, 1895	57.9	96.0	77.0	97.1	95.3	94.7	83.2	76.9	90.2
January, 1896	55.7	96.0	75.9	97.1	95.3	94.7	71.5	57.5	90.2
April, 1896	53.6	96.0	74.8	97.1	95.3	100.8	82.5	68.6	90.2
July, 1896	49.3	96.0	72.7	97.1	95.3	100.8	81.5	67.6	90.2
October, 1896	49.3	96.0	72.7	97.1	85.8	100.8	72.5	68.4	90.2
January, 1897	53.6	96.0	74.8	97.1	85.8	100.8	81.8	55.1	80.6
April, 1897	47.1	96.0	71.6	97.1	85.8	100.8	81.8	50.8	58.0
July, 1897	45.0	96.0	70.5	97.1	85.8	100.8	85.9	48.5	58.0
October, 1897	45.0	96.0	70.5	97.1	95.3	100.8	84.9	57.3	58.0
January, 1898	49.3	96.0	72.7	97.1	95.3	100.8	79.0	52.0	58.0
April, 1898	51.4	96.0	73.7	97.1	95.3	100.8	85.9	53.0	58.0
July, 1898	85.7	96.0	90.9	97.1	95.3	100.8	99.9	51.1	54.8
October, 1898	81.4	96.0	88.7	97.1	95.3	100.8	97.4	54.7	56.4
January, 1899	64.3	96.0	80.2	97.1	95.3	100.8	103.4	59.1	59.6
April, 1899	81.4	96.0	88.7	97.1	95.3	110.4	127.4	87.5	83.0
July, 1899	83.6	96.0	89.8	97.1	105.9	110.4	124.9	117.1	91.0

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

LUMBER AND BUILDING MATERIALS.

Date.	Brick, common domestic building.	Carbonate of lead in oil (American pure white lead).	Cement, Rosendale.	Chestnut lumber, in the log, not sawed.	Doors, pine, unmolded, 2 ft. 4 in. by 6 ft. 8 in., 1½ in. thick.	Hemlock boards, first quality, 1-in., not planed.	Lime, Rockland.	Maple boards, first quality, 1-in., rough.	Oak boards, white, plain, first quality, 1-in., rough.
Jan., 1890..	119.4	103.3	105.9	101.9	114.9	96.8	100.4	100.0	100.0
Apr., 1890..	117.3	107.0	94.1	101.9	114.9	96.8	111.5	100.0	100.0
July, 1890..	94.7	92.2	94.1	101.9	95.7	106.5	100.4	100.0	100.0
Oct., 1890..	107.0	99.6	100.0	101.9	95.7	106.5	100.4	100.0	100.0
Jan., 1891..	98.8	103.3	100.0	101.9	95.7	101.6	100.4	100.0	100.0
Apr., 1891..	90.6	95.9	100.0	101.9	95.7	101.6	94.8	100.0	100.0
July, 1891..	84.4	99.6	100.0	101.9	95.7	96.8	100.4	100.0	100.0
Oct., 1891..	90.6	99.6	100.0	101.9	95.7	96.8	94.8	100.0	100.0
Jan., 1892..	97.2	99.6	105.9	84.9	95.7	96.8	97.0	100.0	100.0
Apr., 1892..	93.9	99.6	94.1	84.9	95.7	96.8	95.9	100.0	100.0
July, 1892..	88.9	99.6	94.1	84.9	95.7	101.6	105.9	100.0	100.0
Oct., 1892..	90.6	99.6	94.1	84.9	95.7	101.6	94.8	100.0	100.0
Jan., 1893..	105.4	99.6	100.0	84.9	103.4	101.6	109.3	100.0	100.0
Apr., 1893..	96.0	84.8	94.1	76.4	95.7	96.8	100.4	100.0	100.0
July, 1893..	88.9	92.2	91.2	76.4	88.1	96.8	100.4	100.0	100.0
Oct., 1893..	86.5	95.9	94.1	76.4	88.1	96.8	105.9	100.0	100.0
Jan., 1894..	93.0	84.8	100.0	76.4	84.3	91.9	98.1	95.5	100.0
Apr., 1894..	82.3	75.6	91.2	76.4	84.3	87.1	92.6	95.5	100.0
July, 1894..	76.2	75.6	88.2	76.4	76.6	87.1	98.1	95.5	100.0
Oct., 1894..	78.2	77.5	88.2	76.4	76.6	87.1	94.8	95.5	100.0
Jan., 1895..	95.5	77.5	100.0	76.4	72.8	87.1	89.2	95.5	100.0
Apr., 1895..	88.5	73.8	91.2	76.4	68.9	87.1	89.2	95.5	100.0
July, 1895..	78.2	81.1	88.2	76.4	68.9	84.7	83.6	95.5	100.0
Oct., 1895..	84.4	81.1	88.2	76.4	68.9	82.3	78.1	95.5	100.0
Jan., 1896..	90.6	81.1	97.1	76.4	65.1	77.4	87.0	90.9	97.1
Apr., 1896..	84.4	77.5	88.2	76.4	65.1	77.4	78.1	90.9	97.1
July, 1896..	77.4	77.5	85.3	76.4	65.1	77.4	69.1	90.9	97.1
Oct., 1896..	77.4	77.5	88.2	76.4	61.3	77.4	74.7	90.9	97.1
Jan., 1897..	82.3	77.5	94.1	76.4	61.3	79.8	72.5	90.9	97.1
Apr., 1897..	74.1	77.5	85.3	76.4	61.3	79.8	81.4	95.5	97.1
July, 1897..	72.0	77.5	82.4	76.4	61.3	79.8	83.6	95.5	97.1
Oct., 1897..	84.4	77.5	82.4	76.4	65.1	82.3	83.6	95.5	97.1
Jan., 1898..	98.8	81.1	85.3	76.4	65.1	82.3	87.0	95.5	100.0
Apr., 1898..	90.6	81.1	82.4	84.9	68.9	87.1	90.3	95.5	100.0
July, 1898..	88.5	81.1	79.4	84.9	72.8	87.1	72.5	95.5	100.0
Oct., 1898..	94.7	81.1	82.4	84.9	76.6	91.9	72.5	95.5	100.0
Jan., 1899..	102.9	81.1	88.2	84.9	84.3	101.6	83.6	95.5	100.0
Apr., 1899..	96.8	84.8	82.4	93.4	88.1	111.3	89.2	100.0	102.9
July, 1899..	86.5	84.8	94.1	93.4	95.7	121.0	83.6	100.0	102.9

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

LUMBER AND BUILDING MATERIALS—Concluded.

Date.	Pine boards.				Putty.	Shingles, pine, 16 inches, XXX.	Spruce boards, No. 2, 1-inch.	Tar, Wilmington.	Turpentine.
	White, clear, 1-inch, not planed.	White, common, 1-inch, not planed.	White, culls, 1-inch, not planed.	Average.					
January, 1890...	101.8	105.1	104.5	103.8	100.0	110.6	97.7	94.4	112.7
April, 1890.....	101.8	105.1	104.5	103.8	100.0	110.6	104.7	91.9	108.9
July, 1890.....	99.5	98.5	100.4	99.5	100.0	97.0	101.2	96.8	102.6
October, 1890....	97.2	98.5	100.4	98.7	100.0	97.0	101.2	108.9	99.4
January, 1891....	99.5	98.5	100.4	99.5	100.0	107.2	101.2	99.2	98.8
April, 1891.....	99.5	98.5	100.4	99.5	100.0	107.2	101.2	99.2	102.6
July, 1891.....	99.5	98.5	96.4	98.1	100.0	90.2	97.7	96.8	95.0
October, 1891....	99.5	98.5	96.4	98.1	100.0	90.2	97.7	106.4	98.7
January, 1892....	101.8	98.5	96.4	98.9	100.0	90.2	97.7	106.4	86.1
April, 1892.....	104.1	98.5	96.4	99.7	100.0	90.2	101.2	106.4	95.0
July, 1892.....	106.4	101.8	100.4	102.9	80.0	90.2	97.7	108.9	74.7
October, 1892....	108.7	101.8	104.5	105.0	91.4	90.2	97.7	101.6	72.2
January, 1893....	111.1	101.8	104.5	105.8	91.4	88.5	97.7	99.2	78.5
April, 1893.....	111.1	101.8	108.5	107.1	91.4	88.5	104.7	96.8	85.5
July, 1893.....	111.1	98.5	108.5	106.0	91.4	88.5	101.2	94.4	78.8
October, 1893....	111.1	98.5	108.5	106.0	91.4	88.5	97.7	99.2	69.7
January, 1894....	108.7	98.5	108.5	105.2	91.4	88.5	94.2	91.9	73.5
April, 1894.....	106.4	98.5	108.5	104.5	91.4	86.8	97.7	87.1	73.8
July, 1894.....	104.1	96.9	104.5	101.8	91.4	86.8	94.2	87.1	76.6
October, 1894....	104.1	96.9	100.4	100.5	82.9	86.8	90.7	96.8	72.2
January, 1895....	104.1	95.3	96.4	98.6	82.9	86.8	94.2	89.5	70.3
April, 1895.....	104.1	92.0	92.4	96.2	82.9	86.8	101.2	89.5	98.2
July, 1895.....	104.1	92.0	88.4	94.8	82.9	86.8	97.7	104.0	78.5
October, 1895....	101.8	92.0	88.4	94.1	82.9	85.1	94.2	99.2	70.9
January, 1896....	101.8	88.7	88.4	93.0	82.9	85.1	94.2	89.5	76.0
April, 1896.....	101.8	88.7	88.4	93.0	82.9	85.1	94.2	84.7	72.2
July, 1896.....	101.8	88.7	88.4	93.0	82.9	85.1	90.7	94.4	64.0
October, 1896....	104.1	88.7	88.4	93.7	82.9	86.8	90.7	89.5	70.9
January, 1897....	104.1	85.4	88.4	92.6	82.9	86.8	90.7	94.4	67.1
April, 1897.....	104.1	85.4	88.4	92.6	82.9	86.8	90.7	87.1	74.1
July, 1897.....	104.1	78.8	80.4	87.8	82.9	88.5	90.7	96.8	67.1
October, 1897....	104.1	78.8	80.4	87.8	82.9	88.5	90.7	108.9	83.0
January, 1898....	104.1	78.8	80.4	87.8	82.9	90.2	90.7	89.5	84.9
April, 1898.....	104.1	82.1	84.4	90.2	82.9	90.2	90.7	84.7	81.1
July, 1898.....	104.1	85.4	88.4	92.6	82.9	91.9	90.7	104.0	66.5
October, 1898....	104.1	88.7	88.4	93.7	82.9	91.9	90.7	108.9	77.3
January, 1899....	106.4	96.3	96.4	99.4	80.0	98.6	97.7	104.0	115.8
April, 1899.....	111.1	101.8	104.5	105.8	97.1	97.0	101.2	99.2	107.7
July, 1899.....	118.0	111.7	112.5	114.1	97.1	102.1	104.7	121.0	97.5

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

DRUGS AND CHEMICALS.

Date.	Alcohol, 94 per cent.	Brim- stone, crude.	Glycerin, Amer- ican, re- fined.	Linseed oil, domestic raw, in barrels.	Opium.	Quinine, Amer- ican, bulk.	Soda ash, carbon- ate, 48 per cent.	Sul- phuric acid, 66 per cent.
January, 1890.....	90.8	76.7	109.5	111.3	124.7	122.6	85.8	114.9
April, 1890.....	90.8	76.7	109.5	115.0	128.3	108.6	153.3	114.9
July, 1890.....	97.2	86.6	109.5	115.0	135.5	108.6	85.8	97.7
October, 1890.....	100.9	84.6	103.4	115.0	137.3	112.1	92.0	97.7
January, 1891.....	101.8	102.3	97.3	107.6	84.9	105.1	99.6	80.5
April, 1891.....	103.7	137.7	94.3	105.8	75.9	87.5	98.1	97.7
July, 1891.....	103.7	98.4	94.3	87.2	72.3	87.5	95.0	97.7
October, 1891.....	105.5	118.0	91.2	74.2	72.3	84.0	95.0	97.7
January, 1892.....	105.5	119.0	91.2	68.7	68.7	84.0	95.0	97.7
April, 1892.....	100.9	87.5	85.1	72.4	63.8	84.0	95.0	97.7
July, 1892.....	103.7	94.4	85.1	77.9	59.6	77.0	93.5	114.9
October, 1892.....	102.8	92.5	82.1	81.6	58.7	70.0	98.1	114.9
January, 1893.....	116.5	81.6	82.1	89.1	68.7	70.0	95.0	103.4
April, 1893.....	104.6	76.7	82.1	92.8	112.0	77.0	82.8	103.4
July, 1893.....	100.0	75.7	82.1	92.8	94.0	77.0	76.6	97.7
October, 1893.....	100.0	67.9	82.1	74.2	97.6	77.0	70.5	86.2
January, 1894.....	102.8	69.8	79.1	87.2	81.3	87.5	70.5	86.2
April, 1894.....	102.8	67.9	73.0	96.5	94.9	96.3	76.6	86.2
July, 1894.....	102.8	67.9	69.9	100.2	77.7	87.5	76.6	86.2
October, 1894.....	115.6	62.0	69.9	100.2	68.7	89.3	70.5	80.5
January, 1895.....	106.9	63.9	69.9	103.9	84.9	89.3	70.5	80.5
April, 1895.....	108.7	62.0	66.9	103.9	75.9	87.5	70.5	80.5
July, 1895.....	107.8	62.0	66.9	107.6	60.5	87.5	58.2	80.5
October, 1895.....	105.5	61.0	66.9	81.6	61.4	87.5	61.3	80.5
January, 1896.....	106.4	60.0	100.3	77.9	74.1	94.6	61.3	80.5
April, 1896.....	106.4	62.0	100.3	74.2	72.3	92.8	67.4	80.5
July, 1896.....	106.0	72.8	100.3	68.7	72.3	91.1	67.4	80.5
October, 1896.....	104.6	81.6	100.3	64.9	79.5	74.4	55.2	80.5
January, 1897.....	103.7	82.6	100.3	57.5	79.5	61.3	55.2	114.9
April, 1897.....	103.7	77.7	73.0	59.4	86.7	52.5	55.2	114.9
July, 1897.....	105.0	76.7	73.0	53.8	84.9	52.5	55.2	114.9
October, 1897.....	106.0	81.6	73.0	63.1	94.9	80.5	55.2	97.7
January, 1898.....	103.7	82.6	69.9	77.9	98.5	87.5	55.2	114.9
April, 1898.....	103.4	86.6	66.9	72.4	110.2	73.5	55.2	114.9
July, 1898.....	108.7	90.5	79.1	76.1	123.8	70.0	46.0	137.9
October, 1898.....	109.6	82.6	74.5	61.2	131.0	68.3	46.0	137.9
January, 1899.....	111.9	83.6	73.0	76.1	123.8	73.5	46.0	137.9
April, 1899.....	111.0	85.6	73.0	87.2	108.4	133.1	46.0	137.9
July, 1899.....	111.9	81.6	76.0	72.4	113.0	119.1	55.2	137.9

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

HOUSE-FURNISHING GOODS.

Date.	Furniture.				Glass-ware, tumblers, 4-pint, medium grade.	Pails, wooden, 2-hoop.	Tubs, wooden.		
	Chairs, bedroom, maple, cane seat.	Chairs, kitchen, common spindle.	Tables, kitchen, pine, 3 1/4-foot.	Average.			Nest of 3.	Nest of 8.	Average.
January, 1890	100.2	99.9	100.0	100.0	99.6	100.0	100.0	100.3	100.2
April, 1890	100.2	99.9	100.0	100.0	99.6	100.0	100.0	100.3	100.2
July, 1890	100.2	99.9	100.0	100.0	99.6	100.0	100.0	100.3	100.2
October, 1890	100.2	99.9	100.0	100.0	99.6	100.0	100.0	100.3	100.2
January, 1891	100.2	99.9	100.0	100.0	99.6	109.1	100.0	100.3	100.2
April, 1891	100.2	99.9	100.0	100.0	99.6	100.0	100.0	100.3	100.2
July, 1891	100.2	99.9	100.0	100.0	99.6	100.0	100.0	100.3	100.2
October, 1891	100.2	99.9	100.0	100.0	99.6	100.0	100.0	100.3	100.2
January, 1892	98.1	101.1	100.0	99.7	103.5	90.9	100.0	97.7	98.9
April, 1892	98.1	101.1	100.0	99.7	103.5	86.4	100.0	95.0	97.5
July, 1892	98.1	101.1	100.0	99.7	103.5	86.4	100.0	92.4	96.2
October, 1892	98.1	101.1	100.0	99.7	103.5	86.4	98.4	89.7	94.1
January, 1893	98.1	101.1	100.0	99.7	99.6	81.8	94.4	84.5	89.5
April, 1893	98.1	101.1	100.0	99.7	99.6	81.8	84.0	79.2	81.6
July, 1893	98.1	101.1	100.0	99.7	99.6	80.0	78.4	73.9	76.2
October, 1893	98.1	101.1	100.0	99.7	99.6	77.3	76.0	73.9	75.0
January, 1894	85.9	83.2	95.0	88.0	99.6	77.3	72.0	71.3	71.7
April, 1894	85.9	83.2	95.0	88.0	99.6	72.7	72.0	71.3	71.7
July, 1894	85.9	83.2	95.0	88.0	99.6	77.3	68.0	68.6	68.3
October, 1894	85.9	83.2	95.0	88.0	99.6	77.3	68.0	63.3	65.7
January, 1895	85.9	83.2	95.0	88.0	91.6	72.7	60.0	63.3	61.7
April, 1895	85.9	83.2	95.0	88.0	91.6	77.3	61.6	60.7	61.2
July, 1895	85.9	83.2	95.0	88.0	91.6	68.2	56.0	58.1	57.1
October, 1895	85.9	83.2	95.0	88.0	91.6	81.8	68.0	63.3	65.7
January, 1896	85.9	83.2	92.0	87.0	79.6	77.3	72.0	73.9	78.0
April, 1896	85.9	83.2	92.0	87.0	79.6	77.3	72.0	71.3	71.7
July, 1896	85.9	83.2	92.0	87.0	79.6	77.3	68.0	68.6	68.3
October, 1896	85.9	83.2	92.0	87.0	79.6	81.8	68.0	68.6	68.3
January, 1897	71.6	83.2	92.0	82.3	79.6	77.3	68.0	67.0	67.5
April, 1897	71.6	83.2	92.0	82.3	79.6	81.8	70.4	71.3	70.9
July, 1897	71.6	83.2	92.0	82.3	79.6	81.8	68.0	71.3	69.7
October, 1897	71.6	83.2	92.0	82.3	79.6	77.3	64.0	68.6	66.3
January, 1898	71.6	77.3	92.0	80.3	75.7	72.7	64.0	71.3	67.7
April, 1898	71.6	77.3	92.0	80.3	75.7	72.7	68.0	73.9	71.0
July, 1898	71.6	77.3	92.0	80.3	75.7	68.2	68.0	73.9	71.0
October, 1898	78.8	83.2	92.0	84.7	75.7	68.2	68.0	73.9	71.0
January, 1899	78.8	83.2	92.0	84.7	79.6	77.3	76.0	76.5	76.3
April, 1899	89.5	95.1	92.0	92.2	79.6	86.4	88.0	87.1	87.6
July, 1899	89.5	101.1	100.0	96.9	79.6	95.5	100.0	92.4	96.2

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Continued.

MISCELLANEOUS.

Date.	Powder, rifle.	Rubber, Para, new fine.	Soap, castile, mottled, pure.	Starch.		
				Pure.	Silver gloss.	Aver- age.
January, 1890.....	92.8	91.5	94.5	94.7	100.4	97.6
April, 1890.....	92.8	105.8	94.5	94.7	100.4	97.6
July, 1890.....	102.1	112.8	102.7	94.7	100.4	97.6
October, 1890.....	102.1	115.3	98.6	103.3	100.4	101.9
January, 1891.....	102.1	99.0	98.6	103.3	100.4	101.9
April, 1891.....	102.1	113.4	98.6	103.3	100.4	101.9
July, 1891.....	102.1	103.4	98.6	103.3	100.4	101.9
October, 1891.....	102.1	79.0	106.8	103.3	100.4	101.9
January, 1892.....	102.1	80.2	106.8	99.0	96.8	97.9
April, 1892.....	102.1	90.3	106.8	99.0	96.8	97.9
July, 1892.....	92.8	85.9	106.8	99.0	96.8	97.9
October, 1892.....	78.9	85.9	100.7	99.0	96.8	97.9
January, 1893.....	74.2	86.5	100.7	99.0	96.8	97.9
April, 1893.....	74.2	97.8	100.7	99.0	96.8	97.9
July, 1893.....	64.9	84.0	100.7	99.0	96.8	97.9
October, 1893.....	60.3	89.6	100.7	99.0	96.8	97.9
January, 1894.....	60.3	87.1	102.7	99.0	96.8	97.9
April, 1894.....	60.3	83.4	98.6	99.0	96.8	97.9
July, 1894.....	60.3	84.0	98.6	103.3	100.4	101.9
October, 1894.....	60.3	87.1	92.5	99.0	96.8	97.9
January, 1895.....	60.3	92.8	86.3	99.0	96.8	97.9
April, 1895.....	60.3	90.9	84.2	99.0	96.8	97.9
July, 1895.....	60.3	91.8	82.2	99.0	96.8	97.9
October, 1895.....	60.3	95.3	82.2	99.0	96.8	97.9
January, 1896.....	60.3	96.5	82.2	99.0	96.8	97.9
April, 1896.....	60.3	92.8	82.2	94.7	93.2	94.0
July, 1896.....	74.2	103.4	82.2	94.7	93.2	94.0
October, 1896.....	74.2	103.4	82.2	94.7	93.2	94.0
January, 1897.....	74.2	99.0	86.3	94.7	93.2	94.0
April, 1897.....	74.2	102.2	86.3	94.7	93.2	94.0
July, 1897.....	74.2	104.0	86.3	94.7	93.2	94.0
October, 1897.....	74.2	107.8	90.4	94.7	93.2	94.0
January, 1898.....	74.2	103.4	90.4	94.7	93.2	94.0
April, 1898.....	74.2	117.8	90.4	94.7	93.2	94.0
July, 1898.....	74.2	119.7	90.4	94.7	93.2	94.0
October, 1898.....	74.2	115.9	90.4	94.7	93.2	94.0
January, 1899.....	74.2	118.5	90.4	94.7	93.2	94.0
April, 1899.....	74.2	127.9	90.4	94.7	93.2	94.0
July, 1899.....	74.2	124.1	90.4	94.7	93.2	94.0

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—RELATIVE PRICES—Concluded.

SUMMARY BY GROUPS.

Date.	Food.	Cloths and clothing.	Fuel and lighting.	Metals and implements.	Lumber and building materials.	Drugs and chemicals.	House-furnishing goods.	Miscellaneous.	All articles.
January, 1890	99.2	101.9	99.0	106.8	104.1	104.5	100.0	94.1	102.0
April, 1890	97.8	102.2	99.5	103.5	104.2	112.1	100.0	97.6	101.9
July, 1890	96.5	102.1	100.7	105.3	98.8	104.5	100.0	103.8	100.4
October, 1890	103.3	102.4	100.6	105.7	101.1	105.4	100.0	104.5	103.1
January, 1891	103.0	100.3	100.6	98.1	100.5	97.4	102.2	100.4	100.6
April, 1891	104.8	98.5	99.7	97.5	99.3	100.1	100.0	104.0	100.7
July, 1891	99.6	97.9	100.7	95.1	97.1	92.0	100.0	101.5	97.7
October, 1891	101.5	97.6	99.8	94.0	97.7	92.2	100.0	97.5	97.9
January, 1892	98.1	97.0	99.6	94.1	97.1	91.2	98.3	96.8	96.5
April, 1892	93.3	96.0	97.9	92.3	96.9	85.7	96.8	99.3	94.2
July, 1892	94.8	96.2	98.9	92.3	95.0	88.3	96.5	95.9	94.5
October, 1892	97.7	96.3	99.3	90.7	94.6	87.6	95.9	90.9	94.7
January, 1893	103.8	98.9	104.1	88.9	97.7	88.3	92.7	89.8	97.2
April, 1893	102.6	98.3	103.3	89.4	94.5	91.4	90.7	92.7	96.6
July, 1893	96.1	95.6	105.2	87.6	92.6	87.0	88.9	86.9	93.1
October, 1893	101.0	98.0	105.2	84.4	93.1	81.9	87.9	87.1	93.0
January, 1894	94.2	90.0	105.8	80.6	91.2	83.1	84.2	87.0	89.6
April, 1894	87.8	87.8	100.8	79.0	88.7	86.8	83.0	85.1	86.7
July, 1894	87.9	86.2	102.0	79.4	87.4	83.6	83.3	86.2	85.0
October, 1894	93.3	85.4	101.6	78.2	86.9	82.1	82.7	84.5	86.9
January, 1895	90.3	80.0	100.8	76.1	87.8	83.7	78.5	84.3	84.7
April, 1895	91.5	79.4	96.4	75.9	88.4	82.0	79.5	83.3	84.7
July, 1895	87.9	83.6	96.4	84.7	86.4	78.9	76.2	83.1	85.2
October, 1895	85.8	83.3	98.6	89.1	85.4	75.7	81.8	83.9	86.3
January, 1896	84.4	87.2	97.5	83.7	85.6	81.9	79.2	84.2	85.2
April, 1896	80.2	83.3	97.7	85.6	83.1	82.0	77.8	82.3	83.0
July, 1896	75.8	81.4	100.1	85.4	81.8	82.4	78.1	88.5	81.5
October, 1896	78.9	82.8	100.9	83.7	82.4	80.1	79.2	88.5	82.4
January, 1897	79.6	82.3	99.3	80.1	83.1	81.9	76.7	88.4	82.0
April, 1897	78.2	81.4	97.8	78.8	83.0	77.9	78.7	89.2	80.9
July, 1897	76.0	81.4	97.8	77.4	82.6	77.0	78.4	89.6	79.9
October, 1897	83.1	83.0	97.8	80.6	85.7	81.5	76.4	91.6	83.6
January, 1898	83.4	80.8	96.1	79.4	86.5	86.3	74.1	90.5	83.3
April, 1898	82.9	80.9	94.4	79.7	86.7	85.4	74.9	94.1	83.3
July, 1898	83.2	80.9	95.5	81.4	86.0	92.1	73.8	94.6	84.2
October, 1898	84.2	80.3	93.6	81.6	88.3	88.9	74.9	93.6	84.4
January, 1899	86.6	80.7	90.8	83.2	94.1	90.7	79.5	94.3	86.5
April, 1899	87.1	82.5	91.2	98.1	97.1	97.8	86.5	96.6	90.8
July, 1899	85.9	84.5	89.8	107.9	99.9	95.9	92.1	95.7	92.9

The most superficial glance at the table reveals the fact that while the tendency has been in the main toward falling prices the last months show a rise. This is by no means equal among the various groups, the final figures showing considerable variation, though the minimum figures for the various groups show greater uniformity. Of course it will be recognized that some of the groups comprise but a limited number of articles, and are thus not so well suited for comparison as the larger groups.

It is of interest to know not only the movement of the average, but also how far the individual articles vary from the average. In the Aldrich report the final date of the investigation was selected for such an exhibit. Here a like course seems unadvisable. Prices in general move up or down through considerable periods of time, and when the given movement is well under way it may be surmised that prices move together and that individual quotations follow more or less closely the general movement. A period of change from an upward to a downward movement or vice versa does not impress itself at once

upon all articles, but upon one after the other. The final date, July, 1899, was in the midst of such a period of change. Certain articles had felt the upward impulse, others had not. The range of variation therefore in July, 1899, is greater than at any date before the rise of prices began, and probably greater than at a later date when the rise will have been communicated to all the articles included in the investigation. It has been deemed preferable then to choose the date, January, 1899, before a conspicuous upward movement began to show the range of price variation from the general average. The result is shown in the table which follows:

RELATIVE PRICES OF 99 ARTICLES IN EACH SPECIFIED PRICE CLASS, JANUARY, 1899.

Articles classified according to relative prices.	Relative price.	Articles classified according to relative prices.	Relative price.	Articles classified according to relative prices.	Relative price.
<i>Below 70.</i>		<i>80 to 90—concluded.</i>		<i>90 to 100—concluded.</i>	
Food:		Food—Concluded.		Metals and implements:	
Coffee	41.5	Meat, ham	84.6	Scythes	95.8
Nutmegs	48.6	Meat, bacon	85.3	Saws	97.1
Beans	61.5	Meat, salt	86.6	Lumber and building materials:	
Meal, corn	66.5	Butter	87.5	Shingles	98.6
Cloths and clothing:		Lard	88.3	Maple	95.5
Cotton	60.7	Cloths and clothing:		Spruce	97.7
Sheetings	65.9	Shawls	81.3	Pine	99.4
Drillings	69.3	Wool	81.3	Miscellaneous:	
Shirtings	69.4	Dress goods	83.0	Soap	90.4
Metals and implements:		Flannels	84.1	Starch	94.0
Steel billets	59.1	Felts	88.1		
Steel rails	59.6	Bags	88.9	Total, 90 to 100	21
Bar iron	63.0	Carpets	89.4		
Pig iron	65.3	Metals and implements:		<i>100 to 110.</i>	
Drugs and chemicals:		Rope	80.2	Food:	
Soda ash	46.0	Quicksilver	81.5	Meat, beef	105.7
Total below 70	13	Butts	84.1	Cheese	109.6
		Copper	84.3	Fuel and lighting:	
<i>70 to 80.</i>		Lead	86.5	Matches	106.0
Food:		Lumber and building materials:		Metals and implements:	
Flour, wheat	72.5	Putty	80.0	Locks	100.0
Fruit	76.5	Carbonate of lead	81.1	Doorknobs	100.0
Baked beans	77.6	Lime	83.6	Shovels	100.8
Meat, mutton	78.5	Doors, pine	84.3	Spelter	103.4
Tallow	79.5	Chestnut lumber	84.9	Lumber and building materials:	
Cloths and clothing:		Cement	88.2	Oak	100.0
Ginghams	70.4	Drugs and chemicals:		Hemlock	101.6
Denims	71.4	Brimstone	83.6	Brick	102.9
Calico	73.0	House furnishing goods:		Tar	104.0
Suitings	73.5	Furniture	84.7		
Print cloths	75.2	Total, 80 to 90	26	Total, 100 to 110	11
Tickings	76.1			<i>110 or over.</i>	
Fuel and lighting:		<i>90 to 100.</i>		Food:	
Coal, bituminous	71.9	Food:		Pepper	110.1
Metals and implements:		Fish	90.7	Meat, beef on the hoof	118.4
Nails	70.7	Salt	94.3	Cloths and clothing:	
Drugs and chemicals:		Starch, corn	94.3	Leather	119.9
Glycerin	73.0	Sugar	96.5	Lumber and building materials:	
Quinine	73.5	Milk	96.7	Turpentine	115.8
Linseed oil	76.1	Molasses	96.8	Drugs and chemicals:	
House furnishing goods:		Eggs	96.9	Alcohol	111.9
Tubs	76.3	Bread	97.8	Opium	123.8
Palls	77.3	Rice	98.7	Sulphuric acid	137.9
Glassware	79.6	Cloths and clothing:		Miscellaneous:	
Miscellaneous:		Boots and shoes	95.4	Rubber	118.5
Powder	74.2	Cotton thread	97.3		
Total, 70 to 80	20	Fuel and lighting:		Total, 110 or over ...	8
		Coal, anthracite	90.7		
<i>80 to 90.</i>		Candles	94.7		
Food:					
Flour, rye	83.2				

Summarizing the foregoing table, it appears that of the total 99 articles, whose average relative price was 86.5 in January, 1899, 67 articles

stand between 70 and 100, or within a range of approximately 15 points above or below the average. The number of articles which exceed 100—that is, which show a rise in price—is 19, while 13 articles show a fall in price of more than 30 points.

More significant than the final prices has been the course of prices during the period under discussion, January, 1890, to July, 1899. From 102.0 in January, 1890, prices fell with only trifling interruptions until July, 1897, when they reached the point 79.9. There was a recovery to nearly 84 in October, and comparative stability at this point until October, 1898. A slight rise was noticeable in January, 1899, but the tendency was more conspicuous in April and July.

An examination of prices at each quarter period shows that the tendency to fall, which prevailed during the greater part of the period, was not wholly without interruption, and the question arises as to the causes of these temporary movements in a counter direction. The first conspicuous check to the falling tendency appears in October, 1890. A reference to the various groups shows that between July, 1890, and October, 1890, there was a very considerable rise of price in the food group. This change is due to the inclusion in this group of certain articles whose prices vary with the seasons, and the study of the detailed table shows between July, 1890, and October, 1890, marked changes in the prices of beans, butter, cheese, eggs, and dried fruit. Returning to general prices, we find another interruption to the falling tendency occurring in January and April, 1893. Again, the change is caused by variations in the prices of food products, and an examination of the detailed table shows changes between October, 1892, and January, 1893, in such seasonal articles as butter, cheese, and notably eggs, which in that month reached the highest point in the whole period covered by this investigation. But a more striking variation occurs in this period in the prices of hog products (lard, salt pork, bacon, and ham) and tallow. From July, 1893, the downward course of prices is fairly regular until April, 1895, though the variation of the seasonal articles in October, 1894, causes an almost inappreciable rise in general prices. July and October, 1895, together with January, 1896, show a slight rise in prices. But this change is not due to the food group and must be looked for elsewhere. An examination shows upward movements in cloths and clothing and in metals and implements. In the former the movement is not general, being most noticeable in the leather group. Nor was the advance in price long sustained, for July, 1896, approximates the former level. In the group "Metals and implements," the changes are most conspicuous in the distinctively iron products, such as pig iron, steel, and especially wire nails. Doorknobs, copper, locks, quicksilver, and spelter also felt the upward movement in a slight degree, but other articles in the group did not advance. From July, 1896, to July, 1897, the course

of prices is slightly downward, and the minimum point in the period under consideration is reached. The subsequent movement of prices, the rise to October, 1897, the comparatively stationary position until October, 1898, and the following notable rise in prices have already been alluded to.

It is to be noted that in the general upward movement of prices, since October, 1898, food products have played an inconspicuous part. On the contrary, changes have been very rapid in metals and implements, which reached in July, 1899, a higher point than at any time during the period, not excepting the initial point, January, 1890. Lumber and building materials had also risen to a point corresponding to the average upon which the relative prices were based.

A study of the individual groups reveals the greatest fluctuations in food. The cause of these fluctuations has already been noted, namely, the existence, for a group of articles, of prices varying according to the seasons. As a rule, the July prices are lower than those of other periods during the year. The advance depends, apparently, upon the character of the season. It occurs in the fall of the year, and is sometimes quite marked by October 1, but in other cases does not conspicuously appear until January prices are noted. It is probable in such cases that the real change takes place in November or December following comparatively mild weather in September and early October. The effect of these changes on the course of prices can best be seen by eliminating from the food group the distinctively seasonal articles, beans, butter, cheese, and eggs. The results of such a subtraction are given in the following table:

AVERAGE RELATIVE PRICES OF ENTIRE FOOD GROUP AND OF FOOD GROUP EXCLUDING BEANS, BUTTER, CHEESE, AND EGGS, JANUARY, 1890, TO JULY, 1899.

Date.	Average relative prices.			Date.	Average relative prices.		
	Entire food group.	Beans, butter, cheese, and eggs.	Food group excluding beans, butter, cheese, and eggs.		Entire food group.	Beans, butter, cheese, and eggs.	Food group excluding beans, butter, cheese, and eggs.
January, 1890	99.2	101.9	98.7	January, 1895	90.3	107.0	87.5
April, 1890	97.8	88.9	99.3	April, 1895	91.5	95.1	90.9
July, 1890	95.5	76.8	98.6	July, 1895	87.9	83.8	88.6
October, 1890	103.3	105.2	103.0	October, 1895	85.8	84.9	86.0
January, 1891	103.0	117.4	100.6	January, 1896	84.4	96.2	82.5
April, 1891	104.8	116.4	102.9	April, 1896	80.2	75.7	80.9
July, 1891	99.6	91.7	101.0	July, 1896	75.8	63.6	77.9
October, 1891	101.5	104.5	101.0	October, 1896	78.9	77.9	79.1
January, 1892	98.1	116.7	95.0	January, 1897	79.6	85.3	78.6
April, 1892	98.3	97.8	92.5	April, 1897	78.2	78.3	78.2
July, 1892	94.8	89.7	95.7	July, 1897	76.0	60.2	78.6
October, 1892	97.7	105.5	96.4	October, 1897	83.1	81.9	83.3
January, 1893	103.8	126.6	100.0	January, 1898	83.4	91.0	82.1
April, 1893	102.6	110.1	101.3	April, 1898	82.9	72.1	84.7
July, 1893	96.1	90.8	97.0	July, 1898	83.2	68.5	85.6
October, 1893	101.0	112.4	99.1	October, 1898	84.2	83.1	84.4
January, 1894	94.2	112.0	91.2	January, 1899	86.6	88.9	86.2
April, 1894	87.8	89.2	87.6	April, 1899	87.1	88.2	86.9
July, 1894	87.5	82.6	88.3	July, 1899	85.9	78.7	87.1
October, 1894	93.3	101.1	92.0				

Another method of showing the effect of these seasonal changes is by noting the variation of the quarterly prices from the average of the year. In order to make this method clear, the groups "Food," which shows marked seasonal changes, and "Metals and implements," in which seasonal variations have little influence, have been contrasted in the table following. The average variation is the average of the differences between the quarterly prices and the average price for the year.

AVERAGE VARIATION FROM AVERAGE OF YEAR IN RELATIVE PRICE OF FOOD AND OF METALS AND IMPLEMENTS, 1890 TO 1899.

Year.	Food.					Metals and implements.				
	Average relative price.	Average variation.		Minimum relative price.		Average relative price.	Average variation.		Minimum relative price..	
		Points.	Per cent.	Month.	Amount.		Points.	Per cent.	Month.	Amount.
1890	99.0	2.30	2.32	July..	95.5	105.3	0.93	0.88	Apr...	103.5
1891	102.2	1.68	1.64	July..	99.6	96.2	1.63	1.69	Oct...	94.0
1892	96.0	1.93	2.01	Apr...	93.3	92.4	.90	.97	Oct...	90.7
1893	100.9	2.38	2.36	July..	96.1	87.6	1.58	1.80	Oct...	84.4
1894	90.7	3.05	3.36	July..	87.5	79.3	.70	.88	Oct...	78.2
1895	88.9	2.08	2.28	Oct...	85.8	81.5	5.45	6.69	Apr...	75.9
1896	79.8	2.48	3.11	July..	75.8	84.6	.90	1.06	(0)	83.7
1897	79.2	2.13	2.69	July..	76.0	79.2	1.13	1.43	July..	77.4
1898	83.4	.88	.46	Apr...	82.9	80.5	.98	1.22	Jan...	79.4

a January and October.

In this table the average variation, except in the years which show notable changes in prices, is much greater in the group "Food" than in the group "Metals and implements." While the minimum point in the food group is usually July, in the other group October usually occupies this place until the upward movement begins, which tends to transfer the minimum to the beginning of the year.

Another group which is somewhat conspicuous for its variations is the group "Drugs and chemicals." This is relatively a small group, and changes in the price of one commodity exercise a marked influence upon the average for the group. An examination of the detailed table shows notable changes first in one article and then in another, notably in brimstone, glycerin, opium, and sulphuric acid. As these changes are not coincident, we have in the aggregate result frequent variations. Thus, in this group the minimum price is found in October, 1895, when low prices prevailed for all the articles. Otherwise the course of prices, even in this small group, follows fairly well the general average.

Thus far attention has been directed to the course of prices as indicated by the simple average of the various relative prices. It has been seen that individual groups, and even individual articles, may interrupt or modify the general tendency. Any system of weighting the articles will accentuate or diminish these tendencies, as the case may be. It is obvious that the food group would, in a weighted

average which measured articles according to their importance, have greater influence upon the aggregate result than it has in the simple average, and that if such a weighted average were made for each of the quarterly periods it would show a greater variation than the simple average. It may be doubted whether such a weighted average would any more accurately represent the price changes in their relation to the purchases of the community than the simple average. The fluctuations which are here referred to are those produced by the seasonal variations in prices of certain food products. Now, it may well be doubted whether these changes represent in fact increased or decreased costs in family expenditure in anything like the same ratio as the changes in price. The householder is able, and does, in fact, meet these changes to a certain extent through decreased or increased consumption of the commodities in question. It has not, therefore, been deemed advisable to construct a weighted average upon the basis of the quarterly quotations.

The value of a weighted average in computations of relative prices has of late been questioned. It has been noted that the weighted average and the simple average, applied to the same figures, show approximately the same results. This is not to be contested. It would, however, be more accurate to say that where the price movement is downward the weighted average is apt to record a higher price than the simple average, and that where the price movement is upward the weighted average records, in the main, lower prices than the simple average. This is due to the fact that in all weighted averages food products assume a larger influence than in the simple averages, and that food products, taken in the aggregate, fluctuate in price from year to year less noticeably than other commodities. The above statements are true with regard to the comparative inertia of food products only under the proviso that the same influences are operating upon the prices of these commodities as upon those of other classes of goods. The Aldrich report furnished a conspicuous instance of the contrary situation in the period from 1840 to 1860. Food products were at that time increased in price and staple articles generally shared in that movement. On the other hand, the transformation of industry, for which that period is conspicuous, brought about a notable fall in the prices of manufactured articles. While, therefore, the simple average of the prices quoted in that report showed a fall in price up to 1860, the weighted average, constructed, it is true, by crude methods, showed a contrary tendency.

It has, however, been observed that during the briefer period now under discussion, and for the prices included in the present investigation, the tendencies of the individual series are fairly uniform with those of the average of all. It would, therefore, be expected that the weighted average would vary little from the simple average. Though,

recalling the analysis of the movement in prices of the several groups, a divergence would be expected between the simple and the weighted average in those cases where the food group was conspicuously high, as in January, 1893. Otherwise the weighted average will conform fairly well with the simple average. It is obvious that if the prices of a group of articles stand relatively to those of a certain date at 85, no system of combination or of weights can bring another result than 85. If, now, the series of articles show an average of 85 and a range in the individual cases between 80 and 90, no system of averaging can take the price above 90 or below 80. While the range of prices in the present investigation is considerably wider than in this illustration, yet the table on page 264 reveals a concentration of the individual prices about this average. Unless, therefore, in a system of weights extreme importance is attached to either the maximum or the minimum prices, the average price will doubtless be very close to the simple average. An examination of the table on page 264 will show that at the date, January, 1899, the articles with the minimum prices, with the exception of coffee, were not conspicuously important in household consumption, and that the low price of coffee and a few articles of clothing would be quite neutralized by high prices for meats and boots and shoes. Thus it may be said that the principal advantage of averaging the articles according to importance is to confirm the results of the simple average.

The words "average according to importance" have thus far been used somewhat vaguely, but now an accurate measure of this importance should be obtained. In general, the phrase is not misleading. The importance of an article has obviously something to do with the frequency and volume of its sales. Two methods for measuring the volume of the sales appear to be open. The one takes as its basis the national consumption of the articles in question. In theory this method is irreproachable. In practice, however, statisticians are well aware that accurate figures with regard to the consumption of commodities are extremely difficult to obtain, and that a fair measure of accuracy can only be reached in a very few cases. If the number of articles included in the computations be small, this method can perhaps be applied with success, but it fails for a larger number of articles, such as the present investigation includes. The second method endeavors to ascertain the importance of articles by the part which they play in household expenditure. This gives an approximate idea of the significance of those articles which are purchased directly for household consumption, and is the only one which can be applied to a large number of articles. On the other hand, it must be admitted that certain articles which indirectly affect household expenditures, such as iron products of all kinds, affecting costs of construction of railways, buildings, etc., can not be carefully measured. In a similar way the costs of lumber

and building materials, which ultimately must affect the rents of houses to some extent, can not be accurately measured. The adjustment of actual prices to their importance in household expenditure can be no more than a rough approximation. It has, however, this significance, that it gives to the important articles, food and clothing, a proportionate influence in the result.

In the Aldrich report there was used as a basis of comparison a table giving family expenses of 2,561 normal families, selected from the larger number, which were contained in the reports of the Department of Labor upon the cost of production. It differs from Table XLIV of the Seventh Annual Report of the Department by the omission of one family which was not included in the manuscript copy of that table, which was at the disposal of the Aldrich committee. The distribution of expenditure in these families in proportional parts of 10,000 was as follows:

Rent	1,506
Food	4,103
Fuel	500
Clothing	1,531
Light	90
All other purposes	2,270
Total	10,000

This table gives only the main groups of family expenditure. To ascertain more accurately the expenditure within these groups, the Department of Labor undertook a special investigation which covered 232 families. The results of this investigation are given in the following table:

ANNUAL EXPENDITURE OF 232 FAMILIES FOR CERTAIN PURPOSES.

FOOD.

Group.	Total.	Per family.	Proportion of 10,000.
Beef	\$9,501.76	\$40.95	1,561
Hog products	3,990.03	17.20	655
Meat (not specified)	3,735.09	16.10	614
Poultry	645.35	2.78	106
Fish	690.26	2.97	113
Eggs	1,920.24	8.28	316
Milk	3,484.04	15.02	572
Butter	6,737.67	29.04	1,107
Cheese	401.66	1.73	66
Tea	1,046.36	4.51	172
Coffee	3,242.92	13.97	582
Sugar	3,372.69	16.69	636
Molasses	333.53	1.44	55
Lard	1,222.19	5.27	201
Flour and meal	6,223.65	28.62	1,022
Bread	2,648.86	11.42	436
Rice	144.09	.62	24
Fruit	2,040.84	8.80	332
Potatoes	2,764.49	11.92	464
Vegetables (not specified)	2,910.88	12.55	479
Vinegar, pickles, and condiments	430.37	1.86	71
Food (not specified)	2,894.51	12.47	476
Total	60,881.48	262.42	10,000

ANNUAL EXPENDITURE OF 232 FAMILIES FOR CERTAIN PURPOSES—Concluded.

CLOTHING.

Group.	Total.	Per family.	Proportion of 10,000.
Husband:			
Coats, vests, trousers, overcoats	\$3,271.51	\$14.11	1,407
Boots and shoes	1,093.65	4.71	470
Hats.....	401.72	1.73	173
Underclothes.....	637.23	2.75	274
Shirts.....	346.47	1.49	149
Miscellaneous.....	2,091.41	9.01	898
Total	7,841.99	33.80	3,371
Wife:			
Dresses, cloaks, shawls.....	1,915.78	8.26	824
Boots and shoes	826.60	3.56	354
Underclothes.....	591.92	2.55	254
Miscellaneous.....	1,946.56	8.39	836
Total	5,280.86	22.76	2,268
Children:			
Coats, etc.....	1,415.50	6.10	606
Dresses, etc.....	1,527.72	6.59	657
Boots and shoes	1,799.66	7.76	774
Hats.....	645.94	2.78	277
Underclothes.....	686.98	2.96	295
Shirts.....	71.29	.31	31
Miscellaneous.....	4,003.42	17.25	1,719
Total	10,150.51	43.75	4,361
Husband	7,841.99	33.80	3,371
Wife	5,280.86	22.76	2,268
Children	10,150.51	43.75	4,361
Total	23,273.36	100.31	10,000

MISCELLANEOUS PURPOSES.

[All expenditures except for food, clothing, rent, lighting, and fuel are here shown.]

Group.	Total.	Per family.	Proportion of 2,270. (a)
Taxes.....	\$1,936.07	\$8.34	115
Insurance.....	2,546.74	10.98	151
Organizations.....	1,118.59	4.82	66
Religion.....	1,556.20	6.71	92
Charity.....	411.72	1.77	24
Furniture and utensils.....	4,258.27	18.36	253
Books and newspapers.....	1,686.90	7.27	100
Amusements.....	1,550.20	6.68	92
Intoxicating liquors.....	2,816.15	12.14	168
Tobacco.....	1,789.77	7.71	107
Illness and death.....	5,650.56	24.36	335
Other purposes.....	12,908.90	55.64	767
Total	33,230.67	164.78	2,270

a This is the proportion of this class of expenditure in the total of 10,000.

The mode of applying prices to the proportions which result from these tables is fully set forth in the Aldrich report and can only be briefly indicated here. The prices given in this report are not for exactly the same articles as those included in the budgets of the Aldrich report, and there must, therefore, be a certain adjustment of the present prices to those conditions. In some cases it has been necessary to

group the commodities to suit the heads of the tables, grouping those under food as follows:

FORMATION OF GROUP RATIOS—FOOD.

Beef—	Flour and meal—
Beef on the hoof.	2 wheat flour.
Beef.	1 rye flour.
Hog products—	1 corn meal.
Bacon.	Vinegar and condiments—
Ham.	Salt.
Meat not specified—	Nutmegs.
2 beef, as above.	Pepper.
2 hog products, as above.	
1 meat, salt.	
1 mutton.	

This grouping shows the method of finding relative prices for various groups of articles in the food table below. For instance, the relative price for beef is found by taking the average of the two items, beef on the hoof and beef, and for hog products, the average of bacon and ham. In finding the average for flour and meal, wheat flour is taken twice on account of its greater importance, the other two items being rye flour and corn meal.

In applying this grouping to the actual figures, it will be noted that the relative price of meat not specified has been considered equal to the average of all meats. The relative price of food not specified has been considered equal to the average of all food except meat. The table covers 87.89 per cent of the total expenditure for food as indicated in the following illustration for January, 1899:

RELATIVE PRICES OF FOOD, JANUARY, 1899, MEASURED BY ITS CONSUMPTION.

	Group.	Importance.	Index.	Result.
1	Beef	1,561	112.1	174,988.1
2	Hog products	655	85.0	55,675.0
3	Meat not specified	614	93.2	57,224.8
	Total meat	2,830	101.7	287,887.9
4	Fish	118	90.7	10,249.1
5	Eggs	316	96.9	30,620.4
6	Milk	572	96.7	55,312.4
7	Butter	1,107	87.5	96,862.5
8	Cheese	66	109.6	7,233.6
9	Coffee	532	41.5	22,078.0
10	Sugar	638	96.5	61,374.0
11	Molasses	55	96.8	5,324.0
12	Lard	201	83.3	17,743.3
13	Flour and meal	1,022	73.7	75,321.4
14	Bread	436	97.8	42,640.8
15	Rice	24	98.7	2,363.8
16	Fruit	332	76.5	25,398.0
17	Vinegar and condiments	71	84.3	6,985.3
	Total (except meat)	5,483	83.6	458,516.6
18	Food not specified	476	85.6	39,793.6
	Meat	2,830	101.7	287,887.9
	Grand total	8,789	89.5	786,198.1

The adjustment of the clothing prices to the schedule has been made in the following manner:

FORMATION OF GROUP RATIOS—CLOTHING

- Coats, etc.:
 - Suitings.
- Boots and shoes:
 - Boots and shoes.
 - Leather.
- Dresses, etc.:
 - 2 women's dress goods.
 - 1 shawls.
- Hats, underclothes, shirts, miscellaneous:
 - General average of cloths and clothing after deducting bags, boots and shoes, leather, suitings, shawls, women's dress goods, carpets, cotton, and wool.

The method of applying the ratios thus found to the actual proportions of expenditure is similar to that used in the case of food, and is illustrated in the following example:

RELATIVE PRICES OF CLOTHING, JANUARY, 1899, MEASURED BY CONSUMPTION.

Group.	Importance.	Index.	Result.
Coats, vests, trousers, overcoats (husband and children).....	2, 015	73. 5	148, 102. 5
Dresses, cloaks, shawls (wife and children).....	1, 481	82. 4	122, 034. 4
Boots and shoes (husband, wife, and children).....	1, 598	107. 7	172, 104. 6
Other clothing (husband, wife, and children).....	4, 906	76. 4	374, 818. 4
	10, 000	81. 7	817, 059. 9

Under miscellaneous expenditures, which include all items except rent, food, fuel, lighting, and clothing, it appears by reference to the table on page 274 that for one group only, "Furniture and utensils," was there a direct change in the relative price. The relative prices for the other groups are assumed, as in the Aldrich report, to have remained unchanged, that is at 100, with the exception of the group "Other purposes," which is considered to have been affected, in part at least, by price changes. This group includes a great variety of articles not accounted for under other heads, as well as other expenditures which are not affected by price changes. It has been assumed that one-half the expenditures for other purposes were for the purchase of the commodities not otherwise accounted for, and the index or relative price for this part of the group has been found by taking the average relative price of these commodities, which are as follows: Cornstarch, bags, carpets, cotton, wool, matches, and all the articles in the groups "Metals and implements," "Lumber and building materials," "Drugs and chemicals," and "Miscellaneous." The relative price for the other half of the expenditures for other purposes has been assumed to remain unchanged.

Having thus obtained relative prices for the principal groups, they can now be applied to the table following, which gives the relative importance of these groups in the total. In so doing it has been assumed that the index or average relative price for food, embracing as it does by far the greater force of the food consumption, was sufficiently characteristic to stand for the whole group. In the computations it has been assumed, in order to follow the practice of the Aldrich report, that those portions of expenditure not directly affected by price changes have remained uniform. This assumption has been criticised, and it must be confessed that as applied to the longer period covered by the Aldrich report such criticism is justifiable, but it is less cogent in its application to the shorter period now under consideration. It is, however, a supposititious element which is unnecessary, and it has only been repeated here for the purpose of furnishing a parallel to the computations made in the Aldrich report. In the family budgets it has been possible to apply price changes to 68.6 per cent of the aggregate expenditure, which seems to be directly affected by such price changes as it has been possible to measure. A statement, which applies exclusively to this portion of expenditure which does not involve any assumption as to the other expenditure whatever, has been added to the computations, and is therefore the true weighted average according to expenditure. The method of combining the figures is given in the following illustration, and the results of various computations in the table which follows:

RELATIVE PRICES OF ALL ARTICLES, JANUARY, 1899, MEASURED BY CONSUMPTION.

	Group.	Importance.	Index.	Result.
1	Rent.....	1,506	100.0	150,600.0
2	Food.....	4,103	89.5	367,218.5
3	Fuel.....	600	81.3	40,650.0
4	Lighting.....	90	94.7	8,523.0
5	Clothing.....	1,531	81.7	125,082.7
6	Taxes.....	115	100.0	11,500.0
7	Insurance.....	151	100.0	15,100.0
8	Organizations.....	66	100.0	6,600.0
9	Religion.....	92	100.0	9,200.0
10	Charity.....	24	100.0	2,400.0
11	Furniture and utensils.....	253	79.5	20,113.5
12	Books.....	100	100.0	10,000.0
13	Amusements.....	92	100.0	9,200.0
14	Liquor.....	168	100.0	16,800.0
15	Tobacco.....	107	100.0	10,700.0
16	Illness and death.....	335	100.0	33,500.0
17	Other purposes.....	384	100.0	38,400.0
		383	89.1	34,125.3
	Total.....	10,000	91.0	909,713.0
	Less items assumed to be invariable.....	3,140	100.0	314,000.0
		6,860	86.8	595,713.0

RELATIVE PRICES IN JANUARY OF EACH YEAR, 1890 TO 1899. FOR ALL ARTICLES GROUPED BY DIFFERENT METHODS.

Date.	All articles simply averaged.	All articles averaged according to importance, certain expenditures being considered uniform.	All articles averaged according to importance, comprising 68.6 per cent of total expenditure.
January, 1890	102.0	100.1	100.2
January, 1891	100.6	102.2	103.2
January, 1892	96.5	100.0	100.1
January, 1893	97.2	103.4	105.0
January, 1894	89.6	97.5	96.4
January, 1895	84.7	93.5	90.5
January, 1896	85.2	92.8	89.5
January, 1897	82.0	90.3	85.9
January, 1898	83.3	91.0	86.8
January, 1899	86.5	91.0	86.8

This table confirms what has already been said as to the comparative identity of the first and last series. The changes in price which the final column records are, in the main, in the same direction as those which the first column records. The only exceptions to this statement are in January, 1891, and January, 1893, when the food products, and in 1893, particularly the meat products, were high in price. It will be noted, furthermore, that as a rule the figures in the final column are superior to those in the first column, and it is undoubtedly due to the somewhat greater emphasis laid upon food in the average according to importance.

It only remains now to consider what is the relation between the results which have been set forth here and the results of the former investigation. At the outset of the investigation it was hoped that the figures would furnish substantially a direct continuation of the former investigation. This hope has not been realized to the full extent. It is evident that if the present investigation covered the prices of all the articles of the former report secured from identical sources relative prices could then be calculated upon the basis of 1860, as in the former report, and would form a continuous series with that report. But it was not possible in all cases, as already explained, (1) to secure the same sources of information, as many changes in business had naturally occurred, and (2) even when the same sources were available, it was in a considerable number of cases found that the identical articles for which prices were given in the former report were no longer sold.

With regard to prices obtained from new sources or for articles which were practically identical, except as to a slight difference in grade, it is believed that differences in prices which may be found on dates which are common to the two investigations may be ignored. For while it is true that two series of relative prices for an article of the same description obtained from different sources or differing

slightly in quality might not exactly coincide, yet if a large number of articles be taken representing the classes covered by these investigations, it must be assumed that an average of their relative prices would accurately represent the tendency of prices in general to rise or fall, for such an assumption is the basis of all investigations into the course of prices. It may be assumed, therefore, that if only those articles or groups of articles which are common to the two investigations, 90 in number, were taken, and the earlier series could be extended to July, 1899, and the later series carried back to January, 1860, the average relative prices for the entire number of articles calculated upon the basis of 1860 in the two series would be identical, or substantially so.

The average relative price for January, 1891, upon the basis of 1860, obtained in the former investigation by the simple average, was 92.2. This, however, included a considerable number of articles not covered in the present inquiry and the present inquiry on the other hand includes 9 articles, viz, baked beans, bags, boots and shoes, cotton thread, felts, ginghams, women's dress goods, steel billets, and steel rails, not in the former. But 90 articles or groups of articles were covered by both reports. If an average be made for January, 1891, for these 90 articles, using the figures of the Aldrich report, a relative price on the basis of 1860 of 96.6 is shown, while in the present investigation the 99 articles show on the basis here used a relative price of 100.6, which is changed to 100.8 when only the 90 are used. In order to express the relative prices of the present investigation in terms of the 1860 prices, and at the same time make them comparable with the Aldrich report, it is only necessary to take out the 9 extra articles and make appropriate changes in the present series, so that each new figure bears the same relation to 96.6 as it now bears to 100.8. The results of such calculations are as follows, the first column showing the average relative prices of 90 articles or groups of articles according to the present investigation, and the second column those averages expressed in terms of 1860 prices:

AVERAGE RELATIVE PRICES AS SHOWN BY THE PRESENT INVESTIGATION OF THE 90 ARTICLES COMMON TO THE ALDRICH REPORT AND THE PRESENT INVESTIGATION FOR JANUARY OF EACH YEAR, 1890 TO 1899.

Date.	Average relative prices of 90 articles.	
	According to present investigation.	In terms of 1860 prices.
January, 1890.....	101.7	97.5
January, 1891.....	100.8	96.6
January, 1892.....	96.4	92.4
January, 1893.....	97.3	93.2
January, 1894.....	89.8	86.1
January, 1895.....	85.1	81.5
January, 1896.....	85.1	81.5
January, 1897.....	82.0	78.6
January, 1898.....	83.9	80.4
January, 1899.....	87.2	83.6

These figures then express the results of the present inquiry in terms of the prices of 1860, but they do not, it will be observed, furnish a complete series continuous with the figures of the Aldrich report. Such a continuous series could be obtained if the articles which are identical to the two investigations were selected from the figures of the Aldrich report and a new series of relative prices for the whole period, 1860 to 1891, calculated. The advantage of such a calculation would be that it would enable us to compare relative prices since 1891 with dates lying between 1860 and 1891. It would exhibit no new features with regard to the course of prices, the common object of both investigations, and might create confusion by establishing two series of relative prices, differing probably in minor details, for the years 1860 to 1891. It seems, on the whole, better that the two investigations should stand on separate bases, each exhibiting the course of prices during its own period. A continuous series of relative prices for a long period of time, except for a very restricted number of articles, is an ideal which is impossible of realization in practice. From time to time the lists of articles must be revised because of the changing character of our consumption. New commodities, on account of these changes, displace the older ones and become the staples of trade and representative of prices. The holding to the old commodities after they have ceased to be distinctive would be an obvious error. Whenever, therefore, an investigation into prices includes any considerable number of articles, a revision of the list becomes imperative. A series of investigations, each of which should be characteristic for the period to which it relates, seems best, therefore, rather than a single list extending over a very long period, which loses in accuracy any advantages which it may appear to gain from uniformity.

The table following gives in detail the wholesale prices of various commodities at the beginning of each quarterly period from January, 1890, to July, 1899.

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899.

FOOD.

BAKED BEANS: Old South brand.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.30 per dozen cans.	Apr., 1893	\$1.35 per dozen cans.	July, 1896	\$1.10 per dozen cans.
Apr., 1890	1.30 " " "	July, 1893	1.30 " " "	Oct., 1896	1.10 " " "
July, 1890	1.20 " " "	Oct., 1893	1.30 " " "	Jan., 1897	1.10 " " "
Oct., 1890	1.25 " " "	Jan., 1894	1.30 " " "	Apr., 1897	1.10 " " "
Jan., 1891	1.35 " " "	Apr., 1894	1.25 " " "	July, 1897	1.10 " " "
Apr., 1891	1.35 " " "	July, 1894	1.25 " " "	Oct., 1897	1.10 " " "
July, 1891	1.35 " " "	Oct., 1894	1.25 " " "	Jan., 1898	1.00 " " "
Oct., 1891	1.25 " " "	Jan., 1895	1.25 " " "	Apr., 1898	1.00 " " "
Jan., 1892	1.25 " " "	Apr., 1895	1.25 " " "	July, 1898	1.00 " " "
Apr., 1892	1.25 " " "	July, 1895	1.15 " " "	Oct., 1898	1.00 " " "
July, 1892	1.25 " " "	Oct., 1895	1.15 " " "	Jan., 1899	1.00 " " "
Oct., 1892	1.35 " " "	Jan., 1896	1.15 " " "	Apr., 1899	1.10 " " "
Jan., 1893	1.35 " " "	Apr., 1896	1.15 " " "	July, 1899	1.10 " " "

BEANS: Pea, York State, marrow, choice, H. P.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.80 per bush.	Apr., 1893	\$2.10 per bush.	July, 1896	\$1.00 @ 1.05 per bush.
Apr., 1890	1.75 @ 1.80 " " "	July, 1893	2.00 " " "	Oct., 1896	1.15 @ 1.20 " " "
July, 1890	1.90 " " "	Oct., 1893	1.90 " " "	Jan., 1897	.95 " " "
Oct., 1890	2.50 @ 2.55 " " "	Jan., 1894	1.75 @ 1.80 " " "	Apr., 1897	.85 " " "
Jan., 1891	2.15 @ 2.20 " " "	Apr., 1894	1.67½ " " "	July, 1897	.85 " " "
Apr., 1891	2.20 " " "	July, 1894	1.95 " " "	Oct., 1897	1.10 " " "
July, 1891	2.35 @ 2.40 " " "	Oct., 1894	1.70 @ 1.75 " " "	Jan., 1898	1.10 @ 1.15 " " "
Oct., 1891	2.00 @ 2.10 " " "	Jan., 1895	1.70 " " "	Apr., 1898	1.05 @ 1.10 " " "
Jan., 1892	1.85 " " "	Apr., 1895	2.20 " " "	July, 1898	1.15 @ 1.20 " " "
Apr., 1892	1.75 @ 1.80 " " "	July, 1895	2.15 " " "	Oct., 1898	1.25 " " "
July, 1892	1.85 " " "	Oct., 1895	1.60 " " "	Jan., 1899	1.25 @ 1.30 " " "
Oct., 1892	2.00 " " "	Jan., 1896	1.80 " " "	Apr., 1899	1.35 " " "
Jan., 1893	1.95 " " "	Apr., 1896	1.15 " " "	July, 1899	1.32½ @ 1.35 " " "

BREAD: Boston crackers.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0405 per pound.	Apr., 1893	\$0.0450 per pound.	July, 1896	\$0.0405 per pound.
Apr., 1890	.0405 " " "	July, 1893	.0405 " " "	Oct., 1896	.0360 " " "
July, 1890	.0450 " " "	Oct., 1893	.0405 " " "	Jan., 1897	.0450 " " "
Oct., 1890	.0450 " " "	Jan., 1894	.0450 " " "	Apr., 1897	.0405 " " "
Jan., 1891	.0450 " " "	Apr., 1894	.0450 " " "	July, 1897	.0360 " " "
Apr., 1891	.0450 " " "	July, 1894	.0450 " " "	Oct., 1897	.0360 " " "
July, 1891	.0405 " " "	Oct., 1894	.0405 " " "	Jan., 1898	.0360 " " "
Oct., 1891	.0495 " " "	Jan., 1895	.0360 " " "	Apr., 1898	.0495 " " "
Jan., 1892	.0450 " " "	Apr., 1895	.0395 " " "	July, 1898	.0495 " " "
Apr., 1892	.0450 " " "	July, 1895	.0395 " " "	Oct., 1898	.0405 " " "
July, 1892	.0450 " " "	Oct., 1895	.0395 " " "	Jan., 1899	.0405 " " "
Oct., 1892	.0450 " " "	Jan., 1896	.0360 " " "	Apr., 1899	.0405 " " "
Jan., 1893	.0450 " " "	Apr., 1896	.0395 " " "	July, 1899	.0405 " " "

BREAD: Navy ship bread.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0350 per pound.	Apr., 1893	\$0.0300 per pound.	July, 1896	\$0.0300 per pound.
Apr., 1890	.0350 " " "	July, 1893	.0300 " " "	Oct., 1896	.0300 " " "
July, 1890	.0350 " " "	Oct., 1893	.0300 " " "	Jan., 1897	.0300 " " "
Oct., 1890	.0350 " " "	Jan., 1894	.0300 " " "	Apr., 1897	.0300 " " "
Jan., 1891	.0350 " " "	Apr., 1894	.0300 " " "	July, 1897	.0300 " " "
Apr., 1891	.0350 " " "	July, 1894	.0300 " " "	Oct., 1897	.0300 " " "
July, 1891	.0350 " " "	Oct., 1894	.0300 " " "	Jan., 1898	.0300 " " "
Oct., 1891	.0400 " " "	Jan., 1895	.0300 " " "	Apr., 1898	.0350 " " "
Jan., 1892	.0350 " " "	Apr., 1895	.0300 " " "	July, 1898	.0400 " " "
Apr., 1892	.0350 " " "	July, 1895	.0350 " " "	Oct., 1898	.0360 " " "
July, 1892	.0300 " " "	Oct., 1895	.0300 " " "	Jan., 1899	.0360 " " "
Oct., 1892	.0300 " " "	Jan., 1896	.0300 " " "	Apr., 1899	.0360 " " "
Jan., 1893	.0350 " " "	Apr., 1896	.0300 " " "	July, 1899	.0360 " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

FOOD—Continued.

BREAD: Oyster crackers.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0540 per pound.	Apr., 1893	\$0.0540 per pound.	July, 1896	\$0.0450 per pound.
Apr., 1890	.0540 " "	July, 1893	.0540 " "	Oct., 1896	.0450 " "
July, 1890	.0540 " "	Oct., 1893	.0540 " "	Jan., 1897	.0540 " "
Oct., 1890	.0540 " "	Jan., 1894	.0540 " "	Apr., 1897	.0495 " "
Jan., 1891	.0540 " "	Apr., 1894	.0540 " "	July, 1897	.0450 " "
Apr., 1891	.0540 " "	July, 1894	.0540 " "	Oct., 1897	.0495 " "
July, 1891	.0540 " "	Oct., 1894	.0450 " "	Jan., 1898	.0450 " "
Oct., 1891	.0630 " "	Jan., 1895	.0495 " "	Apr., 1898	.0540 " "
Jan., 1892	.0540 " "	Apr., 1895	.0495 " "	July, 1898	.0540 " "
Apr., 1892	.0540 " "	July, 1895	.0495 " "	Oct., 1898	.0540 " "
July, 1892	.0540 " "	Oct., 1895	.0495 " "	Jan., 1899	.0540 " "
Oct., 1892	.0540 " "	Jan., 1896	.0495 " "	Apr., 1899	.0540 " "
Jan., 1893	.0540 " "	Apr., 1896	.0450 " "	July, 1899	.0540 " "

BREAD: Soda crackers.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0540 per pound.	Apr., 1893	\$0.0540 per pound.	July, 1896	\$0.0495 per pound.
Apr., 1890	.0540 " "	July, 1893	.0540 " "	Oct., 1896	.0495 " "
July, 1890	.0540 " "	Oct., 1893	.0540 " "	Jan., 1897	.0540 " "
Oct., 1890	.0540 " "	Jan., 1894	.0540 " "	Apr., 1897	.0495 " "
Jan., 1891	.0540 " "	Apr., 1894	.0540 " "	July, 1897	.0495 " "
Apr., 1891	.0540 " "	July, 1894	.0540 " "	Oct., 1897	.0495 " "
July, 1891	.0540 " "	Oct., 1894	.0495 " "	Jan., 1898	.0495 " "
Oct., 1891	.0540 " "	Jan., 1895	.0495 " "	Apr., 1898	.0495 " "
Jan., 1892	.0540 " "	Apr., 1895	.0495 " "	July, 1898	.0585 " "
Apr., 1892	.0540 " "	July, 1895	.0540 " "	Oct., 1898	.0540 " "
July, 1892	.0540 " "	Oct., 1895	.0495 " "	Jan., 1899	.0540 " "
Oct., 1892	.0540 " "	Jan., 1896	.0495 " "	Apr., 1899	.0540 " "
Jan., 1893	.0540 " "	Apr., 1896	.0495 " "	July, 1899	.0540 " "

BUTTER: Creamery, Western, extra, firsts.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.20 @ 0.23 per lb.	Apr., 1893	\$0.27 @ 0.28 per lb.	July, 1896	\$0.14 @ 0.14½ per lb.
Apr., 1890	.18 @ .19 " "	July, 1893	.20 " " " "	Oct., 1896	.14 @ .15 " "
July, 1890	.13 @ .14 " "	Oct., 1893	.26 @ .27 " "	Jan., 1897	.18 " " " "
Oct., 1890	.19 @ .21 " "	Jan., 1894	.25 @ .26 " "	Apr., 1897	.19 @ .20 " "
Jan., 1891	.23 @ .24 " "	Apr., 1894	.19 @ .20 " "	July, 1897	.14 @ .15 " "
Apr., 1891	.25 @ .26 " "	July, 1894	.17 " " " "	Oct., 1897	.19 " " " "
July, 1891	.17 @ .17½ " "	Oct., 1894	.22 @ .23 " "	Jan., 1898	.20 " " " "
Oct., 1891	.22 @ .23 " "	Jan., 1895	.22 @ .23 " "	Apr., 1898	.20 @ .21 " "
Jan., 1892	.26 @ .27 " "	Apr., 1895	.17 @ .19 " "	July, 1898	.16 " " " "
Apr., 1892	.21 @ .22 " "	July, 1895	.16 @ .17 " "	Oct., 1898	.18 @ .19 " "
July, 1892	.20 " " " "	Oct., 1895	.17 @ .19 " "	Jan., 1899	.17½ @ .18 " "
Oct., 1892	.22 @ .23 " "	Jan., 1896	.21 @ .22 " "	Apr., 1899	.19 @ .19½ " "
Jan., 1893	.28 @ .29 " "	Apr., 1896	.18 @ .19 " "	July, 1899	.17½ @ .18 " "

CHEESE: New York, extra.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.10½ @ 0.10½ per lb.	Apr., 1893	\$0.11½ per lb.	July, 1896	\$0.07 @ 0.07½ per lb.
Apr., 1890	.11½ " " " "	July, 1893	.08½ @ 0.08½ " "	Oct., 1896	.09 @ .09½ " "
July, 1890	.07½ " " " "	Oct., 1893	.11 @ .11½ " "	Jan., 1897	.10½ @ .11 " "
Oct., 1890	.09½ " " " "	Jan., 1894	.11½ " " " "	Apr., 1897	.12 @ .12½ " "
Jan., 1891	.09½ @ .10 " "	Apr., 1894	.12 @ .12½ " "	July, 1897	.07 @ .07½ " "
Apr., 1891	.12 " " " "	July, 1894	.08½ " " " "	Oct., 1897	.09 @ .09½ " "
July, 1891	.08 @ .08½ " "	Oct., 1894	.11 " " " "	Jan., 1898	.09 @ .09½ " "
Oct., 1891	.10 " " " "	Jan., 1895	.11½ @ .11½ " "	Apr., 1898	.08 @ .08½ " "
Jan., 1892	.11½ " " " "	Apr., 1895	.11½ @ .11½ " "	July, 1898	.07½ @ .07½ " "
Apr., 1892	.12½ " " " "	July, 1895	.08½ @ .08½ " "	Oct., 1898	.09 @ .09½ " "
July, 1892	.08½ " " " "	Oct., 1895	.08½ @ .09 " "	Jan., 1899	.10½ @ .11½ " "
Oct., 1892	.10½ @ .10½ " "	Jan., 1896	.10 @ .10½ " "	Apr., 1899	.12 @ .12½ " "
Jan., 1893	.11½ @ .11½ " "	Apr., 1896	.09 @ .10 " "	July, 1899	.08½ @ .08½ " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

FOOD—Continued.

COFFEE: Rio, fair.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.19 per pound.	Apr., 1893	\$0.18½ per pound.	July, 1896	\$0.16½ per pound.
Apr., 1890	.19½ " "	July, 1893	.19 " "	Oct., 1896	.14½ " "
July, 1890	.19½ " "	Oct., 1893	.19½ " "	Jan., 1897	.14½ " "
Oct., 1890	.20½ " "	Jan., 1894	.19½ " "	Apr., 1897	.12 " "
Jan., 1891	.19 " "	Apr., 1894	.19½ " "	July, 1897	.12 " "
Apr., 1891	.19½ " "	July, 1894	.18½ " "	Oct., 1897	.10 " "
July, 1891	.18½ " "	Oct., 1894	.18½ " "	Jan., 1898	.08 " "
Oct., 1891	.16 " "	Jan., 1895	.18 " "	Apr., 1898	.07½ " "
Jan., 1892	.16½ " "	Apr., 1895	.19½ " "	July, 1898	.07½ " "
Apr., 1892	.17 " "	July, 1895	.18 " "	Oct., 1898	.07½ " "
July, 1892	.17 " "	Oct., 1895	.18½ " "	Jan., 1899	.07½ " "
Oct., 1892	.18½ " "	Jan., 1896	.17½ " "	Apr., 1899	.07½ " "
Jan., 1893	.18½ " "	Apr., 1896	.17½ " "	July, 1899	.06½ " "

EGGS: Western, firsts, choice, fresh.

Jan., 1890	\$0.20 @ 0.21 per doz.	Apr., 1893	\$0.16½ @ 0.17 per doz.	July, 1896	\$0.11½ @ 0.12 per doz.
Apr., 1890	.12 " "	July, 1893	.15½ " "	Oct., 1896	.17 @ .17½ " "
July, 1890	.13 @ .14 " "	Oct., 1893	.22 " "	Jan., 1897	.18 @ .19 " "
Oct., 1890	.20 " "	Jan., 1894	.23 " "	Apr., 1897	.10 " "
Jan., 1891	.23 @ .29 " "	Apr., 1894	.11 " "	July, 1897	.10½ " "
Apr., 1891	.21 @ .22 " "	July, 1894	.12½ @ .13 " "	Oct., 1897	.16 @ .17 " "
July, 1891	.16 @ .16½ " "	Oct., 1894	.19 " "	Jan., 1898	.22 @ .23 " "
Oct., 1891	.20 @ .21 " "	Jan., 1895	.23 " "	Apr., 1898	.10 " "
Jan., 1892	.25 " "	Apr., 1895	.13½ " "	July, 1898	.12 @ .124 " "
Apr., 1892	.144 " "	July, 1895	.12½ " "	Oct., 1898	.164 @ .17 " "
July, 1892	.15½ @ .16 " "	Oct., 1895	.17 @ .17½ " "	Jan., 1899	.18 @ .19 " "
Oct., 1892	.21 " "	Jan., 1896	.21 @ .22 " "	Apr., 1899	.13 " "
Jan., 1893	.30 " "	Apr., 1896	.11½ " "	July, 1899	.14½ " "

FISH: Cod, entirely boned.

Jan., 1890	\$0.12 per pound.	Apr., 1893	\$0.11 per pound.	July, 1896	\$0.09½ per pound.
Apr., 1890	.12 " "	July, 1893	.11 " "	Oct., 1896	.094 " "
July, 1890	.12 " "	Oct., 1893	.11 " "	Jan., 1897	.094 " "
Oct., 1890	.12½ " "	Jan., 1894	.11 " "	Apr., 1897	.094 " "
Jan., 1891	.12½ " "	Apr., 1894	.10 " "	July, 1897	.094 " "
Apr., 1891	.13 " "	July, 1894	.10 " "	Oct., 1897	.10 " "
July, 1891	.12½ " "	Oct., 1894	.11 " "	Jan., 1898	.10 " "
Oct., 1891	.13 " "	Jan., 1895	.11 " "	Apr., 1898	.10 " "
Jan., 1892	.13 " "	Apr., 1895	.11 " "	July, 1898	.10 " "
Apr., 1892	.13 " "	July, 1895	.09 " "	Oct., 1898	.10 " "
July, 1892	.11 " "	Oct., 1895	.09 " "	Jan., 1899	.10 " "
Oct., 1892	.11 " "	Jan., 1896	.09½ " "	Apr., 1899	.11 " "
Jan., 1893	.11 " "	Apr., 1896	.09½ " "	July, 1899	.10 " "

FISH: Mackerel, salt, XXXX, No. 2.

Jan., 1890	\$22.00 per barrel.	Apr., 1893	\$21.00 per barrel.	July, 1896	\$18.00 per barrel.
Apr., 1890	22.00 " "	July, 1893	21.00 " "	Oct., 1896	16.00 " "
July, 1890	21.00 " "	Oct., 1893	19.00 " "	Jan., 1897	15.00 " "
Oct., 1890	23.00 " "	Jan., 1894	18.00 " "	Apr., 1897	11.00 " "
Jan., 1891	22.00 " "	Apr., 1894	15.00 " "	July, 1897	11.00 " "
Apr., 1891	22.00 " "	July, 1894	13.00 " "	Oct., 1897	17.50 " "
July, 1891	20.00 " "	Oct., 1894	16.00 " "	Jan., 1898	18.50 " "
Oct., 1891	19.00 " "	Jan., 1895	18.00 " "	Apr., 1898	19.00 " "
Jan., 1892	20.00 " "	Apr., 1895	21.00 " "	July, 1898	18.00 " "
Apr., 1892	24.00 " "	July, 1895	19.50 " "	Oct., 1898	21.00 " "
July, 1892	24.00 " "	Oct., 1895	21.50 " "	Jan., 1899	21.50 " "
Oct., 1892	18.00 " "	Jan., 1896	23.00 " "	Apr., 1899	21.50 " "
Jan., 1893	20.00 " "	Apr., 1896	22.00 " "	July, 1899	21.50 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

FOOD—Continued.

FLOUR: Rye.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$3.25 per barrel.	Apr., 1893	\$3.19 per barrel.	July, 1896	\$2.92½ per barrel.
Apr., 1890	2.95 " "	July, 1893	3.23 " "	Oct., 1896	3.11 " "
July, 1890	3.05 " "	Oct., 1893	3.31 " "	Jan., 1897	2.73 " "
Oct., 1890	3.90 " "	Jan., 1894	2.82 " "	Apr., 1897	2.45 " "
Jan., 1891	4.30 " "	Apr., 1894	2.92 " "	July, 1897	3.02 " "
Apr., 1891	5.05 " "	July, 1894	2.95 " "	Oct., 1897	3.08 " "
July, 1891	4.70 " "	Oct., 1894	2.84 " "	Jan., 1898	3.00 " "
Oct., 1891	5.05 " "	Jan., 1895	2.99 " "	Apr., 1898	3.50 " "
Jan., 1892	4.764 " "	Apr., 1895	4.00 " "	July, 1898	2.83½ " "
Apr., 1892	4.224 " "	July, 1895	3.19 " "	Oct., 1898	3.23 " "
July, 1892	3.844 " "	Oct., 1895	2.70 " "	Jan., 1899	3.424 " "
Oct., 1892	3.45 " "	Jan., 1896	2.70 " "	Apr., 1899	3.30 " "
Jan., 1893	3.26 " "	Apr., 1896	2.70 " "	July, 1899	3.28 " "

FLOUR: Wheat.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$5.50 per barrel.	Apr., 1893	\$4.85 per barrel.	July, 1896	\$4.40 per barrel.
Apr., 1890	6.00 " "	July, 1893	4.75 " "	Oct., 1896	4.50 " "
July, 1890	6.00 " "	Oct., 1893	4.80 " "	Jan., 1897	5.35 " "
Oct., 1890	6.20 " "	Jan., 1894	4.40 " "	Apr., 1897	4.85 " "
Jan., 1891	5.85 " "	Apr., 1894	4.25 " "	July, 1897	4.65 " "
Apr., 1891	6.30 " "	July, 1894	4.35 " "	Oct., 1897	5.75 " "
July, 1891	6.00 " "	Oct., 1894	4.15 " "	Jan., 1898	5.60 " "
Oct., 1891	5.95 " "	Jan., 1895	4.20 " "	Apr., 1898	5.75 " "
Jan., 1892	5.60 " "	Apr., 1895	4.10 " "	July, 1898	5.35 " "
Apr., 1892	5.10 " "	July, 1895	4.85 " "	Oct., 1898	4.65 " "
July, 1892	5.10 " "	Oct., 1895	4.30 " "	Jan., 1899	4.30 " "
Oct., 1892	5.00 " "	Jan., 1896	4.25 " "	Apr., 1899	4.50 " "
Jan., 1893	5.00 " "	Apr., 1896	4.40 " "	July, 1899	4.50 " "

FRUIT: Apples, evaporated.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.08 @ 0.09 per lb.	Apr., 1893	\$0.10 @ 0.11½ per lb.	July, 1896	\$0.05½ @ 0.07 per lb.
Apr., 1890	.11 @ .12 " "	July, 1893	.08 @ .094 " "	Oct., 1896	b .04½ @ .06 " "
July, 1890	.09 @ .10½ " "	Oct., 1893	.084 @ .11 " "	Jan., 1897	.03½ @ .05 " "
Oct., 1890	.15 @ .17 " "	Jan., 1894	.10 @ .13 " "	Apr., 1897	.04 @ .05 " "
Jan., 1891	.14 @ .16 " "	Apr., 1894	.10 @ .12 " "	July, 1897	.04 @ .05 " "
Apr., 1891	.14 @ .16 " "	July, 1894	.13 @ .15 " "	Oct., 1897	.08 @ .09 " "
July, 1891	.12 @ .14 " "	Oct., 1894	a .07 @ .09 " "	Jan., 1898	.084 @ .09 " "
Oct., 1891	.07 @ .09 " "	Jan., 1895	a .061 @ .084 " "	Apr., 1898	.084 @ .09 " "
Jan., 1892	.06 @ .08 " "	Apr., 1895	.071 @ .084 " "	July, 1898	.094 @ .10 " "
Apr., 1892	a .05 @ .07 " "	July, 1895	.061 @ .074 " "	Oct., 1898	.08 @ .09 " "
July, 1892	a .05 @ .07 " "	Oct., 1895	b .064 @ .074 " "	Jan., 1899	.08 @ .10 " "
Oct., 1892	a .07 @ .09 " "	Jan., 1896	.064 @ .08 " "	Apr., 1899	.09 @ .104 " "
Jan., 1893	a .08 @ .10 " "	Apr., 1896	.054 @ .07 " "	July, 1899	.084 @ .10 " "

FRUIT: Currants, new, in barrels.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.04½ per lb.	Apr., 1893	\$0.03½ @ 0.03½ per lb.	July, 1896	\$0.03½ @ 0.03½ per lb.
Apr., 1890	.05 @ 0.05½ " "	July, 1893	.02½ @ .02½ " "	Oct., 1896	.03½ @ .04 " "
July, 1890	.05 " "	Oct., 1893	.02 @ .02½ " "	Jan., 1897	.03½ " "
Oct., 1890	.044 @ .04½ " "	Jan., 1894	.01½ @ .01½ " "	Apr., 1897	.04 " "
Jan., 1891	.04 " "	Apr., 1894	.01½ @ .01½ " "	July, 1897	.04½ @ .05½ " "
Apr., 1891	.044 " "	July, 1894	.02 " "	Oct., 1897	.05½ @ .06 " "
July, 1891	.044 @ .044 " "	Oct., 1894	.024 " "	Jan., 1898	.064 @ .064 " "
Oct., 1891	.034 " "	Jan., 1895	.024 " "	Apr., 1898	.064 @ .064 " "
Jan., 1892	.034 @ .034 " "	Apr., 1895	.034 @ .034 " "	July, 1898	.054 @ .06 " "
Apr., 1892	.021 @ .024 " "	July, 1895	.011 @ .02 " "	Oct., 1898	.054 @ .054 " "
July, 1892	.024 " "	Oct., 1895	.024 " "	Jan., 1899	.044 @ .044 " "
Oct., 1892	.034 @ .034 " "	Jan., 1896	.024 @ .024 " "	Apr., 1899	.044 @ .044 " "
Jan., 1893	.034 @ .034 " "	Apr., 1896	.024 @ .024 " "	July, 1899	.044 @ .044 " "

a Includes "prime" grade.
b Estimated price, no quotations.

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

FOOD—Continued.

FRUIT: Prunes, California, in boxes, 60s to 70s.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.07½ @ 0.07½ per lb.	Apr., 1893	\$0.12 @ 0.12½ per lb.	July, 1896	\$0.05¼ @ 0.05½ per lb.
Apr., 1890	.12½ " " "	July, 1893	.10 @ 11½ " " "	Oct., 1896	.04½ @ .05 " " "
July, 1890	.12½ " " "	Oct., 1893	a .08½ @ .09½ " " "	Jan., 1897	.05½ @ .06 " " "
Oct., 1890	.12½ " " "	Jan., 1894	.07½ @ .07½ " " "	Apr., 1897	.05 @ .05½ " " "
Jan., 1891	.12 @ 12½ " " "	Apr., 1894	.06 " " "	July, 1897	.04½ @ .04½ " " "
Apr., 1891	.11 @ 11½ " " "	July, 1894	.07½ " " "	Oct., 1897	.06½ " " "
July, 1891	.08½ @ .09 " " "	Oct., 1894	.07 @ .07½ " " "	Jan., 1898	.05 @ .05½ " " "
Oct., 1891	.07½ @ .07½ " " "	Jan., 1895	.07½ " " "	Apr., 1898	.05 @ .05½ " " "
Jan., 1892	.08½ @ .08½ " " "	Apr., 1895	.07 @ .07½ " " "	July, 1898	.05 @ .05½ " " "
Apr., 1892	a .07½ @ .08½ " " "	July, 1895	.05½ @ .06½ " " "	Oct., 1898	.05½ @ .06½ " " "
July, 1892	.07½ @ .09 " " "	Oct., 1895	.06½ @ .06½ " " "	Jan., 1899	.05½ @ .06 " " "
Oct., 1892	a .10½ " " "	Jan., 1896	.06½ @ .06½ " " "	Apr., 1899	.05½ @ .06 " " "
Jan., 1893	.12½ " " "	Apr., 1896	.05 @ .06½ " " "	July, 1899	.05½ " " "

FRUIT: Raisins, California, London layer, new.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$2.20 @ 2.40 per box.	Apr., 1893	\$1.75 @ 2.00 per box.	July, 1896	\$1.00 " " per box.
Apr., 1890	2.25 @ 2.45 " " "	July, 1893	1.65 @ 1.80 " " "	Oct., 1896	1.10 @ 1.15 " " "
July, 1890	2.20 @ 2.40 " " "	Oct., 1893	1.50 @ 1.65 " " "	Jan., 1897	1.45 @ 1.50 " " "
Oct., 1890	2.10 @ 2.35 " " "	Jan., 1894	1.10 @ 1.40 " " "	Apr., 1897	1.30 @ 1.40 " " "
Jan., 1891	2.00 @ 2.10 " " "	Apr., 1894	.80 @ 1.15 " " "	July, 1897	1.25 @ 1.50 " " "
Apr., 1891	1.80 @ 2.25 " " "	July, 1894	1.05 @ 1.10 " " "	Oct., 1897	1.30 @ 1.50 " " "
July, 1891	1.35 @ 1.65 " " "	Oct., 1894	1.00 @ 1.10 " " "	Jan., 1898	1.35 @ 1.45 " " "
Oct., 1891	1.40 @ 1.50 " " "	Jan., 1895	1.45 @ 1.50 " " "	Apr., 1898	1.25 @ 1.40 " " "
Jan., 1892	1.20 @ 1.60 " " "	Apr., 1895	1.50 " " "	July, 1898	1.30 @ 1.40 " " "
Apr., 1892	1.35 @ 1.45 " " "	July, 1895	1.35 @ 1.50 " " "	Oct., 1898	1.45 @ 1.50 " " "
July, 1892	1.15 @ 1.35 " " "	Oct., 1895	1.45 @ 1.60 " " "	Jan., 1899	1.20 @ 1.35 " " "
Oct., 1892	1.15 @ 1.50 " " "	Jan., 1896	.90 @ 1.25 " " "	Apr., 1899	1.00 @ 1.15 " " "
Jan., 1893	1.60 @ 1.35 " " "	Apr., 1896	.80 @ .90 " " "	July, 1899	1.15 " " "

LARD: Prime, steam.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.066½ @ 0.066½ per lb.	Apr., 1893	\$0.097½ @ 0.100 per lb.	July, 1896	\$0.086½ " " per lb.
Apr., 1890	.060½ " " "	July, 1893	.093½ @ .095 " " "	Oct., 1896	.040 " " "
July, 1890	.066½ " " "	Oct., 1893	.097½ @ .100 " " "	Jan., 1897	.086½ @ 0.037 " " "
Oct., 1890	.062½ " " "	Jan., 1894	.078½ @ .080 " " "	Apr., 1897	.089½ @ .040 " " "
Jan., 1891	.067½ @ .068 " " "	Apr., 1894	.068 @ .069 " " "	July, 1897	.083½ " " "
Apr., 1891	.065 @ .066½ " " "	July, 1894	.066 " " "	Oct., 1897	.043½ " " "
July, 1891	.062½ " " "	Oct., 1894	.080 " " "	Jan., 1898	.046½ " " "
Oct., 1891	.068½ @ .070 " " "	Jan., 1895	.067 " " "	Apr., 1898	.051½ " " "
Jan., 1892	.069 @ .069½ " " "	Apr., 1895	.069 " " "	July, 1898	.050 " " "
Apr., 1892	.061½ @ .061½ " " "	July, 1895	.063½ " " "	Oct., 1898	.045½ " " "
July, 1892	.070 @ .070½ " " "	Oct., 1895	.057½ " " "	Jan., 1899	.054 " " "
Oct., 1892	.080 @ .081½ " " "	Jan., 1896	.052½ " " "	Apr., 1899	.050½ " " "
Jan., 1893	.097½ @ .103½ " " "	Apr., 1896	.049½ " " "	July, 1899	.049½ " " "

MEAL: Corn, yellow, kiln dried.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$2.65 per barrel.	Apr., 1893	\$2.70 per barrel.	July, 1896	\$2.05 per barrel.
Apr., 1890	2.45 " " "	July, 1893	2.70 " " "	Oct., 1896	2.05 " " "
July, 1890	2.45 " " "	Oct., 1893	2.80 " " "	Jan., 1897	2.00 " " "
Oct., 1890	3.20 " " "	Jan., 1894	2.70 " " "	Apr., 1897	1.70 " " "
Jan., 1891	3.25 " " "	Apr., 1894	2.65 " " "	July, 1897	1.75 " " "
Apr., 1891	3.75 " " "	July, 1894	2.80 " " "	Oct., 1897	1.80 " " "
July, 1891	3.75 " " "	Oct., 1894	3.10 " " "	Jan., 1898	2.00 " " "
Oct., 1891	4.05 " " "	Jan., 1895	2.90 " " "	Apr., 1898	2.05 " " "
Jan., 1892	3.55 " " "	Apr., 1895	2.60 " " "	July, 1898	2.15 " " "
Apr., 1892	2.95 " " "	July, 1895	2.85 " " "	Oct., 1898	2.05 " " "
July, 1892	3.15 " " "	Oct., 1895	2.55 " " "	Jan., 1899	2.15 " " "
Oct., 1892	3.10 " " "	Jan., 1896	2.25 " " "	Apr., 1899	2.10 " " "
Jan., 1893	2.85 " " "	Apr., 1896	2.15 " " "	July, 1899	2.15 " " "

a Estimated price, no quotations.

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

FOOD—Continued.

MEAT: Beef on the hoof, good, 1,200 to 1,350 pound beeves.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$2.85 @ 4.85 per 100 lbs.	Apr., 1893	\$4.15 @ 5.50 per 100 lbs.	July, 1896	\$3.25 @ 4.55 per 100 lbs.
Apr., 1890	3.55 @ 4.85 " "	July, 1893	3.25 @ 5.35 " "	Oct., 1896	3.20 @ 5.25 " "
July, 1890	3.50 @ 4.65 " "	Oct., 1893	3.00 @ 5.70 " "	Jan., 1897	3.80 @ 5.25 " "
Oct., 1890	2.75 @ 5.00 " "	Jan., 1894	3.00 @ 5.10 " "	Apr., 1897	3.75 @ 5.35 " "
Jan., 1891	3.58 @ 4.89 " "	Apr., 1894	3.05 @ 4.85 " "	July, 1897	3.65 @ 5.15 " "
Apr., 1891	4.50 @ 5.72 " "	July, 1894	3.00 @ 4.90 " "	Oct., 1897	4.00 @ 5.35 " "
July, 1891	4.19 @ 5.80 " "	Oct., 1894	3.00 @ 6.10 " "	Jan., 1898	3.80 @ 5.40 " "
Oct., 1891	2.91 @ 5.28 " "	Jan., 1895	3.15 @ 5.30 " "	Apr., 1898	3.95 @ 5.95 " "
Jan., 1892	3.00 @ 4.75 " "	Apr., 1895	4.25 @ 6.25 " "	July, 1898	4.25 @ 5.55 " "
Apr., 1892	3.30 @ 4.75 " "	July, 1895	3.45 @ 5.75 " "	Oct., 1898	4.00 @ 5.75 " "
July, 1892	3.45 @ 5.35 " "	Oct., 1895	3.20 @ 5.50 " "	Jan., 1899	4.20 @ 5.90 " "
Oct., 1892	2.85 @ 5.35 " "	Jan., 1896	3.20 @ 4.80 " "	Apr., 1899	4.20 @ 5.60 " "
Jan., 1893	3.35 @ 5.65 " "	Apr., 1896	3.00 @ 4.50 " "	July, 1899	4.65 @ 5.85 " "

MEAT: Beef on the hoof, choice, 1,350 to 1,500 pound beeves.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$3.45 @ 5.25 per 100 lbs.	Apr., 1893	\$4.40 @ 6.00 per 100 lbs.	July, 1896	\$3.40 @ 4.65 per 100 lbs.
Apr., 1890	3.85 @ 5.30 " "	July, 1893	3.50 @ 5.40 " "	Oct., 1896	3.35 @ 5.30 " "
July, 1890	3.70 @ 5.00 " "	Oct., 1893	3.50 @ 5.30 " "	Jan., 1897	3.80 @ 5.50 " "
Oct., 1890	3.30 @ 5.25 " "	Jan., 1894	3.15 @ 5.60 " "	Apr., 1897	3.95 @ 5.50 " "
Jan., 1891	4.13 @ 5.36 " "	Apr., 1894	3.30 @ 4.85 " "	July, 1897	4.00 @ 5.20 " "
Apr., 1891	4.96 @ 5.91 " "	July, 1894	3.60 @ 5.05 " "	Oct., 1897	4.00 @ 5.35 " "
July, 1891	5.01 @ 5.99 " "	Oct., 1894	3.60 @ 6.35 " "	Jan., 1898	3.90 @ 5.50 " "
Oct., 1891	3.56 @ 5.91 " "	Jan., 1895	3.50 @ 5.45 " "	Apr., 1898	4.05 @ 5.50 " "
Jan., 1892	3.45 @ 5.50 " "	Apr., 1895	5.00 @ 6.30 " "	July, 1898	4.20 @ 5.65 " "
Apr., 1892	3.50 @ 4.85 " "	July, 1895	4.00 @ 5.90 " "	Oct., 1898	4.20 @ 5.85 " "
July, 1892	3.85 @ 6.10 " "	Oct., 1895	3.50 @ 5.50 " "	Jan., 1899	4.60 @ 6.00 " "
Oct., 1892	3.25 @ 5.75 " "	Jan., 1896	3.40 @ 4.90 " "	Apr., 1899	4.40 @ 5.75 " "
Jan., 1893	3.90 @ 6.00 " "	Apr., 1896	3.20 @ 4.75 " "	July, 1899	4.85 @ 5.90 " "

MEAT: Beef on the hoof, 1,200 to 1,500 pound beeves.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$4.05 per 100 pounds.	Apr., 1893	\$5.00 per 100 pounds.	July, 1896	\$4.10 per 100 pounds.
Apr., 1890	4.40 " " " "	July, 1893	4.25 " " " "	Oct., 1896	4.40 " " " "
July, 1890	4.20 " " " "	Oct., 1893	4.45 " " " "	Jan., 1897	4.45 " " " "
Oct., 1890	4.00 " " " "	Jan., 1894	4.20 " " " "	Apr., 1897	4.55 " " " "
Jan., 1891	4.35 " " " "	Apr., 1894	4.15 " " " "	July, 1897	4.55 " " " "
Apr., 1891	5.00 " " " "	July, 1894	4.05 " " " "	Oct., 1897	4.75 " " " "
July, 1891	4.60 " " " "	Oct., 1894	4.80 " " " "	Jan., 1898	4.75 " " " "
Oct., 1891	4.10 " " " "	Jan., 1895	4.30 " " " "	Apr., 1898	4.65 " " " "
Jan., 1892	4.10 " " " "	Apr., 1895	5.50 " " " "	July, 1898	4.90 " " " "
Apr., 1892	4.05 " " " "	July, 1895	4.80 " " " "	Oct., 1898	5.05 " " " "
July, 1892	4.35 " " " "	Oct., 1895	4.30 " " " "	Jan., 1899	5.35 " " " "
Oct., 1892	4.30 " " " "	Jan., 1896	4.00 " " " "	Apr., 1899	5.05 " " " "
Jan., 1893	4.85 " " " "	Apr., 1896	3.80 " " " "	July, 1899	5.40 " " " "

MEAT: Beef, loins.

Date.	Price.	Date.	Price.	Date.	Price.
Jan. 1890	\$0.19 per pound.	Apr., 1896	\$0.21 per pound.	July, 1896	\$0.20 per pound.
Apr., 1890	.19 " " " "	July, 1893	.21 " " " "	Oct., 1896	.21 " " " "
July, 1890	.19 " " " "	Oct., 1893	.21 " " " "	Jan., 1897	.21 " " " "
Oct., 1890	.19 " " " "	Jan., 1894	.22 " " " "	Apr., 1897	.21 " " " "
Jan., 1891	.19 " " " "	Apr., 1894	.21 " " " "	July, 1897	.21 " " " "
Apr., 1891	.20 " " " "	July, 1894	.20 " " " "	Oct., 1897	.21 " " " "
July, 1891	.20 " " " "	Oct., 1894	.21 " " " "	Jan., 1898	.20 " " " "
Oct., 1891	.20 " " " "	Jan., 1895	.21 " " " "	Apr., 1898	.20 " " " "
Jan., 1892	.20 " " " "	Apr., 1895	.22 " " " "	July, 1898	.20 " " " "
Apr., 1892	.19 " " " "	July, 1895	.21 " " " "	Oct., 1898	.21 " " " "
July, 1892	.19 " " " "	Oct., 1895	.22 " " " "	Jan., 1899	.21 " " " "
Oct., 1892	.19 " " " "	Jan., 1896	.21 " " " "	Apr., 1899	.21 " " " "
Jan., 1893	.19 " " " "	Apr., 1896	.20 " " " "	July, 1899	.21 " " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

FOOD—Continued.

MEAT: Beef, ribs.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.16 per pound.	Apr., 1893	\$0.17 per pound.	July, 1896	\$0.16 per pound.
Apr., 1890	.16 " "	July, 1893	.17 " "	Oct., 1896	.17 " "
July, 1890	.16 " "	Oct., 1893	.17 " "	Jan., 1897	.17 " "
Oct., 1890	.16 " "	Jan., 1894	.18 " "	Apr., 1897	.17 " "
Jan., 1891	.16 " "	Apr., 1894	.17 " "	July, 1897	.17 " "
Apr., 1891	.17 " "	July, 1894	.16 " "	Oct., 1897	.17 " "
July, 1891	.17 " "	Oct., 1894	.17 " "	Jan., 1898	.16 " "
Oct., 1891	.17 " "	Jan., 1895	.17 " "	Apr., 1898	.16 " "
Jan., 1892	.17 " "	Apr., 1895	.18 " "	July, 1898	.16 " "
Apr., 1892	.16 " "	July, 1895	.17 " "	Oct., 1898	.17 " "
July, 1892	.16 " "	Oct., 1895	.18 " "	Jan., 1899	.1 " "
Oct., 1892	.16 " "	Jan., 1896	.17 " "	Apr., 1899	.17 " "
Jan., 1893	.16 " "	Apr., 1896	.17 " "	July, 1899	.17 " "

MEAT: Beef, salt, family.

Jan., 1890	\$9.75 @ 10.25 per bbl.	Apr., 1893	\$11.50 @ 13.00 per bbl.	July, 1896	\$8.50 @ 9.00 per bbl.
Apr., 1890	8.00 @ 9.50 " "	July, 1893	10.00 @ 12.00 " "	Oct., 1896	8.00 @ 9.00 " "
July, 1890	8.35 @ 9.50 " "	Oct., 1893	12.00 @ 14.00 " "	Jan., 1897	8.50 @ 10.00 " "
Oct., 1890	10.15 @ 11.40 " "	Jan., 1894	14.00 @ 15.50 " "	Apr., 1897	9.00 @ 10.25 " "
Jan., 1891	9.00 @ 10.00 " "	Apr., 1894	12.00 @ 14.00 " "	July, 1897	8.50 @ 9.50 " "
Apr., 1891	10.00 @ 11.00 " "	July, 1894	9.50 @ 11.00 " "	Oct., 1897	9.10 @ 10.00 " "
July, 1891	12.50 @ 14.00 " "	Oct., 1894	10.00 @ 12.00 " "	Jan., 1898	8.00 @ 8.50 " "
Oct., 1891	10.50 @ 11.50 " "	Jan., 1895	10.50 @ 12.50 " "	Apr., 1898	9.50 @ 10.00 " "
Jan., 1892	9.50 @ 10.00 " "	Apr., 1895	10.75 @ 12.50 " "	July, 1898	10.00 @ 10.50 " "
Apr., 1892	9.50 @ 11.75 " "	July, 1895	10.50 @ 13.50 " "	Oct., 1898	8.00 " "
July, 1892	9.75 @ 10.90 " "	Oct., 1895	10.00 @ 12.00 " "	Jan., 1899	8.50 @ 9.00 " "
Oct., 1892	8.50 @ 10.00 " "	Jan., 1896	10.00 @ 12.00 " "	Apr., 1899	9.00 " "
Jan., 1893	11.50 @ 13.00 " "	Apr., 1896	10.00 @ 12.00 " "	July, 1899	9.00 " "

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

Jan., 1890	\$10.00 @ 10.50 per bbl.	Apr., 1893	\$18.00 @ 18.50 per bbl.	July, 1896	\$8.00 @ 8.25 per bbl.
Apr., 1890	11.00 @ 12.00 " "	July, 1893	19.00 @ 19.50 " "	Oct., 1896	8.00 @ 8.50 " "
July, 1890	13.25 @ 13.75 " "	Oct., 1893	18.00 @ 18.25 " "	Jan., 1897	8.25 @ 8.75 " "
Oct., 1890	11.25 @ 12.25 " "	Jan., 1894	13.75 @ 14.50 " "	Apr., 1897	9.00 @ 9.50 " "
Jan., 1891	10.00 @ 12.00 " "	Apr., 1894	13.00 @ 13.25 " "	July, 1897	8.25 @ 8.75 " "
Apr., 1891	11.50 @ 13.50 " "	July, 1894	13.75 @ 14.00 " "	Oct., 1897	9.00 @ 10.00 " "
July, 1891	10.00 @ 12.00 " "	Oct., 1894	14.75 @ 15.50 " "	Jan., 1898	8.75 @ 9.25 " "
Oct., 1891	10.75 @ 12.00 " "	Jan., 1895	12.75 @ 13.25 " "	Apr., 1898	9.50 @ 9.75 " "
Jan., 1892	9.00 @ 10.00 " "	Apr., 1895	13.50 @ 14.00 " "	July, 1898	10.00 @ 10.50 " "
Apr., 1892	9.50 @ 10.00 " "	July, 1895	13.25 @ 14.00 " "	Oct., 1898	8.50 @ 8.75 " "
July, 1892	11.00 @ 12.00 " "	Oct., 1895	10.00 @ 10.50 " "	Jan., 1899	9.75 @ 10.25 " "
Oct., 1892	11.25 @ 12.50 " "	Jan., 1896	9.00 @ 9.25 " "	Apr., 1899	9.00 @ 9.50 " "
Jan., 1893	15.25 @ 16.50 " "	Apr., 1896	8.75 @ 9.50 " "	July, 1899	8.75 @ 9.00 " "

MEAT: Bacon, short rib sides.

Jan., 1890	\$0.056½ @ 0.056½ per lb.	Apr., 1893	\$0.103½ @ 0.105 per lb.	July, 1896	\$0.043½ per lb.
Apr., 1890	.053½ @ .059 " "	July, 1893	.101½ @ .102½ " "	Oct., 1896	.040 " "
July, 1890	.053½ @ .057 " "	Oct., 1893	.112½ @ .117½ " "	Jan., 1897	.042½ @ 0.043½ " "
Oct., 1890	.060 @ .061 " "	Jan., 1894	.066½ @ .068½ " "	Apr., 1897	.052½ " "
Jan., 1891	.057½ @ .058 " "	Apr., 1894	.072½ @ .070 " "	July, 1897	.061½ " "
Apr., 1891	.065 @ .066½ " "	July, 1894	.071½ @ .075 " "	Oct., 1897	.061½ " "
July, 1891	.066½ @ .067½ " "	Oct., 1894	.080 " "	Jan., 1898	.050 " "
Oct., 1891	.062½ " "	Jan., 1895	.065 " "	Apr., 1898	.056 " "
Jan., 1892	.062½ @ .063½ " "	Apr., 1895	.067½ " "	July, 1898	.060 " "
Apr., 1892	.062½ " "	July, 1895	.068½ " "	Oct., 1898	.061½ " "
July, 1892	.083½ @ .084 " "	Oct., 1895	.062½ " "	Jan., 1899	.053½ " "
Oct., 1892	.087½ @ .088½ " "	Jan., 1896	.051½ " "	Apr., 1899	.052 " "
Jan., 1893	.092½ @ .095 " "	Apr., 1896	.052½ " "	July, 1899	.062 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

FOOD—Continued.

MEAT: Ham, sugar cured.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.09 @ 0.11½ per lb.	Apr., 1893	\$0.13½ @ 0.14½ per lb.	July, 1896	\$0.09 @ 0.10½ per lb.
Apr., 1890	.09½ @ .11½ " "	July, 1893	.12 @ .13 " "	Oct., 1896	.09½ @ .11½ " "
July, 1890	.094 @ .11½ " "	Oct., 1893	.12 @ .13 " "	Jan., 1897	.09½ @ .11 " "
Oct., 1890	.10 @ .11½ " "	Jan., 1894	.09 @ .10 " "	Apr., 1897	.09½ @ .11½ " "
Jan., 1891	.084 @ .10½ " "	Apr., 1894	.094 @ .10 " "	July, 1897	.09½ @ .11½ " "
Apr., 1891	.084 @ .104 " "	July, 1894	.104 @ .12 " "	Oct., 1897	.09 @ .104 " "
July, 1891	.094 @ .11½ " "	Oct., 1894	.114 @ .12½ " "	Jan., 1898	.08 @ .094 " "
Oct., 1891	.10 @ .12 " "	Jan., 1895	.09 @ .094 " "	Apr., 1898	.08 @ .094 " "
Jan., 1892	.084 @ .094 " "	Apr., 1895	.094 @ .10 " "	July, 1898	.074 @ .10 " "
Apr., 1892	.094 @ .104 " "	July, 1895	.094 @ .11 " "	Oct., 1898	.074 @ .10 " "
July, 1892	.114 @ .12½ " "	Oct., 1895	.094 @ .104 " "	Jan., 1899	.074 @ .10 " "
Oct., 1892	.104 @ .114 " "	Jan., 1896	.09 @ .104 " "	Apr., 1899	.074 @ .094 " "
Jan., 1893	.114 @ .13 " "	Apr., 1896	.09 @ .104 " "	July, 1899	.10 @ .104 " "

MEAT: Mutton, racks and saddles.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.20 per pound.	Apr., 1893	\$0.16 per pound.	July, 1896	\$0.13 per pound.
Apr., 1890	.20 " "	July, 1893	.18 " "	Oct., 1896	.14 " "
July, 1890	.20 " "	Oct., 1893	.15 " "	Jan., 1897	.11 " "
Oct., 1890	.20 " "	Jan., 1894	.13 " "	Apr., 1897	.14 " "
Jan., 1891	.18 " "	Apr., 1894	.13 " "	July, 1897	.14 " "
Apr., 1891	.18 " "	July, 1894	.15 " "	Oct., 1897	.13 " "
July, 1891	.20 " "	Oct., 1894	.13 " "	Jan., 1898	.14 " "
Oct., 1891	.18 " "	Jan., 1895	.10 " "	Apr., 1898	.15 " "
Jan., 1892	.18 " "	Apr., 1895	.16 " "	July, 1898	.15 " "
Apr., 1892	.19 " "	July, 1895	.14 " "	Oct., 1898	.15 " "
July, 1892	.22 " "	Oct., 1895	.14 " "	Jan., 1899	.15 " "
Oct., 1892	.20 " "	Jan., 1896	.12 " "	Apr., 1899	.15 " "
Jan., 1893	.16 " "	Apr., 1896	.12 " "	July, 1899	.15 " "

MILK: Fresh.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.36 per can. (a)	Apr., 1893	\$0.30 per can. (a)	July, 1896	\$0.30 per can. (a)
Apr., 1890	.32 " "	July, 1893	.30 " "	Oct., 1896	.33 " "
July, 1890	.32 " "	Oct., 1893	.35 " "	Jan., 1897	.33 " "
Oct., 1890	.36 " "	Jan., 1894	.35 " "	Apr., 1897	.30 " "
Jan., 1891	.36 " "	Apr., 1894	.30 " "	July, 1897	.30 " "
Apr., 1891	.32 " "	July, 1894	.30 " "	Oct., 1897	.33 " "
July, 1891	.32 " "	Oct., 1894	.35 " "	Jan., 1898	.33 " "
Oct., 1891	.36 " "	Jan., 1895	.35 " "	Apr., 1898	.30 " "
Jan., 1892	.35 " "	Apr., 1895	.30 " "	July, 1898	.30 " "
Apr., 1892	.30 " "	July, 1895	.30 " "	Oct., 1898	.33 " "
July, 1892	.30 " "	Oct., 1895	.35 " "	Jan., 1899	.33 " "
Oct., 1892	.35 " "	Jan., 1896	.33 " "	Apr., 1899	.30 " "
Jan., 1893	.35 " "	Apr., 1896	.30 " "	July, 1899	.30 " "

MOLASSES: New Orleans, prime.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.42 per gallon.	Apr., 1893	\$0.35 per gallon.	July, 1896	\$0.32 per gallon.
Apr., 1890	.40 " "	July, 1893	.33 " "	Oct., 1896	.31 " "
July, 1890	.40 " "	Oct., 1893	.31 " "	Jan., 1897	.29 " "
Oct., 1890	.38 " "	Jan., 1894	.35 " "	Apr., 1897	.29 " "
Jan., 1891	.36 " "	Apr., 1894	.31 " "	July, 1897	.28 " "
Apr., 1891	.30 " "	July, 1894	.30 " "	Oct., 1897	.28 " "
July, 1891	.32 " "	Oct., 1894	.29 " "	Jan., 1898	.32 " "
Oct., 1891	.32 " "	Jan., 1895	.33 " "	Apr., 1898	.30 " "
Jan., 1892	.37 " "	Apr., 1895	.31 " "	July, 1898	.33 " "
Apr., 1892	.34 " "	July, 1895	.29 " "	Oct., 1898	.35 " "
July, 1892	.33 " "	Oct., 1895	.30 " "	Jan., 1899	.35 " "
Oct., 1892	.32 " "	Jan., 1896	.34 " "	Apr., 1899	.36 " "
Jan., 1893	.36 " "	Apr., 1896	.33 " "	July, 1899	.36 " "

a A can contains 8 quarts and 1 pint.

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

FOOD—Continued.

MOLASSES: Puerto Rico, best.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.42 per gallon.	Apr., 1893	\$0.34 per gallon.	July, 1896	\$0.34 per gallon.
Apr., 1890	.38 " "	July, 1893	.34 " "	Oct., 1896	.34 " "
July, 1890	.38 " "	Oct., 1893	.32 " "	Jan., 1897	.34 " "
Oct., 1890	.38 " "	Jan., 1894	.38 " "	Apr., 1897	.33 " "
Jan., 1891	.36 " "	Apr., 1894	.37 " "	July, 1897	.31 " "
Apr., 1891	.35 " "	July, 1894	.37 " "	Oct., 1897	.30 " "
July, 1891	.35 " "	Oct., 1894	.36 " "	Jan., 1898	.34 " "
Oct., 1891	.35 " "	Jan., 1895	.39 " "	Apr., 1898	.33 " "
Jan., 1892	.36 " "	Apr., 1895	.37 " "	July, 1898	.33 " "
Apr., 1892	.34 " "	July, 1895	.36 " "	Oct., 1898	.32 " "
July, 1892	.33 " "	Oct., 1895	.34 " "	Jan., 1899	.36 " "
Oct., 1892	.32 " "	Jan., 1896	.36 " "	Apr., 1899	.36 " "
Jan., 1893	.35 " "	Apr., 1896	.35 " "	July, 1899	.37 " "

RICE: Carolina, good.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.05 per pound.	Apr., 1893	\$0.03½ per pound.	July, 1896	\$0.04 per pound.
Apr., 1890	.05½ " "	July, 1893	.02½ " "	Oct., 1896	.04½ " "
July, 1890	.05½ " "	Oct., 1893	.03½ " "	Jan., 1897	.04½ " "
Oct., 1890	.06½ " "	Jan., 1894	.03½ " "	Apr., 1897	.04½ " "
Jan., 1891	.06½ " "	Apr., 1894	.04½ " "	July, 1897	.04½ " "
Apr., 1891	.06½ " "	July, 1894	.04½ " "	Oct., 1897	.04½ " "
July, 1891	.06½ " "	Oct., 1894	.04½ " "	Jan., 1898	.04½ " "
Oct., 1891	.06½ " "	Jan., 1895	.04½ " "	Apr., 1898	.05 " "
Jan., 1892	.04½ " "	Apr., 1895	.04 " "	July, 1898	.06 " "
Apr., 1892	.04½ " "	July, 1895	.04½ " "	Oct., 1898	.05½ " "
July, 1892	.04½ " "	Oct., 1895	.04 " "	Jan., 1899	.05½ " "
Oct., 1892	.04½ " "	Jan., 1896	.03½ " "	Apr., 1899	.05½ " "
Jan., 1893	.03½ " "	Apr., 1896	.03½ " "	July, 1899	.05½ " "

SALT: Fine, boiled.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.65 per barrel. (a)	Apr., 1893	\$0.65 per barrel. (a)	July, 1896	\$0.65 per barrel. (a)
Apr., 1890	.65 " "	July, 1893	.65 " "	Oct., 1896	.65 " "
July, 1890	.65 " "	Oct., 1893	.65 " "	Jan., 1897	.65 " "
Oct., 1890	.65 " "	Jan., 1894	.65 " "	Apr., 1897	.65 " "
Jan., 1891	.65 " "	Apr., 1894	.65 " "	July, 1897	.65 " "
Apr., 1891	.65 " "	July, 1894	.65 " "	Oct., 1897	.65 " "
July, 1891	.65 " "	Oct., 1894	.65 " "	Jan., 1898	.65 " "
Oct., 1891	.65 " "	Jan., 1895	.65 " "	Apr., 1898	.65 " "
Jan., 1892	.65 " "	Apr., 1895	.65 " "	July, 1898	.65 " "
Apr., 1892	.65 " "	July, 1895	.65 " "	Oct., 1898	.65 " "
July, 1892	.65 " "	Oct., 1895	.65 " "	Jan., 1899	.65 " "
Oct., 1892	.65 " "	Jan., 1896	.65 " "	Apr., 1899	.65 " "
Jan., 1893	.65 " "	Apr., 1896	.65 " "	July, 1899	.65 " "

SALT: Turks Island.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.23 per bushel.	Apr., 1893	\$0.26 per bushel.	July, 1896	\$0.22 per bushel.
Apr., 1890	.26 " "	July, 1893	.24 " "	Oct., 1896	.23 " "
July, 1890	.29 " "	Oct., 1893	.23 " "	Jan., 1897	.20 " "
Oct., 1890	.23 " "	Jan., 1894	.23 " "	Apr., 1897	.21 " "
Jan., 1891	.25 " "	Apr., 1894	.25 " "	July, 1897	.21 " "
Apr., 1891	.28 " "	July, 1894	.23 " "	Oct., 1897	.22 " "
July, 1891	.28 " "	Oct., 1894	.21 " "	Jan., 1898	.20 " "
Oct., 1891	.26 " "	Jan., 1895	.27 " "	Apr., 1898	.21 " "
Jan., 1892	.26 " "	Apr., 1895	.21 " "	July, 1898	.21 " "
Apr., 1892	.25 " "	July, 1895	.21 " "	Oct., 1898	.22 " "
July, 1892	.27 " "	Oct., 1895	.21 " "	Jan., 1899	.23 " "
Oct., 1892	.30 " "	Jan., 1896	.21 " "	Apr., 1899	.24 " "
Jan., 1893	.25 " "	Apr., 1896	.21 " "	July, 1899	.21 " "

a Barrel of 230 pounds.

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

FOOD—Continued.

SPICES: Nutmegs, 110 nuts per pound.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.62 per pound.	Apr., 1893	\$0.47 per pound.	July, 1896	\$0.34 per pound.
Apr., 1890	.63 " "	July, 1893	.44 " "	Oct., 1896	.33 " "
July, 1890	.65 " "	Oct., 1893	.43 " "	Jan., 1897	.32 " "
Oct., 1890	.63 " "	Jan., 1894	.42 " "	Apr., 1897	.32 " "
Jan., 1891	.63 " "	Apr., 1894	.39 " "	July, 1897	.34 " "
Apr., 1891	.60 " "	July, 1894	.37 " "	Oct., 1897	.33 " "
July, 1891	.60 " "	Oct., 1894	.40 " "	Jan., 1898	.32 " "
Oct., 1891	.60 " "	Jan., 1895	.40 " "	Apr., 1898	.34 " "
Jan., 1892	.59 " "	Apr., 1895	.40 " "	July, 1898	.32 " "
Apr., 1892	.52 " "	July, 1895	.40 " "	Oct., 1898	.29 " "
July, 1892	.51 " "	Oct., 1895	.40 " "	Jan., 1899	.30 " "
Oct., 1892	.50 " "	Jan., 1896	.39 " "	Apr., 1899	.27 " "
Jan., 1893	.48 " "	Apr., 1896	.35 " "	July, 1899	.27 " "

SPICES: Pepper, whole, Sumatra.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.12½ per pound.	Apr., 1893	\$0.05½ per pound.	July, 1896	\$0.04½ per pound.
Apr., 1890	.11½ " "	July, 1893	.04½ " "	Oct., 1896	.04 " "
July, 1890	.10 " "	Oct., 1893	.05 " "	Jan., 1897	.05 " "
Oct., 1890	.09 " "	Jan., 1894	.05 " "	Apr., 1897	.04½ " "
Jan., 1891	.08½ " "	Apr., 1894	.04½ " "	July, 1897	.05½ " "
Apr., 1891	.08½ " "	July, 1894	.04½ " "	Oct., 1897	.07½ " "
July, 1891	.07½ " "	Oct., 1894	.04½ " "	Jan., 1898	.07½ " "
Oct., 1891	.07½ " "	Jan., 1895	.04 " "	Apr., 1898	.08½ " "
Jan., 1892	.06½ " "	Apr., 1895	.04½ " "	July, 1898	.08½ " "
Apr., 1892	.06½ " "	July, 1895	.04½ " "	Oct., 1898	.09 " "
July, 1892	.06½ " "	Oct., 1895	.04½ " "	Jan., 1899	.10 " "
Oct., 1892	.06½ " "	Jan., 1896	.04½ " "	Apr., 1899	.10½ " "
Jan., 1893	.06½ " "	Apr., 1896	.04½ " "	July, 1899	.10½ " "

STARCH: Corn.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.05400 per pound.	Apr., 1893	\$0.05625 per pound.	July, 1896	\$0.05400 per pound.
Apr., 1890	.05400 " "	July, 1893	.05625 " "	Oct., 1896	.05400 " "
July, 1890	.05400 " "	Oct., 1893	.05625 " "	Jan., 1897	.05400 " "
Oct., 1890	.05850 " "	Jan., 1894	.05625 " "	Apr., 1897	.05400 " "
Jan., 1891	.06300 " "	Apr., 1894	.05625 " "	July, 1897	.05400 " "
Apr., 1891	.05850 " "	July, 1894	.05850 " "	Oct., 1897	.05400 " "
July, 1891	.05850 " "	Oct., 1894	.05625 " "	Jan., 1898	.05400 " "
Oct., 1891	.05850 " "	Jan., 1895	.05625 " "	Apr., 1898	.05400 " "
Jan., 1892	.05625 " "	Apr., 1895	.05625 " "	July, 1898	.05400 " "
Apr., 1892	.05625 " "	July, 1895	.05625 " "	Oct., 1898	.05400 " "
July, 1892	.05625 " "	Oct., 1895	.05625 " "	Jan., 1899	.05400 " "
Oct., 1892	.05625 " "	Jan., 1896	.05625 " "	Apr., 1899	.05400 " "
Jan., 1893	.05625 " "	Apr., 1896	.05400 " "	July, 1899	.05400 " "

SUGAR: Centrifugal, 96-degree test.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.044100 per pound.	Apr., 1893	\$0.037500 per pound.	July, 1896	\$0.035000 per pound.
Apr., 1890	.040800 " "	July, 1893	.033750 " "	Oct., 1896	.030625 " "
July, 1890	.040800 " "	Oct., 1893	.038750 " "	Jan., 1897	.031875 " "
Oct., 1890	.045600 " "	Jan., 1894	.028750 " "	Apr., 1897	.038750 " "
Jan., 1891	.051400 " "	Apr., 1894	.028750 " "	July, 1897	.035000 " "
Apr., 1891	.036250 " "	July, 1894	.031250 " "	Oct., 1897	.039375 " "
July, 1891	.033100 " "	Oct., 1894	.037500 " "	Jan., 1898	.042500 " "
Oct., 1891	.033750 " "	Jan., 1895	.030000 " "	Apr., 1898	.041250 " "
Jan., 1892	.033750 " "	Apr., 1895	.030000 " "	July, 1898	.042500 " "
Apr., 1892	.031250 " "	July, 1895	.032500 " "	Oct., 1898	.042500 " "
July, 1892	.031250 " "	Oct., 1895	.035625 " "	Jan., 1899	.043125 " "
Oct., 1892	.035000 " "	Jan., 1896	.037500 " "	Apr., 1899	.044375 " "
Jan., 1893	.034400 " "	Apr., 1896	.041875 " "	July, 1899	.045000 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

FOOD—Concluded.

SUGAR: Fair refining, 89-degree test.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.048750 per pound.	Apr., 1893	\$0.032500 per pound.	July, 1896	\$0.030000 per pound.
Apr., 1890	.048125 " "	July, 1893	.037500 " "	Oct., 1896	.026375 " "
July, 1890	.047500 " "	Oct., 1893	.033750 " "	Jan., 1897	.028125 " "
Oct., 1890	.058750 " "	Jan., 1894	.026250 " "	Apr., 1897	.030000 " "
Jan., 1891	.045625 " "	Apr., 1894	.025000 " "	July, 1897	.030000 " "
Apr., 1891	.031875 " "	July, 1894	.026375 " "	Oct., 1897	.033125 " "
July, 1891	.030000 " "	Oct., 1894	.031250 " "	Jan., 1898	.036250 " "
Oct., 1891	.028750 " "	Jan., 1895	.027500 " "	Apr., 1898	.036250 " "
Jan., 1892	.030625 " "	Apr., 1895	.026875 " "	July, 1898	.036250 " "
Apr., 1892	.027500 " "	July, 1895	.028750 " "	Oct., 1898	.037500 " "
July, 1892	.027500 " "	Oct., 1895	.031250 " "	Jan., 1899	.038125 " "
Oct., 1892	.030000 " "	Jan., 1896	.033750 " "	Apr., 1899	.039375 " "
Jan., 1893	.030000 " "	Apr., 1896	.037500 " "	July, 1899	.040000 " "

SUGAR: Granulated.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.065000 per pound.	Apr., 1893	\$0.048400 per pound.	July, 1896	\$0.046000 per pound.
Apr., 1890	.060625 " "	July, 1893	.052700 " "	Oct., 1896	.042300 " "
July, 1890	.062500 " "	Oct., 1893	.050900 " "	Jan., 1897	.041000 " "
Oct., 1890	.066250 " "	Jan., 1894	.037400 " "	Apr., 1897	.044700 " "
Jan., 1891	.059375 " "	Apr., 1894	.039800 " "	July, 1897	.044700 " "
Apr., 1891	.045000 " "	July, 1894	.039800 " "	Oct., 1897	.048400 " "
July, 1891	.042500 " "	Oct., 1894	.044100 " "	Jan., 1898	.049600 " "
Oct., 1891	.043750 " "	Jan., 1895	.037400 " "	Apr., 1898	.048400 " "
Jan., 1892	.040400 " "	Apr., 1895	.038600 " "	July, 1898	.050900 " "
Apr., 1892	.042800 " "	July, 1895	.043500 " "	Oct., 1898	.049600 " "
July, 1892	.042200 " "	Oct., 1895	.044100 " "	Jan., 1899	.047200 " "
Oct., 1892	.049000 " "	Jan., 1896	.045900 " "	Apr., 1899	.048400 " "
Jan., 1893	.046000 " "	Apr., 1896	.048900 " "	July, 1899	.052100 " "

TALLOW.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.04 $\frac{1}{2}$ per lb.	Apr., 1893	\$0.05 $\frac{1}{2}$ per lb.	July, 1896	\$0.03 $\frac{1}{2}$ per lb.
Apr., 1890	.04 $\frac{1}{2}$ @ 0.04 $\frac{1}{2}$ " "	July, 1893	.04 $\frac{1}{2}$ " "	Oct., 1896	.03 $\frac{1}{2}$ " "
July, 1890	.04 $\frac{1}{2}$ " "	Oct., 1893	.05 $\frac{1}{2}$ " "	Jan., 1897	.03 $\frac{1}{2}$ @ 0.03 $\frac{1}{2}$ " "
Oct., 1890	.05 " "	Jan., 1894	.06 $\frac{1}{2}$ @ 0.05 $\frac{1}{2}$ " "	Apr., 1897	.03 $\frac{1}{2}$ " "
Jan., 1891	.04 $\frac{1}{2}$ @ .04 $\frac{1}{2}$ " "	Apr., 1894	.04 $\frac{1}{2}$ @ .04 $\frac{1}{2}$ " "	July, 1897	.03 $\frac{1}{2}$ " "
Apr., 1891	.05 $\frac{1}{2}$ " "	July, 1894	.04 $\frac{1}{2}$ @ .04 $\frac{1}{2}$ " "	Oct., 1897	.03 $\frac{1}{2}$ " "
July, 1891	.04 $\frac{1}{2}$ @ .04 $\frac{1}{2}$ " "	Oct., 1894	.04 $\frac{1}{2}$ " "	Jan., 1898	.03 $\frac{1}{2}$ @ .03 $\frac{1}{2}$ " "
Oct., 1891	.05 " "	Jan., 1895	.04 $\frac{1}{2}$ " "	Apr., 1898	.03 $\frac{1}{2}$ " "
Jan., 1892	.04 $\frac{1}{2}$ " "	Apr., 1895	.04 $\frac{1}{2}$ " "	July, 1898	.03 $\frac{1}{2}$ " "
Apr., 1892	.04 $\frac{1}{2}$ " "	July, 1895	.04 $\frac{1}{2}$ " "	Oct., 1898	.03 $\frac{1}{2}$ " "
July, 1892	.04 $\frac{1}{2}$ " "	Oct., 1895	.04 $\frac{1}{2}$ " "	Jan., 1899	.03 $\frac{1}{2}$ " "
Oct., 1892	.04 $\frac{1}{2}$ " "	Jan., 1896	.03 $\frac{1}{2}$ " "	Apr., 1899	.04 $\frac{1}{2}$ @ .04 $\frac{1}{2}$ " "
Jan., 1893	.05 $\frac{1}{2}$ " "	Apr., 1896	.03 $\frac{1}{2}$ @ .03 $\frac{1}{2}$ " "	July, 1899	.04 $\frac{1}{2}$ @ .04 $\frac{1}{2}$ " "

CLOTHS AND CLOTHING.

BAGS: 2-bushel, Amoskeag.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.15 $\frac{1}{2}$ each.	Apr., 1893	\$0.15 $\frac{1}{2}$ each.	July, 1896	\$0.12 $\frac{1}{2}$ each.
Apr., 1890	.15 $\frac{1}{2}$ " "	July, 1893	.15 $\frac{1}{2}$ " "	Oct., 1896	.13 " "
July, 1890	.16 " "	Oct., 1893	.13 $\frac{1}{2}$ " "	Jan., 1897	.13 " "
Oct., 1890	.16 $\frac{1}{2}$ " "	Jan., 1894	.13 $\frac{1}{2}$ " "	Apr., 1897	.13 " "
Jan., 1891	.15 $\frac{1}{2}$ " "	Apr., 1894	.13 $\frac{1}{2}$ " "	July, 1897	.12 $\frac{1}{2}$ " "
Apr., 1891	.15 $\frac{1}{2}$ " "	July, 1894	.11 $\frac{1}{2}$ " "	Oct., 1897	.13 $\frac{1}{2}$ " "
July, 1891	.15 $\frac{1}{2}$ " "	Oct., 1894	.12 $\frac{1}{2}$ " "	Jan., 1898	.12 $\frac{1}{2}$ " "
Oct., 1891	.15 $\frac{1}{2}$ " "	Jan., 1895	.10 $\frac{1}{2}$ " "	Apr., 1898	.12 $\frac{1}{2}$ " "
Jan., 1892	.15 $\frac{1}{2}$ " "	Apr., 1895	.11 " "	July, 1898	.14 " "
Apr., 1892	.15 $\frac{1}{2}$ " "	July, 1895	.11 $\frac{1}{2}$ " "	Oct., 1898	.14 $\frac{1}{2}$ " "
July, 1892	.15 $\frac{1}{2}$ " "	Oct., 1895	.13 " "	Jan., 1899	.14 " "
Oct., 1892	.15 $\frac{1}{2}$ " "	Jan., 1896	.13 $\frac{1}{2}$ " "	Apr., 1899	.14 $\frac{1}{2}$ " "
Jan., 1893	.15 $\frac{1}{2}$ " "	Apr., 1896	.12 $\frac{1}{2}$ " "	July, 1899	.14 $\frac{1}{2}$ " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

CLOTHS AND CLOTHING—Continued.

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

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.85 per pair.	Apr., 1893	\$0.85 per pair.	July, 1896	\$0.85 per pair.
Apr., 1890	.85 " "	July, 1893	.85 " "	Oct., 1896	.85 " "
July, 1890	.85 " "	Oct., 1893	.85 " "	Jan., 1897	.85 " "
Oct., 1890	.85 " "	Jan., 1894	.85 " "	Apr., 1897	.85 " "
Jan., 1891	.85 " "	Apr., 1894	.85 " "	July, 1897	.85 " "
Apr., 1891	.85 " "	July, 1894	.85 " "	Oct., 1897	.85 " "
July, 1891	.85 " "	Oct., 1894	.85 " "	Jan., 1898	.85 " "
Oct., 1891	.85 " "	Jan., 1895	.85 " "	Apr., 1898	.85 " "
Jan., 1892	.85 " "	Apr., 1895	.85 " "	July, 1898	.85 " "
Apr., 1892	.85 " "	July, 1895	.85 " "	Oct., 1898	.85 " "
July, 1892	.85 " "	Oct., 1895	.85 " "	Jan., 1899	.85 " "
Oct., 1892	.85 " "	Jan., 1896	.85 " "	Apr., 1899	.85 " "
Jan., 1893	.85 " "	Apr., 1896	.85 " "	July, 1899	.85 " "

BOOTS AND SHOES: Men's brogans.

Jan., 1890	\$1.05 per pair.	Apr., 1893	\$1.02½ per pair.	July, 1896	\$1.00 per pair.
Apr., 1890	1.05 " "	July, 1893	1.00 " "	Oct., 1896	.97½ " "
July, 1890	1.05 " "	Oct., 1893	1.00 " "	Jan., 1897	.95 " "
Oct., 1890	1.05 " "	Jan., 1894	1.00 " "	Apr., 1897	.95 " "
Jan., 1891	1.05 " "	Apr., 1894	1.00 " "	July, 1897	.95 " "
Apr., 1891	1.05 " "	July, 1894	.95 " "	Oct., 1897	.95 " "
July, 1891	1.05 " "	Oct., 1894	.92½ " "	Jan., 1898	.90 " "
Oct., 1891	1.05 " "	Jan., 1895	.92½ " "	Apr., 1898	.90 " "
Jan., 1892	1.05 " "	Apr., 1895	.95 " "	July, 1898	.92½ " "
Apr., 1892	1.05 " "	July, 1895	1.05 " "	Oct., 1898	.92½ " "
July, 1892	1.02½ " "	Oct., 1895	1.00 " "	Jan., 1899	.92½ " "
Oct., 1892	1.02½ " "	Jan., 1896	1.00 " "	Apr., 1899	.92½ " "
Jan., 1893	1.02½ " "	Apr., 1896	1.00 " "	July, 1899	.95 " "

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

Jan., 1890	\$2.40 per pair.	Apr., 1893	\$2.40 per pair.	July, 1896	\$2.40 per pair.
Apr., 1890	2.40 " "	July, 1893	2.40 " "	Oct., 1896	2.40 " "
July, 1890	2.40 " "	Oct., 1893	2.40 " "	Jan., 1897	2.40 " "
Oct., 1890	2.40 " "	Jan., 1894	2.40 " "	Apr., 1897	2.40 " "
Jan., 1891	2.40 " "	Apr., 1894	2.40 " "	July, 1897	2.40 " "
Apr., 1891	2.40 " "	July, 1894	2.40 " "	Oct., 1897	2.40 " "
July, 1891	2.40 " "	Oct., 1894	2.40 " "	Jan., 1898	2.40 " "
Oct., 1891	2.40 " "	Jan., 1895	2.40 " "	Apr., 1898	2.40 " "
Jan., 1892	2.40 " "	Apr., 1895	2.40 " "	July, 1898	2.24 " "
Apr., 1892	2.40 " "	July, 1895	2.40 " "	Oct., 1898	2.24 " "
July, 1892	2.40 " "	Oct., 1895	2.40 " "	Jan., 1899	2.24 " "
Oct., 1892	2.40 " "	Jan., 1896	2.40 " "	Apr., 1899	2.24 " "
Jan., 1893	2.40 " "	Apr., 1896	2.40 " "	July, 1899	2.24 " "

BOOTS AND SHOES: Men's split boots, kip top, 16-inch, ½ double sole.

Jan., 1890	\$17.00 per doz. pairs.	Apr., 1893	\$16.50 per doz. pairs.	July, 1896	\$15.50 per doz. pairs.
Apr., 1890	17.00 " " "	July, 1893	16.50 " " "	Oct., 1896	15.50 " " "
July, 1890	17.00 " " "	Oct., 1893	16.50 " " "	Jan., 1897	16.00 " " "
Oct., 1890	17.00 " " "	Jan., 1894	16.00 " " "	Apr., 1897	16.00 " " "
Jan., 1891	17.00 " " "	Apr., 1894	16.00 " " "	July, 1897	16.00 " " "
Apr., 1891	17.00 " " "	July, 1894	16.00 " " "	Oct., 1897	16.00 " " "
July, 1891	17.00 " " "	Oct., 1894	16.00 " " "	Jan., 1898	16.50 " " "
Oct., 1891	17.00 " " "	Jan., 1895	15.00 " " "	Apr., 1898	16.50 " " "
Jan., 1892	17.00 " " "	Apr., 1895	15.00 " " "	July, 1898	16.50 " " "
Apr., 1892	17.00 " " "	July, 1895	15.00 " " "	Oct., 1898	16.50 " " "
July, 1892	17.00 " " "	Oct., 1895	15.00 " " "	Jan., 1899	17.00 " " "
Oct., 1892	17.00 " " "	Jan., 1896	15.50 " " "	Apr., 1899	17.00 " " "
Jan., 1893	16.50 " " "	Apr., 1896	15.50 " " "	July, 1899	17.00 " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

CLOTHS AND CLOTHING—Continued.

CALICO: Cocheeco prints.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.06½ per yard.	Apr., 1893	\$0.06½ per yard.	July, 1896	\$0.05 per yard.
Apr., 1890	.06½ " "	July, 1893	.06 " "	Oct., 1896	.05 " "
July, 1890	.06½ " "	Oct., 1893	.06 " "	Jan., 1897	.05 " "
Oct., 1890	.06½ " "	Jan., 1894	.06½ " "	Apr., 1897	.05 " "
Jan., 1891	.06 " "	Apr., 1894	.06½ " "	July, 1897	.05 " "
Apr., 1891	.06 " "	July, 1894	.06½ " "	Oct., 1897	.05 " "
July, 1891	.06 " "	Oct., 1894	.06½ " "	Jan., 1898	.04½ " "
Oct., 1891	.06 " "	Jan., 1895	.05 " "	Apr., 1898	.04½ " "
Jan., 1892	.06½ " "	Apr., 1895	.05 " "	July, 1898	.04½ " "
Apr., 1892	.06½ " "	July, 1895	.06½ " "	Oct., 1898	.04½ " "
July, 1892	.06½ " "	Oct., 1895	.06½ " "	Jan., 1899	.04½ " "
Oct., 1892	.06½ " "	Jan., 1896	.06½ " "	Apr., 1899	.04½ " "
Jan., 1893	.06½ " "	Apr., 1896	.06½ " "	July, 1899	.05 " "

CARPETS: Brussels, 5-frame, Bigelow.

Jan., 1890	\$1.07½ per yard.	Apr., 1893	\$1.02½ per yard.	July, 1896	\$0.97½ per yard.
Apr., 1890	1.07½ " "	July, 1893	1.02½ " "	Oct., 1896	.97½ " "
July, 1890	1.07½ " "	Oct., 1893	1.02½ " "	Jan., 1897	.97½ " "
Oct., 1890	1.07½ " "	Jan., 1894	.97½ " "	Apr., 1897	.97½ " "
Jan., 1891	1.17½ " "	Apr., 1894	.97½ " "	July, 1897	1.02½ " "
Apr., 1891	1.17½ " "	July, 1894	.97½ " "	Oct., 1897	1.02½ " "
July, 1891	1.17½ " "	Oct., 1894	.97½ " "	Jan., 1898	1.07½ " "
Oct., 1891	1.17½ " "	Jan., 1895	.97½ " "	Apr., 1898	1.07½ " "
Jan., 1892	1.17½ " "	Apr., 1895	.97½ " "	July, 1898	1.07½ " "
Apr., 1892	1.07½ " "	July, 1895	.97½ " "	Oct., 1898	1.07½ " "
July, 1892	1.02½ " "	Oct., 1895	.97½ " "	Jan., 1899	1.07½ " "
Oct., 1892	1.02½ " "	Jan., 1896	.97½ " "	Apr., 1899	1.07½ " "
Jan., 1893	1.02½ " "	Apr., 1896	.97½ " "	July, 1899	1.07½ " "

CARPETS: Ingrain, 2-ply, Lowell.

Jan., 1890	\$0.5810 per yard.	Apr., 1893	\$0.5208 per yard.	July, 1896	\$0.4127 per yard.
Apr., 1890	.4829 " "	July, 1893	.5302 " "	Oct., 1896	.3796 " "
July, 1890	.5031 " "	Oct., 1893	.4864 " "	Jan., 1897	.4096 " "
Oct., 1890	.5065 " "	Jan., 1894	.4801 " "	Apr., 1897	.3956 " "
Jan., 1891	.5647 " "	Apr., 1894	.4636 " "	July, 1897	.4311 " "
Apr., 1891	.5379 " "	July, 1894	.4542 " "	Oct., 1897	.4492 " "
July, 1891	.5554 " "	Oct., 1894	.4112 " "	Jan., 1898	.4944 " "
Oct., 1891	.5096 " "	Jan., 1895	.4305 " "	Apr., 1898	.4599 " "
Jan., 1892	.5032 " "	Apr., 1895	.4079 " "	July, 1898	.4838 " "
Apr., 1892	.5014 " "	July, 1895	.4108 " "	Oct., 1898	.4088 " "
July, 1892	.5035 " "	Oct., 1895	.3825 " "	Jan., 1899	.4173 " "
Oct., 1892	.5089 " "	Jan., 1896	.4074 " "	Apr., 1899	.4004 " "
Jan., 1893	.5239 " "	Apr., 1896	.3832 " "	July, 1899	.4293 " "

CARPETS: Wilton, 5-frame, Bigelow.

Jan., 1890	\$2.00 per yard.	Apr., 1893	\$2.00 per yard.	July, 1896	\$1.75 per yard.
Apr., 1890	2.00 " "	July, 1893	2.00 " "	Oct., 1896	1.75 " "
July, 1890	2.00 " "	Oct., 1893	2.00 " "	Jan., 1897	1.75 " "
Oct., 1890	2.00 " "	Jan., 1894	2.00 " "	Apr., 1897	1.75 " "
Jan., 1891	2.10 " "	Apr., 1894	2.00 " "	July, 1897	1.85 " "
Apr., 1891	2.10 " "	July, 1894	2.00 " "	Oct., 1897	1.85 " "
July, 1891	2.10 " "	Oct., 1894	2.00 " "	Jan., 1898	1.90 " "
Oct., 1891	2.10 " "	Jan., 1895	1.75 " "	Apr., 1898	1.90 " "
Jan., 1892	2.00 " "	Apr., 1895	1.75 " "	July, 1898	1.90 " "
Apr., 1892	2.00 " "	July, 1895	1.75 " "	Oct., 1898	1.90 " "
July, 1892	2.00 " "	Oct., 1895	1.75 " "	Jan., 1899	1.90 " "
Oct., 1892	2.00 " "	Jan., 1896	1.75 " "	Apr., 1899	1.90 " "
Jan., 1893	2.00 " "	Apr., 1896	1.75 " "	July, 1899	1.90 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

CLOTHS AND CLOTHING—Continued.

COTTON THREAD: 6-cord, 200 yards, J. and P. Coats.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0324875 per spool.	Apr., 1893	\$0.0318750 per spool.	July, 1896	\$0.0311250 per spool.
Apr., 1890	.0324875 " "	July, 1893	.0318750 " "	Oct., 1896	.0311250 " "
July, 1890	.0318750 " "	Oct., 1893	.0318750 " "	Jan., 1897	.0311250 " "
Oct., 1890	.0318750 " "	Jan., 1894	.0318750 " "	Apr., 1897	.0311250 " "
Jan., 1891	.0318750 " "	Apr., 1894	.0318750 " "	July, 1897	.0311250 " "
Apr., 1891	.0318750 " "	July, 1894	.0318750 " "	Oct., 1897	.0311250 " "
July, 1891	.0318750 " "	Oct., 1894	.0318750 " "	Jan., 1898	.0311250 " "
Oct., 1891	.0318750 " "	Jan., 1895	.0318750 " "	Apr., 1898	.0311250 " "
Jan., 1892	.0318750 " "	Apr., 1895	.0318750 " "	July, 1898	.0311250 " "
Apr., 1892	.0318750 " "	July, 1895	.0318750 " "	Oct., 1898	.0311250 " "
July, 1892	.0318750 " "	Oct., 1895	.0318750 " "	Jan., 1899	.0311250 " "
Oct., 1892	.0318750 " "	Jan., 1896	.0318750 " "	Apr., 1899	.0311250 " "
Jan., 1893	.0318750 " "	Apr., 1896	.0318750 " "	July, 1899	.0311250 " "

COTTON: Upland, middling.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.10 $\frac{1}{8}$ per pound.	Apr., 1893	\$0.08 $\frac{1}{2}$ per pound.	July, 1896	\$0.07 $\frac{7}{8}$ per pound.
Apr., 1890	.11 $\frac{1}{8}$ " "	July, 1893	.08 " "	Oct., 1896	.08 $\frac{1}{8}$ " "
July, 1890	.12 " "	Oct., 1893	.08 $\frac{1}{2}$ " "	Jan., 1897	.07 " "
Oct., 1890	.10 $\frac{1}{2}$ " "	Jan., 1894	.07 $\frac{1}{2}$ " "	Apr., 1897	.07 $\frac{1}{2}$ " "
Jan., 1891	.09 $\frac{3}{4}$ " "	Apr., 1894	.07 $\frac{1}{2}$ " "	July, 1897	.07 $\frac{1}{2}$ " "
Apr., 1891	.09 " "	July, 1894	.07 $\frac{1}{2}$ " "	Oct., 1897	.06 $\frac{1}{2}$ " "
July, 1891	.08 $\frac{1}{2}$ " "	Oct., 1894	.06 $\frac{1}{2}$ " "	Jan., 1898	.05 $\frac{1}{2}$ " "
Oct., 1891	.08 $\frac{1}{2}$ " "	Jan., 1895	.05 $\frac{1}{2}$ " "	Apr., 1898	.06 $\frac{1}{2}$ " "
Jan., 1892	.07 $\frac{1}{2}$ " "	Apr., 1895	.06 $\frac{1}{2}$ " "	July, 1898	.06 $\frac{1}{2}$ " "
Apr., 1892	.06 $\frac{1}{2}$ " "	July, 1895	.07 $\frac{1}{2}$ " "	Oct., 1898	.05 $\frac{1}{2}$ " "
July, 1892	.07 $\frac{1}{2}$ " "	Oct., 1895	.09 $\frac{1}{2}$ " "	Jan., 1899	.05 $\frac{1}{2}$ " "
Oct., 1892	.07 $\frac{1}{2}$ " "	Jan., 1896	.08 $\frac{1}{2}$ " "	Apr., 1899	.06 $\frac{1}{2}$ " "
Jan., 1893	.09 $\frac{1}{2}$ " "	Apr., 1896	.07 $\frac{1}{2}$ " "	July, 1899	.06 $\frac{1}{2}$ " "

DENIMS: Amoskeag.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.11 $\frac{1}{2}$ per yard.	Apr., 1893	\$0.11 $\frac{1}{2}$ per yard.	July, 1896	\$0.09 $\frac{1}{2}$ per yard.
Apr., 1890	.11 $\frac{1}{2}$ " "	July, 1893	.12 " "	Oct., 1896	.10 " "
July, 1890	.11 $\frac{1}{2}$ " "	Oct., 1893	.12 " "	Jan., 1897	.10 " "
Oct., 1890	.12 " "	Jan., 1894	.11 " "	Apr., 1897	.09 $\frac{1}{2}$ " "
Jan., 1891	.11 $\frac{1}{2}$ " "	Apr., 1894	.11 " "	July, 1897	.09 " "
Apr., 1891	.11 $\frac{1}{2}$ " "	July, 1894	.11 " "	Oct., 1897	.09 " "
July, 1891	.11 $\frac{1}{2}$ " "	Oct., 1894	.11 " "	Jan., 1898	.09 " "
Oct., 1891	.11 $\frac{1}{2}$ " "	Jan., 1895	.10 " "	Apr., 1898	.09 " "
Jan., 1892	.11 $\frac{1}{2}$ " "	Apr., 1895	.09 $\frac{1}{2}$ " "	July, 1898	.09 " "
Apr., 1892	.11 $\frac{1}{2}$ " "	July, 1895	.09 $\frac{1}{2}$ " "	Oct., 1898	.08 $\frac{1}{2}$ " "
July, 1892	.11 $\frac{1}{2}$ " "	Oct., 1895	.10 " "	Jan., 1899	.08 $\frac{1}{2}$ " "
Oct., 1892	.11 $\frac{1}{2}$ " "	Jan., 1896	.10 $\frac{1}{2}$ " "	Apr., 1899	.09 " "
Jan., 1893	.11 $\frac{1}{2}$ " "	Apr., 1896	.09 $\frac{1}{2}$ " "	July, 1899	.09 $\frac{1}{2}$ " "

DRILLINGS: Stark A.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0615 per yard.	Apr., 1893	\$0.0578 per yard.	July, 1896	\$0.0520 per yard.
Apr., 1890	.0629 " "	July, 1893	.0595 " "	Oct., 1896	.0510 " "
July, 1890	.0672 " "	Oct., 1893	.0647 " "	Jan., 1897	.0483 " "
Oct., 1890	.0649 " "	Jan., 1894	.0531 " "	Apr., 1897	.0469 " "
Jan., 1891	.0644 " "	Apr., 1894	.0498 " "	July, 1897	.0456 " "
Apr., 1891	.0614 " "	July, 1894	.0483 " "	Oct., 1897	.0482 " "
July, 1891	.0594 " "	Oct., 1894	.0491 " "	Jan., 1898	.0416 " "
Oct., 1891	.0543 " "	Jan., 1895	.0471 " "	Apr., 1898	.0443 " "
Jan., 1892	.0553 " "	Apr., 1895	.0465 " "	July, 1898	.0445 " "
Apr., 1892	.0532 " "	July, 1895	.0450 " "	Oct., 1898	.0422 " "
July, 1892	.0529 " "	Oct., 1895	.0559 " "	Jan., 1899	.0425 " "
Oct., 1892	.0517 " "	Jan., 1896	.0538 " "	Apr., 1899	.0453 " "
Jan., 1893	.0560 " "	Apr., 1896	.0524 " "	July, 1899	.0465 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

CLOTHS AND CLOTHING—Continued.

FELTS: Press, 12 by 5½ feet, fine Fourdins.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$21.00 each.	Apr., 1893	\$18.53 each.	July, 1896	\$17.00 each.
Apr., 1890	21.00 "	July, 1893	18.53 "	Oct., 1896	17.00 "
July, 1890	21.00 "	Oct., 1893	18.53 "	Jan., 1897	17.00 "
Oct., 1890	21.00 "	Jan., 1894	18.53 "	Apr., 1897	17.00 "
Jan., 1891	18.53 "	Apr., 1894	18.53 "	July, 1897	17.00 "
Apr., 1891	18.53 "	July, 1894	18.53 "	Oct., 1897	17.00 "
July, 1891	18.53 "	Oct., 1894	17.00 "	Jan., 1898	17.00 "
Oct., 1891	18.53 "	Jan., 1895	17.00 "	Apr., 1898	17.00 "
Jan., 1892	18.53 "	Apr., 1895	17.00 "	July, 1898	17.00 "
Apr., 1892	18.53 "	July, 1895	17.00 "	Oct., 1898	17.00 "
July, 1892	18.53 "	Oct., 1895	17.00 "	Jan., 1899	17.00 "
Oct., 1892	18.53 "	Jan., 1896	17.00 "	Apr., 1899	17.00 "
Jan., 1893	18.53 "	Apr., 1896	17.00 "	July, 1899	17.00 "

FELTS: Wet, 24 by 5½ feet, fine Fourdins.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$21.38 each.	Apr., 1893	\$21.17 each.	July, 1896	\$19.04 each.
Apr., 1890	21.38 "	July, 1893	21.17 "	Oct., 1896	19.04 "
July, 1890	21.38 "	Oct., 1893	21.17 "	Jan., 1897	19.04 "
Oct., 1890	21.38 "	Jan., 1894	21.17 "	Apr., 1897	19.04 "
Jan., 1891	21.17 "	Apr., 1894	21.17 "	July, 1897	19.04 "
Apr., 1891	21.17 "	July, 1894	21.17 "	Oct., 1897	19.04 "
July, 1891	21.17 "	Oct., 1894	19.04 "	Jan., 1898	19.04 "
Oct., 1891	21.17 "	Jan., 1895	19.04 "	Apr., 1898	19.04 "
Jan., 1892	21.17 "	Apr., 1895	19.04 "	July, 1898	19.04 "
Apr., 1892	21.17 "	July, 1895	19.04 "	Oct., 1898	19.04 "
July, 1892	21.17 "	Oct., 1895	19.04 "	Jan., 1899	19.04 "
Oct., 1892	21.17 "	Jan., 1896	19.04 "	Apr., 1899	19.04 "
Jan., 1893	21.17 "	Apr., 1896	19.04 "	July, 1899	19.04 "

FLANNELS: Twilled blue, 3-4, Talbot T.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.308750 per yard.	Apr., 1893	\$0.302250 per yard.	July, 1896	\$0.214500 per yard.
Apr., 1890	.325000 " "	July, 1893	.302250 " "	Oct., 1896	.214500 " "
July, 1890	.260000 " "	Oct., 1893	.302250 " "	Jan., 1897	.218250 " "
Oct., 1890	.300625 " "	Jan., 1894	.279000 " "	Apr., 1897	.218250 " "
Jan., 1891	.300625 " "	Apr., 1894	.249900 " "	July, 1897	.218250 " "
Apr., 1891	.300625 " "	July, 1894	.249900 " "	Oct., 1897	.242500 " "
July, 1891	.300625 " "	Oct., 1894	.249900 " "	Jan., 1898	.242500 " "
Oct., 1891	.300625 " "	Jan., 1895	.240760 " "	Apr., 1898	.242500 " "
Jan., 1892	.302250 " "	Apr., 1895	.226420 " "	July, 1898	.242500 " "
Apr., 1892	.302250 " "	July, 1895	.229980 " "	Oct., 1898	.252200 " "
July, 1892	.302250 " "	Oct., 1895	.229980 " "	Jan., 1899	.252200 " "
Oct., 1892	.302250 " "	Jan., 1896	.211130 " "	Apr., 1899	.232800 " "
Jan., 1893	.279000 " "	Apr., 1896	.214500 " "	July, 1899	.232800 " "

GINGHAMS: Amoskeag.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.06½ per yard.	Apr., 1893	\$0.06½ per yard.	July, 1896	\$0.04½ per yard.
Apr., 1890	.06½ " "	July, 1893	.06½ " "	Oct., 1896	.04½ " "
July, 1890	.06½ " "	Oct., 1893	.06½ " "	Jan., 1897	.04½ " "
Oct., 1890	.06½ " "	Jan., 1894	.05½ " "	Apr., 1897	.04½ " "
Jan., 1891	.06½ " "	Apr., 1894	.04½ " "	July, 1897	.04½ " "
Apr., 1891	.06½ " "	July, 1894	.04½ " "	Oct., 1897	.04½ " "
July, 1891	.06½ " "	Oct., 1894	.04½ " "	Jan., 1898	.04½ " "
Oct., 1891	.06½ " "	Jan., 1895	.04½ " "	Apr., 1898	.04½ " "
Jan., 1892	.06½ " "	Apr., 1895	.04½ " "	July, 1898	.04½ " "
Apr., 1892	.06½ " "	July, 1895	.04½ " "	Oct., 1898	.04½ " "
July, 1892	.06½ " "	Oct., 1895	.05 " "	Jan., 1899	.04½ " "
Oct., 1892	.06½ " "	Jan., 1896	.05½ " "	Apr., 1899	.04½ " "
Jan., 1893	.06½ " "	Apr., 1896	.04½ " "	July, 1899	.05 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

CLOTHS AND CLOTHING—Continued.

LEATHER: Harness.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.30 per pound.	Apr., 1893	\$0.25 per pound.	July, 1896	\$0.29 per pound.
Apr., 1890	.29 " "	July, 1893	.25 " "	Oct., 1896	.30 " "
July, 1890	.29 " "	Oct., 1893	.24 " "	Jan., 1897	.32 " "
Oct., 1890	.31 " "	Jan., 1894	.24 " "	Apr., 1897	.33 " "
Jan., 1891	.30 " "	Apr., 1894	.24 " "	July, 1897	.34 " "
Apr., 1891	.31 " "	July, 1894	.24 " "	Oct., 1897	.32 " "
July, 1891	.28 " "	Oct., 1894	.25 " "	Jan., 1898	.29 " "
Oct., 1891	.29 " "	Jan., 1895	.25 " "	Apr., 1898	.30 " "
Jan., 1892	.30 " "	Apr., 1895	.25½ " "	July, 1898	.31 " "
Apr., 1892	.29 " "	July, 1895	.29 " "	Oct., 1898	.31 " "
July, 1892	.27 " "	Oct., 1895	.30 " "	Jan., 1899	.30 " "
Oct., 1892	.26 " "	Jan., 1896	.31 " "	Apr., 1899	.31 " "
Jan., 1893	.25 " "	Apr., 1896	.30 " "	July, 1899	.33 " "

LEATHER: Hides, dry, Buenos Ayres.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.1412 per pound.	Apr., 1893	\$0.1250 per pound.	July, 1896	\$0.1600 per pound.
Apr., 1890	.1412 " "	July, 1893	.1150 " "	Oct., 1896	.1600 " "
July, 1890	.1412 " "	Oct., 1893	.1100 " "	Jan., 1897	.1800 " "
Oct., 1890	.1412 " "	Jan., 1894	.1050 " "	Apr., 1897	.1850 " "
Jan., 1891	.1341 " "	Apr., 1894	.1100 " "	July, 1897	.1850 " "
Apr., 1891	.1341 " "	July, 1894	.1050 " "	Oct., 1897	.2000 " "
July, 1891	.1341 " "	Oct., 1894	.1050 " "	Jan., 1898	.2000 " "
Oct., 1891	.1341 " "	Jan., 1895	.1200 " "	Apr., 1898	.2000 " "
Jan., 1892	.1300 " "	Apr., 1895	.1350 " "	July, 1898	.2000 " "
Apr., 1892	.1275 " "	July, 1895	.2100 " "	Oct., 1898	.2100 " "
July, 1892	.1225 " "	Oct., 1895	.2400 " "	Jan., 1899	.2000 " "
Oct., 1892	.1275 " "	Jan., 1896	.1800 " "	Apr., 1899	.1900 " "
Jan., 1893	.1275 " "	Apr., 1896	.1700 " "	July, 1899	.2100 " "

LEATHER: Sole, first quality, medium weight, Buenos Ayres.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.1900 per pound.	Apr., 1893	\$0.1900 per pound.	July, 1896	\$0.1850 per pound.
Apr., 1890	.1900 " "	July, 1893	.1900 " "	Oct., 1896	.1850 " "
July, 1890	.1900 " "	Oct., 1893	.1900 " "	Jan., 1897	.2000 " "
Oct., 1890	.1900 " "	Jan., 1894	.1850 " "	Apr., 1897	.2200 " "
Jan., 1891	.1852 " "	Apr., 1894	.1850 " "	July, 1897	.2000 " "
Apr., 1891	.1852 " "	July, 1894	.1700 " "	Oct., 1897	.2200 " "
July, 1891	.1852 " "	Oct., 1894	.1650 " "	Jan., 1898	.2100 " "
Oct., 1891	.1852 " "	Jan., 1895	.1650 " "	Apr., 1898	.2100 " "
Jan., 1892	.1800 " "	Apr., 1895	.1700 " "	July, 1898	.2100 " "
Apr., 1892	.1750 " "	July, 1895	.2300 " "	Oct., 1898	.2000 " "
July, 1892	.1800 " "	Oct., 1895	.2400 " "	Jan., 1899	.2100 " "
Oct., 1892	.1800 " "	Jan., 1896	.2200 " "	Apr., 1899	.2200 " "
Jan., 1893	.1750 " "	Apr., 1896	.1800 " "	July, 1899	.2200 " "

PRINT CLOTHS: 28-inch, 64 by 64, Metacomet.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.035000 per yard.	Apr., 1893	\$0.038750 per yard.	July, 1896	\$0.024962 per yard.
Apr., 1890	.032500 " "	July, 1893	.032500 " "	Oct., 1896	.025658 " "
July, 1890	.033750 " "	Oct., 1893	.027500 " "	Jan., 1897	.025000 " "
Oct., 1890	.033125 " "	Jan., 1894	.029375 " "	Apr., 1897	.025625 " "
Jan., 1891	.030000 " "	Apr., 1894	.028125 " "	July, 1897	.024375 " "
Apr., 1891	.030000 " "	July, 1894	.026875 " "	Oct., 1897	.025000 " "
July, 1891	.029375 " "	Oct., 1894	.030000 " "	Jan., 1898	.022500 " "
Oct., 1891	.030000 " "	Jan., 1895	.026875 " "	Apr., 1898	.020000 " "
Jan., 1892	.030625 " "	Apr., 1895	.025000 " "	July, 1898	.019375 " "
Apr., 1892	.030625 " "	July, 1895	.028750 " "	Oct., 1898	.020000 " "
July, 1892	.033750 " "	Oct., 1895	.032500 " "	Jan., 1899	.023750 " "
Oct., 1892	.035000 " "	Jan., 1896	.029375 " "	Apr., 1899	.027500 " "
Jan., 1893	.040000 " "	Apr., 1896	.025000 " "	July, 1899	.027500 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

CLOTHS AND CLOTHING—Continued.

**SHAWLS: Standard, 72 by 144 inches, weighing 42 ounces, made of XX Ohio
fleece wool.**

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$4.46½ each.	Apr., 1898	\$4.33½ each.	July, 1896	\$3.55½ each.
Apr., 1890	4.46½ "	July, 1898	4.33½ "	Oct., 1896	3.55½ "
July, 1890	4.46½ "	Oct., 1898	4.33½ "	Jan., 1897	3.55½ "
Oct., 1890	4.46½ "	Jan., 1894	4.12½ "	Apr., 1897	3.55½ "
Jan., 1891	4.41½ "	Apr., 1894	4.12½ "	July, 1897	3.55½ "
Apr., 1891	4.41½ "	July, 1894	4.12½ "	Oct., 1897	3.55½ "
July, 1891	4.41½ "	Oct., 1894	4.12½ "	Jan., 1898	3.60 "
Oct., 1891	4.41½ "	Jan., 1895	3.46 "	Apr., 1898	3.60 "
Jan., 1892	4.33½ "	Apr., 1895	3.46 "	July, 1898	3.60 "
Apr., 1892	4.33½ "	July, 1895	3.46 "	Oct., 1898	3.60 "
July, 1892	4.33½ "	Oct., 1895	3.46 "	Jan., 1899	3.60 "
Oct., 1892	4.33½ "	Jan., 1896	3.55½ "	Apr., 1899	3.60 "
Jan., 1893	4.33½ "	Apr., 1896	2.55½ "	July, 1899	3.60 "

SHEETINGS: Brown, 4-4, Atlantic.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.06625 per yard.	Apr., 1898	\$0.05600 per yard.	July, 1896	\$0.05250 per yard.
Apr., 1890	.06625 " "	July, 1898	.06250 " "	Oct., 1896	.05250 " "
July, 1890	.06625 " "	Oct., 1898	.06125 " "	Jan., 1897	.05600 " "
Oct., 1890	.06875 " "	Jan., 1894	.06000 " "	Apr., 1897	.04750 " "
Jan., 1891	.06900 " "	Apr., 1894	.05625 " "	July, 1897	.04875 " "
Apr., 1891	.06700 " "	July, 1894	.05625 " "	Oct., 1897	.04875 " "
July, 1891	.06600 " "	Oct., 1894	.05125 " "	Jan., 1898	.04750 " "
Oct., 1891	.06300 " "	Jan., 1895	.05000 " "	Apr., 1898	.04500 " "
Jan., 1892	.05910 " "	Apr., 1895	.05000 " "	July, 1898	.04375 " "
Apr., 1892	.06040 " "	July, 1895	.05000 " "	Oct., 1898	.04500 " "
July, 1892	.05800 " "	Oct., 1895	.05750 " "	Jan., 1899	.04250 " "
Oct., 1892	.05600 " "	Jan., 1896	.05750 " "	Apr., 1899	.04625 " "
Jan., 1893	.05900 " "	Apr., 1896	.05500 " "	July, 1899	.04750 " "

SHEETINGS: 36-inch, Stark AA.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0654 per yard.	Apr., 1898	\$0.0563 per yard.	July, 1896	\$0.0519 per yard.
Apr., 1890	.0681 " "	July, 1898	.0545 " "	Oct., 1896	.0507 " "
July, 1890	.0674 " "	Oct., 1898	.0548 " "	Jan., 1897	.0492 " "
Oct., 1890	.0670 " "	Jan., 1894	.0529 " "	Apr., 1897	.0453 " "
Jan., 1891	.0661 " "	Apr., 1894	.0501 " "	July, 1897	.0455 " "
Apr., 1891	.0615 " "	July, 1894	.0492 " "	Oct., 1897	.0425 " "
July, 1891	.0594 " "	Oct., 1894	.0503 " "	Jan., 1898	.0397 " "
Oct., 1891	.0541 " "	Jan., 1895	.0535 " "	Apr., 1898	.0435 " "
Jan., 1892	.0566 " "	Apr., 1895	.0462 " "	July, 1898	.0448 " "
Apr., 1892	.0547 " "	July, 1895	.0467 " "	Oct., 1898	.0402 " "
July, 1892	.0534 " "	Oct., 1895	.0566 " "	Jan., 1899	.0417 " "
Oct., 1892	.0515 " "	Jan., 1896	.0542 " "	Apr., 1899	.0432 " "
Jan., 1893	.0590 " "	Apr., 1896	.0525 " "	July, 1899	.0450 " "

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

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.083125 per yard.	Apr., 1898	\$0.083790 per yard.	July, 1896	\$0.061250 per yard.
Apr., 1890	.083125 " "	July, 1898	.079135 " "	Oct., 1896	.063700 " "
July, 1890	.085500 " "	Oct., 1898	.079135 " "	Jan., 1897	.063700 " "
Oct., 1890	.085500 " "	Jan., 1894	.073696 " "	Apr., 1897	.061250 " "
Jan., 1891	.083125 " "	Apr., 1894	.071050 " "	July, 1897	.056350 " "
Apr., 1891	.083125 " "	July, 1894	.072153 " "	Oct., 1897	.056350 " "
July, 1891	.081050 " "	Oct., 1894	.069825 " "	Jan., 1898	.058800 " "
Oct., 1891	.083125 " "	Jan., 1895	.069825 " "	Apr., 1898	.058800 " "
Jan., 1892	.078731 " "	Apr., 1895	.063700 " "	July, 1898	.056350 " "
Apr., 1892	.078731 " "	July, 1895	.065170 " "	Oct., 1898	.056350 " "
July, 1892	.079135 " "	Oct., 1895	.074480 " "	Jan., 1899	.053900 " "
Oct., 1892	.079135 " "	Jan., 1896	.079135 " "	Apr., 1899	.063700 " "
Jan., 1893	.063790 " "	Apr., 1896	.072153 " "	July, 1899	.063700 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

CLOTHS AND CLOTHING—Continued.

SHIRTINGS: Bleached, 4-4, Hope.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0712 per yard.	Apr., 1893	\$0.0713 per yard.	July, 1896	\$0.0570 per yard.
Apr., 1890	.0712 " "	July, 1893	.0665 " "	Oct., 1896	.0618 " "
July, 1890	.0736 " "	Oct., 1893	.0665 " "	Jan., 1897	.0618 " "
Oct., 1890	.0736 " "	Jan., 1894	.0632 " "	Apr., 1897	.0570 " "
Jan., 1891	.0712 " "	Apr., 1894	.0618 " "	July, 1897	.0570 " "
Apr., 1891	.0712 " "	July, 1894	.0618 " "	Oct., 1897	.0570 " "
July, 1891	.0639 " "	Oct., 1894	.0618 " "	Jan., 1898	.0533 " "
Oct., 1891	.0639 " "	Jan., 1895	.0546 " "	Apr., 1898	.0533 " "
Jan., 1892	.0665 " "	Apr., 1895	.0546 " "	July, 1898	.0509 " "
Apr., 1892	.0665 " "	July, 1895	.0594 " "	Oct., 1898	.0509 " "
July, 1892	.0641 " "	Oct., 1895	.0639 " "	Jan., 1899	.0486 " "
Oct., 1892	.0665 " "	Jan., 1896	.0713 " "	Apr., 1899	.0523 " "
Jan., 1893	.0713 " "	Apr., 1896	.0594 " "	July, 1899	.0546 " "

SHIRTINGS: Bleached, 4-4, Lonsdale.

Jan., 1890	\$0.0831 per yard.	Apr., 1893	\$0.0855 per yard.	July, 1896	\$0.0618 per yard.
Apr., 1890	.0831 " "	July, 1893	.0808 " "	Oct., 1896	.0665 " "
July, 1890	.0855 " "	Oct., 1893	.0808 " "	Jan., 1897	.0665 " "
Oct., 1890	.0855 " "	Jan., 1894	.0741 " "	Apr., 1897	.0611 " "
Jan., 1891	.0808 " "	Apr., 1894	.0736 " "	July, 1897	.0632 " "
Apr., 1891	.0831 " "	July, 1894	.0736 " "	Oct., 1897	.0641 " "
July, 1891	.0808 " "	Oct., 1894	.0713 " "	Jan., 1898	.0588 " "
Oct., 1891	.0808 " "	Jan., 1895	.0618 " "	Apr., 1898	.0588 " "
Jan., 1892	.0808 " "	Apr., 1895	.0641 " "	July, 1898	.0561 " "
Apr., 1892	.0808 " "	July, 1895	.0639 " "	Oct., 1898	.0561 " "
July, 1892	.0808 " "	Oct., 1895	.0784 " "	Jan., 1899	.0538 " "
Oct., 1892	.0808 " "	Jan., 1896	.0808 " "	Apr., 1899	.0585 " "
Jan., 1893	.0855 " "	Apr., 1896	.0665 " "	July, 1899	.0635 " "

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

Jan., 1890	\$0.10210 per yard.	Apr., 1893	\$0.09726 per yard.	July, 1896	\$0.09025 per yard.
Apr., 1890	.10210 " "	July, 1893	.09476 " "	Oct., 1896	.09225 " "
July, 1890	.10450 " "	Oct., 1893	.09025 " "	Jan., 1897	.08500 " "
Oct., 1890	.10450 " "	Jan., 1894	.09025 " "	Apr., 1897	.08500 " "
Jan., 1891	.10450 " "	Apr., 1894	.09025 " "	July, 1897	.09025 " "
Apr., 1891	.10210 " "	July, 1894	.09025 " "	Oct., 1897	.09025 " "
July, 1891	.09975 " "	Oct., 1894	.09025 " "	Jan., 1898	.08000 " "
Oct., 1891	.09975 " "	Jan., 1895	.09025 " "	Apr., 1898	.08000 " "
Jan., 1892	.09726 " "	Apr., 1895	.08574 " "	July, 1898	.08000 " "
Apr., 1892	.09726 " "	July, 1895	.08574 " "	Oct., 1898	.08000 " "
July, 1892	.09726 " "	Oct., 1895	.08574 " "	Jan., 1899	.08000 " "
Oct., 1892	.09726 " "	Jan., 1896	.09025 " "	Apr., 1899	.08000 " "
Jan., 1893	.09726 " "	Apr., 1896	.09025 " "	July, 1899	.08799 " "

SUITINGS: All wool, indigo blue, 54-inch, 14-ounce, Middlesex standard.

Jan., 1890	\$1.70 per yard.	Apr., 1893	\$1.70 per yard.	July, 1896	\$1.25 per yard.
Apr., 1890	1.70 " "	July, 1893	1.614 " "	Oct., 1896	1.25 " "
July, 1890	1.70 " "	Oct., 1893	1.614 " "	Jan., 1897	1.15 " "
Oct., 1890	1.70 " "	Jan., 1894	1.614 " "	Apr., 1897	1.15 " "
Jan., 1891	1.70 " "	Apr., 1894	1.614 " "	July, 1897	1.15 " "
Apr., 1891	1.70 " "	July, 1894	1.614 " "	Oct., 1897	1.15 " "
July, 1891	1.70 " "	Oct., 1894	1.614 " "	Jan., 1898	1.25 " "
Oct., 1891	1.70 " "	Jan., 1895	1.284 " "	Apr., 1898	1.25 " "
Jan., 1892	1.70 " "	Apr., 1895	1.284 " "	July, 1898	1.25 " "
Apr., 1892	1.70 " "	July, 1895	1.25 " "	Oct., 1898	1.25 " "
July, 1892	1.70 " "	Oct., 1895	1.25 " "	Jan., 1899	1.25 " "
Oct., 1892	1.70 " "	Jan., 1896	1.25 " "	Apr., 1899	1.25 " "
Jan., 1893	1.70 " "	Apr., 1896	1.25 " "	July, 1899	1.25 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

CLOTHS AND CLOTHING—Continued.

TICKINGS: Amoskeag, A. C. A.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.12 per yard.	Apr., 1893	\$0.12 per yard.	July, 1896	\$0.10 per yard.
Apr., 1890	.12 " "	July, 1893	.12 " "	Oct., 1896	.10 " "
July, 1890	.11½ " "	Oct., 1893	.11½ " "	Jan., 1897	.10½ " "
Oct., 1890	.12 " "	Jan., 1894	.11½ " "	Apr., 1897	.09½ " "
Jan., 1891	.12 " "	Apr., 1894	.10½ " "	July, 1897	.09½ " "
Apr., 1891	.11½ " "	July, 1894	.10½ " "	Oct., 1897	.09½ " "
July, 1891	.11 " "	Oct., 1894	.10 " "	Jan., 1898	.09 " "
Oct., 1891	.11 " "	Jan., 1895	.09½ " "	Apr., 1898	.09 " "
Jan., 1892	.11 " "	Apr., 1895	.09½ " "	July, 1898	.09 " "
Apr., 1892	.11 " "	July, 1895	.10 " "	Oct., 1898	.08½ " "
July, 1892	.11 " "	Oct., 1895	.10 " "	Jan., 1899	.09 " "
Oct., 1892	.11 " "	Jan., 1896	.11 " "	Apr., 1899	.09½ " "
Jan., 1893	.11½ " "	Apr., 1896	.09½ " "	July, 1899	.09½ " "

WOMEN'S DRESS GOODS: Cotton warp alpaca, 22-inch, Hamilton.

Jan., 1890	\$0.07½ per yard.	Apr., 1893	\$0.07½ per yard.	July, 1896	\$0.06½ per yard.
Apr., 1890	.07½ " "	July, 1893	.07½ " "	Oct., 1896	.06½ " "
July, 1890	.07½ " "	Oct., 1893	.07½ " "	Jan., 1897	.06½ " "
Oct., 1890	.07½ " "	Jan., 1894	.07 " "	Apr., 1897	.06½ " "
Jan., 1891	.07½ " "	Apr., 1894	.07 " "	July, 1897	.06½ " "
Apr., 1891	.07½ " "	July, 1894	.07 " "	Oct., 1897	.06½ " "
July, 1891	.07½ " "	Oct., 1894	.07 " "	Jan., 1898	.06½ " "
Oct., 1891	.07½ " "	Jan., 1895	.06½ " "	Apr., 1898	.06½ " "
Jan., 1892	.07½ " "	Apr., 1895	.06½ " "	July, 1898	.06½ " "
Apr., 1892	.07½ " "	July, 1895	.06½ " "	Oct., 1898	.06½ " "
July, 1892	.07½ " "	Oct., 1895	.06½ " "	Jan., 1899	.06½ " "
Oct., 1892	.07½ " "	Jan., 1896	.06½ " "	Apr., 1899	.06½ " "
Jan., 1893	.07½ " "	Apr., 1896	.06½ " "	July, 1899	.06½ " "

WOMEN'S DRESS GOODS: Cotton warp cashmere, 22-inch, Hamilton.

Jan., 1890	\$0.08½ per yard.	Apr., 1893	\$0.08½ per yard.	July, 1896	\$0.07 per yard.
Apr., 1890	.08½ " "	July, 1893	.08½ " "	Oct., 1896	.07 " "
July, 1890	.08½ " "	Oct., 1893	.08½ " "	Jan., 1897	.07 " "
Oct., 1890	.08½ " "	Jan., 1894	.07½ " "	Apr., 1897	.07 " "
Jan., 1891	.08½ " "	Apr., 1894	.07½ " "	July, 1897	.07 " "
Apr., 1891	.08½ " "	July, 1894	.07½ " "	Oct., 1897	.07 " "
July, 1891	.08½ " "	Oct., 1894	.07½ " "	Jan., 1898	.07 " "
Oct., 1891	.08½ " "	Jan., 1895	.07½ " "	Apr., 1898	.07 " "
Jan., 1892	.08½ " "	Apr., 1895	.07½ " "	July, 1898	.07 " "
Apr., 1892	.08½ " "	July, 1895	.07½ " "	Oct., 1898	.07 " "
July, 1892	.08½ " "	Oct., 1895	.07½ " "	Jan., 1899	.07 " "
Oct., 1892	.08½ " "	Jan., 1896	.07½ " "	Apr., 1899	.07 " "
Jan., 1893	.08½ " "	Apr., 1896	.07½ " "	July, 1899	.07 " "

WOMEN'S DRESS GOODS: Cotton warp cashmere, 27-inch, Hamilton.

Jan., 1890	\$0.10 per yard.	Apr., 1893	\$0.09½ per yard.	July, 1896	\$0.08½ per yard.
Apr., 1890	.10 " "	July, 1893	.09½ " "	Oct., 1896	.08 " "
July, 1890	.10 " "	Oct., 1893	.09½ " "	Jan., 1897	.08 " "
Oct., 1890	.10 " "	Jan., 1894	.09½ " "	Apr., 1897	.08 " "
Jan., 1891	.10 " "	Apr., 1894	.09½ " "	July, 1897	.08 " "
Apr., 1891	.10 " "	July, 1894	.09½ " "	Oct., 1897	.08 " "
July, 1891	.10 " "	Oct., 1894	.09½ " "	Jan., 1898	.08 " "
Oct., 1891	.10 " "	Jan., 1895	.08½ " "	Apr., 1898	.08 " "
Jan., 1892	.10 " "	Apr., 1895	.08½ " "	July, 1898	.08 " "
Apr., 1892	.10 " "	July, 1895	.08½ " "	Oct., 1898	.08 " "
July, 1892	.09½ " "	Oct., 1895	.08½ " "	Jan., 1899	.08 " "
Oct., 1892	.09½ " "	Jan., 1896	.08½ " "	Apr., 1899	.08½ " "
Jan., 1893	.09½ " "	Apr., 1896	.08½ " "	July, 1899	.08½ " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

CLOTHS AND CLOTHING—Concluded.

WOOL: Ohio, fine fleece, scoured.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.73½ per pound.	Apr., 1898	\$0.66½ per pound.	July, 1896	\$0.37½ per pound.
Apr., 1890	.73½ " "	July, 1898	.53½ " "	Oct., 1896	.40 " "
July, 1890	.73½ " "	Oct., 1898	.51 " "	Jan., 1897	.42½ " "
Oct., 1890	.73½ " "	Jan., 1894	.51 " "	Apr., 1897	.46½ " "
Jan., 1891	.73½ " "	Apr., 1894	.46½ " "	July, 1897	.47½ " "
Apr., 1891	.71 " "	July, 1894	.44½ " "	Oct., 1897	.60 " "
July, 1891	.68½ " "	Oct., 1894	.42½ " "	Jan., 1898	.64½ " "
Oct., 1891	.68½ " "	Jan., 1895	.38½ " "	Apr., 1898	.64½ " "
Jan., 1892	.66½ " "	Apr., 1895	.36½ " "	July, 1898	.62½ " "
Apr., 1892	.64½ " "	July, 1895	.40 " "	Oct., 1898	.63½ " "
July, 1892	.62½ " "	Oct., 1895	.40 " "	Jan., 1899	.58½ " "
Oct., 1892	.64½ " "	Jan., 1896	.42½ " "	Apr., 1899	.55½ " "
Jan., 1893	.64½ " "	Apr., 1896	.42½ " "	July, 1899	.63½ " "

WOOL: Ohio, medium fleece, scoured.

Jan., 1890	\$0.59½ per pound.	Apr., 1898	\$0.51½ per pound.	July, 1896	\$0.29 per pound.
Apr., 1890	.58 " "	July, 1898	.42 " "	Oct., 1896	.30½ " "
July, 1890	.59½ " "	Oct., 1898	.38½ " "	Jan., 1897	.34 " "
Oct., 1890	.59½ " "	Jan., 1894	.38½ " "	Apr., 1897	.36½ " "
Jan., 1891	.59½ " "	Apr., 1894	.37 " "	July, 1897	.38 " "
Apr., 1891	.59½ " "	July, 1894	.34 " "	Oct., 1897	.46½ " "
July, 1891	.56½ " "	Oct., 1894	.34 " "	Jan., 1898	.48½ " "
Oct., 1891	.56½ " "	Jan., 1895	.32½ " "	Apr., 1898	.47½ " "
Jan., 1892	.56½ " "	Apr., 1895	.32½ " "	July, 1898	.46½ " "
Apr., 1892	.54½ " "	July, 1895	.34 " "	Oct., 1898	.48½ " "
July, 1892	.54½ " "	Oct., 1895	.34 " "	Jan., 1899	.46½ " "
Oct., 1892	.53½ " "	Jan., 1896	.34½ " "	Apr., 1899	.45 " "
Jan., 1893	.53½ " "	Apr., 1896	.34 " "	July, 1899	.50 " "

FUEL AND LIGHTING.

CANDLES: Best adamantine.

Jan., 1890	\$0.12 per pound.	Apr., 1898	\$0.13 per pound.	July, 1896	\$0.12 per pound.
Apr., 1890	.13 " "	July, 1898	.13 " "	Oct., 1896	.12 " "
July, 1890	.13 " "	Oct., 1898	.13 " "	Jan., 1897	.12 " "
Oct., 1890	.13 " "	Jan., 1894	.13 " "	Apr., 1897	.12 " "
Jan., 1891	.13 " "	Apr., 1894	.13 " "	July, 1897	.12 " "
Apr., 1891	.13 " "	July, 1894	.13 " "	Oct., 1897	.12 " "
July, 1891	.13 " "	Oct., 1894	.13 " "	Jan., 1898	.12 " "
Oct., 1891	.12 " "	Jan., 1895	.13 " "	Apr., 1898	.12 " "
Jan., 1892	.12 " "	Apr., 1895	.12 " "	July, 1898	.12 " "
Apr., 1892	.12 " "	July, 1895	.12 " "	Oct., 1898	.12 " "
July, 1892	.12 " "	Oct., 1895	.12 " "	Jan., 1899	.12 " "
Oct., 1892	.12 " "	Jan., 1896	.12 " "	Apr., 1899	.12 " "
Jan., 1893	.13 " "	Apr., 1896	.12 " "	July, 1899	.12 " "

COAL: Anthracite, pea.

Jan., 1890	\$2.75 per ton.	Apr., 1898	\$2.75 per ton.	July, 1896	\$2.85 per ton.
Apr., 1890	3.25 " "	July, 1898	2.85 " "	Oct., 1896	2.85 " "
July, 1890	3.25 " "	Oct., 1898	2.85 " "	Jan., 1897	2.65 " "
Oct., 1890	3.00 " "	Jan., 1894	3.00 " "	Apr., 1897	2.85 " "
Jan., 1891	3.00 " "	Apr., 1894	3.00 " "	July, 1897	2.65 " "
Apr., 1891	3.00 " "	July, 1894	3.00 " "	Oct., 1897	2.65 " "
July, 1891	3.00 " "	Oct., 1894	3.00 " "	Jan., 1898	2.65 " "
Oct., 1891	3.00 " "	Jan., 1895	3.00 " "	Apr., 1898	2.75 " "
Jan., 1892	3.00 " "	Apr., 1895	2.85 " "	July, 1898	2.85 " "
Apr., 1892	2.75 " "	July, 1895	2.85 " "	Oct., 1898	2.75 " "
July, 1892	2.75 " "	Oct., 1895	2.85 " "	Jan., 1899	2.75 " "
Oct., 1892	2.75 " "	Jan., 1896	2.85 " "	Apr., 1899	2.75 " "
Jan., 1893	2.75 " "	Apr., 1896	2.65 " "	July, 1899	2.50 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

FUEL AND LIGHTING—Concluded.

COAL: Anthracite, stove.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$4.20 per ton.	Apr., 1893	\$4.00 per ton.	July, 1896	\$4.10 per ton.
Apr., 1890	3.45 " "	July, 1893	4.45 " "	Oct., 1896	4.35 " "
July, 1890	3.85 " "	Oct., 1893	4.45 " "	Jan., 1897	4.10 " "
Oct., 1890	4.15 " "	Jan., 1894	4.45 " "	Apr., 1897	4.10 " "
Jan., 1891	4.25 " "	Apr., 1894	3.60 " "	July, 1897	4.35 " "
Apr., 1891	3.60 " "	July, 1894	4.00 " "	Oct., 1897	4.35 " "
July, 1891	3.90 " "	Oct., 1894	3.85 " "	Jan., 1898	3.70 " "
Oct., 1891	4.25 " "	Jan., 1895	3.60 " "	Apr., 1898	3.85 " "
Jan., 1892	4.10 " "	Apr., 1895	3.30 " "	July, 1898	3.85 " "
Apr., 1892	3.90 " "	July, 1895	3.30 " "	Oct., 1898	3.85 " "
July, 1892	4.35 " "	Oct., 1895	4.00 " "	Jan., 1899	3.60 " "
Oct., 1892	4.60 " "	Jan., 1896	3.65 " "	Apr., 1899	3.60 " "
Jan., 1893	4.60 " "	Apr., 1896	3.60 " "	July, 1899	3.85 " "

COAL: Bituminous.

Jan., 1890	\$3.30 per gross ton.	Apr., 1893	\$3.15 per gross ton.	July, 1896	\$2.90 per gross ton.
Apr., 1890	3.15 " " "	July, 1893	3.15 " " "	Oct., 1896	2.90 " " "
July, 1890	3.15 " " "	Oct., 1893	3.15 " " "	Jan., 1897	2.90 " " "
Oct., 1890	3.15 " " "	Jan., 1894	3.15 " " "	Apr., 1897	2.60 " " "
Jan., 1891	3.10 " " "	Apr., 1894	2.85 " " "	July, 1897	2.60 " " "
Apr., 1891	3.25 " " "	July, 1894	2.85 " " "	Oct., 1897	2.60 " " "
July, 1891	3.25 " " "	Oct., 1894	2.85 " " "	Jan., 1898	2.65 " " "
Oct., 1891	3.25 " " "	Jan., 1895	2.85 " " "	Apr., 1898	2.65 " " "
Jan., 1892	3.20 " " "	Apr., 1895	2.75 " " "	July, 1898	2.75 " " "
Apr., 1892	3.20 " " "	July, 1895	2.75 " " "	Oct., 1898	2.55 " " "
July, 1892	3.15 " " "	Oct., 1895	2.75 " " "	Jan., 1899	2.30 " " "
Oct., 1892	3.10 " " "	Jan., 1896	2.75 " " "	Apr., 1899	2.35 " " "
Jan., 1893	3.20 " " "	Apr., 1896	2.90 " " "	July, 1899	2.20 " " "

MATCHES: 8-card.

[Sales of 50 gross.]

Jan., 1890	\$0.37 per gross.	Apr., 1893	\$0.49½ per gross.	July, 1896	\$0.49½ per gross.
Apr., 1890	.37 " "	July, 1893	.49½ " "	Oct., 1896	.49½ " "
July, 1890	.37 " "	Oct., 1893	.49½ " "	Jan., 1897	.49½ " "
Oct., 1890	.37 " "	Jan., 1894	.49½ " "	Apr., 1897	.49½ " "
Jan., 1891	.37 " "	Apr., 1894	.49½ " "	July, 1897	.49½ " "
Apr., 1891	.37 " "	July, 1894	.49½ " "	Oct., 1897	.49½ " "
July, 1891	.37 " "	Oct., 1894	.49½ " "	Jan., 1898	.49½ " "
Oct., 1891	.37 " "	Jan., 1895	.49½ " "	Apr., 1898	.49½ " "
Jan., 1892	.39 " "	Apr., 1895	.49½ " "	July, 1898	.49½ " "
Apr., 1892	.39 " "	July, 1895	.49½ " "	Oct., 1898	.49½ " "
July, 1892	.39 " "	Oct., 1895	.49½ " "	Jan., 1899	.49½ " "
Oct., 1892	.39 " "	Jan., 1896	.49½ " "	Apr., 1899	.49½ " "
Jan., 1893	.45 " "	Apr., 1896	.49½ " "	July, 1899	.49½ " "

MATCHES: Parlor.

Jan., 1890	\$4.75 per gross.	Apr., 1893	\$4.75 per gross.	July, 1896	\$4.75 per gross.
Apr., 1890	4.75 " "	July, 1893	4.75 " "	Oct., 1896	4.75 " "
July, 1890	4.75 " "	Oct., 1893	4.75 " "	Jan., 1897	4.75 " "
Oct., 1890	4.75 " "	Jan., 1894	4.75 " "	Apr., 1897	4.75 " "
Jan., 1891	4.75 " "	Apr., 1894	4.75 " "	July, 1897	4.75 " "
Apr., 1891	4.75 " "	July, 1894	4.75 " "	Oct., 1897	4.75 " "
July, 1891	4.75 " "	Oct., 1894	4.75 " "	Jan., 1898	4.75 " "
Oct., 1891	4.75 " "	Jan., 1895	4.75 " "	Apr., 1898	3.75 " "
Jan., 1892	4.75 " "	Apr., 1895	4.75 " "	July, 1898	3.75 " "
Apr., 1892	4.75 " "	July, 1895	4.75 " "	Oct., 1898	3.75 " "
July, 1892	4.75 " "	Oct., 1895	4.75 " "	Jan., 1899	3.75 " "
Oct., 1892	4.75 " "	Jan., 1896	4.75 " "	Apr., 1899	3.75 " "
Jan., 1893	4.75 " "	Apr., 1896	4.75 " "	July, 1899	3.75 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

METALS AND IMPLEMENTS.

BAR IRON: Best refined, rolled, all muck iron.

[Average monthly price at Pittsburg.]

Date:	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.90 per 100 pounds.	Apr., 1893	\$1.55 per 100 pounds.	July, 1896	\$1.20 per 100 pounds.
Apr., 1890	1.85 " " "	July, 1893	1.52 " " "	Oct., 1896	1.20 " " "
July, 1890	1.80 " " "	Oct., 1893	1.40 " " "	Jan., 1897	1.22 " " "
Oct., 1890	1.85 " " "	Jan., 1894	1.30 " " "	Apr., 1897	1.14 " " "
Jan., 1891	1.80 " " "	Apr., 1894	1.20 " " "	July, 1897	.95 " " "
Apr., 1891	1.70 " " "	July, 1894	1.20 " " "	Oct., 1897	1.15 " " "
July, 1891	1.70 " " "	Oct., 1894	1.15 " " "	Jan., 1898	1.15 " " "
Oct., 1891	1.70 " " "	Jan., 1895	1.10 " " "	Apr., 1898	1.05 " " "
Jan., 1892	1.70 " " "	Apr., 1895	1.10 " " "	July, 1898	1.05 " " "
Apr., 1892	1.60 " " "	July, 1895	1.32 " " "	Oct., 1898	1.10 " " "
July, 1892	1.70 " " "	Oct., 1895	1.42 " " "	Jan., 1899	1.12 " " "
Oct., 1892	1.67 " " "	Jan., 1896	1.25 " " "	Apr., 1899	1.65 " " "
Jan., 1893	1.59 " " "	Apr., 1896	1.20 " " "	July, 1899	2.00 " " "

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

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.40 per dozen pairs.	Apr., 1893	\$0.38 per dozen pairs.	July, 1896	\$0.33 per dozen pairs.
Apr., 1890	.40 " " "	July, 1893	.38 " " "	Oct., 1896	.33 " " "
July, 1890	.40 " " "	Oct., 1893	.38 " " "	Jan., 1897	.35 " " "
Oct., 1890	.41 " " "	Jan., 1894	.38 " " "	Apr., 1897	.35 " " "
Jan., 1891	.40 " " "	Apr., 1894	.38 " " "	July, 1897	.35 " " "
Apr., 1891	.38 " " "	July, 1894	.35 " " "	Oct., 1897	.35 " " "
July, 1891	.38 " " "	Oct., 1894	.35 " " "	Jan., 1898	.35 " " "
Oct., 1891	.38 " " "	Jan., 1895	.33 " " "	Apr., 1898	.35 " " "
Jan., 1892	.38 " " "	Apr., 1895	.33 " " "	July, 1898	.33 " " "
Apr., 1892	.38 " " "	July, 1895	.33 " " "	Oct., 1898	.33 " " "
July, 1892	.38 " " "	Oct., 1895	.35 " " "	Jan., 1899	.33 " " "
Oct., 1892	.38 " " "	Jan., 1896	.33 " " "	Apr., 1899	.35 " " "
Jan., 1893	.38 " " "	Apr., 1896	.33 " " "	July, 1899	.40 " " "

COPPER: Sheet.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.22 per pound.	Apr., 1893	\$0.16 per pound.	July, 1896	\$0.15 per pound.
Apr., 1890	.22 " " "	July, 1893	.14 " " "	Oct., 1896	.15 " " "
July, 1890	.25 " " "	Oct., 1893	.14 " " "	Jan., 1897	.15 " " "
Oct., 1890	.22 " " "	Jan., 1894	.15 " " "	Apr., 1897	.15½ " " "
Jan., 1891	.22 " " "	Apr., 1894	.14 " " "	July, 1897	.14 " " "
Apr., 1891	.22 " " "	July, 1894	.14 " " "	Oct., 1897	.14 " " "
July, 1891	.16 " " "	Oct., 1894	.14 " " "	Jan., 1898	.14 " " "
Oct., 1891	.16 " " "	Jan., 1895	.14 " " "	Apr., 1898	.14 " " "
Jan., 1892	.16 " " "	Apr., 1895	.14 " " "	July, 1898	.14 " " "
Apr., 1892	.16 " " "	July, 1895	.14 " " "	Oct., 1898	.14 " " "
July, 1892	.16 " " "	Oct., 1895	.15 " " "	Jan., 1899	.16½ " " "
Oct., 1892	.16 " " "	Jan., 1896	.13½ " " "	Apr., 1899	.21½ " " "
Jan., 1893	.16 " " "	Apr., 1896	.13½ " " "	July, 1899	.22½ " " "

COPPER: Wire, No. 8, B. and S. Ga. and heavier.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.17½ per pound.	Apr., 1893	\$0.14 per pound.	July, 1896	\$0.14 per pound.
Apr., 1890	.17½ " " "	July, 1893	.13½ " " "	Oct., 1896	.13½ " " "
July, 1890	.20 " " "	Oct., 1893	.12½ " " "	Jan., 1897	.14 " " "
Oct., 1890	.20 " " "	Jan., 1894	.12 " " "	Apr., 1897	.14 " " "
Jan., 1891	.18 " " "	Apr., 1894	.12 " " "	July, 1897	.13½ " " "
Apr., 1891	.17 " " "	July, 1894	.11 " " "	Oct., 1897	.13½ " " "
July, 1891	.16 " " "	Oct., 1894	.11½ " " "	Jan., 1898	.13 " " "
Oct., 1891	.15 " " "	Jan., 1895	.11½ " " "	Apr., 1898	.14 " " "
Jan., 1892	.13½ " " "	Apr., 1895	.11 " " "	July, 1898	.14 " " "
Apr., 1892	.15 " " "	July, 1895	.12½ " " "	Oct., 1898	.14 " " "
July, 1892	.15 " " "	Oct., 1895	.14½ " " "	Jan., 1899	.15 " " "
Oct., 1892	.14 " " "	Jan., 1896	.13½ " " "	Apr., 1899	.20 " " "
Jan., 1893	.14 " " "	Apr., 1896	.13½ " " "	July, 1899	.19 " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

METALS AND IMPLEMENTS—Continued.

DOOR KNOBS: Mineral.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.05 per pair.	Apr., 1893	\$0.05 per pair.	July, 1896	\$0.05 per pair.
Apr., 1890	.05 " "	July, 1893	.05 " "	Oct., 1896	.05 " "
July, 1890	.05 " "	Oct., 1893	.05 " "	Jan., 1897	.05 " "
Oct., 1890	.05 " "	Jan., 1894	.05 " "	Apr., 1897	.05 " "
Jan., 1891	.05 " "	Apr., 1894	.05 " "	July, 1897	.05 " "
Apr., 1891	.05 " "	July, 1894	.05 " "	Oct., 1897	.05 " "
July, 1891	.05 " "	Oct., 1894	.05 " "	Jan., 1898	.05 " "
Oct., 1891	.05 " "	Jan., 1895	.05 " "	Apr., 1898	.05 " "
Jan., 1892	.05 " "	Apr., 1895	.05 " "	July, 1898	.05 " "
Apr., 1892	.05 " "	July, 1895	.05½ " "	Oct., 1898	.05 " "
July, 1892	.05 " "	Oct., 1895	.05½ " "	Jan., 1899	.05 " "
Oct., 1892	.05 " "	Jan., 1896	.05 " "	Apr., 1899	.05 " "
Jan., 1893	.05 " "	Apr., 1896	.05 " "	July, 1899	.06½ " "

LEAD: Pig.

Jan., 1890	\$3.85 per 100 pounds.	Apr., 1893	\$3.95 per 100 pounds.	July, 1896	\$3.00 per 100 pounds.
Apr., 1890	3.85 " "	July, 1893	3.40 " "	Oct., 1896	2.60 " "
July, 1890	4.42½ " "	Oct., 1893	3.65 " "	Jan., 1897	2.90 " "
Oct., 1890	5.00 " "	Jan., 1894	3.20 " "	Apr., 1897	3.20 " "
Jan., 1891	4.05 " "	Apr., 1894	3.30 " "	July, 1897	3.35 " "
Apr., 1891	4.32½ " "	July, 1894	3.10 " "	Oct., 1897	4.00 " "
July, 1891	4.45 " "	Oct., 1894	3.05 " "	Jan., 1898	3.55 " "
Oct., 1891	4.55 " "	Jan., 1895	3.00 " "	Apr., 1898	3.50 " "
Jan., 1892	4.25 " "	Apr., 1895	3.05 " "	July, 1898	3.30 " "
Apr., 1892	4.22½ " "	July, 1895	3.12½ " "	Oct., 1898	3.82½ " "
July, 1892	4.20 " "	Oct., 1895	3.15 " "	Jan., 1899	3.70 " "
Oct., 1892	3.95 " "	Jan., 1896	3.00 " "	Apr., 1899	4.15 " "
Jan., 1893	3.75 " "	Apr., 1896	3.00 " "	July, 1899	4.25 " "

LEAD: Pipe.

Jan., 1890	\$4.80 per 100 pounds.	Apr., 1893	\$5.00 per 100 pounds.	July, 1896	\$3.75 per 100 pounds.
Apr., 1890	4.80 " "	July, 1893	5.00 " "	Oct., 1896	3.50 " "
July, 1890	5.60 " "	Oct., 1893	5.00 " "	Jan., 1897	3.60 " "
Oct., 1890	6.40 " "	Jan., 1894	5.00 " "	Apr., 1897	4.20 " "
Jan., 1891	5.80 " "	Apr., 1894	4.60 " "	July, 1897	4.20 " "
Apr., 1891	5.80 " "	July, 1894	4.20 " "	Oct., 1897	5.00 " "
July, 1891	5.60 " "	Oct., 1894	4.20 " "	Jan., 1898	4.40 " "
Oct., 1891	5.60 " "	Jan., 1895	4.20 " "	Apr., 1898	4.40 " "
Jan., 1892	5.20 " "	Apr., 1895	4.20 " "	July, 1898	4.80 " "
Apr., 1892	5.20 " "	July, 1895	4.20 " "	Oct., 1898	4.80 " "
July, 1892	5.20 " "	Oct., 1895	4.20 " "	Jan., 1899	4.80 " "
Oct., 1892	5.20 " "	Jan., 1896	4.20 " "	Apr., 1899	5.40 " "
Jan., 1893	5.00 " "	Apr., 1896	4.20 " "	July, 1899	5.40 " "

LOCKS: Common mortise.

Jan., 1890	\$0.08½ each.	Apr., 1893	\$0.08½ each.	July, 1896	\$0.08½ each.
Apr., 1890	.08½ " "	July, 1893	.08½ " "	Oct., 1896	.08½ " "
July, 1890	.08½ " "	Oct., 1893	.08½ " "	Jan., 1897	.08½ " "
Oct., 1890	.08½ " "	Jan., 1894	.08½ " "	Apr., 1897	.08½ " "
Jan., 1891	.08½ " "	Apr., 1894	.08½ " "	July, 1897	.08½ " "
Apr., 1891	.08½ " "	July, 1894	.08½ " "	Oct., 1897	.08½ " "
July, 1891	.08½ " "	Oct., 1894	.08½ " "	Jan., 1898	.08½ " "
Oct., 1891	.08½ " "	Jan., 1895	.08½ " "	Apr., 1898	.08½ " "
Jan., 1892	.08½ " "	Apr., 1895	.08½ " "	July, 1898	.08½ " "
Apr., 1892	.08½ " "	July, 1895	.09 " "	Oct., 1898	.08½ " "
July, 1892	.08½ " "	Oct., 1895	.09 " "	Jan., 1899	.08½ " "
Oct., 1892	.08½ " "	Jan., 1896	.08½ " "	Apr., 1899	.09 " "
Jan., 1893	.08½ " "	Apr., 1896	.08½ " "	July, 1899	.09½ " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

METALS AND IMPLEMENTS—Continued.

LOCKS: Common rim.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.07½ each.	Apr., 1893	\$0.07½ each.	July, 1896	\$0.07½ each.
Apr., 1890	.07½ "	July, 1893	.07½ "	Oct., 1896	.07½ "
July, 1890	.07½ "	Oct., 1893	.07½ "	Jan., 1897	.07½ "
Oct., 1890	.07½ "	Jan., 1894	.07½ "	Apr., 1897	.07½ "
Jan., 1891	.07½ "	Apr., 1894	.07½ "	July, 1897	.07½ "
Apr., 1891	.07½ "	July, 1894	.07½ "	Oct., 1897	.07½ "
July, 1891	.07½ "	Oct., 1894	.07½ "	Jan., 1898	.07½ "
Oct., 1891	.07½ "	Jan., 1895	.07½ "	Apr., 1898	.07½ "
Jan., 1892	.07½ "	Apr., 1895	.07½ "	July, 1898	.07½ "
Apr., 1892	.07½ "	July, 1895	.08½ "	Oct., 1898	.07½ "
July, 1892	.07½ "	Oct., 1895	.08½ "	Jan., 1899	.07½ "
Oct., 1892	.07½ "	Jan., 1896	.07½ "	Apr., 1899	.08½ "
Jan., 1893	.07½ "	Apr., 1896	.07½ "	July, 1899	.08½ "

NAILS: Wire, base price.

[Average monthly price at Chicago, carload lots from factory.]

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$2.90 per 100-lb. keg.	Apr., 1893	\$1.65 per 100-lb. keg.	July, 1896	\$2.70 per 100-lb. keg.
Apr., 1890	2.40 " " "	July, 1893	1.47 " " "	Oct., 1896	2.70 " " "
July, 1890	2.40 " " "	Oct., 1893	1.40 " " "	Jan., 1897	1.47 " " "
Oct., 1890	2.40 " " "	Jan., 1894	1.17 " " "	Apr., 1897	1.47 " " "
Jan., 1891	2.22 " " "	Apr., 1894	1.00 " " "	July, 1897	1.85 " " "
Apr., 1891	2.12 " " "	July, 1894	1.20 " " "	Oct., 1897	1.54 " " "
July, 1891	2.07 " " "	Oct., 1894	1.05 " " "	Jan., 1898	1.55 " " "
Oct., 1891	1.90 " " "	Jan., 1895	.96 " " "	Apr., 1898	1.47 " " "
Jan., 1892	1.82 " " "	Apr., 1895	.96 " " "	July, 1898	1.36 " " "
Apr., 1892	1.75 " " "	July, 1895	1.96 " " "	Oct., 1898	1.46 " " "
July, 1892	1.70 " " "	Oct., 1895	2.40 " " "	Jan., 1899	1.59 " " "
Oct., 1892	1.57 " " "	Jan., 1896	2.42 " " "	Apr., 1899	2.25 " " "
Jan., 1893	1.57 " " "	Apr., 1896	2.55 " " "	July, 1899	2.70 " " "

PIG IRON: Bessemer.

[Average monthly price at Pittsburg.]

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$23.60 per gross ton.	Apr., 1893	\$13.86 per gross ton.	July, 1896	\$12.12 per gross ton.
Apr., 1890	17.85 " " "	July, 1893	13.21 " " "	Oct., 1896	11.71 " " "
July, 1890	18.62 " " "	Oct., 1893	11.60 " " "	Jan., 1897	10.77 " " "
Oct., 1890	17.35 " " "	Jan., 1894	10.90 " " "	Apr., 1897	9.91 " " "
Jan., 1891	15.95 " " "	Apr., 1894	10.49 " " "	July, 1897	9.39 " " "
Apr., 1891	16.10 " " "	July, 1894	12.60 " " "	Oct., 1897	10.70 " " "
July, 1891	16.25 " " "	Oct., 1894	11.02 " " "	Jan., 1898	10.00 " " "
Oct., 1891	15.50 " " "	Jan., 1895	10.06 " " "	Apr., 1898	10.35 " " "
Jan., 1892	15.65 " " "	Apr., 1895	10.69 " " "	July, 1898	10.31 " " "
Apr., 1892	14.50 " " "	July, 1895	14.14 " " "	Oct., 1898	10.40 " " "
July, 1892	14.00 " " "	Oct., 1895	15.77 " " "	Jan., 1899	11.00 " " "
Oct., 1892	13.90 " " "	Jan., 1896	11.81 " " "	Apr., 1899	15.06 " " "
Jan., 1893	13.59 " " "	Apr., 1896	13.32 " " "	July, 1899	20.45 " " "

PIG IRON: No. 1, anthracite, foundry.

[Average monthly price at Philadelphia.]

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$19.90 per gross ton.	Apr., 1893	\$14.58 per gross ton.	July, 1896	\$12.75 per gross ton.
Apr., 1890	18.25 " " "	July, 1893	15.00 " " "	Oct., 1896	12.56 " " "
July, 1890	18.00 " " "	Oct., 1893	14.20 " " "	Jan., 1897	12.75 " " "
Oct., 1890	18.00 " " "	Jan., 1894	13.37 " " "	Apr., 1897	12.12 " " "
Jan., 1891	17.50 " " "	Apr., 1894	12.60 " " "	July, 1897	11.75 " " "
Apr., 1891	17.50 " " "	July, 1894	12.50 " " "	Oct., 1897	12.00 " " "
July, 1891	17.50 " " "	Oct., 1894	12.50 " " "	Jan., 1898	12.00 " " "
Oct., 1891	17.75 " " "	Jan., 1895	12.08 " " "	Apr., 1898	11.75 " " "
Jan., 1892	17.50 " " "	Apr., 1895	12.00 " " "	July, 1898	11.25 " " "
Apr., 1892	16.00 " " "	July, 1895	13.80 " " "	Oct., 1898	11.70 " " "
July, 1892	15.06 " " "	Oct., 1895	14.50 " " "	Jan., 1899	12.12 " " "
Oct., 1892	15.00 " " "	Jan., 1896	13.56 " " "	Apr., 1899	16.50 " " "
Jan., 1893	14.80 " " "	Apr., 1896	13.25 " " "	July, 1899	20.37 " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

METALS AND IMPLEMENTS—Continued.

QUICKSILVER.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.68 per pound.	Apr., 1893	\$0.52 per pound.	July, 1896	\$0.49½ per pound.
Apr., 1890	.58 " "	July, 1893	.54 " "	Oct., 1896	.49 " "
July, 1890	.75 " "	Oct., 1893	.52 " "	Jan., 1897	.48½ " "
Oct., 1890	.79 " "	Jan., 1894	.45 " "	Apr., 1897	.53 " "
Jan., 1891	.70 " "	Apr., 1894	.45½ " "	July, 1897	.53 " "
Apr., 1891	.62 " "	July, 1894	.48½ " "	Oct., 1897	.50 " "
July, 1891	.61 " "	Oct., 1894	.49½ " "	Jan., 1898	.51½ " "
Oct., 1891	.60 " "	Jan., 1895	.48 " "	Apr., 1898	.53 " "
Jan., 1892	.64 " "	Apr., 1895	.47½ " "	July, 1898	.57 " "
Apr., 1892	.58½ " "	July, 1895	.54 " "	Oct., 1898	.53 " "
July, 1892	.55 " "	Oct., 1895	.51 " "	Jan., 1899	.55 " "
Oct., 1892	.53 " "	Jan., 1896	.53 " "	Apr., 1899	.58 " "
Jan., 1893	.52 " "	Apr., 1896	.50 " "	July, 1899	.58½ " "

ROPE: Manila.

Jan., 1890	\$0.13 per pound.	Apr., 1893	\$0.09½ per pound.	July, 1896	\$0.05½ per pound.
Apr., 1890	.14½ " "	July, 1893	.09½ " "	Oct., 1896	.06½ " "
July, 1890	.14 " "	Oct., 1893	.07½ " "	Jan., 1897	.06½ " "
Oct., 1890	.13½ " "	Jan., 1894	.07 " "	Apr., 1897	.06½ " "
Jan., 1891	.11 " "	Apr., 1894	.07 " "	July, 1897	.06½ " "
Apr., 1891	.10½ " "	July, 1894	.07½ " "	Oct., 1897	.06½ " "
July, 1891	.09 " "	Oct., 1894	.07½ " "	Jan., 1898	.06½ " "
Oct., 1891	.08½ " "	Jan., 1895	.07½ " "	Apr., 1898	.06 " "
Jan., 1892	.10½ " "	Apr., 1895	.06½ " "	July, 1898	.10 " "
Apr., 1892	.10½ " "	July, 1895	.06½ " "	Oct., 1898	.09½ " "
July, 1892	.10½ " "	Oct., 1895	.06½ " "	Jan., 1899	.07½ " "
Oct., 1892	.10½ " "	Jan., 1896	.06½ " "	Apr., 1899	.09½ " "
Jan., 1893	.09½ " "	Apr., 1896	.06½ " "	July, 1899	.09½ " "

ROPE: Tarred, American.

Jan., 1890	\$0.09 per pound.	Apr., 1893	\$0.09½ per pound.	July, 1896	\$0.08½ per pound.
Apr., 1890	.09 " "	July, 1893	.09½ " "	Oct., 1896	.08½ " "
July, 1890	.09 " "	Oct., 1893	.09½ " "	Jan., 1897	.08½ " "
Oct., 1890	.09 " "	Jan., 1894	.09½ " "	Apr., 1897	.08½ " "
Jan., 1891	.09 " "	Apr., 1894	.09 " "	July, 1897	.08½ " "
Apr., 1891	.09 " "	July, 1894	.09 " "	Oct., 1897	.08½ " "
July, 1891	.09 " "	Oct., 1894	.09 " "	Jan., 1898	.08½ " "
Oct., 1891	.09 " "	Jan., 1895	.08½ " "	Apr., 1898	.08½ " "
Jan., 1892	.10 " "	Apr., 1895	.08½ " "	July, 1898	.08½ " "
Apr., 1892	.09½ " "	July, 1895	.08½ " "	Oct., 1898	.08½ " "
July, 1892	.09½ " "	Oct., 1895	.08½ " "	Jan., 1899	.08½ " "
Oct., 1892	.09½ " "	Jan., 1896	.08½ " "	Apr., 1899	.08½ " "
Jan., 1893	.09½ " "	Apr., 1896	.08½ " "	July, 1899	.08½ " "

SAWS: Hand, standard, Disston's.

Jan., 1890	\$12.15 per dozen.	Apr., 1893	\$12.15 per dozen.	July, 1896	\$12.15 per dozen.
Apr., 1890	12.15 " "	July, 1893	12.15 " "	Oct., 1896	12.15 " "
July, 1890	12.15 " "	Oct., 1893	12.15 " "	Jan., 1897	12.15 " "
Oct., 1890	12.15 " "	Jan., 1894	12.15 " "	Apr., 1897	12.15 " "
Jan., 1891	12.96 " "	Apr., 1894	12.15 " "	July, 1897	12.15 " "
Apr., 1891	12.96 " "	July, 1894	12.15 " "	Oct., 1897	12.15 " "
July, 1891	12.96 " "	Oct., 1894	12.15 " "	Jan., 1898	12.15 " "
Oct., 1891	12.96 " "	Jan., 1895	12.15 " "	Apr., 1898	12.15 " "
Jan., 1892	12.15 " "	Apr., 1895	12.15 " "	July, 1898	12.15 " "
Apr., 1892	12.15 " "	July, 1895	12.15 " "	Oct., 1898	12.15 " "
July, 1892	12.15 " "	Oct., 1895	12.15 " "	Jan., 1899	12.15 " "
Oct., 1892	12.15 " "	Jan., 1896	12.15 " "	Apr., 1899	12.15 " "
Jan., 1893	12.15 " "	Apr., 1896	12.15 " "	July, 1899	12.15 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

METALS AND IMPLEMENTS—Continued.

SCYTHES.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$4.00 per dozen.	Apr., 1893	\$3.60 per dozen.	July, 1896	\$3.60 per dozen.
Apr., 1890	4.00 " "	July, 1893	3.60 " "	Oct., 1896	3.24 " "
July, 1890	4.00 " "	Oct., 1893	3.60 " "	Jan., 1897	3.24 " "
Oct., 1890	4.00 " "	Jan., 1894	3.60 " "	Apr., 1897	3.24 " "
Jan., 1891	3.60 " "	Apr., 1894	3.60 " "	July, 1897	3.24 " "
Apr., 1891	3.60 " "	July, 1894	3.60 " "	Oct., 1897	3.60 " "
July, 1891	3.60 " "	Oct., 1894	3.60 " "	Jan., 1898	3.60 " "
Oct., 1891	3.60 " "	Jan., 1895	3.60 " "	Apr., 1898	3.60 " "
Jan., 1892	3.60 " "	Apr., 1895	3.60 " "	July, 1898	3.60 " "
Apr., 1892	3.60 " "	July, 1895	3.60 " "	Oct., 1898	3.60 " "
July, 1892	3.60 " "	Oct., 1895	3.60 " "	Jan., 1899	3.60 " "
Oct., 1892	3.60 " "	Jan., 1896	3.60 " "	Apr., 1899	3.60 " "
Jan., 1893	3.60 " "	Apr., 1896	3.60 " "	July, 1899	4.00 " "

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

Jan., 1890	\$7.87 per dozen.	Apr., 1893	\$7.87 per dozen.	July, 1896	\$7.93 per dozen.
Apr., 1890	7.87 " "	July, 1893	7.87 " "	Oct., 1896	7.93 " "
July, 1890	7.87 " "	Oct., 1893	7.87 " "	Jan., 1897	7.93 " "
Oct., 1890	7.87 " "	Jan., 1894	7.45 " "	Apr., 1897	7.93 " "
Jan., 1891	7.87 " "	Apr., 1894	7.45 " "	July, 1897	7.93 " "
Apr., 1891	7.87 " "	July, 1894	7.45 " "	Oct., 1897	7.93 " "
July, 1891	7.87 " "	Oct., 1894	7.45 " "	Jan., 1898	7.93 " "
Oct., 1891	7.87 " "	Jan., 1895	7.45 " "	Apr., 1898	7.93 " "
Jan., 1892	7.87 " "	Apr., 1895	7.45 " "	July, 1898	7.93 " "
Apr., 1892	7.87 " "	July, 1895	7.45 " "	Oct., 1898	7.93 " "
July, 1892	7.87 " "	Oct., 1895	7.45 " "	Jan., 1899	7.93 " "
Oct., 1892	7.87 " "	Jan., 1896	7.45 " "	Apr., 1899	8.69 " "
Jan., 1893	7.87 " "	Apr., 1896	7.93 " "	July, 1899	8.69 " "

SPELTER: Domestic.

Jan., 1890	\$0.0540 per pound.	Apr., 1893	\$0.0430 per pound.	July, 1896	\$0.0407½ per pound.
Apr., 1890	.0520 " "	July, 1893	.0415 " "	Oct., 1896	.0362½ " "
July, 1890	.0550 " "	Oct., 1893	.0375 " "	Jan., 1897	.0409 " "
Oct., 1890	.0590 " "	Jan., 1894	.0550 " "	Apr., 1897	.0409 " "
Jan., 1891	.0425 " "	Apr., 1894	.0370 " "	July, 1897	.0430 " "
Apr., 1891	.0512½ " "	July, 1894	.0347½ " "	Oct., 1897	.0425 " "
July, 1891	.0450 " "	Oct., 1894	.0342½ " "	Jan., 1898	.0395 " "
Oct., 1891	.0450 " "	Jan., 1895	.0327½ " "	Apr., 1898	.0430 " "
Jan., 1892	.0465 " "	Apr., 1895	.0321 " "	July, 1898	.0500 " "
Apr., 1892	.0460 " "	July, 1895	.0361 " "	Oct., 1898	.0487½ " "
July, 1892	.0430 " "	Oct., 1895	.0416 " "	Jan., 1899	.0517½ " "
Oct., 1892	.0450 " "	Jan., 1896	.0357½ " "	Apr., 1899	.0637½ " "
Jan., 1893	.0437½ " "	Apr., 1896	.0412½ " "	July, 1899	.0625 " "

STEEL BILLETS.

[Average monthly price at mill at Pittsburg.]

Jan., 1890	\$36.00 per gross ton.	Apr., 1893	\$22.72 per gross ton.	July, 1896	\$19.50 per gross ton.
Apr., 1890	34.63 " "	July, 1893	21.37 " "	Oct., 1896	19.73 " "
July, 1890	32.50 " "	Oct., 1893	17.94 " "	Jan., 1897	15.90 " "
Oct., 1890	30.00 " "	Jan., 1894	16.10 " "	Apr., 1897	14.65 " "
Jan., 1891	25.65 " "	Apr., 1894	15.69 " "	July, 1897	14.00 " "
Apr., 1891	25.35 " "	July, 1894	17.75 " "	Oct., 1897	16.55 " "
July, 1891	25.80 " "	Oct., 1894	16.00 " "	Jan., 1898	15.00 " "
Oct., 1891	24.85 " "	Jan., 1895	14.79 " "	Apr., 1898	15.30 " "
Jan., 1892	25.00 " "	Apr., 1895	15.42 " "	July, 1898	14.75 " "
Apr., 1892	22.87 " "	July, 1895	21.06 " "	Oct., 1898	15.30 " "
July, 1892	23.29 " "	Oct., 1895	22.19 " "	Jan., 1899	17.06 " "
Oct., 1892	23.55 " "	Jan., 1896	16.60 " "	Apr., 1899	25.25 " "
Jan., 1893	21.75 " "	Apr., 1896	19.80 " "	July, 1899	33.80 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

METALS AND IMPLEMENTS—Concluded.

STEEL RAILS: Bessemer.

[Average monthly price at mills in eastern Pennsylvania.]

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$85.25 per gross ton.	Apr., 1893	\$29.00 per gross ton.	July, 1896	\$28.00 per gross ton.
Apr., 1890	83.50 " " "	July, 1893	29.00 " " "	Oct., 1896	28.00 " " "
July, 1890	81.50 " " "	Oct., 1893	27.50 " " "	Jan., 1897	25.00 " " "
Oct., 1890	80.00 " " "	Jan., 1894	24.00 " " "	Apr., 1897	18.00 " " "
Jan., 1891	29.00 " " "	Apr., 1894	24.00 " " "	July, 1897	18.00 " " "
Apr., 1891	30.00 " " "	July, 1894	24.00 " " "	Oct., 1897	18.00 " " "
July, 1891	30.00 " " "	Oct., 1894	24.00 " " "	Jan., 1898	18.00 " " "
Oct., 1891	30.00 " " "	Jan., 1895	22.00 " " "	Apr., 1898	18.00 " " "
Jan., 1892	30.00 " " "	Apr., 1895	22.00 " " "	July, 1898	17.00 " " "
Apr., 1892	30.00 " " "	July, 1895	24.00 " " "	Oct., 1898	17.50 " " "
July, 1892	30.00 " " "	Oct., 1895	28.00 " " "	Jan., 1899	18.50 " " "
Oct., 1892	30.00 " " "	Jan., 1896	28.00 " " "	Apr., 1899	25.75 " " "
Jan., 1893	29.00 " " "	Apr., 1896	28.00 " " "	July, 1899	28.25 " " "

LUMBER AND BUILDING MATERIALS.

BRICK: Common domestic building.

Jan., 1890	\$7.25 per M.	Apr., 1893	\$5.83 per M.	July, 1896	\$4.70 per M.
Apr., 1890	7.12½ " " "	July, 1893	5.40 " " "	Oct., 1896	4.70 " " "
July, 1890	5.75 " " "	Oct., 1893	5.25 " " "	Jan., 1897	5.00 " " "
Oct., 1890	6.50 " " "	Jan., 1894	5.65 " " "	Apr., 1897	4.50 " " "
Jan., 1891	6.00 " " "	Apr., 1894	5.00 " " "	July, 1897	4.37½ " " "
Apr., 1891	5.50 " " "	July, 1894	4.62½ " " "	Oct., 1897	5.12½ " " "
July, 1891	5.12½ " " "	Oct., 1894	4.75 " " "	Jan., 1898	6.00 " " "
Oct., 1891	5.50 " " "	Jan., 1895	5.80 " " "	Apr., 1898	5.50 " " "
Jan., 1892	5.90 " " "	Apr., 1895	5.37½ " " "	July, 1898	5.37½ " " "
Apr., 1892	6.70 " " "	July, 1895	4.75 " " "	Oct., 1898	5.75 " " "
July, 1892	5.40 " " "	Oct., 1895	5.12½ " " "	Jan., 1899	6.25 " " "
Oct., 1892	5.50 " " "	Jan., 1896	5.50 " " "	Apr., 1899	5.87½ " " "
Jan., 1893	6.40 " " "	Apr., 1896	5.12½ " " "	July, 1899	5.25 " " "

CARBONATE OF LEAD: In oil (American pure white lead).

Jan., 1890	\$7.00 per 100 lbs.	Apr., 1893	\$5.75 per 100 lbs.	July, 1896	\$5.25 per 100 lbs.
Apr., 1890	7.25 " " "	July, 1893	6.25 " " "	Oct., 1896	5.25 " " "
July, 1890	6.25 " " "	Oct., 1893	6.50 " " "	Jan., 1897	5.25 " " "
Oct., 1890	6.75 " " "	Jan., 1894	5.75 " " "	Apr., 1897	5.25 " " "
Jan., 1891	7.00 " " "	Apr., 1894	5.12½ " " "	July, 1897	5.25 " " "
Apr., 1891	6.50 " " "	July, 1894	5.12½ " " "	Oct., 1897	5.25 " " "
July, 1891	6.75 " " "	Oct., 1894	5.25 " " "	Jan., 1898	5.50 " " "
Oct., 1891	6.75 " " "	Jan., 1895	5.25 " " "	Apr., 1898	5.50 " " "
Jan., 1892	6.75 " " "	Apr., 1895	5.00 " " "	July, 1898	5.50 " " "
Apr., 1892	6.75 " " "	July, 1895	5.50 " " "	Oct., 1898	5.50 " " "
July, 1892	6.75 " " "	Oct., 1895	5.50 " " "	Jan., 1899	5.50 " " "
Oct., 1892	6.75 " " "	Jan., 1896	5.50 " " "	Apr., 1899	5.75 " " "
Jan., 1893	6.75 " " "	Apr., 1896	5.25 " " "	July, 1899	5.75 " " "

CEMENT: Rosendale.

Jan., 1890	\$0.90 per barrel.	Apr., 1893	\$0.80 per barrel.	July, 1896	\$0.72½ per barrel.
Apr., 1890	.80 " " "	July, 1893	.77½ " " "	Oct., 1896	.75 " " "
July, 1890	.80 " " "	Oct., 1893	.80 " " "	Jan., 1897	.80 " " "
Oct., 1890	.85 " " "	Jan., 1894	.85 " " "	Apr., 1897	.72½ " " "
Jan., 1891	.85 " " "	Apr., 1894	.77½ " " "	July, 1897	.70 " " "
Apr., 1891	.85 " " "	July, 1894	.75 " " "	Oct., 1897	.70 " " "
July, 1891	.85 " " "	Oct., 1894	.75 " " "	Jan., 1898	.72½ " " "
Oct., 1891	.85 " " "	Jan., 1895	.85 " " "	Apr., 1898	.70 " " "
Jan., 1892	.90 " " "	Apr., 1895	.77½ " " "	July, 1898	.67½ " " "
Apr., 1892	.80 " " "	July, 1895	.75 " " "	Oct., 1898	.70 " " "
July, 1892	.80 " " "	Oct., 1895	.75 " " "	Jan., 1899	.75 " " "
Oct., 1892	.80 " " "	Jan., 1896	.82½ " " "	Apr., 1899	.70 " " "
Jan., 1893	.85 " " "	Apr., 1896	.75 " " "	July, 1899	.80 " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

LUMBER AND BUILDING MATERIALS—Continued.

CHESTNUT: Lumber, in the log, not sawed.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$12.00 per M feet.	Apr., 1893	\$9.00 per M feet.	July, 1896	\$9.00 per M feet.
Apr., 1890	12.00 " "	July, 1893	9.00 " "	Oct., 1896	9.00 " "
July, 1890	12.00 " "	Oct., 1893	9.00 " "	Jan., 1897	9.00 " "
Oct., 1890	12.00 " "	Jan., 1894	9.00 " "	Apr., 1897	9.00 " "
Jan., 1891	12.00 " "	Apr., 1894	9.00 " "	July, 1897	9.00 " "
Apr., 1891	12.00 " "	July, 1894	9.00 " "	Oct., 1897	9.00 " "
July, 1891	12.00 " "	Oct., 1894	9.00 " "	Jan., 1898	9.00 " "
Oct., 1891	12.00 " "	Jan., 1895	9.00 " "	Apr., 1898	10.00 " "
Jan., 1892	10.00 " "	Apr., 1895	9.00 " "	July, 1898	10.00 " "
Apr., 1892	10.00 " "	July, 1895	9.00 " "	Oct., 1898	10.00 " "
July, 1892	10.00 " "	Oct., 1895	9.00 " "	Jan., 1899	10.00 " "
Oct., 1892	10.00 " "	Jan., 1896	9.00 " "	Apr., 1899	11.00 " "
Jan., 1893	10.00 " "	Apr., 1896	9.00 " "	July, 1899	11.00 " "

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

Jan., 1890	\$1.50 each.	Apr., 1893	\$1.25 each.	July, 1896	\$0.85 each.
Apr., 1890	1.50 " "	July, 1893	1.15 " "	Oct., 1896	.80 " "
July, 1890	1.25 " "	Oct., 1893	1.15 " "	Jan., 1897	.80 " "
Oct., 1890	1.25 " "	Jan., 1894	1.10 " "	Apr., 1897	.80 " "
Jan., 1891	1.25 " "	Apr., 1894	1.10 " "	July, 1897	.80 " "
Apr., 1891	1.25 " "	July, 1894	1.00 " "	Oct., 1897	.85 " "
July, 1891	1.25 " "	Oct., 1894	1.00 " "	Jan., 1898	.85 " "
Oct., 1891	1.25 " "	Jan., 1895	.95 " "	Apr., 1898	.90 " "
Jan., 1892	1.25 " "	Apr., 1895	.90 " "	July, 1898	.95 " "
Apr., 1892	1.25 " "	July, 1895	.90 " "	Oct., 1898	1.00 " "
July, 1892	1.25 " "	Oct., 1895	.90 " "	Jan., 1899	1.10 " "
Oct., 1892	1.25 " "	Jan., 1896	.85 " "	Apr., 1899	1.15 " "
Jan., 1893	1.35 " "	Apr., 1896	.85 " "	July, 1899	1.25 " "

HEMLOCK: Boards, first quality, 1-inch, not planed.

Jan., 1890	\$10.00 per M feet.	Apr., 1893	\$10.00 per M feet.	July, 1896	\$8.00 per M feet.
Apr., 1890	10.00 " "	July, 1893	10.00 " "	Oct., 1896	8.00 " "
July, 1890	11.00 " "	Oct., 1893	10.00 " "	Jan., 1897	8.25 " "
Oct., 1890	11.00 " "	Jan., 1894	9.50 " "	Apr., 1897	8.25 " "
Jan., 1891	10.50 " "	Apr., 1894	9.50 " "	July, 1897	8.25 " "
Apr., 1891	10.50 " "	July, 1894	9.00 " "	Oct., 1897	8.50 " "
July, 1891	10.00 " "	Oct., 1894	9.00 " "	Jan., 1898	8.50 " "
Oct., 1891	10.00 " "	Jan., 1895	9.00 " "	Apr., 1898	9.00 " "
Jan., 1892	10.00 " "	Apr., 1895	9.00 " "	July, 1898	9.00 " "
Apr., 1892	10.00 " "	July, 1895	8.75 " "	Oct., 1898	9.50 " "
July, 1892	10.50 " "	Oct., 1895	8.50 " "	Jan., 1899	10.50 " "
Oct., 1892	10.50 " "	Jan., 1896	8.00 " "	Apr., 1899	11.50 " "
Jan., 1893	10.50 " "	Apr., 1896	8.00 " "	July, 1899	12.50 " "

LIME: Rockland.

Jan., 1890	\$0.90 per barrel.	Apr., 1893	\$0.90 per barrel.	July, 1896	\$0.62 per barrel.
Apr., 1890	1.00 " "	July, 1893	.90 " "	Oct., 1896	.67 " "
July, 1890	.90 " "	Oct., 1893	.95 " "	Jan., 1897	.65 " "
Oct., 1890	.90 " "	Jan., 1894	.88 " "	Apr., 1897	.73 " "
Jan., 1891	.90 " "	Apr., 1894	.83 " "	July, 1897	.75 " "
Apr., 1891	.85 " "	July, 1894	.88 " "	Oct., 1897	.75 " "
July, 1891	.90 " "	Oct., 1894	.85 " "	Jan., 1898	.78 " "
Oct., 1891	.85 " "	Jan., 1895	.80 " "	Apr., 1898	.81 " "
Jan., 1892	.87 " "	Apr., 1895	.80 " "	July, 1898	.65 " "
Apr., 1892	.86 " "	July, 1895	.75 " "	Oct., 1898	.65 " "
July, 1892	.95 " "	Oct., 1895	.70 " "	Jan., 1899	.75 " "
Oct., 1892	.85 " "	Jan., 1896	.78 " "	Apr., 1899	.80 " "
Jan., 1893	.98 " "	Apr., 1896	.70 " "	July, 1899	.75 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

LUMBER AND BUILDING MATERIALS—Continued.

MAPLE: Boards, first quality, 1-inch, rough.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$22.00 per M feet.	Apr., 1893	\$22.00 per M feet.	July, 1896	\$20.00 per M feet.
Apr., 1890	22.00 " "	July, 1893	22.00 " "	Oct., 1896	20.00 " "
July, 1890	22.00 " "	Oct., 1893	22.00 " "	Jan., 1897	20.00 " "
Oct., 1890	22.00 " "	Jan., 1894	21.00 " "	Apr., 1897	21.00 " "
Jan., 1891	22.00 " "	Apr., 1894	21.00 " "	July, 1897	21.00 " "
Apr., 1891	22.00 " "	July, 1894	21.00 " "	Oct., 1897	21.00 " "
July, 1891	22.00 " "	Oct., 1894	21.00 " "	Jan., 1898	21.00 " "
Oct., 1891	22.00 " "	Jan., 1895	21.00 " "	Apr., 1898	21.00 " "
Jan., 1892	22.00 " "	Apr., 1895	21.00 " "	July, 1898	21.00 " "
Apr., 1892	22.00 " "	July, 1895	21.00 " "	Oct., 1898	21.00 " "
July, 1892	22.00 " "	Oct., 1895	21.00 " "	Jan., 1899	21.00 " "
Oct., 1892	22.00 " "	Jan., 1896	20.00 " "	Apr., 1899	22.00 " "
Jan., 1893	22.00 " "	Apr., 1896	20.00 " "	July, 1899	22.00 " "

OAK: Boards, white, plain, first quality, 1-inch, rough.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$35.00 per M feet.	Apr., 1893	\$35.00 per M feet.	July, 1896	\$34.00 per M feet.
Apr., 1890	35.00 " "	July, 1893	35.00 " "	Oct., 1896	34.00 " "
July, 1890	35.00 " "	Oct., 1893	35.00 " "	Jan., 1897	34.00 " "
Oct., 1890	35.00 " "	Jan., 1894	35.00 " "	Apr., 1897	34.00 " "
Jan., 1891	35.00 " "	Apr., 1894	35.00 " "	July, 1897	34.00 " "
Apr., 1891	35.00 " "	July, 1894	35.00 " "	Oct., 1897	34.00 " "
July, 1891	35.00 " "	Oct., 1894	35.00 " "	Jan., 1898	35.00 " "
Oct., 1891	35.00 " "	Jan., 1895	35.00 " "	Apr., 1898	35.00 " "
Jan., 1892	35.00 " "	Apr., 1895	35.00 " "	July, 1898	35.00 " "
Apr., 1892	35.00 " "	July, 1895	35.00 " "	Oct., 1898	35.00 " "
July, 1892	35.00 " "	Oct., 1895	35.00 " "	Jan., 1899	35.00 " "
Oct., 1892	35.00 " "	Jan., 1896	34.00 " "	Apr., 1899	36.00 " "
Jan., 1893	35.00 " "	Apr., 1896	34.00 " "	July, 1899	36.00 " "

PINE: Boards, white, clear, 1-inch, not planed.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$44.00 per M feet.	Apr., 1893	\$48.00 per M feet.	July, 1896	\$44.00 per M feet.
Apr., 1890	44.00 " "	July, 1893	48.00 " "	Oct., 1896	45.00 " "
July, 1890	43.00 " "	Oct., 1893	48.00 " "	Jan., 1897	45.00 " "
Oct., 1890	42.00 " "	Jan., 1894	47.00 " "	Apr., 1897	45.00 " "
Jan., 1891	43.00 " "	Apr., 1894	46.00 " "	July, 1897	45.00 " "
Apr., 1891	43.00 " "	July, 1894	45.00 " "	Oct., 1897	45.00 " "
July, 1891	43.00 " "	Oct., 1894	45.00 " "	Jan., 1898	45.00 " "
Oct., 1891	43.00 " "	Jan., 1895	45.00 " "	Apr., 1898	45.00 " "
Jan., 1892	44.00 " "	Apr., 1895	45.00 " "	July, 1898	45.00 " "
Apr., 1892	45.00 " "	July, 1895	45.00 " "	Oct., 1898	45.00 " "
July, 1892	46.00 " "	Oct., 1895	44.00 " "	Jan., 1899	46.00 " "
Oct., 1892	47.00 " "	Jan., 1896	44.00 " "	Apr., 1899	48.00 " "
Jan., 1893	48.00 " "	Apr., 1896	44.00 " "	July, 1899	51.00 " "

PINE: Boards, white, common, 1-inch, not planed.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$16.00 per M feet.	Apr., 1893	\$15.50 per M feet.	July, 1896	\$13.50 per M feet.
Apr., 1890	16.00 " "	July, 1893	15.00 " "	Oct., 1896	13.50 " "
July, 1890	15.00 " "	Oct., 1893	15.00 " "	Jan., 1897	13.00 " "
Oct., 1890	15.00 " "	Jan., 1894	15.00 " "	Apr., 1897	13.00 " "
Jan., 1891	15.00 " "	Apr., 1894	15.00 " "	July, 1897	12.00 " "
Apr., 1891	15.00 " "	July, 1894	14.75 " "	Oct., 1897	12.00 " "
July, 1891	15.00 " "	Oct., 1894	14.75 " "	Jan., 1898	12.00 " "
Oct., 1891	15.00 " "	Jan., 1895	14.50 " "	Apr., 1898	12.50 " "
Jan., 1892	15.00 " "	Apr., 1895	14.00 " "	July, 1898	13.00 " "
Apr., 1892	15.00 " "	July, 1895	14.00 " "	Oct., 1898	13.50 " "
July, 1892	15.50 " "	Oct., 1895	14.00 " "	Jan., 1899	14.50 " "
Oct., 1892	15.50 " "	Jan., 1896	13.50 " "	Apr., 1899	15.50 " "
Jan., 1893	15.50 " "	Apr., 1896	13.50 " "	July, 1899	17.00 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

LUMBER AND BUILDING MATERIALS—Continued.

PINE: Boards, white, culls, 1-inch, not planed.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$13.00 per M feet.	Apr., 1893	\$13.50 per M feet.	July, 1896	\$11.00 per M feet.
Apr., 1890	13.00 " "	July, 1893	13.50 " "	Oct., 1896	11.00 " "
July, 1890	12.50 " "	Oct., 1893	13.50 " "	Jan., 1897	11.00 " "
Oct., 1890	12.50 " "	Jan., 1894	13.50 " "	Apr., 1897	11.00 " "
Jan., 1891	12.50 " "	Apr., 1894	13.50 " "	July, 1897	10.00 " "
Apr., 1891	12.50 " "	July, 1894	13.00 " "	Oct., 1897	10.00 " "
July, 1891	12.00 " "	Oct., 1894	12.50 " "	Jan., 1898	10.00 " "
Oct., 1891	12.00 " "	Jan., 1895	12.00 " "	Apr., 1898	10.50 " "
Jan., 1892	12.00 " "	Apr., 1895	11.50 " "	July, 1898	11.00 " "
Apr., 1892	12.00 " "	July, 1895	11.00 " "	Oct., 1898	11.00 " "
July, 1892	12.50 " "	Oct., 1895	11.00 " "	Jan., 1899	12.00 " "
Oct., 1892	13.00 " "	Jan., 1896	11.00 " "	Apr., 1899	13.00 " "
Jan., 1893	13.00 " "	Apr., 1896	11.00 " "	July, 1899	14.00 " "

PUTTY.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.0175 per pound.	Apr., 1893	\$0.0160 per pound.	July, 1896	\$0.0145 per pound.
Apr., 1890	.0175 " "	July, 1893	.0160 " "	Oct., 1896	.0145 " "
July, 1890	.0175 " "	Oct., 1893	.0160 " "	Jan., 1897	.0145 " "
Oct., 1890	.0175 " "	Jan., 1894	.0160 " "	Apr., 1897	.0145 " "
Jan., 1891	.0175 " "	Apr., 1894	.0160 " "	July, 1897	.0145 " "
Apr., 1891	.0175 " "	July, 1894	.0160 " "	Oct., 1897	.0145 " "
July, 1891	.0175 " "	Oct., 1894	.0145 " "	Jan., 1898	.0145 " "
Oct., 1891	.0175 " "	Jan., 1895	.0145 " "	Apr., 1898	.0145 " "
Jan., 1892	.0175 " "	Apr., 1895	.0145 " "	July, 1898	.0145 " "
Apr., 1892	.0175 " "	July, 1895	.0145 " "	Oct., 1898	.0145 " "
July, 1892	.0140 " "	Oct., 1895	.0145 " "	Jan., 1899	.0140 " "
Oct., 1892	.0160 " "	Jan., 1896	.0145 " "	Apr., 1899	.0170 " "
Jan., 1893	.0160 " "	Apr., 1896	.0145 " "	July, 1899	.0170 " "

SHINGLES: Pine, 16 inches, XXX.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$3.25 per M.	Apr., 1893	\$2.60 per M.	July, 1896	\$2.50 per M.
Apr., 1890	3.25 " "	July, 1893	2.60 " "	Oct., 1896	2.55 " "
July, 1890	2.85 " "	Oct., 1893	2.60 " "	Jan., 1897	2.55 " "
Oct., 1890	2.85 " "	Jan., 1894	2.60 " "	Apr., 1897	2.60 " "
Jan., 1891	3.15 " "	Apr., 1894	2.55 " "	July, 1897	2.60 " "
Apr., 1891	3.15 " "	July, 1894	2.55 " "	Oct., 1897	2.60 " "
July, 1891	2.65 " "	Oct., 1894	2.55 " "	Jan., 1898	2.65 " "
Oct., 1891	2.65 " "	Jan., 1895	2.55 " "	Apr., 1898	2.65 " "
Jan., 1892	2.65 " "	Apr., 1895	2.55 " "	July, 1898	2.70 " "
Apr., 1892	2.65 " "	July, 1895	2.55 " "	Oct., 1898	2.70 " "
July, 1892	2.65 " "	Oct., 1895	2.50 " "	Jan., 1899	2.75 " "
Oct., 1892	2.65 " "	Jan., 1896	2.50 " "	Apr., 1899	2.85 " "
Jan., 1893	2.60 " "	Apr., 1896	2.50 " "	July, 1899	3.00 " "

SPRUCE: Boards, No. 2, 1-inch.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$14.00 per M feet.	Apr., 1893	\$15.00 per M feet.	July, 1896	\$13.00 per M feet.
Apr., 1890	15.00 " "	July, 1893	14.50 " "	Oct., 1896	13.00 " "
July, 1890	14.50 " "	Oct., 1893	14.00 " "	Jan., 1897	13.00 " "
Oct., 1890	14.50 " "	Jan., 1894	13.50 " "	Apr., 1897	13.00 " "
Jan., 1891	14.50 " "	Apr., 1894	14.00 " "	July, 1897	13.00 " "
Apr., 1891	14.50 " "	July, 1894	13.50 " "	Oct., 1897	13.00 " "
July, 1891	14.00 " "	Oct., 1894	13.00 " "	Jan., 1898	13.00 " "
Oct., 1891	14.00 " "	Jan., 1895	13.50 " "	Apr., 1898	13.00 " "
Jan., 1892	14.00 " "	Apr., 1895	14.50 " "	July, 1898	13.00 " "
Apr., 1892	14.50 " "	July, 1895	14.00 " "	Oct., 1898	13.00 " "
July, 1892	14.00 " "	Oct., 1895	13.50 " "	Jan., 1899	14.00 " "
Oct., 1892	14.00 " "	Jan., 1896	13.50 " "	Apr., 1899	14.50 " "
Jan., 1893	14.00 " "	Apr., 1896	13.50 " "	July, 1899	15.00 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY,
1899—Continued.

LUMBER AND BUILDING MATERIALS—Concluded.

TAR: Wilmington.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.95 per barrel.	Apr., 1893	\$2.00 per barrel.	July, 1896	\$1.95 per barrel.
Apr., 1890	1.90 " "	July, 1893	1.95 " "	Oct., 1896	1.85 " "
July, 1890	2.00 " "	Oct., 1893	2.05 " "	Jan., 1897	1.95 " "
Oct., 1890	2.25 " "	Jan., 1894	1.90 " "	Apr., 1897	1.80 " "
Jan., 1891	2.05 " "	Apr., 1894	1.80 " "	July, 1897	2.00 " "
Apr., 1891	2.05 " "	July, 1894	1.80 " "	Oct., 1897	2.25 " "
July, 1891	2.00 " "	Oct., 1894	2.00 " "	Jan., 1898	1.85 " "
Oct., 1891	2.20 " "	Jan., 1895	1.85 " "	Apr., 1898	1.75 " "
Jan., 1892	2.20 " "	Apr., 1895	1.85 " "	July, 1898	2.15 " "
Apr., 1892	2.20 " "	July, 1895	2.15 " "	Oct., 1898	2.25 " "
July, 1892	2.25 " "	Oct., 1895	2.05 " "	Jan., 1899	2.15 " "
Oct., 1892	2.10 " "	Jan., 1896	1.85 " "	Apr., 1899	2.05 " "
Jan., 1893	2.05 " "	Apr., 1896	1.75 " "	July, 1899	2.50 " "

TURPENTINE.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.44½ per gallon.	Apr., 1893	\$0.33½ per gallon.	July, 1896	\$0.25½ per gallon.
Apr., 1890	.43 " "	July, 1893	.29½ " "	Oct., 1896	.28 " "
July, 1890	.40½ " "	Oct., 1893	.27½ " "	Jan., 1897	.26½ " "
Oct., 1890	.39½ " "	Jan., 1894	.29 " "	Apr., 1897	.29½ " "
Jan., 1891	.39 " "	Apr., 1894	.29½ " "	July, 1897	.26½ " "
Apr., 1891	.40½ " "	July, 1894	.30½ " "	Oct., 1897	.32½ " "
July, 1891	.37½ " "	Oct., 1894	.28½ " "	Jan., 1898	.33½ " "
Oct., 1891	.37 " "	Jan., 1895	.27½ " "	Apr., 1898	.32 " "
Jan., 1892	.34 " "	Apr., 1895	.36 " "	July, 1898	.26½ " "
Apr., 1892	.37½ " "	July, 1895	.29 " "	Oct., 1898	.30½ " "
July, 1892	.29½ " "	Oct., 1895	.28 " "	Jan., 1899	.45½ " "
Oct., 1892	.28½ " "	Jan., 1896	.30 " "	Apr., 1899	.42½ " "
Jan., 1893	.31 " "	Apr., 1896	.28½ " "	July, 1899	.38½ " "

DRUGS AND CHEMICALS.

ALCOHOL: 94 per cent.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.98 per gallon.	Apr., 1893	\$2.28 per gallon.	July, 1896	\$2.31 per gallon.
Apr., 1890	1.98 " "	July, 1893	2.18 " "	Oct., 1896	2.28 " "
July, 1890	2.12 " "	Oct., 1893	2.18 " "	Jan., 1897	2.26 " "
Oct., 1890	2.20 " "	Jan., 1894	2.24 " "	Apr., 1897	2.26 " "
Jan., 1891	2.22 " "	Apr., 1894	2.24 " "	July, 1897	2.29 " "
Apr., 1891	2.26 " "	July, 1894	2.24 " "	Oct., 1897	2.31 " "
July, 1891	2.26 " "	Oct., 1894	2.52 " "	Jan., 1898	2.26 " "
Oct., 1891	2.30 " "	Jan., 1895	2.33 " "	Apr., 1898	2.25½ " "
Jan., 1892	2.30 " "	Apr., 1895	2.37 " "	July, 1898	2.37 " "
Apr., 1892	2.20 " "	July, 1895	2.35 " "	Oct., 1898	2.39 " "
July, 1892	2.26 " "	Oct., 1895	2.30 " "	Jan., 1899	2.44 " "
Oct., 1892	2.24 " "	Jan., 1896	2.32 " "	Apr., 1899	2.42 " "
Jan., 1893	2.54 " "	Apr., 1896	2.32 " "	July, 1899	2.44 " "

BRIMSTONE: Crude.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$19.50 per ton.	Apr., 1893	\$19.50 per ton.	July, 1896	\$18.50 per ton.
Apr., 1890	19.50 " "	July, 1893	19.25 " "	Oct., 1896	20.75 " "
July, 1890	22.00 " "	Oct., 1893	17.25 " "	Jan., 1897	21.00 " "
Oct., 1890	21.50 " "	Jan., 1894	17.75 " "	Apr., 1897	19.75 " "
Jan., 1891	26.00 " "	Apr., 1894	17.25 " "	July, 1897	19.50 " "
Apr., 1891	35.00 " "	July, 1894	17.25 " "	Oct., 1897	20.75 " "
July, 1891	25.00 " "	Oct., 1894	15.75 " "	Jan., 1898	21.00 " "
Oct., 1891	30.00 " "	Jan., 1895	16.25 " "	Apr., 1898	22.00 " "
Jan., 1892	30.25 " "	Apr., 1895	15.75 " "	July, 1898	23.00 " "
Apr., 1892	22.25 " "	July, 1895	15.75 " "	Oct., 1898	21.00 " "
July, 1892	24.00 " "	Oct., 1895	13.50 " "	Jan., 1899	21.25 " "
Oct., 1892	23.50 " "	Jan., 1896	15.25 " "	Apr., 1899	21.75 " "
Jan., 1893	20.75 " "	Apr., 1896	15.75 " "	July, 1899	20.75 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

DRUGS AND CHEMICALS—Continued.

GLYCERIN: American, refined.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.18 per pound.	Apr., 1893	\$0.13½ per pound.	July, 1896	\$0.16½ per pound.
Apr., 1890	.18 " "	July, 1893	.13½ " "	Oct., 1896	.16½ " "
July, 1890	.18 " "	Oct., 1893	.13½ " "	Jan., 1897	.16½ " "
Oct., 1890	.17 " "	Jan., 1894	.13 " "	Apr., 1897	.12 " "
Jan., 1891	.16 " "	Apr., 1894	.12 " "	July, 1897	.12 " "
Apr., 1891	.15½ " "	July, 1894	.11½ " "	Oct., 1897	.12 " "
July, 1891	.15½ " "	Oct., 1894	.11½ " "	Jan., 1898	.11½ " "
Oct., 1891	.15 " "	Jan., 1895	.11 " "	Apr., 1898	.11 " "
Jan., 1892	.15 " "	Apr., 1895	.11 " "	July, 1898	.13 " "
Apr., 1892	.14 " "	July, 1895	.11 " "	Oct., 1898	.12½ " "
July, 1892	.14 " "	Oct., 1895	.11 " "	Jan., 1899	.12 " "
Oct., 1892	.13½ " "	Jan., 1896	.16½ " "	Apr., 1899	.12 " "
Jan., 1893	.13½ " "	Apr., 1896	.16½ " "	July, 1899	.12½ " "

LINSEED OIL: Domestic raw, in barrels.

Jan., 1890	\$0.60 per gallon.	Apr., 1893	\$0.50 per gallon.	July, 1896	\$0.37 per gallon.
Apr., 1890	.62 " "	July, 1893	.50 " "	Oct., 1896	.35 " "
July, 1890	.62 " "	Oct., 1893	.40 " "	Jan., 1897	.31 " "
Oct., 1890	.62 " "	Jan., 1894	.47 " "	Apr., 1897	.32 " "
Jan., 1891	.58 " "	Apr., 1894	.52 " "	July, 1897	.29 " "
Apr., 1891	.57 " "	July, 1894	.54 " "	Oct., 1897	.34 " "
July, 1891	.47 " "	Oct., 1894	.54 " "	Jan., 1898	.42 " "
Oct., 1891	.40 " "	Jan., 1895	.56 " "	Apr., 1898	.39 " "
Jan., 1892	.37 " "	Apr., 1895	.56 " "	July, 1898	.41 " "
Apr., 1892	.39 " "	July, 1895	.58 " "	Oct., 1898	.33 " "
July, 1892	.42 " "	Oct., 1895	.44 " "	Jan., 1899	.41 " "
Oct., 1892	.44 " "	Jan., 1896	.42 " "	Apr., 1899	.47 " "
Jan., 1893	.48 " "	Apr., 1896	.40 " "	July, 1899	.39 " "

OPIUM.

Jan., 1890	\$3.45 per pound.	Apr., 1893	\$3.10 per pound.	July, 1896	\$2.00 per pound.
Apr., 1890	3.55 " "	July, 1893	2.60 " "	Oct., 1896	2.20 " "
July, 1890	3.75 " "	Oct., 1893	2.70 " "	Jan., 1897	2.20 " "
Oct., 1890	3.80 " "	Jan., 1894	2.25 " "	Apr., 1897	2.40 " "
Jan., 1891	2.35 " "	Apr., 1894	2.62½ " "	July, 1897	2.35 " "
Apr., 1891	2.10 " "	July, 1894	2.15 " "	Oct., 1897	2.62½ " "
July, 1891	2.00 " "	Oct., 1894	1.90 " "	Jan., 1898	2.72½ " "
Oct., 1891	2.00 " "	Jan., 1895	2.35 " "	Apr., 1898	3.05 " "
Jan., 1892	1.90 " "	Apr., 1895	2.10 " "	July, 1898	3.55 " "
Apr., 1892	1.75 " "	July, 1895	1.67½ " "	Oct., 1898	3.62½ " "
July, 1892	1.65 " "	Oct., 1895	1.70 " "	Jan., 1899	3.42½ " "
Oct., 1892	1.62½ " "	Jan., 1896	2.05 " "	Apr., 1899	3.00 " "
Jan., 1893	1.90 " "	Apr., 1896	2.00 " "	July, 1899	3.12½ " "

QUININE: American, bulk.

Jan., 1890	\$0.35 per ounce.	Apr., 1893	\$0.22 per ounce.	July, 1896	\$0.26 per ounce.
Apr., 1890	.31 " "	July, 1893	.22 " "	Oct., 1896	.21½ " "
July, 1890	.31 " "	Oct., 1893	.22 " "	Jan., 1897	.17½ " "
Oct., 1890	.32 " "	Jan., 1894	.25 " "	Apr., 1897	.15 " "
Jan., 1891	.30 " "	Apr., 1894	.27½ " "	July, 1897	.15 " "
Apr., 1891	.25 " "	July, 1894	.25 " "	Oct., 1897	.23 " "
July, 1891	.25 " "	Oct., 1894	.25½ " "	Jan., 1898	.25 " "
Oct., 1891	.24 " "	Jan., 1895	.25½ " "	Apr., 1898	.21 " "
Jan., 1892	.24 " "	Apr., 1895	.25 " "	July, 1898	.20 " "
Apr., 1892	.24 " "	July, 1895	.25 " "	Oct., 1898	.19½ " "
July, 1892	.22 " "	Oct., 1895	.25 " "	Jan., 1899	.21 " "
Oct., 1892	.20 " "	Jan., 1896	.27 " "	Apr., 1899	.38 " "
Jan., 1893	.20 " "	Apr., 1896	.26½ " "	July, 1899	.34 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

DRUGS AND CHEMICALS—Concluded.

SODA ASH: Carbonate, 48 per cent.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.01400 per pound.	Apr., 1893	\$0.01350 per pound.	July, 1896	\$0.01100 per pound.
Apr., 1890	.02500 " "	July, 1893	.01250 " "	Oct., 1896	.00900 " "
July, 1890	.01400 " "	Oct., 1893	.01150 " "	Jan., 1897	.00900 " "
Oct., 1890	.01500 " "	Jan., 1894	.01150 " "	Apr., 1897	.00900 " "
Jan., 1891	.01625 " "	Apr., 1894	.01250 " "	July, 1897	.00900 " "
Apr., 1891	.01600 " "	July, 1894	.01250 " "	Oct., 1897	.00900 " "
July, 1891	.01550 " "	Oct., 1894	.01150 " "	Jan., 1898	.00900 " "
Oct., 1891	.01550 " "	Jan., 1895	.01150 " "	Apr., 1898	.00900 " "
Jan., 1892	.01550 " "	Apr., 1895	.01150 " "	July, 1898	.00750 " "
Apr., 1892	.01550 " "	July, 1895	.00950 " "	Oct., 1898	.00750 " "
July, 1892	.01525 " "	Oct., 1895	.01000 " "	Jan., 1899	.00750 " "
Oct., 1892	.01600 " "	Jan., 1896	.01000 " "	Apr., 1899	.00750 " "
Jan., 1893	.01550 " "	Apr., 1896	.01100 " "	July, 1899	.00900 " "

SULPHURIC ACID: 66 per cent.

Jan., 1890	\$0.0100 per pound.	Apr., 1893	\$0.0090 per pound.	July, 1896	\$0.0070 per pound.
Apr., 1890	.0100 " "	July, 1893	.0085 " "	Oct., 1896	.0070 " "
July, 1890	.0085 " "	Oct., 1893	.0075 " "	Jan., 1897	.0100 " "
Oct., 1890	.0085 " "	Jan., 1894	.0075 " "	Apr., 1897	.0100 " "
Jan., 1891	.0070 " "	Apr., 1894	.0075 " "	July, 1897	.0100 " "
Apr., 1891	.0085 " "	July, 1894	.0075 " "	Oct., 1897	.0085 " "
July, 1891	.0085 " "	Oct., 1894	.0070 " "	Jan., 1898	.0100 " "
Oct., 1891	.0085 " "	Jan., 1895	.0070 " "	Apr., 1898	.0100 " "
Jan., 1892	.0085 " "	Apr., 1895	.0070 " "	July, 1898	.0120 " "
Apr., 1892	.0085 " "	July, 1895	.0070 " "	Oct., 1898	.0120 " "
July, 1892	.0100 " "	Oct., 1895	.0070 " "	Jan., 1899	.0120 " "
Oct., 1892	.0100 " "	Jan., 1896	.0070 " "	Apr., 1899	.0120 " "
Jan., 1893	.0090 " "	Apr., 1896	.0070 " "	July, 1899	.0120 " "

HOUSE FURNISHING GOODS.

FURNITURE: Chairs, bedroom, maple, cane seat.

Jan., 1890	\$7.00 per dozen.	Apr., 1893	\$6.85 per dozen.	July, 1896	\$6.00 per dozen.
Apr., 1890	7.00 " "	July, 1893	6.85 " "	Oct., 1896	6.00 " "
July, 1890	7.00 " "	Oct., 1893	6.85 " "	Jan., 1897	5.00 " "
Oct., 1890	7.00 " "	Jan., 1894	6.00 " "	Apr., 1897	5.00 " "
Jan., 1891	7.00 " "	Apr., 1894	6.00 " "	July, 1897	5.00 " "
Apr., 1891	7.00 " "	July, 1894	6.00 " "	Oct., 1897	5.00 " "
July, 1891	7.00 " "	Oct., 1894	6.00 " "	Jan., 1898	5.00 " "
Oct., 1891	7.00 " "	Jan., 1895	6.00 " "	Apr., 1898	5.00 " "
Jan., 1892	6.85 " "	Apr., 1895	6.00 " "	July, 1898	5.00 " "
Apr., 1892	6.85 " "	July, 1895	6.00 " "	Oct., 1898	5.50 " "
July, 1892	6.85 " "	Oct., 1895	6.00 " "	Jan., 1899	5.50 " "
Oct., 1892	6.85 " "	Jan., 1896	6.00 " "	Apr., 1899	6.25 " "
Jan., 1893	6.85 " "	Apr., 1896	6.00 " "	July, 1899	6.25 " "

FURNITURE: Chairs, kitchen, common spindle.

Jan., 1890	\$4.20 per dozen.	Apr., 1893	\$4.25 per dozen.	July, 1896	\$3.50 per dozen.
Apr., 1890	4.20 " "	July, 1893	4.25 " "	Oct., 1896	3.50 " "
July, 1890	4.20 " "	Oct., 1893	4.25 " "	Jan., 1897	3.50 " "
Oct., 1890	4.20 " "	Jan., 1894	3.50 " "	Apr., 1897	3.50 " "
Jan., 1891	4.20 " "	Apr., 1894	3.50 " "	July, 1897	3.50 " "
Apr., 1891	4.20 " "	July, 1894	3.50 " "	Oct., 1897	3.50 " "
July, 1891	4.20 " "	Oct., 1894	3.50 " "	Jan., 1898	3.25 " "
Oct., 1891	4.20 " "	Jan., 1895	3.50 " "	Apr., 1898	3.25 " "
Jan., 1892	4.25 " "	Apr., 1895	3.50 " "	July, 1898	3.25 " "
Apr., 1892	4.25 " "	July, 1895	3.50 " "	Oct., 1898	3.50 " "
July, 1892	4.25 " "	Oct., 1895	3.50 " "	Jan., 1899	3.50 " "
Oct., 1892	4.25 " "	Jan., 1896	3.50 " "	Apr., 1899	4.00 " "
Jan., 1893	4.25 " "	Apr., 1896	3.50 " "	July, 1899	4.25 " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

HOUSE FURNISHING GOODS—Continued.

FURNITURE: Tables, kitchen, pine, 3½-foot.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$15.00 per dozen.	Apr., 1893	\$15.00 per dozen.	July, 1896	\$13.80 per dozen.
Apr., 1890	15.00 " "	July, 1893	15.00 " "	Oct., 1896	13.80 " "
July, 1890	15.00 " "	Oct., 1893	15.00 " "	Jan., 1897	13.80 " "
Oct., 1890	15.00 " "	Jan., 1894	14.25 " "	Apr., 1897	13.80 " "
Jan., 1891	15.00 " "	Apr., 1894	14.25 " "	July, 1897	13.80 " "
Apr., 1891	15.00 " "	July, 1894	14.25 " "	Oct., 1897	13.80 " "
July, 1891	15.00 " "	Oct., 1894	14.25 " "	Jan., 1898	13.80 " "
Oct., 1891	15.00 " "	Jan., 1895	14.25 " "	Apr., 1898	13.80 " "
Jan., 1892	15.00 " "	Apr., 1895	14.25 " "	July, 1898	13.80 " "
Apr., 1892	15.00 " "	July, 1895	14.25 " "	Oct., 1898	13.80 " "
July, 1892	15.00 " "	Oct., 1895	14.25 " "	Jan., 1899	13.80 " "
Oct., 1892	15.00 " "	Jan., 1896	13.80 " "	Apr., 1899	13.80 " "
Jan., 1893	15.00 " "	Apr., 1896	13.80 " "	July, 1899	15.00 " "

GLASSWARE: Tumblers, one-half pint, medium grade.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.25 per dozen.	Apr., 1893	\$0.25 per dozen.	July, 1896	\$0.20 per dozen.
Apr., 1890	.25 " "	July, 1893	.25 " "	Oct., 1896	.20 " "
July, 1890	.25 " "	Oct., 1893	.25 " "	Jan., 1897	.20 " "
Oct., 1890	.25 " "	Jan., 1894	.25 " "	Apr., 1897	.20 " "
Jan., 1891	.25 " "	Apr., 1894	.25 " "	July, 1897	.20 " "
Apr., 1891	.25 " "	July, 1894	.25 " "	Oct., 1897	.20 " "
July, 1891	.25 " "	Oct., 1894	.25 " "	Jan., 1898	.19 " "
Oct., 1891	.25 " "	Jan., 1895	.23 " "	Apr., 1898	.19 " "
Jan., 1892	.26 " "	Apr., 1895	.23 " "	July, 1898	.19 " "
Apr., 1892	.26 " "	July, 1895	.23 " "	Oct., 1898	.19 " "
July, 1892	.26 " "	Oct., 1895	.23 " "	Jan., 1899	.20 " "
Oct., 1892	.26 " "	Jan., 1896	.20 " "	Apr., 1899	.20 " "
Jan., 1893	.25 " "	Apr., 1896	.20 " "	July, 1899	.20 " "

FAILS: Wooden, 2-hoop.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.10 per dozen.	Apr., 1893	\$0.90 per dozen.	July, 1896	\$0.85 per dozen.
Apr., 1890	1.10 " "	July, 1893	.88 " "	Oct., 1896	.90 " "
July, 1890	1.10 " "	Oct., 1893	.85 " "	Jan., 1897	.85 " "
Oct., 1890	1.10 " "	Jan., 1894	.85 " "	Apr., 1897	.90 " "
Jan., 1891	1.20 " "	Apr., 1894	.80 " "	July, 1897	.90 " "
Apr., 1891	1.10 " "	July, 1894	.85 " "	Oct., 1897	.85 " "
July, 1891	1.10 " "	Oct., 1894	.85 " "	Jan., 1898	.80 " "
Oct., 1891	1.10 " "	Jan., 1895	.80 " "	Apr., 1898	.80 " "
Jan., 1892	1.00 " "	Apr., 1895	.85 " "	July, 1898	.75 " "
Apr., 1892	.95 " "	July, 1895	.75 " "	Oct., 1898	.75 " "
July, 1892	.95 " "	Oct., 1895	.90 " "	Jan., 1899	.85 " "
Oct., 1892	.95 " "	Jan., 1896	.85 " "	Apr., 1899	.95 " "
Jan., 1893	.90 " "	Apr., 1896	.80 " "	July, 1899	1.05 " "

TUBS: Wooden.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.25 per nest of 3.	Apr., 1893	\$1.05 per nest of 3.	July, 1896	\$0.85 per nest of 3.
Apr., 1890	1.25 " " "	July, 1893	.98 " " "	Oct., 1896	.85 " " "
July, 1890	1.25 " " "	Oct., 1893	.95 " " "	Jan., 1897	.85 " " "
Oct., 1890	1.25 " " "	Jan., 1894	.90 " " "	Apr., 1897	.88 " " "
Jan., 1891	1.25 " " "	Apr., 1894	.90 " " "	July, 1897	.85 " " "
Apr., 1891	1.25 " " "	July, 1894	.85 " " "	Oct., 1897	.80 " " "
July, 1891	1.25 " " "	Oct., 1894	.85 " " "	Jan., 1898	.80 " " "
Oct., 1891	1.25 " " "	Jan., 1895	.75 " " "	Apr., 1898	.85 " " "
Jan., 1892	1.25 " " "	Apr., 1895	.77 " " "	July, 1898	.85 " " "
Apr., 1892	1.25 " " "	July, 1895	.70 " " "	Oct., 1898	.85 " " "
July, 1892	1.25 " " "	Oct., 1895	.85 " " "	Jan., 1899	.95 " " "
Oct., 1892	1.23 " " "	Jan., 1896	.90 " " "	Apr., 1899	1.10 " " "
Jan., 1893	1.13 " " "	Apr., 1896	.90 " " "	July, 1899	1.25 " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Continued.

HOUSE FURNISHING GOODS—Concluded.

TUBS: Wooden.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$1.90 per nest of 8.	Apr., 1893	\$1.50 per nest of 8.	July, 1896	\$1.30 per nest of 8.
Apr., 1890	1.90 " " "	July, 1893	1.40 " " "	Oct., 1896	1.30 " " "
July, 1890	1.90 " " "	Oct., 1893	1.40 " " "	Jan., 1897	1.27 " " "
Oct., 1890	1.90 " " "	Jan., 1894	1.35 " " "	Apr., 1897	1.35 " " "
Jan., 1891	1.90 " " "	Apr., 1894	1.35 " " "	July, 1897	1.35 " " "
Apr., 1891	1.90 " " "	July, 1894	1.30 " " "	Oct., 1897	1.30 " " "
July, 1891	1.90 " " "	Oct., 1894	1.20 " " "	Jan., 1898	1.35 " " "
Oct., 1891	1.90 " " "	Jan., 1895	1.20 " " "	Apr., 1898	1.40 " " "
Jan., 1892	1.85 " " "	Apr., 1895	1.15 " " "	July, 1898	1.40 " " "
Apr., 1892	1.80 " " "	July, 1895	1.10 " " "	Oct., 1898	1.40 " " "
July, 1892	1.75 " " "	Oct., 1895	1.20 " " "	Jan., 1899	1.45 " " "
Oct., 1892	1.70 " " "	Jan., 1896	1.40 " " "	Apr., 1899	1.65 " " "
Jan., 1893	1.60 " " "	Apr., 1896	1.35 " " "	July, 1899	1.75 " " "

MISCELLANEOUS.

POWDER: Rifle.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$5.00 per 25-lb. keg.	Apr., 1893	\$4.00 per 25-lb. keg.	July, 1896	\$4.00 per 25-lb. keg.
Apr., 1890	5.00 " " "	July, 1893	3.50 " " "	Oct., 1896	4.00 " " "
July, 1890	5.50 " " "	Oct., 1893	3.25 " " "	Jan., 1897	4.00 " " "
Oct., 1890	5.50 " " "	Jan., 1894	3.25 " " "	Apr., 1897	4.00 " " "
Jan., 1891	5.50 " " "	Apr., 1894	3.25 " " "	July, 1897	4.00 " " "
Apr., 1891	5.50 " " "	July, 1894	3.25 " " "	Oct., 1897	4.00 " " "
July, 1891	5.50 " " "	Oct., 1894	3.25 " " "	Jan., 1898	4.00 " " "
Oct., 1891	5.50 " " "	Jan., 1895	3.25 " " "	Apr., 1898	4.00 " " "
Jan., 1892	5.50 " " "	Apr., 1895	3.25 " " "	July, 1898	4.00 " " "
Apr., 1892	5.50 " " "	July, 1895	3.25 " " "	Oct., 1898	4.00 " " "
July, 1892	5.00 " " "	Oct., 1895	3.25 " " "	Jan., 1899	4.00 " " "
Oct., 1892	4.25 " " "	Jan., 1896	3.25 " " "	Apr., 1899	4.00 " " "
Jan., 1893	4.00 " " "	Apr., 1896	3.25 " " "	July, 1899	4.00 " " "

RUBBER: Para, new fine.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.73 per lb.	Apr., 1893	\$0.77 @ 0.79 per lb.	July, 1896	\$0.80 @ 0.85 per lb.
Apr., 1890	.84 " "	July, 1893	.66 @ .68 " "	Oct., 1896	.81 @ .84 " "
July, 1890	.90 " "	Oct., 1893	.71 @ .72 " "	Jan., 1897	.79 " " "
Oct., 1890	.92 " "	Jan., 1894	.69 @ .70 " "	Apr., 1897	.81 @ .82 " "
Jan., 1891	.78 @ 0.80 " "	Apr., 1894	.66 @ .67 " "	July, 1897	.83 " " "
Apr., 1891	.90 @ .91 " "	July, 1894	.66½ @ .67½ " "	Oct., 1897	.86 " " "
July, 1891	.82 @ .83 " "	Oct., 1894	.68 @ .71 " "	Jan., 1898	.82 @ .83 " "
Oct., 1891	.63 " " "	Jan., 1895	.73 @ .75 " "	Apr., 1898	.94 " " "
Jan., 1892	.63 @ .65 " "	Apr., 1895	.72 @ .73 " "	July, 1898	.95½ " " "
Apr., 1892	.72 " " "	July, 1895	.72½ @ .74 " "	Oct., 1898	.92 @ .93 " "
July, 1892	.68 @ .69 " "	Oct., 1895	.75 @ .77 " "	Jan., 1899	.94 @ .95 " "
Oct., 1892	.68 @ .69 " "	Jan., 1896	.77 " " "	Apr., 1899	1.02 " " "
Jan., 1893	.68 @ .70 " "	Apr., 1896	.74 " " "	July, 1899	.99 " " "

SOAP: Castile, mottled, pure.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.05½ per pound.	Apr., 1893	\$0.06½ per pound.	July, 1896	\$0.05 per pound.
Apr., 1890	.05½ " "	July, 1893	.06½ " " "	Oct., 1896	.05 " " "
July, 1890	.06½ " " "	Oct., 1893	.06½ " " "	Jan., 1897	.05½ " " "
Oct., 1890	.06 " " "	Jan., 1894	.06½ " " "	Apr., 1897	.05½ " " "
Jan., 1891	.06 " " "	Apr., 1894	.06 " " "	July, 1897	.05½ " " "
Apr., 1891	.06 " " "	July, 1894	.06 " " "	Oct., 1897	.05½ " " "
July, 1891	.06 " " "	Oct., 1894	.05½ " " "	Jan., 1898	.05½ " " "
Oct., 1891	.06½ " " "	Jan., 1895	.05½ " " "	Apr., 1898	.05½ " " "
Jan., 1892	.06½ " " "	Apr., 1895	.05½ " " "	July, 1898	.05½ " " "
Apr., 1892	.06½ " " "	July, 1895	.05 " " "	Oct., 1898	.05½ " " "
July, 1892	.06½ " " "	Oct., 1895	.05 " " "	Jan., 1899	.05½ " " "
Oct., 1892	.06½ " " "	Jan., 1896	.05 " " "	Apr., 1899	.05½ " " "
Jan., 1893	.06½ " " "	Apr., 1896	.05 " " "	July, 1899	.05½ " " "

WHOLESALE PRICES OF COMMODITIES, JANUARY, 1890, TO JULY, 1899—Concluded.

MISCELLANEOUS—Concluded.

STARCH: Pure.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.04950 per pound.	Apr., 1893	\$0.05175 per pound.	July, 1896	\$0.04950 per pound.
Apr., 1890	.04950 " "	July, 1893	.05175 " "	Oct., 1896	.04950 " "
July, 1890	.04950 " "	Oct., 1893	.05175 " "	Jan., 1897	.04950 " "
Oct., 1890	.05400 " "	Jan., 1894	.05175 " "	Apr., 1897	.04950 " "
Jan., 1891	.05400 " "	Apr., 1894	.05175 " "	July, 1897	.04950 " "
Apr., 1891	.05400 " "	July, 1894	.05400 " "	Oct., 1897	.04950 " "
July, 1891	.05400 " "	Oct., 1894	.05175 " "	Jan., 1898	.04950 " "
Oct., 1891	.05400 " "	Jan., 1895	.05175 " "	Apr., 1898	.04950 " "
Jan., 1892	.05175 " "	Apr., 1895	.05175 " "	July, 1898	.04950 " "
Apr., 1892	.05175 " "	July, 1895	.05175 " "	Oct., 1898	.04950 " "
July, 1892	.05175 " "	Oct., 1895	.05175 " "	Jan., 1899	.04950 " "
Oct., 1892	.05175 " "	Jan., 1896	.05175 " "	Apr., 1899	.04950 " "
Jan., 1893	.05175 " "	Apr., 1896	.04950 " "	July, 1899	.04950 " "

STARCH: Silver gloss.

Date.	Price.	Date.	Price.	Date.	Price.
Jan., 1890	\$0.06300 per pound.	Apr., 1893	\$0.06075 per pound.	July, 1896	\$0.05850 per pound.
Apr., 1890	.06300 " "	July, 1893	.06075 " "	Oct., 1896	.05850 " "
July, 1890	.06300 " "	Oct., 1893	.06075 " "	Jan., 1897	.05850 " "
Oct., 1890	.06300 " "	Jan., 1894	.06075 " "	Apr., 1897	.05850 " "
Jan., 1891	.06300 " "	Apr., 1894	.06075 " "	July, 1897	.05850 " "
Apr., 1891	.06300 " "	July, 1894	.06300 " "	Oct., 1897	.05850 " "
July, 1891	.06300 " "	Oct., 1894	.06075 " "	Jan., 1898	.05850 " "
Oct., 1891	.06300 " "	Jan., 1895	.06075 " "	Apr., 1898	.05850 " "
Jan., 1892	.06075 " "	Apr., 1895	.06075 " "	July, 1898	.05850 " "
Apr., 1892	.06075 " "	July, 1895	.06075 " "	Oct., 1898	.05850 " "
July, 1892	.06075 " "	Oct., 1895	.06075 " "	Jan., 1899	.05850 " "
Oct., 1892	.06075 " "	Jan., 1896	.06075 " "	Apr., 1899	.05850 " "
Jan., 1893	.06075 " "	Apr., 1896	.05850 " "	July, 1899	.05850 " "

FOREIGN LABOR LAWS. (a)

BY W. F. WILLOUGHBY.

GERMANY. (b)

To understand the existing system of labor legislation in Germany it is essential that its historical development should be traced at least in outline. Germany, like Austria, has refused to break with the past, and there can, therefore, be found in her present legislation many regulations the significance of which can be understood only by reference to prior legislation.

The history of the development of German labor legislation must be sought for in that of Prussia. Not only did Prussia, almost alone among German States prior to their federation in the Empire, resolutely attempt to free industry and labor from the restrictions characteristic of former centuries, and seek to bring her industrial legislation in harmony with changed conditions, but she afterwards imposed this legislation, with few modifications, upon the whole Empire.

a In Bulletin Nos. 25 and 26 the labor laws of Great Britain, France, Belgium, and Switzerland have been considered. In the present Bulletin those of Germany are shown. The labor legislation of Austria and other countries will be given in subsequent Bulletins.

b In the summary here given of the laws in Germany use has in all cases been made of copies of the laws themselves. These can easily be consulted in the three numbers of the Guttentag'sche Sammlung deutscher Reichsgesetze:

Reichs-Gewerbeordnung, nebst Ausführungsbestimmungen. Text-Ausgabe mit Anmerkungen und Sachregister, von T. Ph. Berger; fortgeführt von Dr. jur. L. Wilhelmi, 15th edition, Berlin, 1899.

Das Vereins- und Versammlungsrecht in Deutschland. Text-Ausgabe mit Anmerkungen und Sachregister, von Dr. Ernst Ball, Berlin, 1894.

Reichsgesetz betreffend die Gewerbegerichte, von L. Mugdan, 4th edition, Berlin.

In the analysis, and especially in the statement of prior existing legislation, use has, however, been made of other works, among which the following should be mentioned:

La législation du travail, par Ch. Morisseaux, Bruxelles, 1895.

Conrad's Handwörterbuch der Staatswissenschaften, and the two supplemental volumes published in 1895 and 1897.

Royal Commission on Labor, Great Britain. Foreign Reports: Germany, 1893.

Report of the Chief Inspector of Factories and Workshops for the year 1895. Great Britain, 1896 (contains a report by Miss A. M. Anderson on Protection of Labor in Industry, Germany).

Annuaire de la législation du travail. 1^{re} année, 1897; 2^e année, 1898. Office du Travail, Belgique, 1898 and 1899.

Le développement de la législation protectrice des ouvriers en Allemagne depuis 1890, par A. Weber. A report made to the Congrès International de Législation du Travail, à Bruxelles, 1897.

In tracing this development it is desirable to distinguish and follow separately two distinct movements, though legislation in respect to both is frequently found in the same acts. The first relates chiefly to the effort to liberate industry from old restrictions, and to determine the sphere and functions of the old guilds so as to bring them into harmony with modern conditions. The second relates to the gradual growth of a body of legislation concerning factory work, necessitated by the development of manufacturing upon a large scale, the regulation anew of the labor contract, the arbitration of labor disputes, the right of workingmen to form organizations, etc. It is exceedingly important to bear in mind this twofold development, as it has resulted in the formation of two distinct schemes of labor regulation; the one relating solely to the handicraft trades, and fixing the conditions that workingmen must fulfill in order to be apprentices, journeymen, and masters, and the character and powers of their organizations, the guilds, and the other relating to employees working in factories and mills, though under this head are considered some laws, such as that concerning the right of association, that are of general application.

The starting point for the first movement is found in the edict of October 9, 1807, which abolished serfdom, and made free the right to possess land. This was followed in the next year by the circular of December 26, 1808, which proclaimed the right of citizens freely to engage in such occupations as they desired. Exclusive privileges to conduct certain trades and industrial monopolies were gradually abolished by subsequent orders. November 2, 1810, a law was passed which made the exercise of a trade conditional upon securing a "patent" from the Government, but this could not be refused to anyone producing a certificate of good conduct. For certain trades, the pursuit of which was attended by considerable danger, or for which a special knowledge or skill was required, a special authorization was necessary. Certain differences between cities and rural districts in respect to the prosecution of trades and other restrictions upon the freedom of labor, such as fees and special taxes, were at the same time removed.

This process of freeing industry was continued by the law of September 7, 1811, in respect to trade guilds (*Innungen*). This law maintained the old guilds as institutions necessary to unite persons engaged in the same trade, but provided that membership in them should not be compulsory. Persons not members were permitted to employ labor and have apprentices. It is important, however, to note that the Government reserved to itself the right to unite in guilds persons exercising the same trade, if it was believed that the public interests would be served thereby.

A law, dated May 30, 1820, removed the obligation of obtaining a "patent," and provided that a simple declaration to the local authorities would suffice.

This movement for the freeing of industry was consummated in 1845 by the enactment of the very important general labor code (*Gewerbeordnung*) of January 17 of that year. The character and significance of this act is described by M. Morisseaux as follows:

This law was the first act the provisions of which applied uniformly to all the provinces of Prussia. It was the result of ten years' study and investigation by an official commission and various public bodies. It confirmed and extended industrial liberty and removed in all the provinces of the Kingdom a large number of restrictions which were still contrary to this principle. It subordinated the exercise of a trade only to the possession of the necessary aptitude for its prosecution, to a fixed domicile, and to a declaration to the local authorities. In exceptional cases only, where special intelligence was required or the industry was dangerous to the public, were special authorizations required. The law enumerates these dangerous or unhealthy trades, and the special conditions regulating their prosecution. Finally all the old industrial privileges, including those consequent upon the ownership of land, the right of granting monopolies which certain authorities still retained, the right to sell in the city and environs (*Bannrecht*) to the exclusion of strangers, the prohibition of the right to exercise several trades simultaneously, the monopoly of exercising certain trades until then reserved to the cities—all these privileges, all these rights, the remnants of old legislation, and already in part suppressed by the laws of 1810 and 1811—were completely swept away.

The law, however, made the effort to bolster up and maintain the old guilds. The reason for this action was chiefly the desire to preserve the apprenticeship system. It was thought that the education of apprentices was a matter that should not be left to the hazards of a purely private contract. At the same time the Government was not ready to introduce a system for the official examination and regulation of apprentices. The law, therefore, defined anew the duties and rights of guilds and assigned to them the care of the interests of their trades, the regulation of apprenticeships, and the establishment and maintenance of relief funds for their members. Membership in the guilds, however, continued to be upon the voluntary basis.

The country at this time was apparently not prepared for so large a measure of freedom. An industrial depression occurring about this time was attributed in part to this legislation. Changes were demanded, and in consequence some modifications in the sense of limiting the liberty that had been granted were made by the two ordinances of February 9, 1849. The exercise of a handicraft trade was made dependent upon affiliation with the guild for the trade and certain other conditions. New importance was thus given to the guilds.

Commencing with 1860, the current again set strongly toward liberalism. During the years 1860 to 1865 a large number of the German States enacted industrial laws having for their purpose the freeing of industry. In Prussia laws of this character were enacted June 22, 1861, July 1, 1861, and September 13, 1865, though the provisions of the general law of 1845 were not materially changed.

In 1867 the Confederation of the North German States was formed. The Federal constitution, adopted July 26, gave to the central government the power to enact general industrial regulations. It was by no means an easy task to frame a law to supplant the diverse laws of the different States. Success, however, was finally achieved, and a general industrial code (*Gewerbeordnung*) was enacted June 21, 1869. After the founding of the German Empire this law was extended by successive acts to those States which were not embraced in the Confederation of the North. The final step was taken in 1889, when its extension to Alsace-Lorraine was practically completed.

In general character this law was similar to the industrial code of 1845. Its provisions, however, were even more liberal, and an industrial system approaching in freedom that of Great Britain was established. As in 1845, however, almost immediately upon the enactment of the code, a reaction set in, and a movement for the modification of its provisions in the sense of making the right to be an employer, a journeyman, or an apprentice dependent upon certain conditions was started, which, continuing to the present day, has radically modified the system of the legal regulation of labor and industry in the country.

The reason for this dissatisfaction with the legislation of 1869 is found in the rapid growth of the factory system after the war with France, and the corresponding decline in importance and dignity of the old handicraft trades and trade guilds. This change was looked upon by many as a real misfortune. Coming at this time, it was attributed largely to the code of 1869, which left the formation of, and membership in, guilds entirely voluntary.

The means for restoring the handicrafts to their old importance was sought in the restoration to power of the trade guilds. During the last 30 years there has consequently been a determined, and to a considerable extent successful, agitation for the enactment of laws giving increased powers to the guilds. The most radical demanded the organization of the handicraftsmen in each trade into compulsory guilds, with large powers for the regulation of trade matters.

Though conducted with great energy, this agitation was not productive of important results until 1881. A law was enacted July 18 of that year which introduced a number of the changes demanded. While failing to establish the principle of compulsory guilds, this law gave voluntary guilds a very privileged position. It made them organizations of employers and journeymen carrying on a trade on their own account, with an authority of their own, and power to enact certain regulations, especially as regards apprenticeship, which should have all the force of law even in respect to journeymen not affiliated with the guilds. They were to create and maintain aid funds and arbitration tribunals (*Schiedsgerichte*) for the adjustment of trade dis-

putes and organize technical schools and other institutions for the advancement of the interests of their trades. An important change was the removal of the restriction, contained in the law of 1869, that each guild should embrace only members of the same trade, a restriction that had prevented the formation of guilds in small places. The guilds were made civil bodies, and given the power to hold land, to contract obligations, and sue and be sued in their corporate capacity. Finally, the collection of properly imposed dues was made enforceable by law.

This law was far from being as radical as was demanded, and the agitation for the extension of the guilds continued unabated. December 8, 1884, a law was passed which provided that a journeyman not a member of a guild could not have an apprentice. April 23, 1886, another law was enacted, having for its purpose the encouragement of federations of guilds and outlining for them certain fields of activity. The movement was advanced another step by the law of July 6, 1887, which gave additional privileges to guilds, the most important of which was the power conferred on administrative authorities to compel employers and journeymen not affiliated with guilds of their trades to bear their share of the guild expenses for journeymen's shelters, trade schools, and arbitration tribunals.

Finally, this long series of laws reached its consummation in the very important law of July 26, 1897, in which are consolidated all the legal provisions regarding guilds, journeymen, and apprentices. In bringing together in one act these various provisions the Parliament at the same time introduced a number of important modifications in the prior existing laws. Most, if not all, of these changes have for their purpose the increase in power and importance of the guilds, and the more rigid regulation of the right to work as journeymen, to have apprentices, etc. While a general system of compulsory guilds is not created, it is provided that where a majority of the persons interested are in favor of it a compulsory guild, to include all members of a trade in a certain district, can be created by the authorities.

RIGHT OF ASSOCIATION.

In Germany, as in most European countries, the formation by workingmen of organizations of any kind was for many years looked upon as a danger to the State and was prohibited by law. The labor code of 1869, in completing the freeing of industry from many old restrictions, at the same time removed the restriction on the formation of labor organizations. Under this law workingmen have the right to form unions for the purpose of jointly attempting to raise their wages or improve their condition in other respects.

In granting this privilege the law, however, introduced certain provisions to guard against its abuse. The law provides that anyone,

whether employer or employee, who seeks to induce another person or other persons, by physical force, threats, insults, or injuries to take part in any combination or organization, or to induce another or others to withdraw from such combination or organization, may be punished by imprisonment for not more than 3 months.

As yet no general law has been enacted for the purpose of regulating the right of workmen to form trade unions or other trade organizations. With the exception of certain isolated provisions of the general industrial code relating to this subject, the nature of which has been given, the right of association is, therefore, a matter which is regulated by the laws of the individual States of the Empire.

As yet labor organizations have not been given the right of becoming legal persons through incorporation or otherwise. They can not hold property, sue or be sued, or perform other similar acts in a corporate capacity.

There are special laws relating to the formation of joint stock, cooperative, and other similar kinds of organizations, but their consideration does not come within the scope of this paper.

TRADE GUILDS.

The whole system of the legal regulation of trade guilds and apprenticeship, as has been said, is now set forth in the law of July 26, 1897. The essential features of this system are fully shown in the following paragraphs.

Persons carrying on trades on their own account can form guilds for the advancement of their common trade interests. The objects of these guilds shall be: (1) The cultivation of esprit de corps and professional pride among the members of a trade; (2) the maintenance of amicable relations between employers and their employees, the securing of work for unemployed journeymen, and their shelter during the period of their nonemployment; (3) the detailed regulation of the conditions of apprenticeship and the care for the technical and moral education of apprentices; (4) the adjustment of disputes between guild members and their apprentices, as contemplated by the law of July 29, 1890, concerning industrial arbitration.

In carrying out these purposes the following lines of action are specifically recommended by the law to the guilds: (1) The creation of institutions for the development of the industrial and moral character of masters, journeymen, and apprentices, and notably the maintenance of technical schools and the promulgation of orders for their administration; (2) the determination of the conditions under which persons may become masters or journeymen and the granting of certificates to that effect; (3) the establishment of funds to aid guild members and their families, journeymen, apprentices, and helpers in cases of sickness, invalidity, death, or other trouble; (4) the organization

of arbitration tribunals to take the place of the ordinary arbitration authorities for the adjustment of disputes between members and their employees; (5) the creation of a general business organization for the purpose of advancing the trades for which the guilds are created.

In general the jurisdiction of a guild is limited to that of the administrative district in which it is located. Exceptions, however, can be authorized by the central authorities.

Each guild must have its individual constitution, setting forth the rules for its government, the rights of members, and its own obligations. This constitution must contain provisions concerning: (1) The name, location, and district of the guild, and the branch of industry for which it was created; (2) the objects of the guild and the permanent institutions, especially those for the benefit of apprentices, that it intends to create; (3) the conditions of admission, resignation, and expulsion of members; (4) the rights and duties of members, and especially the basis upon which dues will be assessed; (5) the appointment of a board of managers and the determination of its powers, the composition and powers of the guild assembly, the manner of voting, the verification of accounts, and generally the provision of a scheme of government for the guild; (6) the establishment and attributes of a journeyman's commission; (7) the enforcement of regulations concerning the employment of journeymen, apprentices, and helpers, and the attendance upon schools by apprentices; (8) the creation and fixing of the mode of procedure of arbitration tribunals between members and their employees; (9) the levying and enforcement of fines; (10) the manner in which the constitution can be amended or the guild dissolved.

The constitution must not contain any provisions which do not relate to the duties of the guilds as determined by the present law, or which contravene any legal provisions. It must be approved by the superior administrative authorities of the district in which the guild is located. This approval can only be refused when the constitution does not conform to legal requirements, or when there is already in existence in the district a guild for the same industry or industries.

When any of the institutions enumerated above, such as aid funds, arbitration tribunals, etc., are organized by a guild, special regulations for their administration must be prepared, which must also be submitted to the authorities for approval. These officers can exercise their discretion in granting or refusing their approval, but must give their reasons when adverse action is taken. An appeal from this decision can be taken to the central government.

Separate accounts must be kept of the receipts and expenditures of each institution, and the funds of each must be kept separate from the general funds of the guild.

Guilds are corporate bodies, and can acquire property, make contracts, and sue and be sued in their corporate capacity. Their creditors have recourse only against the corporate funds of the guilds.

Membership in guilds is limited to the following classes of persons: Those who exercise on their own account in the district the trade for which the guild is created; those who hold the position of foreman or a similar office in a large establishment; those who fulfill the conditions of the above two classes, but have ceased to work without taking up any other trade, and handicraftsmen (*Handwerker*) working for wages in agricultural and industrial pursuits. Other persons, however, may be admitted as honorary members.

The admission of members can only be made subject to such examinations as are prescribed by the constitution, and this examination can only relate to the test of the capacity of the applicants to carry on their trades. Membership can not be refused to anyone fulfilling the legal and statutory requirements, nor can anyone be admitted without fulfilling these conditions.

Members can resign at the end of any official year, provided a prior notice is not required by the constitution. This notice can not be for a longer period than 6 months. Members upon resigning lose all right to a share in the property of the guild, and, unless it is otherwise specifically provided in their constitutions, in the funds of the subsidiary institutions. Upon the death of a member his interest devolves upon his widow or heirs, and the latter can be permitted by the constitution to vote in his stead in the guild assembly.

No member can be required by his guild to do anything or to pay any dues not having reference to the objects of the guild, nor can the funds of the guild be diverted to other purposes. Dues properly levied for the support of the guild or its subsidiary institutions, and fines, can be compulsorily collected in the same way as communal taxes. Disputes concerning dues are decided in the final instance by the superior administrative authorities.

Guild funds must be invested in the manner provided by the civil code in the case of orphan funds, and an accurate account must be kept of all receipts and expenditures. The approval of the supervising authorities is required for all important financial transactions, such as the purchase, encumbrance, or sale of real estate, or the alienation of property having an historical, scientific, or artistic value.

The guilds are given the power to create sick funds, through which the obligations imposed by the sick-insurance law may be fulfilled. The administration of these funds may be intrusted exclusively to the journeymen and helpers, but if the guild members consent to pay half the dues required, the president and half the committee of administration can be named by the guild.

ARBITRATION TRIBUNALS.—The arbitration tribunals organized by the guilds must be composed of a president, designated by the supervising authorities, and not necessarily a member of the guild, and at least two members, chosen half from among the guild members and

half from among the journeymen and other employees of the guild members. The representatives of the guild members are elected by the guild and those representing the workingmen by the workingmen themselves. Their expenses and an indemnity for loss of time are paid to members for each meeting they attend. The amount of this indemnity and the payment to the president are fixed by the special regulations for the arbitration tribunal.

Whenever a request is made for the intervention of this body it must convene within at least 8 days thereafter and must give its decision as soon as possible. If the decision is that something must be done, the defendant shall, if the plaintiff demands it, be ordered to pay a fixed sum in case he fails to obey the order within the time fixed by the tribunal. This penalty can be collected by a civil action. Decisions must be in writing. They acquire an executory force, unless an appeal is taken to the ordinary arbitration authorities within one month. In certain cases, as where an irreparable damage may result and the matter in dispute does not exceed 100 marks (\$23.80) in value, the decision can be declared immediately executory. This can be avoided, however, by the person obligated giving a suitable guarantee.

The decision can be enforced by the police authorities, or in conformity with the procedure for enforcing civil judgments.

GOVERNMENT.—The administration of the affairs of the guild is intrusted to a guild assembly, a board of managers, and commissions for the management of the subsidiary institutions that may be created within the guild. The assembly is either composed of all the guild members or of a certain number of representatives, as may be provided by the constitution of each guild. The board of managers is elected by secret ballot by the assembly or by acclamation, if there is no objection. A record must be kept of all elections.

The law sets forth in considerable detail the respective spheres of action of the assembly and the board of managers. Without entering into these particulars, it is sufficient to say that all the more important acts, such as the voting of the budget, the acquisition of property, etc., must be approved by the assembly, while those of less importance may be settled by the board of managers.

The guilds have the right to supervise by delegates the execution of the laws concerning industrial work in their trades, and to examine the places of work and rooms destined for apprentices. If this power is availed of, the delegates must report their action to the inspectors of factories whenever requested to do so by those officers.

The journeymen employed by the guild members are permitted to participate in the management of the guild affairs within certain limits as prescribed by law and by the constitutions of the guilds. This they do through a journeymen's commission (*Gesellenausschuss*), whose mission is to participate in the regulation of the con-

ditions of apprenticeship, the examination for journeymen's certificates, and the establishment and administration of all institutions in which the journeymen participate, or for the support of which they are required to pay dues. The manner in which this participation is exercised must be regulated in detail by the constitution of each guild upon the following basis: At least one member of the journeymen's commission must take part in the deliberations of the board of managers; all members of the commission must take part in the work of the guild assembly; and, in all bodies for the administration of institutions for the support of which the journeymen contribute, the commission must elect members equal in number to those elected by the guild, not including the president.

ADMINISTRATIVE CONTROL.—All guilds are subject to the oversight of the superior administrative authorities of the districts in which they are located. This oversight consists especially in the duty of the authorities to see that all legal and statutory requirements are fulfilled by the guilds. Compliance with these obligations can be compelled by the imposition of fines. The authorities adjust disputes relative to the admission or exclusion of members and elections. They have the right to have a representative present at examinations. They convoke and direct guild assemblies when the board of directors of a guild refuses or neglects to summon them. The presence of a representative of the authorities is necessary at all deliberations at which the subjects of the modification of the constitution of the guild, or of the regulations of any of its institutions, or the dissolution of the guild are under consideration. The authorities can dissolve a guild whenever it refuses to comply with the legal requirements, does not properly perform its duties, or becomes so reduced in membership as no longer to be able effectively to accomplish its mission. The method to be pursued in bringing about the dissolution of a guild is carefully stated in the law, but is not of sufficient importance to be here reproduced.

COMPULSORY GUILDS.—As has already been pointed out, the German Parliament, while desiring to foster the growth of trade guilds, was unwilling to take the radical step of making the creation of such institutions compulsory upon employers and journeymen. Instead it adopted the compromise measure by which compulsory guilds shall be created only under certain circumstances and when the persons interested seem to be in favor of their establishment.

The law thus provides that when the majority of the interested parties in a certain district consent to the introduction of the principle of compulsory guilds, the superior administrative authorities can create such an institution. When this is done membership is compulsory upon all persons carrying on the trade to which the guild relates on their own account, whether they were in favor of a compulsory

guild or not. Exception is made in favor of those persons who are at the head of large industrial establishments (factories) and those who do not employ journeymen or apprentices. These persons, however, can become members if they desire to do so. The constitution of each guild will determine, subject to the approval of the higher administrative authorities, the extent to which handicraftsmen (*Handwerker*) who are employed in agricultural and industrial pursuits for wages and as a regular thing employ journeymen or apprentices, and persons conducting a household industry, shall be members of the guilds.

The boundaries of a guild district must be so fixed that no member will be so far removed from the guild headquarters that he can not participate in the corporate life of the guild or benefit by its institutions. A compulsory guild, moreover, can only be created where there are a sufficient number of persons qualified to become members to insure that the guild will have sufficient strength to support the burden of its necessary expenditures.

The action of the authorities upon a request for the establishment of a compulsory guild, whether it is favorable or unfavorable, can be appealed from to the central government. An appeal also lies to the same body when the authorities have refused to approve the constitution of a compulsory guild.

The central government, upon the request of the parties interested, advances the money necessary to meet the first expenses of administration.

When a compulsory guild is created, all voluntary guilds in the district in the trades to which the new guild relates must be dissolved. When this is done the property of the voluntary guilds, except in certain special cases, goes to the compulsory guild that replaces them. In those cases where sick funds have been created by virtue of the sick insurance law they are transferred with all their rights and obligations to the new corporation. The superior administrative authorities, however, can abolish these funds if the guilds do not correspond in respect to their boundaries or trades comprehended. All questions regarding the equitable adjustment of rights or duties growing out of this transaction are settled by the superior administrative authorities, subject to an appeal to the central government.

Members of compulsory guilds can not be compelled against their wish to contribute to aid funds which are not comprehended by the law for the compulsory insurance of workingmen against sickness. The guild also is prohibited from carrying on any common industrial undertaking, but it can promote the creation of institutions which have for their purpose the advancement of the trade and economic interests of its members, such as loan funds and organizations for the purchase in common of materials or for the sale of products. It can also aid such works by subsidies, but can not impose special dues for that purpose.

Guilds can not restrict in any way the freedom of their members in fixing the wages of their employees, or the prices for their goods, or the acceptance of clients. All contracts to the contrary are void.

At least two-thirds of the members of the board of managers and of the various guild commissions must be persons having the right to employ apprentices, and must regularly employ apprentices or journeymen. The members of the commission on apprentices must employ both these classes.

In order to meet the expenditures required by the operations of the guilds and journeymen's commissions, dues must be provided for by the constitution upon such a basis that the contribution of each industrial enterprise will be in proportion to its financial capacity. Where an industrial tax is levied by the central government, these dues can be collected as an addition to this tax. The constitution of a compulsory guild can provide that members who do not regularly employ apprentices or journeymen may be wholly or partially exempted from the obligation to pay dues. It can also provide that those persons who voluntarily affiliate themselves with the guild shall only pay certain fixed dues. The levying of entrance fees is prohibited, and the imposition of dues for the maintenance of institutions within the guild must receive the sanction of the supervising authorities.

Compulsory guilds must prepare annual statements of their expenditures and must present annual reports to the supervising authorities.

A compulsory guild will be dissolved at the request of its assembly when one-fourth of the members obligatorily affiliated with the guild have requested the board of managers to take action, a notice of at least 4 weeks of the assembly meeting at which the subject of dissolution was discussed has been given, and three-fourths of the members at this assembly have voted for dissolution. When dissolution takes place, any surplus funds that the guild may possess are distributed by the supervising authorities to the aid funds belonging to the guild, or to the free guild, if such a one is created to take the place of the compulsory guild dissolved, or to the chamber of trades. This action must be approved by the superior administrative authorities, from whose action an appeal can be taken to the central government.

GUILD UNIONS.—Several or all of the guilds subject to the same supervising authorities may form a union for the care of their common interests. When created, certain of the rights and duties belonging to the individual guilds can be transferred to it. The constitution of the guild union must be approved by the superior administrative authorities, from whose decision an appeal can be taken to the central government. The union can be given the power to acquire property, to contract obligations, and sue and be sued in its own name. In general, these unions are subject to the same supervision and control by the Government authorities as the individual guilds.

GUILD FEDERATIONS.—Guilds not subject to the same supervising authorities can form federations. These federations have as their mission the protection of the interests of the trades represented, the assistance of the guilds, guild unions, and chambers of trades in carrying on their work, and the assistance of the Government authorities, by recommending action when the occasion seems to require it. They are authorized to take charge of securing employment for workmen out of work and to establish trade schools.

The constitutions of federations must be approved by the superior administrative authorities when the jurisdiction of the guilds included does not extend beyond the jurisdiction of those authorities; by the central government when it relates to guilds in a number of districts, and by the chancellor of the Empire when it relates to guilds in two or more federated States. Approval can be refused only when the constitution does not conform to legal requirements, or contemplates action by the guild not authorized by law, or if the number of the guilds composing the federation is not sufficient to properly carry out the object of the federation.

The law regulates in great detail the manner in which these federations shall be governed and the extent to which their acts are subject to the approval of the Government. These provisions, however, are so similar in principle to those governing the guilds and guild unions that it is unnecessary to reproduce them. Like these bodies, the federations can hold property, create aid funds, and act in a corporate capacity. They can be dissolved in much the same way as guilds or guild unions.

CHAMBERS OF TRADES.—The central government can create chambers of trades to look after the handicraft trades of the districts for which they are created. These chambers have for their mission: The detailed regulation of the conditions of apprenticeship; the supervision of the execution of these apprenticeship provisions; the assistance of the central and communal authorities in their efforts to advance the interests of the handicraft trades, by furnishing information and making reports concerning trade matters; the giving of advice on action proposed in relation to these trades, and the preparation of annual reports giving information collected by them concerning trade conditions; the creation of commissions to conduct examinations for the granting of journeymen's certificates, and the creation of commissions to adjust disputes arising out of the action of these examining commissions.

These chambers can also create institutions to promote the industrial and moral welfare of employees and apprentices, and especially can establish or subsidize trade schools. The regulations regarding apprenticeship must be submitted to the central government for approval and must afterwards be published. These regulations will

supersede any provisions of the constitution of the guilds or guild unions that may be in conflict with them. These bodies are required to execute the orders made by the chambers when acting within their powers.

The constitutions of the chambers are formulated by the central government, and must set forth in detail the name, powers, purposes, and scheme of government of the chambers. The number of members of each chamber will be determined by its constitution. The members are chosen by the guilds from among their members, and by the trade unions (*Genossenschaften*) and similar organizations, one-half of whose members, at least, are journeymen working within the district. To be eligible for election, candidates must fulfill various requirements, the most important of which are that they shall be 30 years of age, have carried on a trade on their own account for at least 3 years in the district, and have the right to employ apprentices. The chambers can provide by their constitutions that not more than one-fifth of the members shall be experts selected by the other members, and that, furthermore, other experts with a consultative voice only can be summoned to the meetings.

All the more important affairs of the organizations are managed by the full chambers. Matters of detail are left to a board of managers elected from among the members. It is the duty of the supervising authorities to appoint an official commissioner, who must be summoned to every meeting of the chamber, of the board of managers, or of the different commissions. This commissioner has the right to be heard whenever he desires to speak, to examine all the papers of the chamber, to bring forward propositions for consideration, to demand the convening of the chamber, and to suspend its decisions or those of any of its organs whenever he deems that their legal powers have been exceeded.

A journeymen's commission must be established in connection with each chamber. The duties of this body are to give advice and assistance in the preparation of reports concerning the situation of journeymen and apprentices, and to assist in the preparation of regulations for the government of apprentices, and in the adjustment of appeals against the decisions of the examining boards. The members of these commissions are chosen by the journeymen's commissions of the guilds under the direction of the supervising authorities. Their number and apportionment among the different journeymen's commissions are determined by the constitution of each chamber.

The expense of organizing and administering the chambers, as far as it is not met in some other way, must be defrayed by the communes, which will apportion it among the different trades as determined by the superior administrative authorities. The chambers have the right to impose fines, not exceeding 20 marks (\$4.76) in value, as penalties for the infraction of their rules.

The chambers are subject to the supervision of the superior administrative authorities of the districts in which they are located. If a chamber is repeatedly guilty of opposing the supervising authorities, or neglects to fulfill its obligations, or breaks the law for its regulation, either by acts of commission or omission, or pursues objects foreign to those authorized by law, it can be dissolved by the authorities and the election of a new chamber proceeded with. An appeal against this action can be made to the central government.

The administrative authorities and the chambers and their various commissions are required to render each other all possible assistance in carrying out the objects of the present law.

THE LABOR CONTRACT.

The general principle of the German law regarding the labor contract is that the fixing of the relations between employers and employees, except in so far as it is restricted by the imperial law, is a matter for voluntary agreement. The restrictions here referred to are those in relation to the employment of women and children, Sunday and night work and the like, and those concerning the requirement of notice when it is desired to sever the contract, the damages that can be claimed when the contract is broken, etc., which will now be given.

The labor contract between employees and their employers may, unless otherwise agreed upon, be dissolved at any time by either party by giving 14 days' notice. If a longer or shorter notice is agreed upon, it must be the same for both parties. Agreements contrary to this provision are void. To this rule the following exceptions are permitted: Before the expiration of the term of work agreed upon, an employee may be dismissed without notice (1) if at the time of making the contract he deceived his employer by presenting a false labor pass book or certificate, or if at the time he was under a contract to work for another person; (2) if he is guilty of theft, embezzlement, fraud, or other bad conduct; (3) if he leaves his work or otherwise persistently refuses to fulfill the obligations imposed upon him by his contract; (4) if in spite of warnings, he is reckless in the handling of fire or light; (5) if he is guilty of acts of violence or gross insult toward his employer, his representatives, or members of their families; (6) if he intentionally and unlawfully commits an injury to the detriment of his employer or a fellow-worker; (7) if he incites or seeks to incite members of the employer's family or other employees to commit illegal or immoral acts, or has illegal or immoral relations with members of the family of his employer, or the latter's agents; and (8) if he is unable to continue his work, or is afflicted with a repulsive disease. In the first seven cases action must be taken by the employer within a week from the time the employer becomes

aware of the facts justifying this action. In the last case the extent to which the employee is entitled to an indemnity depends upon the particular circumstances of the case.

The employee, on his part, can leave without giving notice (1) when he is unable to perform his duties; (2) when the employer or his representative is guilty of violence or other serious misconduct toward him or his family; (3) when the employer or his agent, or any member of their families, attempts to incite workmen or members of their families to commit illegal or immoral acts, or has illegal or immoral relations with any member of the workman's family; (4) when his wages are not paid as agreed upon or sufficient work is not furnished him when he is working by the piece system; and (5) when his continuance at work exposes his life or health to danger which was not apparent when the contract was made. In the second case action must be taken within a week from the time he became aware of the circumstances justifying his taking action. Finally, the law of 1891 added the provision that the contract could be severed without notice by either party for other important reasons (*aus wichtigen Gründen*), which expression was subsequently defined to relate to such occurrences as deaths, serious illness in the family, or marriage of female employees, if the contract was for 4 or more weeks' work, or a notice of more than 2 weeks was stipulated.

When the labor contract is illegally broken the injured party is entitled to damages, which can be collected through the regular law courts. In addition to this mode of procedure the law of 1891 makes provision for a system by which certain classes of workers can obtain an indemnity without going to the trouble of proving actual damages, it being sufficient if it is shown that the contract was broken without just cause. In this case the amount of the indemnity is limited to the ordinary daily wages of the district for the number of days still to run before the termination of the contract as agreed upon, but in no case for more than 6 days. By the payment of this claim all other claims arising out of the breach of the contract are nullified. This provision by which indemnification can be secured without proving actual damages does not apply to apprentices, assistants in mercantile or apothecary establishments, employees in mines, nor in the case of home workers or factories where at least 20 workmen or women are employed. It does apply, however, to officials, superintendents, and technical experts.

An employer who persuades a workman to break an existing labor contract before its expiration is equally liable for damages as above provided. In like manner an employer is liable if he employs or retains in his employ a workman whom he knows to be still under contract with another employer. An employee must obey the orders of his employer in reference to the work given to him to per-

form, but he can not be required to perform household duties unless he has specially agreed to do so.

The foregoing provisions regarding the labor contract apply only to workingmen, properly speaking. The law regarding the contract for labor between employers and overseers, managers, technical experts, etc., is somewhat different. As the principle of this regulation is the same it is unnecessary to reproduce it in detail.

APPRENTICESHIP.

The law of 1897 contains detailed provisions for the regulation of apprenticeship in the Empire. These provisions are in the main but reenactments of prior existing regulations, the chief changes being in relation to the powers given to the various guild organizations to draft the details of the regulations for the different trades and their enforcement when promulgated. The following is a condensed translation of the provisions of the law of 1897 concerning this subject:

Only persons enjoying all their civil rights shall have the privilege of having and directing apprentices. This right can be temporarily or permanently withdrawn from persons who have repeatedly failed in a material respect to fulfill their obligations toward apprentices, or who have been guilty of acts contrary to morality and of a nature to make them unfit to have charge of apprentices. This right can also be withdrawn from persons afflicted with physical or mental diseases incapacitating them for the proper performance of that duty. The power of thus withdrawing the right to have or direct apprentices is intrusted to the lower administrative authorities, from whose action an appeal can be taken to the higher authorities.

The apprenticeship contract must be in writing, and be concluded within 4 weeks from the commencement of the service. The contract must show the industry to which the apprenticeship relates, the length of service agreed upon, an indication of the reciprocal duties of the parties, and the cases in which the contract can be terminated by one of the parties without the previous consent of the other. It must be signed by the employer or his representative, the apprentice, and the latter's father or guardian. These provisions do not apply to apprentices employed in apprenticeship shops recognized by the Government.

The duties imposed upon the employer are to instruct the apprentice in all matters relating to his trade; to require him to attend an industrial or finishing school; to see that he applies himself zealously and conducts himself properly; to guard him against bad habits, and to protect him from bad treatment on the part of members of his household or companions. The employer must personally direct the work of the apprentice, or place him under the direction of a competent person charged with his special instruction. He can not require of him work beyond his strength or which may be injurious to his health, and must not deprive him of the time necessary for his school instruction or for divine worship. Apprentices not living at the houses of their employers must not be required to perform household duties.

The apprentice must show himself faithful and obedient to his mas-

ter, or those put in charge of his instruction, and must submit to the paternal discipline of the former.

Provision is made for a probationary period, which usually embraces the first 4 weeks of the apprenticeship term, but which may be extended so as to embrace not more than 3 months. The purpose of this provision is to afford an opportunity for the parties to determine whether the contract is satisfactory, and especially whether the apprentice has such an aptitude for the trade as to justify his continuance in it. During this period the contract can be terminated at will by either party. After the expiration of this period, however, the apprentice can not be dismissed unless he refuses to comply with the provisions of the contract, neglects his school work, or is guilty of some overt act, such as theft.

The apprentice, on his part, can terminate the contract if his employer neglects to carry out his obligations toward him, exposes his health to danger, abuses his right to correct him, neglects his education, or becomes incapable of fulfilling the conditions imposed upon him by the terms of the contract.

Upon the completion of the apprenticeship term, the employer must furnish the apprentice with a certificate showing the industry in which the apprentice has been employed, his length of service, degree of skill acquired, etc. When there are guilds or similar organizations for the trade, this certificate can be replaced by a diploma given by these bodies.

If the father or guardian, or the apprentice himself if he is of age, makes a written declaration that the apprentice desires to enter another trade, the contract can be terminated after 4 weeks' notice. In this case the transaction must be entered in the apprentice's pass book, or certificate, and the apprentice can not be employed in the same trade until after the expiration of 9 months, unless he obtains the consent of his former employer.

If an apprentice breaks his contract without due cause, his return can be compelled through the intervention of the police authorities. A demand for such assistance must be made within 1 week from the time of the departure of the apprentice. When the contract has been thus broken by the apprentice without justification, the employer is also entitled to damages. When definite provisions for damages have not been made in the contract, they will be calculated at a rate not exceeding one-half the wages paid in the district to journeymen or helpers in that trade for each of the days remaining until the end of the term agreed upon, but not to exceed 6 months. The obligation of paying this indemnity rests upon the apprentice's father, or the employer who induced the apprentice to break the contract or took him as an apprentice knowing that he was already bound.

If the number of apprentices of any employer is out of proportion to the amount of the latter's business and the instruction of the apprentices is thereby jeopardized, the lower administrative authorities can compel the dismissal of some of the apprentices and forbid the taking of new ones, so as to bring their number within a certain figure.

The Bundesrat can determine for special categories of industries the maximum number of apprentices that can be employed. Until fixed in this way the central government can take similar action, and when this government fails to act the chambers of trades can limit the number of apprentices.

In the handicraft trades, only those persons have the right to direct apprentices who are 24 years of age and have completed the term of apprenticeship prescribed by the chamber of trades in the trade in which it is desired to instruct apprentices, or have exercised that trade without interruption for 5 years either on their own account, or as foremen, or in a similar capacity. The superior administrative authorities can, however, accord this right to persons not fulfilling these conditions. Before doing so they must take the advice of the guild to which the applicant belongs.

Apprenticeship can be served in a large industrial establishment or be replaced by work in an apprenticeship shop or other establishment for industrial education.

If an employer is a member of a guild, he is required to communicate to it copies of all apprenticeship contracts made with him within 15 days after their conclusion. The guilds can require the contracts to be made before them.

In the absence of regulations promulgated by the Bundesrat or central State authorities, the chambers of trades and guilds can make provisions limiting the number of apprentices that can be allowed.

In general, the term of apprenticeship is 3 years, though it may be extended by the addition of not more than another year. The chambers of trades, with the approval of the superior administrative authorities, and after having consulted with the guilds and associations represented, may fix the duration of apprenticeship in each trade.

Upon completing his term of service, the apprentice must be admitted to the examination for a journeyman's certificate. This examination is taken before commissions, of which there is one for each compulsory guild. Other guilds can only have an examining commission when permission has been obtained from the chambers of trades. When provision has not been made for the examination of candidates for each trade, either by guild commissions, apprenticeship shops, trade schools, or State boards of examiners, the necessary commissions will be created by the chambers of trades.

The examining boards must consist of a president, appointed by the chambers of trades, and at least 2 members, half of whom are elected by the guilds and half by the journeymen's commission. The examination must show that the apprentice is able to perform the duties of his trade with sufficient skill, that he knows the character and value of the materials he must make use of, and that he knows how to take care of them. The knowledge of bookkeeping and accounts may also be required. The result of the examination is entered upon the apprentice's certificate.

The title of master can only be borne by journeymen who, in their trade, have acquired the right to have apprentices, and who have passed the master's examination. In general, this examination can only be taken by those who have exercised their trade for at least 3 years as journeymen. The examination is given by a commission composed of a president and 4 other members created by the superior administrative authorities, and must show that the candidate is able to value and execute the ordinary work of his trade, and that he possesses other knowledge, especially that he is able to keep books and accurate accounts, fitting him to carry on the trade on his own account.

HISTORY OF FACTORY LEGISLATION.

From the consideration of laws concerning the organization of industry, attention is now turned to those regarding the regulation of the relations between employers and employees, the fixing of the conditions under which labor can be performed, etc., or what is known in Germany as protective labor legislation (*Arbeiterschutzgesetzgebung*).

The development of this branch of labor legislation was begun much later than that in relation to trade guilds, apprenticeship, etc. The first important step in this direction was made by Prussia, through the act (*Regulativ*) of March 9, 1839, which prohibited the regular employment of children under 9 years of age in mines, factories, stamping mills, blast furnaces, etc.; limited the maximum working day for young persons under 16 years of age to 10 hours, and prohibited their employment at night or on Sundays and holidays. There were also a number of provisions making it obligatory upon employers to take certain precautions for the maintenance of the health and morality of the employees. It thus contained many of the features of the modern factory act.

In 1845 a very decided advance was made in the enactment of a general labor law, bearing date of January 17 of that year, which made further provisions for the benefit of employees. February 9, 1849, other important changes were introduced by an order in council. This order declared that no person should be compelled to work on Sundays or holidays, provided for the establishment of industrial councils, and ordered that the hours of labor for journeymen, helpers, apprentices, and factory employees should be fixed by these councils. It also prohibited the truck system and required wages to be paid in cash.

A further advance was made by the law of May 16, 1853. The minimum age at which children could be employed in factories was raised to 12 years, and the hours of labor of children under 14 years of age were limited to 6 per day. Other provisions of the law regulated the granting of periods of rest, the times of beginning and ending work, school attendance, etc. Finally, power was given to the authorities to appoint factory inspectors to enforce the law, if they deemed it advisable to do so.

In the following 15 years but little or no change was made in the labor legislation of Prussia. After the founding of the North German Confederation, however, a general labor code, embodying, with some changes, the then existing Prussian legislation, was enacted June 21, 1869. Upon the creation of the German Empire this law was gradually extended to the other States of the Empire, and remains today, though with important amendments, the fundamental law regulating labor in Germany.

The first of these amendments introducing other than minor modifications was the law of July 17, 1878. This law made a number of radical changes, the most important of which were those in relation to the employment of women and the protection of the health and lives of factory employees. For the first time the labor of women was subjected to special conditions, through the provision that women could not be employed for the 3 weeks after their confinement, and through the large powers given to the Bundesrat to regulate or prohibit their employment in industries detrimental to their health, or at night in certain trades.

In 1884 a special law was passed to regulate match factories, and in the same year the duties of employers with regard to the provision of safety appliances and the prevention of accidents were further defined by the accident insurance law of that year.

In 1890 was held the famous International Congress in Relation to Labor Legislation, summoned at Berlin by the Emperor for the purpose of considering the whole question of protective labor legislation. The work of this congress led to the enactment of the law of June 1, 1891. This law, which embodies most of the changes recommended by the German representatives at this congress, subjects the employment of women and children to a far more rigid regulation than ever before attempted; lays down in a definite manner the conditions under which Sunday labor is permissible; contains provisions concerning the framing of factory regulations, the making and breaking of the labor contract, and the payment of wages, and generally revises the whole labor code in the direction of subjecting labor to a more rigid legislative control.

The only other important labor act, apart from those relating to compulsory insurance, is that of July 29, 1890, concerning the creation of tribunals for the arbitration of labor disputes, which will be considered in the section relating to that subject.

Before entering upon a statement of the provisions of the industrial code regarding particular subjects regulated, some explanation should be given of the general scope of that part of it now to be considered which constitutes factory legislation proper. It is unfortunate that this can only be done in a general way. The labor code, as a whole, relates to almost all kinds of industrial work with the exception of transportation, agriculture, the fisheries, and mining; and different parts of the code relate to different categories of work. The regulations concerning such subjects as the employment of women and children, the making of shop regulations, etc., are restricted to the definite class of factories (*Fabriken*), but this class of work has never been definitely and authoritatively defined. Whether a particular establishment will be deemed to be a factory must be determined in each case according to the particular circumstances, such as the num-

ber of persons employed, the importance of the work carried on, the use of machinery, etc. In case of dispute the matter is decided by the courts.

The term factory, moreover, is used with a different signification in different parts of the code treating of factory regulations. Thus the provisions concerning the framing and posting of shop rules apply only to factories employing at least twenty persons. On the other hand, the provisions regarding the employment of women and children are made to apply to "employers and employees in all work places (*Werkstätten*) in which mechanical power (steam, wind, water, gas, electricity, etc.) is employed otherwise than temporarily" subject to the power of the Bundesrat to make exceptions in certain cases. It is also expressly provided that an imperial decree can extend these provisions to classes of work which are not carried on in places which can be called factories, as well as to building operations, with the exception that they can not be made to relate to a person employing only members of his or her own family. In point of fact, this power has been exercised but once, when the industry of clothing and underwear making was subjected to these provisions of the code.

An exceedingly broad application has been ordered of those sections relating to the protection of the lives and health of employees. They are made to relate to practically all kinds of industrial work, whether carried on in factories or not, and thus embrace places in which the handicraft trades are prosecuted. They do not refer, however, to such industries as mining, and transportation, for which special regulations are provided by other laws.

PREVENTION OF ACCIDENTS AND PROTECTION OF HEALTH OF EMPLOYEES.

Each factory law enacted has required the taking of more stringent precautions for the prevention of accidents and the protection of the health of employees than its predecessors. Prior to 1891 these requirements were for the most part expressed in general terms, that all needful precautions should be taken. The law of 1891 reproduces these provisions, but also mentions more specifically the measures that must be observed.

Employers must so install and maintain their machinery and appliances that the lives and health of employees are protected as far as possible. They must in particular see that there are provided sufficient light and air; that injurious dust and gases are removed; that dangerous machinery is properly guarded; that precautions are taken against fire, and that regulations to this effect are prepared and enforced.

Employers must also see that all needful precautions are taken, when both men and women are employed, to protect the morality and good

conduct of employees. They must, as far as possible, separate the two sexes; provide separate lavatories and dressing rooms for the two sexes when the nature of the work requires the employees to change their clothes after finishing their work, and provide a sufficient number of water closets, so arranged that they can in no way lead to improper conduct on the part of the employees.

Where persons under 18 years of age are employed, special precautions must be taken for their protection. In the case of industries presenting unusual danger to life or health, or of such a nature as to make them nuisances to their neighbors, special permission for their operation must be obtained from the authorities, and these officers can make such regulations regarding their location and methods of work as they deem proper.

To insure compliance with these provisions, the police authorities have the power to order such changes in the methods of work in individual establishments as they deem proper. An appeal from these orders can be made, first, to the superior administrative authorities, and then to the central government. The police authorities can also require employers to provide, without expense to the employees, suitable places, properly heated during cold weather, and apart from the workrooms, where the latter can eat their meals.

Unless the orders issued refer to some imminent danger to life or health, time must be allowed to employers in which to comply with the orders. In the case of establishments existing at the time of the passage of this law, orders for considerable alterations can not be issued, unless they are necessary for the removal of a serious menace to life, health, or morality, except in the case of rebuilding or the making of extensive additions to the establishment.

Finally, and most important of all, the Bundesrat is given the power to draw up detailed regulations, setting forth the manner in which particular industries must be carried on. In the case of those industries where the Bundesrat does not make use of this power, the central authorities of each State (*Landes-Centralbehörde*) can take action, and in case of nonaction by them the police authorities can prepare such regulations. Before doing so, however, they must give the trade associations (*Berufsgenossenschaften*) interested an opportunity to express their opinion regarding the proposed action.

As will be subsequently noted in the section relating to the regulation of the hours of labor of adult males, the Bundesrat has also the power of prescribing the duration and time of beginning and ending work in establishments where the working of long hours is believed to be injurious to the health of the employees.

The orders issued by the Bundesrat in pursuance of the foregoing powers must be published in the official journal (*Reichsgesetzblatt*) and be laid before the Reichstag at its next session. At the present time

orders have been issued by the Bundesrat in respect to the following industries: Match factories, July 8, 1893; lead-paint and sugar-of-lead works, July 8, 1893; cigar factories, July 8, 1893; alkali chrome works, February 2, 1897; printing offices and type foundries, July 31, 1897; establishments for the manufacture of electrical accumulators by means of lead or lead compounds, May 11, 1898. Various orders have also been issued by the authorities of the different States of the Empire. The orders in detail follow:

MATCH FACTORIES.—The manufacture of matches by the use of white phosphorus (order of July 8, 1893) is subject to the following conditions:

1. A separate room must be provided for each of the following operations: (1) The preparation of the ignition materials, (2) the dipping of the matches, (3) the drying of the dipped matches, and (4) the filling of the boxes and the first operations of packing. These rooms may communicate directly with each other, but must not so communicate with other workrooms or sleeping or business rooms. A direct communication, however, is permitted between the dipping and the filling or setting room (*Einlegeraum*) and between the boxing and first packing room and the wareroom for finished products. Only that work can be carried on in the four rooms first indicated which is absolutely necessary, except, however, that the application of the sulphur or paraffin can be done in the dipping room.

2. The rooms provided for the first three operations indicated must be at least 5 meters [16.4 feet] high, the dipping and the boxing rooms must have fireproof roofs, and the drying room be entirely fireproof. The walls of the rooms for the preparation of the materials, drying, and boxing must be whitewashed at least once every 6 months, after the previous coat has been removed.

3. The rooms in which the materials are mixed must be so arranged that a complete change of air is secured, so that any phosphorus fumes generated are conducted outside. The materials must be prepared in air-tight closed vessels, whose opening through which they are filled serves also as a safety ventilator. The vessels containing the materials must always be kept well covered.

4. In the dipping of the matches, appliances of such a character must be used that the phosphorus fumes can not escape into the room. In case warmed dipping material is used, only those appliances can be employed which have been approved by the higher administrative authorities for this use.

5. The rooms used for drying the dipped matches must be thoroughly ventilated. If the drying rooms are artificially heated, the temperature must not be allowed to exceed 35° Celsius [95° Fahrenheit]. A thermometer must be placed in each drying room on which is plainly indicated the highest temperature that is permitted. The rooms must only be filled or emptied, when it is necessary that they should be entered, after a complete change of air is brought about by opening the doors and windows for at least half an hour or by special ventilating appliances.

6. The rooms in which the matches are placed in boxes (*Abfüllräume*) and those in which the first packing is done, where this is done in special rooms, must be so arranged that there are at least 10 cubic

meters [353 cubic feet] of air space for each person employed in them. Rooms which are roofed over must have windows which can be opened, and must be provided with sufficient means for an effective ventilation.

7. The rooms for preparing the material and for dipping and boxing the matches must be cleaned every day after the cessation of work. All refuse collected as the result of this cleaning must be immediately burned.

8. The employer must see that all the employed working in the rooms for mixing the materials and for dipping, drying, and boxing the matches, are provided with special work clothes, that the workmen remove these clothes on quitting work in a special room apart from the workrooms, and that cases are provided in this room in which the work clothes and the ordinary clothes can be hung up.

9. The employer must not permit the workmen to bring or eat food inside the workrooms. He must see that the meals are taken in rooms specially prepared for that purpose, which must be completely separated from the workrooms and the dressing room. Provision must also be made outside the workrooms for the heating of food.

10. There must be provided outside the workrooms, but in convenient proximity to them, a sufficient number of washing utensils, in proportion to the number of employees, and vessels for the rinsing out of the mouth.

11. The employer must see that his employees thoroughly wash their hands, rinse out their mouths with water, and remove their work clothes before taking their meals or leaving the establishment.

12. The employer must permit only those persons to be employed in the rooms mentioned in (1) who are provided with certificates from a duly authorized physician that they are not suffering from phosphorus necrosis and that their physical condition is not such as to make them susceptible to this disease. These certificates must be collected, preserved, and shown to the inspectors whenever they so request.

13. The employer must intrust the supervision of the health of his employees to a duly authorized physician, whose name must be given to the inspector, and who must examine each employee at least every 3 months, and inform the employer of every case where evidence of phosphorus necrosis is discovered. The employer, in turn, as soon as he receives such notice or learns of a case of phosphorus necrosis in any other way, must inform the factory inspector in writing. He also must not employ a workingman suffering from such a disease in any of the rooms mentioned in (1).

14. The employer must keep a register showing the employment and discharge of workmen, their full names, ages, residences, and the dates of their employment and discharge. The examining physician must enter in this book the date and result of the physical examinations made by him. The register must be shown to the inspectors whenever they so request.

15. There must be posted in a conspicuous place in each workroom a notice giving a copy of section 2 of the law of May 13, 1884, and of the preceding sections of the present order, and also instructions for the persons employed in the room. A copy of these instructions must be given to each person employed in the rooms mentioned in (1).

16. New establishments for the manufacture of matches by the use of white phosphorus may only begin operation after notice has been given to the inspectors. These officials must, as soon as possible after

the receipt of this notice, assure themselves by a personal examination that the conditions of the order are observed.

17. The local police authorities may close any establishment in which the present order is not observed until such order is complied with.

LEAD PAINT AND SUGAR OF LEAD WORKS.—Establishments for the manufacture of lead paints or sugar of lead (order of July 8, 1893) shall be operated subject to the following conditions:

1. All the workrooms in establishments in which lead paints or sugar of lead are manufactured must be roomy, have high ceilings, be well ventilated, and be kept damp and clean. Suitable appliances must be provided to prevent the entrance into them of lead powder or lead-laden gases and vapors.

2. Apparatus which develop dust must be covered over at all points with thick layers of felt or woolen cloth, or other material equally effective, so that the escape of the powder into the room is prevented. These kinds of apparatus must also be provided with devices preventing a disturbance (*Spannung*) of the air within them. They must not be opened until the powder which has been generated has completely settled and cooled.

3. In dry grinding, packing, and shipping, and in emptying the black litharge and lead oxide furnaces, and the putting in sacks of the lead oxide, and in other operations where lead powder can find its way into the room, such escape of lead powder must be prevented by means of draft and other appliances for carrying off the powder.

4. Rooms which can not be completely protected against the entrance of lead powder or gases or vapors containing lead by means of the precautions above prescribed must be cut off from other rooms in such a way that the powder, gas, or vapor can not penetrate into the latter.

5. The inner surface of the oxidation and drying chambers must be as smooth and tight as possible. The oxidation chamber must be kept damp while it is being charged or emptied. After the oxidation process is complete, the contents of the oxidation chamber must be thoroughly wet before the chamber is entered for the purpose of emptying it, and must be kept moist while this work is taking place. In the same way the raw white lead materials must be kept moist while being transported to the washing or deposit room (*Schlemmraum*) and during its storage there.

6. In the transportation and the manipulation of the wet lead paint materials, and especially in the depositing of material by washing and wet grinding, hand labor must, wherever practicable, be replaced by mechanical apparatus, so that the soiling of the clothes and hands of the persons who are employed in the work is reduced to the lowest possible degree. The extraction by pressure of the white lead deposit must only be undertaken after the lead salts which are in solution have been precipitated.

7. The employment or presence of children under 16 years of age is prohibited in places used for the manufacture of lead paints or sugar of lead. Women may only be employed in such places in those rooms and occupations which do not bring them in contact with the lead products. This section is in force until May 1, 1903.

8. The employer must permit only those persons to be employed in rooms in which lead paints or sugar of lead are made or packed who are in possession of certificates from a duly authorized physician

stating that they are neither weakly nor suffering from a lung, kidney, or stomach trouble or alcoholism. These certificates must be collected, preserved, and shown to the inspectors whenever they so request.

9. Workmen who, in the course of their work, come in contact with lead materials or products must not be employed more than 12 hours in any 24 hours.

10. The employer must provide all employees who come in contact with lead materials or products with work clothes completely covering them and caps covering the head.

11. In work generating lead powder which can not be immediately and completely removed, the employer must permit only those persons to be employed who have the nose and mouth protected by respirators or damp sponges.

12. The employer must permit only those persons to be employed in work bringing them in contact with lead salts in solution who have the hands greased or covered with impermeable gloves.

13. Special work clothes, respirators, sponges, and gloves, as above mentioned, must be furnished by the employer to each workman requiring them in sufficient number and in such condition as to effect the purpose for which they are intended. The employer must also see that these articles are only used by the persons to whom they are assigned, that they are kept in the places provided for them, that the work clothes are cleaned at least once a week, and the respirators, mouth sponges, and gloves each time before they are used, and that they are put away when not in use in the places provided for them.

14. A toilet or dressing and an eating room separate from each other, and in a part of the establishment free from powder, must be placed at the disposition of the employees. These places must be kept constantly clean and free from powder and be heated during cold weather. The dressing room must be provided with sufficient vessels for rinsing the mouth, soap and towels, and appliances for storing the ordinary clothes which are removed before work is begun. Appliances for heating food must be furnished in the eating room or other suitable place. Those employers having 5 or more employees must provide means by which the latter can take a warm bath at least once a week.

15. The employer must intrust the supervision of the health of his employees to a duly authorized physician, whose name must be given to the inspector, and who must examine each employee at least once a month, and inform the employer of every case where evidence of lead poisoning is discovered. The employer must not employ any person giving evidence of such symptoms in work which brings him in contact with lead materials or products until he is entirely cured.

16. The employer must keep, or cause to be kept, on his responsibility for its completeness and accuracy, by the physician having charge of the health conditions of the employees, or by an official of the establishment, a sick register, which must contain (1) the name of the person who keeps the book, (2) the name of the physician having charge of the health of the employees, (3) the name of every sick workman, (4) the nature of the sickness and the occupation followed prior to its occurrence, (5) the date of the sickness, (6) the date when the person is cured, or, if he does not return to work, when he is discharged. This book must be shown to the inspector or proper health officers whenever they so request.

17. The employer must make regulations which, in addition to instructions in respect to the use of the protective appliances above mentioned, must contain the following provisions: Workingmen must not bring spirits, beer, or other strong drink inside the establishment. Workingmen must not bring articles of food inside the workrooms, and these articles must be kept only in the eating room. Meals, so far as they are not taken outside the establishment, must be eaten in the eating room. The workingmen must use the work clothes, respirators, mouth sponges, and gloves in those workrooms and kinds of work where their use has been ordered by the employers. The workingmen must not enter the eating room, eat their meals, or leave the establishment until they have first removed their work clothes, cleaned their hair from powder, carefully washed their hands and faces, cleaned their noses, and rinsed out their mouths. Mention must be made in these regulations that the workingmen who persistently violate them may be dismissed before the termination of their engagement. In those establishments in which at least 20 persons are employed these regulations must be incorporated in the general shop rules required by the code.

18. There must be posted in a conspicuous place in each workroom, as well as in the eating and dressing rooms, a copy of the provisions of the present order and the rules required by the preceding section. The employer is responsible for the carrying out of the provisions of the preceding section, and must discharge any employee repeatedly disregarding them.

19. New establishments for the manufacture of lead paints or sugar of lead shall not begin operations until notice of their establishment has been given to the inspectors. These officers must at once see by a personal examination that the erection of the establishment is in conformity with the prescribed provisions.

20. The local police authorities may close any establishment in which the present order is not observed until such order is complied with.

CIGAR FACTORIES.—Cigar factories (order of July 8, 1893) must be established and operated in accordance with the following conditions:

1. This order applies to all places in which the necessary appliances have been installed for the making of cigars in so far as persons other than the members of the employer's family are employed.

2. The stripping of the tobacco and the making and sorting of the cigars must be performed in rooms the floors of which are not more than 0.5 meter [19.7 inches] below the level of the ground. If the room is next to the roof the ceiling must be ceiled or plastered. The workrooms in which tobacco-making appliances are installed must not be used either as living, sleeping, cooking, or provision-storage rooms, or as rooms for the storage of the tobacco. These rooms must be provided with tight doors, which must be kept closed during working hours.

3. The workrooms must be at least 3 meters [9.8 feet] high and be provided with windows sufficient in number and size to furnish adequate light. The windows must be so made that they can be opened to the extent of at least half their area.

4. The workrooms must have hard and tight floors.

5. The number of persons who may be employed in a room must be so limited that there will be at least 7 cubic meters [247 cubic feet] of air space per person.

6. Only the tobacco or partly manufactured product necessary for a day's work, or the cigars made during the course of the day, shall be allowed to remain in a workroom. All further storage of tobacco or partly manufactured product, as well as the operations of drying, separating, or twisting of tobacco after work hours, is prohibited in workrooms.

7. The workrooms must be thrown open for a complete airing at least twice a day for half an hour, and also during the noon rest and after the ending of the work, by opening the windows to their full extent and the doors which do not lead to the living, sleeping, cooking, and storage rooms. During these times the employees must not be allowed to remain in the rooms.

8. The floors and worktables must be washed or thoroughly cleaned from dust at least once a day.

9. The clothes taken off during the work period must be cared for outside the workrooms. They may, however, be kept inside the workrooms if closed cases are provided in which to place them. These cases must be closed while the work is being carried on.

10. Exceptions to the provisions of (3), (5), and (7) may be granted by the higher administrative authorities, upon the request of the employer, if the workrooms are provided with adequate means of ventilation. In the same way the height of room required by (3) may be reduced if more than the air space required by (5) is provided.

11. Until May 1, 1903, the employment of women and children under 16 years of age shall be subject to the following conditions: Women and children must be employed and paid directly by the persons for whom they work, and not through or on account of a third person. Separate water-closets with separate entrances must be provided for the men and women, and when a change of clothes is made before beginning and after ending work, separate dressing rooms. The provision regarding employment does not apply where the employees stand in the relation to each other of husband and wife, brothers or sisters, or direct ascendants or descendants; and that concerning water-closets and dressing rooms does not apply to places in which not more than 10 persons are employed.

12. A notice, signed by the local police authorities attesting its correctness, must be posted at the entrance of each workroom showing the length, breadth, and height of the room, the cubic meters of air space that it contains, and the number of persons who may consequently be there employed. A notice must also be posted in each workroom giving in clear letters the provisions of the present order.

ALKALI CHROME WORKS.—Alkali chrome works (order of February 2, 1897) shall only be established and operated subject to the following conditions:

1. The trituration and mixture of the raw materials must only be made in apparatus so arranged that it prevents, as far as possible, the escape of the powder into the workrooms.

2. All apparatus employed in the manufacturing operations that produce chrome powder or vapor must be provided with appliances to prevent, as far as possible, the escape of such powder into the workrooms. The reduced materials must only be transported when in a liquid state or in tightly closed vessels. They must be placed in rooms apart from the workrooms, except when they must be near the furnaces. The crystallization and evaporation basins and all other vessels

holding solutions of a temperature of more than 50° C. [122° Fahrenheit], as well as acidification jars, must be provided with tight pipes leading directly to the open air or a chimney.

3. The subsequent work with solid chromates, and especially the operations of drying, sifting, trituration, and packing, must be performed in places apart from the other workrooms. The grinding of the chromates must be done in hermetically closed apparatus.

4. The workrooms and courts must be kept as far as possible from contamination by chromates. Any chromates that may penetrate by leakage or otherwise must be removed as soon as possible. The floors, walls, stairways, and railings must be kept clean. The workrooms must be cleaned whenever necessary, and at least once a month.

5. The employer must furnish his employees with work clothes and caps appropriate for the work performed.

6. That work in the course of which it is impossible to prevent the giving off of powder, and the complete and immediate removal of the same can not be accomplished through ventilation, must be given only to workmen who are provided with protection appliances furnished by the employer, such as respirators, sponges, cloths, or other means for protecting the mouth and nose. This provision applies particularly to the work of extracting the pulverized material from the drying furnaces, placing it in the fusion furnaces, the emptying of the latter, and the placing of the dry material by means of a shovel in receptacles for shipment, and the work of drying, sifting, and packing of the finished chromates.

7. The employer must make regulations concerning, and exercise a supervision over, the use and care of the work clothes of the employees and the respirators and other protective appliances, to insure that they are regularly used and only by the persons for whom they are intended; that the clothes are cleaned at least once a week; that the respirators, mouth sponges, etc., are cleaned each time they are used; and, finally, that during the time they are not in use that they are kept in the place specially provided for their guarding.

8. The employer must provide for his employees, in a part of the establishment protected from powder, a room in which they can wash and change their clothes, and another room in which they can eat their meals. These rooms must be kept clean and free from powder and be heated during cold weather. The toilet room must be furnished with a sufficient quantity of water, vessels for rinsing the mouth, brushes for cleaning the hands and nails, soap and towels, as well as a place in which to keep the clothes taken off before work is begun. The employer must also provide means whereby the employees working with chromates can take a warm bath twice a week.

9. Women and children under 16 years of age must not be employed in places where they are brought in contact with chromates.

10. The employer must only employ in the preparation of chromates those persons who are supplied with a certificate from a duly authorized physician stating that they have no wound in the skin, sore, or skin eruption. These certificates must be collected, preserved, and be shown to the factory inspectors whenever they so request.

11. The employer must place a physician in charge of the supervision of the health conditions of the employees occupied in the making of chromates and inform the inspector of his name. This physician must examine all the employees at least once a month and state for

each one specially whether he has a sore in the skin or any disease of the nose or pharyngeal cavity.

12. The employer must take all necessary precautions to insure that the employees are on the lookout for even slight abrasions of the skin, especially on the hands, and in case such are found that bandages supplied for that purpose are applied by the physician or some one duly authorized by the latter to perform such services. A duly authorized person must examine the faces, forearms, and hands of all the employees every day before they begin or during their work.

13. When so ordered by the physician, those workingmen who exhibit symptoms of any malady due to the action of chromates—such, for example, as a sore in the skin or an erosion of the mucus membrane of the nasal passages—must be removed from the work of preparing chromates until they are completely cured. Those who show themselves to be especially susceptible to injurious effects from this work must be definitely prohibited from its performance.

14. The employer must keep, or cause to be kept, a register of all cases of sickness of employees in the establishment. He is responsible for all omissions or inaccuracies of entries, except those emanating from the physician. This register must show the name of the person who keeps the book, the name of the physician charged with the supervision of the physical condition of the employees, the names of employees attacked by disease, the nature of the disease and the occupations pursued prior to its attack, the date when the disease is declared, the date when the person is declared cured, or, if the invalid does not return to work, when he is discharged, and the date and results of the general medical examinations above prescribed.

15. The employer must prepare a set of regulations, which, in addition to the rules prescribed for (5) and (6), must contain the following provisions: Workingmen must not bring articles of food or drink inside, and meals must be consumed outside, the workrooms. Each workingman must make use of the clothes, masks, respirators, and other protective appliances that are assigned him in the shops and for the work designated in the regulations prepared by the employer. Workingmen must carefully wash their faces and hands before eating their meals. At the end of their day's labor, and before leaving the establishment, they must take off their work clothes, carefully wash their hands and faces, and rinse their mouths and noses without the use of any appliance. Mention must be made in these regulations that the workingmen who persistently violate them may be dismissed without notice before the termination of their engagement. If 20 workingmen or more are regularly employed in an establishment, these regulations must be incorporated in the general shop rules of the establishment.

16. There must be posted in each workroom, as well as in the toilet and eating rooms, a copy of the present order and of the rules required by the preceding section.

PRINTING OFFICES AND TYPE FOUNDRIES.—Printing offices and type foundries (order of July 31, 1897) must be operated in conformity with the following provisions:

1. In places where persons are employed in setting type or in making type or stereotype plates the following rules must be observed: The floors of the rooms must not be more than 1 meter [3.3 feet] below the level of the ground. Exemptions from this rule, however, can be

authorized by the higher administrative authorities where it is shown that hygienic conditions are maintained by a proper isolation of the floor, ventilation, and lighting. Rooms immediately under the roof must not be used unless the ceilings are ceiled or plastered.

2. In places where type or stereotype plates are made there must be provided at least 15 cubic meters [529.7 cubic feet] of air space per person employed. In other places there must be at least 12 cubic meters [423.8 cubic feet] per person. In urgent cases, however, the authorities may permit, during not more than thirty days in a year, places to be occupied by a larger number of persons, but there must be not less than 10 cubic meters [353.1 cubic feet] of air space for each person.

3. The height of workrooms must be at least 2.60 meters [8.5 feet] when they contain not less than 15 cubic meters [529.7 cubic feet] of air space per person, and 3 meters [9.8 feet] in other cases. The rooms must be provided with windows sufficient in number and size to light the places properly when work is being carried on. The windows must be so constructed that the rooms can be properly ventilated by their means. When the ceilings are slanting the average height must be not less than that indicated above.

4. Workrooms must be provided with hard and tight floors, from which dust after it is moistened can be easily collected. Wooden floors must be planed and made impermeable to moisture. The walls and ceilings, so far as they are not covered with a hard glazed surface capable of being easily washed, or oil painted, must be whitewashed at least once a year. The glazed or painted surfaces must be washed at least yearly, and the paint must be renewed every ten years if it is varnished, or every five years if not so treated. The stands and cases containing the type must either descend to the floor in such a way that dust can not accumulate under them, or be raised on legs, so that the floor under them can be easily swept.

5. The workrooms must be completely aired once a day at least, and in addition must be properly ventilated during the progress of the work.

6. The furnaces for fusing the metals must be furnished with a strong draft for the purpose of conducting outside or up a chimney the vapors which are generated. The alloying of the metals, as well as the melting of the waste, must take place either in special rooms or in other rooms after the workmen, other than those engaged in that work, have been made to leave the room.

7. The workrooms and their adjuncts, as well as the walls, windows, and door frames and beams, must be thoroughly washed twice a year. The floors must be swept or washed at least daily.

8. The cases containing the type must be cleaned before they are made use of, and as often as is necessary during their use, but in any case at least twice a year. The blowing of the dust out of these cases must be by means of bellows in the open air, and must not be performed by young persons.

9. Cuspidors in the proportion of at least 1 for every 5 persons must be provided in the workrooms, and must be filled with water which must be renewed each day. The employer must prohibit expectoration upon the floor.

10. Washing utensils and soap must be placed at the disposal of the compositors, as well as the founders, polishers, and grinders, in the

workrooms or rooms adjoining them. At least 1 towel per week must be furnished each workingman. Unless there is a sufficient supply of running water, there must be at least 1 wash basin for 5 persons, and a sufficient supply of pure water, which, after it has been used, can be poured out on the spot. The employer must see that the workingmen make use of these appliances before taking their meals in the establishment and before leaving the establishment.

11. The clothes taken off during the work must be taken care of outside the workrooms. They may, however, be kept inside the workrooms if closed cases or ones covered by curtains are provided, in which they will be protected from dust. These cases must be closed during the progress of the work.

12. Lighting apparatus which gives forth considerable heat must be provided with devices or so arranged that the heat thus generated does not discommode the inmates.

13. The employer must issue rules making it obligatory upon his employees to observe the regulations given above concerning their action. If 20 workingmen or more are regularly employed, these regulations must be incorporated in the general shop rules.

14. A notice, signed by the local police authorities attesting its correctness, must be posted in each workroom, which shows the length, breadth, and height of the room, the number of cubic meters of air space that it contains, and the number of persons who consequently can be employed in it. There must also be posted in a conspicuous place a copy of the foregoing provisions.

Certain exceptions to the provisions of this order, so far as it relates to the number of persons who may be employed in proportion to the amount of air space in workrooms, may be accorded by the higher administrative authorities during the 10 years following the taking effect of the order in the case of establishments already in operation. These provisions, being but temporary, are not reproduced.

ESTABLISHMENTS FOR THE MANUFACTURE OF ELECTRICAL ACCUMULATORS.—Establishments for the manufacture of electrical accumulators by the use of lead or lead compounds (order of May 11, 1898) must be arranged and operated subject to the following provisions:

1. In establishments for the manufacture of electrical accumulators by the use of lead or lead compounds, the places where lead or lead compounds are prepared or applied must be at least 3 meters [9.8 feet] high, and be furnished with windows that can be opened, permitting the air to be renewed in sufficient quantity. Places in which the plates are formed or loaded must be furnished with appliances for inducing an energetic ventilation.

2. In places where powder of lead or lead compounds are produced or diffused during the course of the work, the floor must be made water-tight. The walls and ceiling, so far as they are not covered with a continuous coat susceptible of being washed or oiled, must be whitewashed at least once a year. The employment of wood, soft asphalt, or linoleum to cover the floor, or of wall paper or draperies to furnish the walls, is prohibited.

3. The furnaces for melting the lead must be provided with hoods, inducing a strong draft leading directly into the open air or a chimney.

4. In places where the lead plates are made mechanically by means of a belt saw, a circular saw, a planing machine, or other similar apparatus, all possible care must be taken that the pieces of lead that

are detached, as well as the lead powder formed, are immediately collected at the moment they are produced by means of suitable appliances.

5. Apparatus used for the manufacture of metallic lead powder must be so inclosed and constructed that no powder can escape during either its production or removal.

6. The sifting, moistening, and mixing the material for applying to the plates, so far as it contains lead or lead compounds, the raising of the covering, consisting of paper or other similar material, of the dried plates, as well as all other manipulations of the dry or dried material which produces powder, must be done under appliances having a strong draft, or so constructed that the powder can not possibly escape.

7. The open vessels which contain the lead or lead compound powder must be placed upon a grate, which in turn must be on a plate with a raised border, so that in emptying the vessel any material escaping will be collected upon the plate.

8. The following operations must be conducted in special rooms apart from the other work places: (1) The mechanical preparation of the lead plates (grates or frames); (2) the mechanical preparation of lead compounds; (3) the making and mixing of the material to be applied to the plates (*Füllmasse*), so far as it is accomplished mechanically.

9. The tables used in applying the material to the plates must have a hard and smooth surface and must be washed with water at least once a day.

10. The work of soldering, which is done by means of a hydrogen or coal gas blow flame, must be done, as far as the nature of the work permits, in special places provided with strong drafts. This provision, however, does not apply to soldering work having for its purpose the uniting of elements, and which can not be performed outside of the preparation rooms.

11. The zinc used in the preparation of the hydrogen gas and the sulphuric acid used in the course of the work must be chemically pure.

12. The workrooms must, as far as possible, be guarded against contamination by lead or lead compounds. In the places indicated in (2) the floors must be washed at least once a day after the cessation of work.

13. The employer must place at the disposition of all his employees who are engaged in the making of accumulators a sufficient number of properly made work clothes and caps. He must insure, by the preparation and enforcement of special regulations, that the garments are only used by the persons to whom they are assigned; that they are washed at least once a week, and that while not in use they are kept in places specially prepared for them.

14. A toilet and an eating room separate from each other, and in a part of the establishment to which powder can not penetrate, must be placed at the disposition of the employees. These places must be kept constantly clean and free from powder and be heated during cold weather. The toilet room must be supplied with a sufficient quantity of water, vessels for rinsing the mouth, brushes for cleaning the hands and nails, soap and towels, and places in which to keep the clothes taken off before beginning work. Employers must provide means whereby their employees can take a warm bath at least once a week.

15. Women and children under 16 years of age must not be employed in work which brings them in contact with lead or lead compounds.

16. The employer must employ only those persons in the making of accumulators who are provided with certificates from a physician duly authorized by the higher administrative authorities, stating that their health is such that they can exercise this occupation. These certificates must be collected, preserved, and shown to the inspectors upon their request to see them.

17. The employment of workmen charged with the making, mixing, or application of the material to the plates must be so regulated that their work period either does not exceed 8 hours per day and is broken by an interval of rest of at least $1\frac{1}{2}$ hours or does not exceed 6 hours per day without interruption. In the second case the workmen may still be employed elsewhere in the establishment, provided that during this work they are not brought in contact with lead or lead compounds and that a rest of at least 2 hours intervenes between the two kinds of work. The employer must, within the week following the taking effect of this order or the opening of his establishment, inform the local police authorities of the manner in which he elects to organize the periods of work, and no change shall be made in this arrangement until the police authorities are notified.

18. The employer must confide the examination of the physical condition of his employees to a physician, whose name must be given to the inspector, and who must examine each employee at least once a month to see if he shows any symptoms of a disease that can be traced to lead. If the physician so orders, employees presenting such symptoms must not be employed in work bringing them in contact with lead or lead compounds until they are cured. Those who show that they are specially susceptible to lead poisoning must be permanently taken off of such work.

19. The employer must keep a register showing the employment and discharge of workmen, the number actually employed, and their condition as regards health. He is responsible for the exactness and completeness of these entries so far as they do not emanate from the physician. This register must show the full name, age, residence, date of employment and discharge of each employee, and the nature of his work; the name of the person who keeps the register; the name of the physician charged with the examination of the employees; the date and nature of any illness of an employee and the date of his cure; the dates and results of the general physical examination above prescribed.

20. The employer must make regulations, obligatory upon employees engaged in making accumulators, covering the following points: Workmen must not bring food or drink inside the shops. The introduction or consumption of spirits in the establishment is prohibited. Meals must be eaten outside the workrooms. Workmen must use the work clothes provided for them in accordance with the regulations concerning them. Workmen must not enter the eating room, take their meals, or leave the establishment until they have removed their work clothes and carefully washed their hands and faces and rinsed their mouths. Smoking or chewing of tobacco or the taking of snuff during working hours is prohibited. Mention must be made in these regulations that the workmen who persistently violate them may be dismissed without notice before the termination of their engagement. In those establishments which are required by the

code to have general shop regulations, these rules must be incorporated in those regulations.

21. There must be posted in each workroom, as well as in the toilet and eating rooms, a copy of the present order and the rules required by the preceding section.

22. The local police authorities may close any establishment in which the present order is not observed until such order is complied with.

HOURS OF LABOR OF ADULT MALES.

The number of hours of labor that can be required of adult male laborers is not directly limited by law. The Bundesrat, however, has been given the power of fixing the time that work shall begin and end and the maximum duration of a day's labor in those industries in which it deems that long hours are especially injurious to the health of the employees. It is evident that, under this provision, the Government has the power of limiting the hours of labor of adult workmen in particular industries.

The extent to which the hours of labor of adult males has actually been limited can be seen by reference to the orders promulgated by the Bundesrat regarding the conduct of work in particular industries, as given in the section in relation to the prevention of accidents and the protection of the health of employees, and to the order of March 4, 1896, in relation to bakeries and confectioneries, a summary of which follows. This is the only order that has been issued having as its main purpose the protection of the health or lives of employees by limiting their hours of labor. The other orders provide for such limitation only indirectly, their main purpose being to regulate the conditions under which labor must be performed in those establishments presenting dangerous or unhealthy features.

The essential provisions of the order of March 4, 1896, in relation to bakeries and confectioneries, are as follows:

Bakeries and those confectioneries in which workmen or apprentices are employed in manufacturing bakery products at night—that is, between the hours of 8.30 p. m. and 5.30 a. m.—are subject to the following regulations:

1. The duration of the work shift of employees shall not exceed 12 hours per day, except when it is broken by a rest of 1 hour, when it may equal 13 hours, including the hour for rest. No employee shall work more than 7 shifts per week. Workmen may be employed occasionally in supplemental work, such as the preparation of yeast, in addition to their regular shifts, but not regularly, and then for not more than half an hour. In all cases not less than 8 hours' intermission must be allowed employees between shifts.

2. The hours of labor of apprentices must be 2 hours less than those of other workmen during the first year of apprenticeship, and 1 hour less during the second, and the duration of the intervals of rest between the work shifts must be correspondingly increased.

3. Workmen and apprentices may, however, be permitted to

work overtime (1) on holidays and other special occasions when the permission of the lower administrative authorities has been obtained, and (2) on not more than 20 days, as selected by the employer, in which must be included every day on which an apprentice or workingman is so employed. Moreover, with the exception of the days before Christmas, Easter, and Pentecost, the workingman must in no case be deprived of his 8 hours' uninterrupted rest between shifts, or the apprentice of 9 or 10 hours' rest, as the case may be.

4. The employer must post in a conspicuous place in his workshop a copy of the present order and a calendar on which is plainly marked in ink the 20 days selected by the employer for overtime work.

5. Workingmen and apprentices may be employed on Sunday and holidays in accordance with the provisions of the industrial code only in so far as no infraction of the present regulation results.

6. In those establishments in which the employees are allowed a period of rest of not less than 24 hours, beginning not later than 10 o'clock Saturday evening, the length of the labor shift on the two preceding days may be increased 2 hours, provided that the regulation duration of the rest periods between shifts is not lessened.

7. The foregoing provisions do not apply to establishments in which the only work performed at night is such supplemental work as the preparation of ices, creams, etc. Neither do they apply to establishments in which not more than 3 bakings are had per week, or which only employ workingmen or apprentices at night on unusual occasions in accordance with the permission of the lower administrative authorities, which permission shall not be granted for more than 20 nights in a year.

WORKINGMEN'S PASS BOOKS.

The possession of a labor certificate or pass book (*Arbeitsbuch*) is not, as in Austria, obligatory upon workingmen 18 years of age or over. The law however, provides that any workingman can, upon leaving the employment of another person, demand a certificate setting forth the nature and duration of his employment, his conduct, and the skill with which he has performed his duties. If the employee is a minor, his legal representative can require that the certificate be handed to him, unless the communal authorities order otherwise. If the employee so desires, the police authorities must attest the certificate free of cost.

In order to protect the employee from injury in any way, the employer is prohibited, under heavy penalties, from placing any marks or signs on the certificate conveying any information not expressed in the certificate.

EMPLOYMENT OF WOMEN AND CHILDREN.

Since the enactment of the first law regarding the employment of women and children, the tendency has constantly been to make such regulations more and more restrictive. The law of 1891 introduced notable changes, and its provisions constitute the law now in force.

The employment of children under 13 years of age in industrial establishments is absolutely prohibited, and children over that age

can not be employed until they have fulfilled the legal requirements concerning school attendance. (a)

Children who have not completed their fourteenth year can not be employed more than 6 hours a day, which must be broken by a rest of at least half an hour; and children not having completed their sixteenth year can not be employed more than 10 hours a day, broken by intervals of rest of at least 1 hour in the middle of the day and half an hour in the morning and in the afternoon. During these intermissions the children must not be employed in any way in the factory, and may only be permitted to remain in the workrooms if those parts of the machinery at which they are employed are completely stopped, or when on account of bad weather or sickness it is not desirable to have the children go outside, or the provision of special accommodations presents special difficulties.

For persons under 16 years of age work must not begin before 5.30 a. m. nor continue later than 8.30 p. m.; nor can these persons be employed on Sundays or holidays or during the time set aside by their pastor for religious service and instruction.

Especial precautions are taken to enable children to receive an adequate general and technical education. Employers are required to permit all of their employees under 18 years of age to attend finishing schools (*Fortbildungsschulen*), or schools for the training of women in household duties if they desire to do so, or if they are so obligated by local statutes. A commune, or a union of communes, may make it obligatory for male workers under 18 years of age to attend finishing schools, provided a provincial law to that effect does not already exist. This obligation may be dispensed with in the case of persons attending a guild or other technical school if the higher administrative authorities regard the instruction there given sufficient to replace that of a regular finishing school. These provisions regarding schooling apply equally to apprentices in mercantile establishments.

a Children under 14 years of age are also prohibited by the law from offering goods for sale or peddling in public highways, streets, or places, or from house to house, except that in places where this is customary the local police authorities can permit such work at specified periods, the total duration of which must not exceed 4 weeks in any one calendar year. This prohibition, however, does not apply to the selling of raw agricultural, garden, forestry, apiary, or fishing products, or poultry raised or directly obtained by the persons themselves, or the selling of goods produced at home, within 15 kilometers (9.3 miles) of the home, and which are regarded as pertaining to the weekly market trade, though the local police authorities may prohibit the employment of children under 14 years of age in this way.

It is likewise prohibited for persons employed in itinerant work taking them from town to town to have children under 14 years of age accompany them. Where permissions have been granted prior to the going in force of this provision, they must be revoked unless sufficient provision is made for the education of the children. The foregoing provisions likewise apply in respect to persons of the opposite sex accompanying itinerants unless they are married to the persons they accompany or are their children or grandchildren over 14 years of age.

In order to facilitate the execution of the law concerning the employment of children, it is obligatory upon all minors not of compulsory school age, as a condition precedent to employment, to be provided with a pass book (*Arbeitsbuch*). This obligation was first imposed by the law of 1878. The book must contain the name, address, date of birth, and signature of the owner, and the name and last address of the father or guardian, and must be duly stamped by the authorities, and the latter must keep a record of all books issued.

Upon the owner being employed, the book is surrendered to the employer, who retains it until the owner leaves his service. The employer must enter in it the dates at which its owner entered and left his service and the nature of the employment. When employment ceases, the book is surrendered by the employer to the father or guardian of the employee, if they so request, or if the employee has not completed his sixteenth year. Otherwise it is handed directly to the employee. The purpose of this provision is to strengthen parental authority, the parent or guardian thus having control over the action of the child or ward in respect to the making and breaking of labor contracts.

Employers and not the employees are punished in cases where minors are employed who do not have in their possession pass books, as above provided. These books are furnished gratuitously by the communal authorities upon the request or with the consent of the parent or guardian. When the parent or guardian refuses his consent, to the injury of the employee, the communal authorities can give the book without it. Before a book is granted it must be certified that the minor is no longer of compulsory school age, and that the recipient has never had a pass book. When a new book is issued on account of the loss, destruction, or completion of a former book the fact must be noted in the new book. A charge of 50 pfennigs (\$0.12) can be made for the new book issued under these circumstances. The form of the pass book is determined by the imperial chancellor.

The entries in the books must be made in ink by the employer or a manager of the establishment specially authorized. No marks can be made which may be construed favorably or unfavorably to the owner, nor can entries be made regarding the latter's conduct or capabilities, nor concerning any matters not specified in the law.

If an employer fails to surrender promptly a pass book when legally required to do so, or refuses to make the necessary entries, or unlawfully enters remarks or signs in the book he is liable to a fine of not more than 20 marks (\$4.76) or imprisonment not exceeding 3 days. He is also liable for damages to the employee provided the latter enters suit or makes a formal complaint within 4 weeks.

As a further protection to children, the law provides that wherever persons under 18 years of age are employed special precautions must

be taken for the preservation of their health and their protection against accidents and immoral influences.

In regard to the employment of females, no distinction is made between girls under 16 years and boys of the same age. The most important provision regarding the employment of women is that females over 16 years of age shall not be employed in industrial establishments more than 11 hours per day and on the days preceding Sunday and holidays not more than 10 hours. Women also must not be employed at night, that is between the hours of 8.30 p. m. and 5.30 a. m., nor on Saturday and days preceding holidays after 5.30 p. m. All women must be given not less than 1 hour for rest in the middle of the day, and females over 16 years of age who have household duties to perform must at their request be dismissed half an hour before the noon intermission when the latter is not at least 1½ hours long.

Women are not allowed to work during the 4 weeks following their confinement, and this period must be extended to 6 weeks unless they can obtain a certificate from a physician stating that they are physically fit for work.

In addition to these restrictions upon the employment of women and children, specifically set forth in the law itself, the broad power is given to the Bundesrat to draw up regulations prohibiting, or permitting only under certain specified conditions, the employment of these classes in those industries in which the conditions of work are especially dangerous to the health, lives, or good conduct of the employees. In virtue of this power the Bundesrat has promulgated a number of important orders specifying the conditions under which children and women can be employed in particular industries. (*a*)

That exceptions to the general restrictions upon the employment of women and children should be permitted in certain cases where their enforcement would work a hardship is fully recognized by the law. These exceptions are of two kinds, those of a temporary nature and due for the most part to accidental occurrences, and those which are permanent and have their justification in the nature of the work performed or the conditions under which it must be prosecuted.

Exceptions of the first kind are granted by the local or superior administrative authorities. The local authorities can, upon the request of an employer, permit the employment of women over 16 years of age until 10 p. m. on week days, with the exception of Saturday, provided the duration of the day's work does not exceed 13 hours, in cases where there is an unusual pressure of work—as, for example, in those industries which are prosecuted with exceptional activity during certain seasons of the year. This permission can not be for more than 14 days at any one time, and no employer can be accorded the privilege for more than 40 days in any one calendar year. If the privilege

a For a synopsis of these orders see pages 356-363.

is desired for more than 14 days at any one time, or more than 40 days in the same calendar year, the permission of the superior administrative authorities must be obtained, which can not be granted unless the hours of labor are so regulated that the average yearly working day does not exceed that fixed by law.

The requests for permission to work overtime must be made in writing, and must state the reason why the permission is asked, the number of females to be so employed, the extent of the overtime work proposed, and the period during which it will continue. The reply to these requests must be given by the lower authorities in writing within 3 days. If permission is refused an appeal can be made to the superior authorities. The lower authorities must keep a record of all cases where permission for overtime work has been granted, which must show the name of the employer and the other matters contained in the prescribed application.

Further exceptions to the general regulations may be granted when the work of an establishment is interrupted in consequence of an accident or some other unforeseen cause. In such cases permission may be granted by the superior administrative authorities to further extend the hours of labor of women and to shorten their 1-hour intermission during a period of 4 weeks, and by the chancellor for a longer period. In cases of emergency, as where disasters may be averted, the lower authorities may grant this permission for a period not exceeding 14 days. For the same reason and in the same manner the provisions regarding the hours of labor of children may be suspended.

In case the character of the work or the labor conditions are such that further alterations in the hours of labor are desirable in individual cases where women or children are employed, special permission may be granted by the superior administrative authorities, or by the chancellor, provided, however, that in no case can children under 16 years of age be allowed to work continuously for more than 6 hours without an intermission of 1 hour, and that no change in the legal maximum working day prescribed for them is made in virtue of this provision.

The lower administrative authorities may also permit the employment of women over 16 years of age who have no household duties to perform, or who do not attend a finishing school on Saturday and days preceding holidays after 5.30 p. m., but not later than 8.30 p. m., in such supplementary work as cleaning up, guarding establishments, etc., or when their labor is necessary to prevent the loss of raw materials or products. The permission must be given in writing and preserved by the employer.

The permanent exceptions which are granted by the Bundesrat are much more important, not only because they are permanent, but because they refer to whole industries rather than particular establishments. The Bundesrat has large powers in this respect.

In industrial establishments requiring the maintenance of a continuous fire, or in which regular night and day work is necessary, or where, on account of the peculiar character of the work, regular hours of labor can not well be maintained, or the work is limited to certain seasons, it can set aside the provisions regarding the hours of labor of women and children, their employment on Sundays and holidays, their hours of rest, etc. In these cases the weekly hours of labor can not exceed 65 (in tile works 70) hours for women, 36 hours for children under 14, and 60 hours (in tile works 70) for children from 14 to 16 years of age. The night work, in the case of both women and children, can not exceed 10 hours in every 24, with at least 1 hour intermission in each shift. The day and night shifts must be changed weekly.

In industries where a pressure of work occurs regularly at certain seasons the hours of labor of women may be extended to not more than 13 hours per day, except on Saturday, when the 10-hour limit can not be exceeded. This permission can not be granted for more than 40 days in any one year, except when the hours of labor are so regulated that the average working day for the year does not exceed that fixed by law.

Finally, the Bundesrat may shorten or dispense with the intermissions prescribed for children under 16 years of age, where the nature of the operations or consideration for the employees makes it desirable, provided that the children are not employed more than 6 hours without one or more intermissions aggregating 1 hour.

The orders of the Bundesrat may relate to the whole Empire or only to certain districts. They must be published in the official journal (*Reichs-Gesetzblatt*) and be placed before the Reichstag at its next session.

In pursuance of the powers above enumerated given to the Bundesrat, both to further restrict the employment of women and children in particular industries, and to permit exemptions from the general regulations contained in the law concerning their employment, it has issued a series of orders, reproduced at the end of this section, which set forth in detail the particular conditions under which these classes can be employed in the special industries to which the orders relate.

In order that a proper control may be exercised, the law requires all employers contemplating the employment of women or children to make a written declaration to the local police authorities before they begin operations. This declaration must contain all the information necessary for the maintenance of a rigid control by the authorities; the name and location of the establishment; the hours of labor; the time of beginning and stopping work; the hours and length of intervals of rest; and the nature of the work prosecuted. No change can be made in this arrangement until the police have been notified.

Employers must also post in a conspicuous manner in the rooms where women or children are employed a notice, in a form prescribed by the authorities, giving an extract of the provisions regarding the employment of women and children; and where children are employed, a list of the children there employed, their working days, hours of labor, and periods of rest.

Following are the orders setting forth the conditions under which women and children may be employed in the special industries to which the orders relate:

INDIA-RUBBER WORKS.—In india-rubber works (order of July 21, 1888) the employment of women and children under 16 years of age in the preparation of so-called "preservatives," or materials serving the same purpose, is prohibited.

GLASS WORKS.—The employment of women and children under 16 years of age in glass works (order of March 11, 1892) is subject to the following conditions:

1. Females must not be employed nor their presence permitted in rooms where furnaces (smelting, annealing, flattening) are installed, or in other places in which a high temperature is maintained. Exceptions, however, may be granted by the Bundesrat.

2. Boys under 14 years of age and girls under 16 years of age must not be employed in grinding. In plate-glass works boys under 14 years of age must not be employed at the smelting or flattening ovens or in the carrying of rollers if they weigh more than 5 kilograms (11 pounds).

3. Boys under 16 years of age, so far as their work in glass works is permitted according to the present order, may only be employed when they are in possession of certificates from a physician duly authorized by the higher administrative authorities to issue such documents, that their bodily development is such that their employment will not be detrimental to their health. These certificates must be surrendered to the employer, who will treat them as he must the labor pass books according to the code.

In glass works in which the glass is at the same time smelted and made into finished products the general provisions of the code regarding the hours of labor, intervals of rest, night work, etc., of boys under 16 years of age apply only as modified by the following regulations:

1. Boys under 14 years of age must not be employed more than 6 hours, including the intervals of rest, in any 24 hours, nor more than 36 hours, including intervals of rest, in a week.

2. The labor period of boys from 14 to 16 years of age must not exceed 12 hours, inclusive of intervals of rest, or 10 hours, exclusive of intervals of rest; nor must they be employed more than 60 hours, exclusive of rest periods, in a week. Intermissions of work of less than a quarter of an hour's duration are not considered as rest periods; and one of the intervals of rest must be for at least half an hour.

3. Where work is prosecuted day and night, there must be a weekly change of shifts. This provision does not apply to glass works in which the work is so regulated that the boys have an interval of rest of at least 24 hours' duration between the two shifts. The work in each shift must be broken by one or more intermissions, the total duration of which is at least 1 hour.

4. Boys under 16 years of age must not be employed during the intermissions for adults, and boys under 14 years must not be employed during the intermissions for boys from 14 to 16 years of age.

5. There must be an intermission of at least 12 hours between two labor periods.

6. On Sunday and holidays the work period must not fall between the hours of 6 a. m. and 6 p. m. This provision only applies to the first day when several holidays follow each other.

In glass works in which the smelting shift and the manufacturing shift change with each other the provisions of the code limiting the hours of labor of children, their intervals of rest, and employment at night and on holidays and Sunday, apply only as modified by the following regulations:

1. The labor period of boys under 14 years of age must not exceed in duration half that of the adults, nor be longer than 6 hours, unless intervals of rest of a total duration of at least 1 hour are permitted between the working hours. The total number of hours worked in a week must not exceed 36. Not more than half the total duration of work in any 2 weeks must fall between the hours of 6 p. m. and 6 a. m.

2. Boys from 14 to 16 years of age must not be employed more than 60 hours, exclusive of intervals of rest, in a week, and not more than half the time worked in any 2 weeks must fall between the hours 6 p. m. and 6 a. m. The duration of the periods of rest must be at least 1 hour for shifts of not more than 10 working hours and 1½ hours for longer shifts. Intermissions of work of less than a quarter of an hour's duration are not counted in reckoning the duration of rest periods. One of the rest periods must be at least half an hour in duration.

3. The work period, exclusive of intervals of rest, must not exceed 10 hours during the hours from 6 p. m. to 6 a. m.

4. Boys under 16 years of age must not be employed during the intermissions for adults, and boys under 14 years must not be employed during the intermission for boys from 14 to 16 years of age.

5. There must be an interval of rest between two labor shifts. For boys under 14 years of age this period must be at least as long as a complete labor shift for adults; and for boys from 14 to 16 years of age the period must be at least as long as the shift just ended. During the interval of rest boys under 14 years of age must not be permitted to perform supplementary work. Such work is permitted to boys from 14 to 16 years of age if they are, before the beginning or after the ending of such employment, without work for a time equal to the last ended shift. The time employed in supplementary work must be included in the total duration of employment permitted during the week.

6. The work period must not fall between the hours of 6 a. m. and 6 p. m. on Sunday more than once in 2 weeks.

In glass works subject to the foregoing provisions in respect to works in which the glass is at the same time smelted and made into finished products, and in which the smelting and manufacturing shifts change with each other, the provisions of the code regarding the giving of notice to the authorities and the posting of notices by establishments employing children apply as modified by the following regulations:

1. The list of children to be posted must be so prepared that the persons employed in the same shift must be shown in separate divisions for the boys under 14 years of age and those from 14 to 16 years of age.

2. In glass works in which the smelting and manufacturing shifts change with each other the notice need not show the labor day, the labor period, and the intermissions of work. Instead there must be annexed to the notice a table showing, according to the prescribed form, the information required by it. This table must give information concerning at least the last 14 manufacturing shifts.

3. In rooms in which children are employed there must also be displayed, in addition to the notice required by the code, a second notice giving the provisions of the present order applicable to the establishment.

WIRE-DRAWING MILLS.—The employment of women and children in wire-drawing mills making use of water power (order of March 11, 1892) is subject to the following conditions:

1. When a division of the work into equal shifts can not be temporarily adhered to on account of drought, frost, or flood, children under 14 years of age and women must not be employed in the manufacture of the wire, nor their presence permitted in the rooms devoted to that purpose.

2. For the employment of boys from 14 to 16 years of age under the circumstances above indicated the general provisions of the code apply, with the following modifications:

(a) The total duration of their labor, exclusive of intervals of rest, must not exceed 60 hours in a week, and the duration of work between the hours of 6 p. m. and 6 a. m., exclusive of periods of rest, must not exceed 10 hours. The duration of the periods of rest must be at least 1 hour for shifts of not more than 10 working hours and 1½ hours for longer shifts. Interruptions of work of less than a quarter of an hour are not taken into consideration in estimating the rest periods. Where there are a number of rest periods, one must be of at least half an hour's duration.

(b) A period of rest must be allowed between two labor shifts of a duration at least that of the shift just ended. Supplementary work must be included in calculating the total duration of a week's labor.

(c) The children must not be employed during the intervals of rest for the adults.

(d) On Sunday the work period must not fall oftener than once in 2 weeks during the hours from 6 a. m. to 6 p. m.

3. In wire-drawing mills coming under the foregoing provisions the requirements of the code regarding the posting of notices apply, subject to the following modifications:

(a) The list of children employed, the posting of which is required, must be so prepared that those employed in the same shifts form separate lists.

(b) The notice need not contain information concerning the work periods, the work day, and the intermissions. Instead, there must be a table in which must be entered during, or immediately after, each shift the prescribed entries. This table must give information concerning at least the last 14 shifts. The name of the person keeping the record must also be given.

(c) A notice giving the provisions of the present order must be posted in rooms in which children are employed in the establishments to which this order relates.

CHICORY WORKS.—In chicory works (order of March 17, 1892) women and children under 16 years of age must not be employed nor

permitted in rooms used for drying. A copy of the present order must be posted in all rooms of establishments having drying rooms in which establishments women or children are employed.

SUGAR FACTORIES AND REFINERIES.—In sugar factories and refineries (order of March 24, 1892) the employment of women and children under 16 years of age is permitted only subject to the following conditions:

1. The employment of women and children is absolutely prohibited in the washing and soaking of beet root, on the hoists, or in the transportation of beets and cut-up beets in trucks difficult to move. Their employment or presence is also prohibited in the filling house (*Füllhaus*), in the centrifugal rooms, in the crystallizing, drying, and mash rooms, and in other places where a very high temperature is maintained while the work is in progress.

2. The following modifications are made in the provisions of the code regarding night work, rest periods, etc., of working women over 16 years of age:

(a) They must not be employed at night on the sugar floor (*Zuckerboden*) or in the drying of the cut-up beets, and furthermore may only be employed in such work as is necessary for the maintenance of the continuous prosecution of the industry.

(b) Their employment at night must not exceed 10 hours in every 24, and there must be in each shift several intervals of rest, one of which must be at least 1 hour in duration. The total duration of labor in both day and night shifts must not exceed 65 hours in a week. An interval of rest of at least 12 hours must intervene between two night shifts. The women must alternate between night and day shifts weekly. This change from day to night shifts must be so arranged that the women employed in the day shifts do not commence work in a night shift, or vice versa, until they have had a rest of at least 24 hours. The change from one shift to another must not fall between the hours of 8.30 p. m. and 5.30 a. m.

(c) The number of women employed in day and night shifts in sugar factories and in sugar refineries which are not in operation during the whole year must not exceed the average number employed during the last two periods of operation; and in those refineries which are in operation during the whole year they must not exceed the average number employed during the two preceding calendar years. Beginning with April 1, 1894, the number of women who can thus be employed in day and night shifts must not exceed two-thirds, and beginning with April 1, 1896, one-third of the number usually employed, as above indicated.

(d) The workrooms and passages, stairways, and other means of communication must be properly lighted after dark. The workrooms must have an adequate amount of air space, means of ventilation, and be heated in cold weather.

(e) Special suitably arranged and cleanly kept washing and dressing rooms, and rooms in which to wait during the intervals of rest, must be provided the working women. These rooms must be heated during cold weather. When the higher administrative authorities so order, appliances for the preparation of food and drink must be furnished the women. The women must not be permitted to remain in the workrooms during the 1 hour intermission, except while the industry is not being carried on.

(f) Separate water-closets, with separate entrances, must be provided for the two sexes, in a number proportionate to the number of employees. They, and their entrances, must be properly lighted after dark, and be so arranged that persons working in warm rooms may reach them without danger of taking cold.

(g) There must be conspicuously posted in every room in which women are employed at night a notice showing the work day, the times for beginning and ending work, and the intervals of rest. This notice must give separate lists of the women employed in the day and night shifts.

(h) There must also be posted in a conspicuous place, in the rooms indicated in the preceding paragraph, a notice giving the provisions of the present order.

FORGES AND ROLLING MILLS.—The employment of women and children in forges and rolling mills maintaining continuous fires (order of April 29, 1892) is subject to the following conditions:

1. Women must not be employed in the direct operations of the work, and children under 14 years of age must not be employed anywhere in metal, forge, and rolling mills.

2. The limitations of the code concerning the employment of boys from 14 to 16 years of age apply with the following modifications:

(a) Before they may be employed they must obtain certificates from a physician, duly authorized by the higher administrative authorities to issue such documents, that their bodily development is such that their employment will not be detrimental to their health. These certificates must be surrendered to the employer, who will treat them, as he must the labor pass books, according to the code.

(b) The labor period must not exceed 12 hours, inclusive of intervals of rest, or 10 hours exclusive of intervals of rest, and each shift must be broken by intervals of rest of a total duration of at least 1 hour. Intermissions of less than a quarter of an hour are not to be taken into account. If, however, the work in an establishment is of such a nature that the children in the course of the work are not subject to exacting labor, and have interruptions in their work affording adequate opportunities for rest, the higher administrative authorities may, upon request, and with the reservation that they can at any time revoke their action, provide that such interruptions of work, even though they are less than a quarter of an hour in duration each, may be taken into account in estimating the 1 hour intermission required by law. If the children are employed in more than 8-hour shifts there must be one interval of rest of at least half an hour, which must fall between the fourth and the eighth hours of work. In no case shall children be employed more than 60 hours in a week, exclusive of intervals of rest. When the work is carried on by means of day and night shifts the children must change from one to the other at least weekly. In such establishments the children must not be employed in more than 6 night shifts, or those falling between the hours 8.30 p. m. and 5.30 a. m., in a week.

(c) An interval of rest of at least 12 hours must be allowed between two shifts, and supplementary work must not be permitted during this time.

(d) On Sunday and holidays the children must not be employed between the hours of 6 a. m. and 6 p. m., nor must they be employed on Sunday during the hours before or after this period unless they

have enjoyed an uninterrupted interval of rest of at least 24 hours before the beginning or after the close of the labor shift.

(e) The children must not be employed during the intervals of rest of the adults.

3. The provisions of the code regarding the giving of notice to the authorities and the posting of notices by establishments employing children apply, as modified by the following regulations:

(a) The list of children employed, the posting of which is required, must be so prepared that those employed in each shift form separate lists.

(b) When regular intervals of rest are provided for, the times at which they begin and end must be given separately for each shift.

(c) When there are no regular rest periods, the notices need make no mention concerning them. Instead, a table must be annexed to the notice in which must be entered during or immediately after each labor shift the beginning and the end of the rest periods that were allowed. This table must give information concerning the last 14 labor shifts in the case of establishments employing the two-shift system, and the last 20 shifts in the case of establishments using the three-shift system.

(d) The foregoing table need not be prepared in the case of children who are employed exclusively at the trains (*Walzenstrasse*), and who are not employed in connection with furnaces in continuous operation, so far as these make at least 8 charges in 24 hours and are not recharged during the work at the trains.

(e) The higher administrative authorities may grant exemptions from the foregoing provisions regarding notices in certain special cases.

(f) A notice giving the provisions of the present order must be posted in rooms in which children are employed in the establishments to which this order relates.

TEXTILE FACTORIES.—In hackling and other preparing rooms in textile factories (order of April 29, 1892) children under 16 years of age must not be employed, nor their presence permitted in hackling rooms, or rooms in which machines are used for opening, loosening, grinding, dusting, greasing, or mixing of raw or used textile fibers, or waste, or rags. This prohibition does not apply to cards for wool or cotton. A copy of this order must be posted in all factories, having rooms as above enumerated, which employ children.

SPINNING WORKS.—In spinning works (order of December 8, 1893) which the local police authorities designate as desiring to take advantage of this order, the afternoon intermission prescribed by the code for children under 16 years of age may be omitted on Saturday, and days before holidays, when the following conditions are observed: When the interval of rest is omitted, the work period for the children must not be longer than 9½ hours, and must not extend beyond 5.30 p. m., or more than 4 hours after the midday rest. On these days the children must be permitted to take their afternoon meal while at work. If advantage is taken of this order, a copy of its provisions must be posted.

DAIRIES, ETC.—In dairies and establishments for sterilizing milk (order of July 17, 1895) the provision of the code which requires the work period of women to be between the hours of 5.30 a. m. and 8.30 p. m. is modified to the extent that the work period of women over 16

years of age may, from March 15 to October 15, fall between the hours 4 a. m. and 10 p. m.

PRESERVING FACTORIES.—In preserving factories (order of March 11, 1898) women over 16 years of age can, notwithstanding the restrictions concerning their employment contained in the code, be employed on those days other than Saturday, when manual labor is most required, under the following conditions:

1. The work period shall not exceed 13 hours, and must not fall between the hours 10 p. m. and 5.30 a. m.

2. When the normal work period is exceeded on more than 40 days during the industrial year, beginning May 1 and ending April 30, the hours of labor of the women so employed must be so regulated that the average duration of their daily labor does not exceed the normal work day fixed for them by the code.

3. A table must be posted in a conspicuous place in every establishment taking advantage of this order, upon which the director of the enterprise must enter on the day when overtime work is had the date and the number of hours worked by all women over 16 years of age in the establishment or that particular branch of the work concerned. A copy of the present order must also be conspicuously posted in all such places.

BRICK AND TILE WORKS.—In brick and tile works (order of October 18, 1898) it is prohibited to employ women or children under 16 years of age, (1) in the work of extracting or transporting the raw material, including the wet clay; (2) in molding bricks by hand, with the exception of roof tiles and porous bricks; (3) in work performed in furnaces, or in firing the latter, with the exception of charging and drawing drying furnaces (*Schmauchöfen*) which are open at the top; (4) in the transportation of molded bricks and tiles, including dried and baked bricks, so far as this work is done by wheelbarrows or other similar means, and use can not be made of a hard, even road or one with firm rails.

In works which are operated only during the period from the middle of May to the middle of November, the following exceptions are permitted to the provisions of the code restricting the employment of women and children from 14 to 16 years of age: (1) Children of the age specified may be employed every day on which work can be performed, except Saturday and the days before holidays, 11 instead of 10 hours. (2) In works which are conducted without employing a fixed plant, or where the fixed plant consists of but one furnace, women, and children from 14 to 16 years of age, may be employed 12 instead of 10 hours each day, except Saturday and days before holidays. In this case, however, these employees must be given three intervals of rest, one at noon of not less than 1 hour's duration, and one in the forenoon and one in the afternoon, of not less than one-half hour each. In no case shall more than 4 hours' work be performed without an intermission. (3) The work period of the children and women can, by derogation of the code, begin as early as 4.30 a. m. and continue as late as 9 p. m.

In those works which take advantage of the provisions regarding establishments which are operated only from the middle of May to the middle of November, a notice must be posted containing the provisions of this order regarding brick and tile works generally, and, instead of a copy of the general provisions of the code regarding

women and children, so much of the latter and so much of the provisions of this order as apply in the particular case. In all other works there must be posted a copy of the provisions of the code regarding the employment of women and children, and a copy of those provisions of this order which relate to brick and tile works generally.

MINES AND COKE WORKS.—The order of February 1, 1895, in relation to the employment of women and children in coal mines, and that of March 24, 1892, in relation to their employment in coal mines, lead and zinc mines, and coke works in Oppeln do not fall within the scope of the present work, which is intended in no case to reproduce the laws concerning labor in mines. Their provisions are, therefore, not reproduced.

SUNDAY LABOR.

The regulation anew of Sunday labor was one of the most important features of the labor law of June 1, 1891. Prior to its enactment the law concerning this subject was in a very unsatisfactory condition. The industrial code simply provided that employers could not require their employees to work on Sunday except in certain cases of great necessity. In other words, the meaning of this provision was that a contract calling for Sunday work could not be enforced. There was, however, nothing to prevent workingmen from voluntarily working, and Sunday work was consequently very prevalent.

The law of 1891 changed this. It set forth in detail the conditions under which work might be performed on Sunday, and made the infraction of any of its provisions punishable by a fine, which in some cases amounted to as much as 600 marks (\$142.80). The essential provisions of this law are reproduced in the following paragraphs.

The general principle of the act is that all labor on Sunday and holidays is prohibited in those cases specifically mentioned by the law. This prohibition applies to almost all categories of industrial and commercial work, except when a workingman labors alone or is aided only by the members of his family. It does not, however, apply to agriculture, forestry, fishing, and the liberal arts and professions, nor to concerts, theaters, cafés, restaurants, hotels, and the like, nor to transportation, except when it is a part of the work of an industrial or commercial establishment.

The law further provides that the prohibition of Sunday and holiday work may be extended by an imperial decree approved by the Bundesrat to industries other than those specified in the law. Such decrees must be placed before the Reichstag at its next session. No use has as yet been made of this power.

The determination of the days to be considered as legal holidays is made by the State government in taking account of the religious customs of the people. The cessation from labor must be for 24

continuous hours on each Sunday and holiday, 36 hours when a Sunday and holiday or two holidays succeed each other, and 48 hours at Christmas, Easter, and Pentecost. When a Sunday and holiday or two holidays succeed each other the rest period must always last until 6 p. m. of the second day, and as it must begin at midnight in establishments working only in daytime or in irregular shifts, in such cases it lasts 42 instead of 36 hours. In establishments working continuously night and day by shifts, it may for a holiday or Sunday begin not earlier than 6 p. m. of the day preceding nor later than 6 a. m. of the day itself, and last for 24 hours, in which case the whole establishment shuts down for that length of time.

In commercial establishments (*Handelsgewerbe*) no labor shall be performed on Christmas, Easter, or Pentecost. On other holidays and on Sunday employees may be allowed to work not more than 5 hours. Power, however, is given to the local authorities to limit still further or even to suppress this privilege.

To this general prohibition of commercial work on Sunday there are a number of exceptions. During those periods of the year when trade is unusually active, as the 4 weeks prior to Christmas and certain times when the people from the rural districts come to the cities to make their purchases, the police authorities can permit stores to remain open for as many as 10 hours on Sunday and holidays. The exception made in the case of persons working alone or only aided by members of their families in industrial work does not apply to commercial establishments. The prosecution of business by shops conducted in this way or by peddlers on Sunday is equally prohibited with that of other commercial establishments.

The impracticability of attempting to restrict all Sunday work, no matter what its nature or circumstances under which it must be performed within the limits described above, has necessarily been recognized by the German Parliament. The law, therefore, provides in detail the cases in which these restrictions shall not apply. These exceptions are in part enumerated in the law itself and in part are left to the Bundesrat or other governmental authorities to determine.

The following classes of work are enumerated by the law as exempt from the prohibition of Sunday and holiday work: (1) Work which public convenience requires shall be promptly executed; (2) the making of inventories required by law; (3) the guarding of plants, and the cleaning, repairing, and other work necessary for the maintenance of the equipment or to insure that the work shall not be interrupted, and which can not be performed on other days; (4) work indispensable in order to preserve materials employed or goods manufactured, as far as this work can not be done on week days.

In order to prevent an improper advantage being taken of these exceptions, it is provided that, whenever work of this kind is per-

formed, the employer must keep a record showing for each Sunday or holiday the number of persons employed, the duration of their labor, and the nature of the work performed. This record must be always open to the inspection of the factory inspectors or local authorities.

In those cases where workingmen have been employed, as provided in the third and fourth cases, for more than 3 hours, or have been prevented from attending divine worship, the employer must give to them 12 hours' rest every other Sunday between the hours of 6 a. m. and 6 p. m., or 36 hours' uninterrupted rest, including Sunday, every third week. The local authorities, however, can abrogate this provision where the workingmen are not prevented from attending divine service and enjoy a 24-hours' uninterrupted rest during the week.

By far the most important exceptions, however, are those which the law permits the Bundesrat or the superior or local authorities to accord. The Bundesrat can frame regulations permitting Sunday work in those industries which must be prosecuted without interruption, which can remain in operation only during certain seasons of the year, or which manufacture goods that are only in demand during certain months. Practically the only limitation to the power of the Bundesrat in this respect is that the regulations must be general and apply to all establishments in the same industry. All such orders must be published in the official journal and must be placed before the Reichstag at its next session.

In pursuance of this power the Bundesrat on February 5, 1895, promulgated a very comprehensive order regulating the conditions under which Sunday and holiday work was permissible in a large number of industries. This order has been subsequently modified by other orders relating to particular industries. As thus amended the order now relates to all or certain designated branches of the following industries: (1) Mining and quarrying, the manufacture of iron and steel and other metals, and salt works; (2) stone and earthenware manufacture; (3) enameling, electroplating, and the installation of electrical machines and apparatus; (4) chemical industries; (5) forestry by-products, lighting materials, fats, oils, and varnish; (6) paper and leather; (7) food and food products, and (8) industries which are unusually active at certain times of the year, as confectioneries, toy factories, tailoring and shoemaking on a small scale, millinery, furrier's trade, straw hat factories, and the chemical cleaning and dyeing of wearing apparel. For particular classes of industries under these general groups there is indicated the specific character of the work permitted on Sunday and holidays, and the conditions under which such work is allowed. The order further provides that employees engaged on work accessory to the real work of establishments such as attending to the motive power, lighting plants, etc., must be allowed the minimum rest period

provided for by law. The prescribed rest indicated for employees whose work is permitted on Sunday by this order for single or successive holidays and Sundays must be granted without interruption, and must for the most part or wholly be between 6 p. m. of the preceding work day and 6 a. m. of the succeeding work day. Finally, the employer must post in a conspicuous place in the establishment a notice showing the general provisions of this order and that portion that relates particularly to the industry to which his establishment belongs.

The power of the superior administrative authorities to grant authorizations for Sunday work relates to those industries the operation of which is necessary to satisfy the daily needs of the public, or where the power used is irregular, as water flow and wind.

The local authorities can grant similar authorizations to particular establishments where such work is necessary to prevent great loss on account of an accident or other unforeseen circumstance. In these cases the authorization must be in writing, and a copy must be posted in the place of work where it can be easily seen by the employees. The authorities must also prepare a statement showing all the cases where this permission has been granted, the number of persons whose employment was permitted, the length of time worked, the reasons for granting the permission, etc.

Finally, it is important to note that not only were the existing laws of the individual States regarding Sunday work not repealed, except in so far as they were in opposition to the imperial law, but full freedom was left to the States to further restrict through legislation Sunday labor within their boundaries.

FACTORY AND WORKSHOP RULES.

The question of shop rules or regulations received considerable attention by those having charge of the framing of the law of 1891, and important provisions concerning it were incorporated in the law. Prior to the passage of this act great complaint was made by the employees that, not only were the regulations governing the conduct of work in each establishment framed by the employer in an arbitrary manner, but that owing to the fact that they were often not reduced to writing, the employees had no way of knowing exactly what the regulations were, nor when they would be changed.

To remedy this the law of June 1, 1891, provided that in every industrial establishment in which 20 or more persons were employed a set of shop rules or regulations should be prepared, and that these regulations, as far as they were not contrary to law, should constitute an integral part of the labor contract. These regulations must be dated, signed, and posted where they can easily be seen by the employees, within 4 weeks after the establishment begins operations. In addition,

a copy must be given to each employee upon his entering the service of the establishment. Special regulations can be prepared for particular branches of the work. The regulations do not enter into force until 2 weeks after they are posted.

Though the main purpose of this law is to make the conditions of labor certain and generally known, the law also specifies the essential points that must be covered by the regulations. They must contain provisions concerning the hours of beginning and stopping work and the intervals allowed adult employees for rest; the manner of fixing wages and the times of their payment; the notice required in terminating the labor contract and the grounds upon which it can be dispensed with; the kinds and amount of fines, the manner in which they are levied, and when they are money fines, the method of their collection and the purpose for which they are employed; and the disposition that will be made of money retained on account of the improper breaking of the labor contract.

The law limits the amount of fines that can be levied to not more than one-half the average daily earnings of the employee, except that, in cases relating to the punishment of acts of violence toward fellow-workers, serious transgressions against good morals, or against the orders of the establishment for insuring the safety of the establishment or for the enforcement of the regulations enacted for the carrying out of the provisions of the industrial code, the fines may equal the full amount of the average daily earnings. No fines or penalties can be imposed which are hurtful to the sense of honor or good morals of the employees. In all cases the proceeds from fines must be expended for the benefit of the employees of the establishment in which they are levied. This provision of course does not refer to compensation obtained by employers on account of damages sustained.

The fines levied must be entered in a register kept for that purpose. The entry must show the name of the person fined, the date, cause, and amount of the fine, and the register must be open at all times to the inspection of the proper authorities. The penalties must be fixed without delay and must be made known to the employee.

Causes for dismissal or giving up of work other than those specified in the factory regulations or in the law can not be agreed upon in the labor contract, nor can penalties other than those provided for in those regulations be imposed.

It will be observed from the foregoing that, with the exception of the matter of fines, the law merely fixes the points to be covered, but leaves the parties quite free in determining their exact nature. The law of 1891, however, contains a very important provision in its requirement that the workmen shall be given an opportunity to be heard in the framing of the regulations or of supplements thereto. The law thus provides that before the regulations are promulgated the

adult workmen of the establishment shall be given an opportunity to make known their wishes regarding them.

In a considerable number of the more important industrial establishments permanent workmen's committees (*ständige Arbeiterausschüsse*) had been voluntarily created by the employers for the purpose of having a body which could represent the collective interests of employees. The law recognized the utility of these institutions, and provided that where they were in existence their advice should be taken in the formulation of the regulations. In their absence certain other workmen's organizations, such as the committees for the management of the sick funds, when the majority of their members were elected from among the workmen, could act in this capacity as the representatives of the employees.

If there is a permanent workmen's committee, and its consent is obtained, provisions can be introduced in the regulations concerning the operation of factory institutions created for the benefit of the employees and the conduct of minors outside of the establishment.

Though the employers must thus afford their employees an opportunity to be heard in regard to the framing of the factory rules, they are not bound to conform to their wishes in any respect. Experience, however, has demonstrated that the opportunity to be heard is nevertheless a valuable one for both parties. Conditions that would lead to trouble are often foreseen and modified, and points of little moment to the employers, and yet objectionable to the employees, are frequently eliminated.

After considerable discussion it was decided that it would not be necessary for these rules to receive the approval of the Government. The only administrative control exercised is that copies of all rules must be filed in duplicate with the local authorities within 3 days after their promulgation, with the observations of the workmen if made in writing or the report of the meeting at which they had expressed their opinion. If, however, the regulations do not conform to legal requirements, the authorities can order their modification.

Changes in regulations must be made in the form of supplements or in such a manner that a new set of rules replaces the old, and are subject to the same provisions and formalities as the original regulations.

INSPECTION OF FACTORIES.

The duty of creating a service for the inspection of factories and the enforcement of the law in relation to them is left to the individual States. Formerly each State was left free to determine whether the execution of the factory laws should be left to the ordinary police or local administrative authorities, or special officials should be appointed for that purpose. The law of 1891 changed this and made it obligatory upon the States to appoint special industrial councilors and inspectors

(*Gewerbeaufsichtsbeamten*). Each State thus possesses its own particular service, and fixes the powers and duties of its inspectors and their relation to the local police authorities. The general law of the Empire, however, provides that these officials shall have the right to enter and inspect all industrial establishments at any time, and the employers are bound to furnish them such statistical information as the Bundesrat or provincial authorities may require.

The inspectors must furnish annually to their governments reports setting forth the manner in which they have performed their duties. These reports must be transmitted in their entirety or in abstract to the Bundesrat and Reichstag. From the information contained in them the central government prepares and publishes an annual report under the title of *Amtliche Mittheilungen aus den Jahresberichten der Gewerbeaufsichtsbeamten*. A number of the individual States also publish the reports of their inspectors independently.

In addition to this regular service for the inspection of factories the accident insurance institutions can appoint special officers to oversee the observance of those provisions having for their object the prevention of accidents.

PAYMENT OF WAGES: TRUCK SYSTEM.

As in other countries, it has been found necessary in Germany to enact laws for the purpose of insuring that workmen shall receive their wages in cash and at regular intervals of time. Provisions with this object in view were contained in nearly all of the earlier labor codes. The present law is contained in the act of June 1, 1891, and introduces important modifications in prior existing legislation.

Employers are required to reckon wages in the money of the Empire and to pay them in cash. Employees must not be charged with goods furnished them except under the following conditions: Food may be furnished at actual cost price; the use of land and dwellings may be permitted at the rental customary in the vicinity; fuel, light, regular board, medicine, and medical attendance, as well as tools and materials, may be supplied at their average cost price, and the proper deduction be made from wages on this account.

In the case of contract work, tools and materials may be furnished at more than their cost price provided that the price has been previously agreed upon and does not exceed that usually charged in the neighborhood. This higher price is permitted so that the workmen will be prevented from selling the tools or materials to other parties at a profit.

In all cases the goods, etc., must be furnished directly by the employer and not through a third party, and this can only be done with the consent of the employees.

Payment of wages can not be made in restaurants or saloons without the permission of the lower administrative authorities. The money must be paid to the workingmen themselves and never to third parties for the satisfaction of debts, etc., except as provided by the law in respect to attachments.

If wages are paid otherwise than as above provided, the employees may nevertheless at any time demand their payment according to law, and any defense that may be interposed to the effect that something else has been given in lieu of wages will be held invalid. In this case, if any supplies received are still on hand, they must be turned over to the sick fund to which the employee belongs, and if there is no such fund to the local workingmen's relief fund designated by the communal authorities, and in the absence of such a fund, to the local charity fund. When payments have been made to third parties, they will be considered as null and void.

All contracts in violation of the above provisions are null and void. The same nullity attaches to all agreements between employers and employees regarding the purchase of necessities by the latter from certain stores, or regarding the application of the wages of the employees to any purpose other than their participation in institutions for improving their condition or that of their families. This, however, does not apply to deductions from wages which are authorized by law on account of the breaking of the labor contract, injury to goods, breaking of machinery, etc. Claims for goods furnished and credited in violation of this law can not be sued for by the creditor, nor can they be charged against the debtor, nor made good in any other way, no matter whether the claim is made directly or transferred to another party.

All the provisions regarding the payment of wages apply equally to members of families of employees, to managers, overseers, etc.

Deductions from wages can be made by employers to secure themselves against loss on account of a breach of the labor contract, or to enforce the payment of fines when they have been previously agreed upon, not in excess of one-fourth of the wages due, nor more than the average wages for one week. Agreements may, however, be made for larger deductions to secure employers against loss on account of the loss or destruction of materials.

In addition to these general provisions applicable to the whole Empire, the individual communes, or a union of communes, are authorized to enact regulations, for all or for specified industries, of the following character: (1) That wages must be paid at fixed intervals of time, which must not be longer than one month nor shorter than one week; (2) that wages earned by minors must be paid to the parents or guardians, or that they shall only be paid to the minors upon the written authorization of the parents or guardians, or upon the

acknowledgment by the latter of the receipt of the previous wages; (3) that the employers must report to the parents or guardians at certain intervals of time the amount of wages paid to minors.

The provisions regarding wage payments apply also to persons engaged in productive work outside the establishments of their employers even when such employees furnish their own raw or other materials.

ARBITRATION TRIBUNALS.

In the consideration of the laws relating to guilds, it will be remembered that one of the important functions of those bodies was the constitution of arbitration committees. The jurisdiction of these committees, however, is limited to the adjustment of disputes in which guild members are concerned. They, therefore, scarcely affect any but the handicraft trades, and play little or no part in the settlement of the more important strikes and difficulties affecting the large industrial establishments.

Independently of these bodies, various other kinds of arbitration tribunals had gradually arisen in different parts of the Empire. Some of these had been organized by the local authorities in virtue of a permission to do so given to them by a provision of the labor code of 1869, and continued in the law of July 17, 1878. Others were organized similar, in a number of respects, to the French councils of prudhommes. None of these were very efficient institutions, and the lack of uniformity in their character and methods of operation constituted a real disadvantage.

To remedy these evils a general arbitration law was enacted July 29, 1890. This law is not a radical measure. It does not provide for the obligatory creation of arbitration courts, but, instead, leaves the matter of their establishment to the initiative of the individual communes or provincial authorities. It, however, introduces the provision that if the communes do take action, the tribunal created must be of the character fixed by the law. The main purpose of the law is, therefore, to make more uniform the arbitration tribunals created by the communes, and to define more accurately their powers and modes of action. While this law is treated under the caption of arbitration tribunals, it really provides for a system of special courts for the decision of labor cases, much in the same manner as the ordinary civil courts. The principle of conciliation and arbitration, however, is given great prominence.

It is important to note that this law relates to the settlement of disputes only among a particular class of industrial workers, that covered by section 7 of the industrial code, or factory employees proper. In this class are included officials, superintendents, and technical experts whose annual earnings or wages do not exceed 2,000 marks (\$476). In

no case, however, does the law apply to the handicraft trades. Following is a summary of the provisions of this law:

Tribunals for the decision of industrial disputes between employers and their employees, as well as between employees of the same establishment (*Gewerbegerichte*), may be created in virtue of this law by the communes, unions of communes, or, in certain cases, by the provincial authorities. The creation of an arbitration court by a commune must be by an act of the communal council, in accordance with section 142 of the industrial code. This section provides that such action shall be taken only after the employers and employees affected have had an opportunity to express their opinion, and that the constitution of the court must receive the approval of the higher administrative authorities and be published in the customary way of making communal proclamations. The higher administrative authorities must make known their decision regarding the matter within 6 months. When their decision is adverse, the grounds for the disapproval must be given. Much the same provisions apply to the creation of arbitration courts by a union of communes.

When the employers and workingmen interested petition for the establishment of a tribunal, but the communal authorities fail to act, the provincial government (*Landes-Centralbehörde*) may provide for the creation of such a body.

An arbitration tribunal may be created for all or for only particular categories of industries of a district, and may be for a single commune, a part of a commune, or a union of communes. The law contains special provisions concerning the creation of arbitration courts for the industries of coal mining, salt manufacture, quarrying, etc., which will not be reproduced here. After a court is created, its jurisdiction may be extended by the provincial authorities, after the local authorities have first been heard.

When created, the jurisdiction of these tribunals as regards matters to be adjudicated extends to the following questions without regard to the value of the matter in dispute: (1) The making, continuance, or breaking of the labor contract, and the surrender of, or making of entries in, labor pass books or certificates; (2) claims on account of services rendered, or for indemnities arising out of such relations, and the payment of fines; (3) the calculation and charging of dues required of employees for the sick-insurance funds; and (4) claims of employees against one another when work was undertaken jointly under the same employer. The courts do not have jurisdiction regarding disputes in respect to fines agreed to be paid if, at the termination of the labor contract, the employee enters the service of another person, or enters into business for himself. The jurisdiction of the courts as regards the first three classes of disputes includes those between persons working for definite employers outside the establishments in industrial pro-

ductions and their employers, in so far as their work relates to the manipulation of raw or partly manufactured articles furnished by the employer. The purpose of this provision is to bring home workers under the operation of the law. The same is true of disputes between home workers when working as described under the fourth class of disputes given above. Disputes among home workers who furnish their own raw or partly manufactured materials may come under the jurisdiction of the courts if their special statutes so provide. In all cases the jurisdiction of an arbitration court excludes that of the ordinary civil courts.

Each arbitration tribunal must consist of a president (*Vorsitzer*), at least 1 deputy (*Stellvertreter*), and not less than 4 associates (*Beisitzer*). Where a tribunal is organized in a number of sections, a presiding officer may be designated for each one.

The president and deputy are elected by the local authorities for terms of not less than 1 year. Neither can be an employer or an employee, and their election must be approved by the higher administrative authorities of the district in which the court is situated. This provision, however, does not apply to State or communal officials who hold office by virtue of a State appointment or confirmation so long as they are incumbents of such offices.

The associates must be elected in equal number by the employers and employees voting by secret and direct ballot in separate assemblies. The term of office must be for not less than 1 nor more than 6 years, and members are reeligible. Only those persons shall be electors who have completed their twenty-fifth year, have been domiciled or employed at least 1 year within the territorial jurisdiction of the court, and are eligible for the office of constable or sheriff. If the jurisdiction of a court is limited to certain classes of industries, only the employers and employees in those industries may take part in the elections or be elected. Neither members of a guild having an arbitration committee, nor their employees, may take part in the constitution of a court under this law.

To be eligible for election as members of a court, persons must be 30 years of age and must have resided or worked in the district for at least the 2 preceding years. Persons are not eligible for election if they or their families have been recipients of public relief which has not been repaid, and if they are disqualified from holding the office of constable or sheriff.

The details of the method of holding elections are prescribed by acts of the local authorities. These may provide that specified industrial groups may each elect one or more associates. They may also specify to what extent home workers shall be eligible as electors or members of the courts.

Objections to the legality of an election must be made within 1

month to the higher administrative authorities. If the objection is sustained, the election must be declared void and a new election be held.

In cases where no elections are held, or where they have been repeatedly declared void after having been held, the higher administrative authorities may order that such elections be held by the local authorities where they should have been held by employers or employees, or may themselves appoint members where the election should have been held by the local authorities.

The office of associate is an honorary one, there being no salary attached to it. Acceptance may be refused only upon the same grounds that would justify a person refusing an unsalaried communal office. Where there are no legal provisions regarding the declination of communal offices, a person elected as an associate may decline to serve upon the same grounds that would justify him in declining the position of guardian.

Any person, however, who has been an associate for 6 years may decline to serve for the ensuing 6 years. In all cases the reasons for declining to serve must be put in writing, and will be acted upon by the local authorities.

Though they receive no salary, associates must be allowed a compensation for time lost and be reimbursed for traveling expenses incurred in attending sessions of the court. The amount to be so allowed is determined by local statutes, and can not be declined by the members.

If circumstances arise or become known which would make a member ineligible for election to the office, he must be removed by the higher administrative authorities, after an opportunity has been given to the interested parties to be heard. If a member is guilty of a gross violation of his duties, he may be removed by the provincial court (*Landgericht*) of the district. Proceedings in such cases are instituted by the state's attorney.

Before entering upon their duties the presidents and their deputies must take oath of office before an official designated by the higher administrative authorities, and the associates must take oath of office before the president of the tribunal.

Associates who, without sufficient excuse, do not attend the sessions of the court with promptness, or who in other ways fail to fulfill their obligations, may be sentenced by the president to the payment of a fine not exceeding 300 marks (\$71.40), in addition to such costs as may have been incurred. If a sufficient excuse is afterwards given, the fine may be partially or wholly remitted. An appeal from the action of the president in this matter may be taken to the provincial court of the district in which the arbitration court has its seat.

An arbitration tribunal when exercising its functions must consist of 3 members, including the president, unless otherwise provided by local statute, which may provide that in general or for certain classes

of disputes a larger number of associates must be called. In all cases there must be an equal number of employer and employee associates. A registrar's office must be created for each court.

The law contains detailed provisions concerning the method of procedure in the arbitration courts, which need not be here reproduced except in brief summary form. In general the rules governing procedure in the civil courts are followed, except in so far as they are expressly modified by the present law. Parties can not be represented by attorneys or persons making a business of court proceedings. The terms of the courts will be fixed by their presidents. Parties must be formally summoned by the registrar. When a complaint is entered upon the docket, the president must appoint the earliest possible time for its trial. On regular court days the parties to a dispute may voluntarily appear without having been previously summoned or a day of trial fixed. The filing of a complaint in such a case consists simply of a verbal statement. The complaint must be recorded if the matter remains in dispute. Except in certain special cases, proceedings must be public.

If the complainant fails to appear at the time of trial, judgment will be rendered against him in default, and the case dismissed if the defendant so requests. If the defendant fails to appear, and the complainant makes a motion to that effect, the facts alleged in the bill of complaint will be considered as admitted, and so far as they justify the redress asked judgment will be rendered; otherwise the action will be dismissed. Parties against whom judgment by default has been rendered may within 3 days file a petition that it be set aside. This petition must be heard by the court, and if acted upon favorably the case will be restored to the status in which it was before judgment was rendered.

If the parties duly appear, the effort must first be made by the arbitration tribunal to effect an amicable settlement of the dispute. This attempt at conciliation may be renewed at any stage of the proceedings, and must be renewed at the close of the proceedings if both parties are present. If an agreement is reached, its terms must be recorded in the minutes, and be read to the parties. The minutes must state that the agreement has been read to the parties, and must record its approval by the parties, or any objections that were made to it.

If an amicable agreement is not reached, the action will go to trial. The president will conduct the proceedings. His aim must be to have the parties make a full declaration of all important facts, to indicate the evidence required to establish the claims made, and to make such orders as may be necessary. He may at any time order the personal appearance of the parties, and in the case of their failure to appear may impose a fine not exceeding 100 marks (\$23.80) in amount. Objection to this fine may be made according to the ordinary rules of civil procedure.

If the continuance of a case to another term is necessary, especially when this is required because necessary evidence can not be immediately obtained, the future term and the time for the taking of the evidence must be immediately designated.

Evidence must, as a rule, be taken before the arbitration tribunal. A record must be kept of all proceedings, which must be signed by the president and the registrar.

The judgment must be announced at the term during which the proceedings are terminated; or, if this can not be done, within 3 days at a specially appointed term. The judgment must show: (1) The members of the court who have participated in the trial of the cause; (2) the parties; (3) a brief summary of the matters in dispute and the important grounds for the decision, and (4) the terms of the judgment rendered and the amount of the costs as far as they can be immediately ascertained.

If the judgment requires the performance of an act, the party obligated may, at the request of the other party, be held to pay an indemnity as fixed by the court in case of its nonperformance within a specified time. In the assessing of costs the tribunal, when requested by the successful party, may in its judgment include an indemnity for the time lost by the successful party in his attendance at the trial. Decisions regarding the fixing of costs are final. Appeals from judgments regarding the matters in dispute, however, may be made to the district court when the amount involved exceeds the sum of 100 marks (\$23.80). Decisions are enforced according to the general rules contained in the law relating to civil procedure. The civil courts must render all assistance within their legal powers.

Careful provisions are made by the law that the prosecution of actions in the industrial courts shall be as inexpensive as possible. The law thus provides that only one fee shall be charged in each case, which shall be proportionate to the amount of the sum in dispute. Where this sum does not exceed 20 marks (\$4.76) the fee is 1 mark (\$0.24); where it is more than 20 marks (\$4.76), but not more than 50 marks (\$11.90), 1½ marks (\$0.36), and where the sum is more than 50 marks (\$11.90), but not more than 100 marks (\$23.80), 3 marks (\$0.71). Three marks (\$0.71) additional are charged for each additional 100 marks (\$23.80). In case judgment is acknowledged or rendered by default, or the case is withdrawn before actual trial, only half fees will be charged. If a conciliation is effected at any stage of the proceedings the fee will be remitted altogether. The constitution of each court also may provide for a lower scale of fees or their entire remission. The losing party is responsible for costs. They will be assessed according to the ordinary method in judicial proceedings, and their collection may be enforced in the same way as communal taxes.

In addition to sitting as formal courts for the adjudication of labor cases, the arbitration tribunals may act as boards of conciliation to adjust disputes affecting the relations between employers and their employees. In order to act in this capacity they must be formally requested to serve by both employers and employees. When the latter are more than 3 in number they may appoint delegates to represent them. Such delegates must be at least 25 years of age and in the possession of their full legal rights.

When sitting as a board of conciliation (*Einigungsamt*), the tribunal must consist of the president and 2 employer and 2 employee associates. The board, however, may be increased by the addition of an equal number of prudhommes (*Vertrauensmänner*) for employers and employees. This will be done when both parties request it and designate the names of the persons to be selected. None of the persons on the board must be interested in the dispute.

The board of conciliation, after hearing both parties or their delegates, must determine the points in dispute and the circumstances regarding them that must be taken into account in arriving at a decision. Any associate or prudhomme has the right to put questions through the president to the delegates and witnesses. After a clear understanding concerning the circumstances of the dispute is had, each party must be given an opportunity in a general discussion to express himself regarding the matters alleged by the other party or in the way of testimony by witnesses. This done, the effort to effect a conciliation will be made.

If a conciliation is arrived at its terms must be reduced to writing and signed by all the members of the board and the delegates of both parties. If a conciliation is not effected the board must render a decision covering all the points in dispute between the parties. This decision will be arrived at by a simple majority vote. If, as the result of this vote, it is found that all the employer associates and prudhommes voted one way and all the employee associates and prudhommes voted another, the president may withhold his vote and declare that a decision has not been reached.

When a decision is given it must be announced to the delegates of both parties, with the notice that they must declare within a specified time whether they will abide by the decision or not. At the expiration of the time specified the board must issue a public notice, signed by all the members of the board, containing the decision rendered and the declarations made by the parties regarding the same. If neither a conciliation nor a decision is obtained this fact must be published by the president of the board.

As in the case of councils of prudhommes in other countries, these bodies may be called upon by the State authorities or the officers of

the union of communes for which they are created to report upon industrial questions. For this purpose the tribunals may form special committees, which, if the questions to be considered interest both employers and employees, must be composed of equal numbers of employer and employee associates. The tribunals may also upon their own initiation make recommendations concerning labor matters.

The cost of creating and maintaining the labor courts, as far as they are not covered by receipts, must be defrayed by the communes or unions of communes in which they are located.

Provision is finally made for the settlement of labor disputes in districts in which labor courts, as provided by this law, are not created. In such districts the chief officer of the communes (*Bürgermeister, Schultheiss, Ortsvorsteher, etc.*) is empowered to hear disputes in relation to the making, continuance in, or breaking of the relations between employers and employees, or in relation to the dues required of employees for insurance against sickness.

The parties to a dispute must be given an opportunity to make known their contentions and to introduce evidence. If a conciliation is arrived at its terms must be reduced to writing and be signed by the parties and the communal authority. The decision of the latter must be in writing and may be immediately enforced, if an appeal is not taken within 10 days to the ordinary courts by the local police authorities.

The chief officer of a commune may delegate the duty of deciding labor disputes as above described to a special officer. Instead of leaving this matter to the communes, the provincial authorities may provide for a general conciliation board for the adjustment of disputes within their districts.

LABOR COMMISSION.

Efforts for the establishment of a bureau of labor statistics after the American model were made in Germany as far back as 1872. Unwilling to create a permanent bureau, the central government has, however, created by decree a commission to collect information in relation to labor. This commission (*Kommission für Arbeiterstatistik*) was definitely organized April 1, 1892. It is composed of a president appointed by the chancellor of the Empire, 6 members chosen by the Bundesrat, 7 by the Reichstag, and 1 by the chancellor from among the statistical officers of the Empire.

The work of the commission is declared to be to give its advice, on the request of the Bundesrat or chancellor, concerning proposed statistical works and their execution and results, and to submit to the chancellor propositions for the carrying out of such inquiries. It will be seen from this description of the character of the commission that it may be said to occupy a medium position between industrial com-

missions and labor bureaus. It is a commission in form, but possesses to a considerable extent the permanency of a labor bureau. As regards its mode of action, it formulates inquiries and considers the results obtained, but the information gathered is compiled and prepared for publication by the imperial statistical bureau.

Thus far it has issued 10 or more volumes of reports giving the results of its investigations. They relate to the conditions of labor in various industries, and have furnished the information upon which the Bundesrat has based a number of regulations promulgated by it for the regulation of labor in particular trades.

RECENT REPORTS OF STATE BUREAUS OF LABOR STATISTICS.

IOWA.

Eighth Biennial Report of the Bureau of Labor Statistics for the State of Iowa, 1897-1898. W. E. O'Brien, Commissioner. 108 pp.

The following subjects are treated in this report: Letter of transmittal, introduction, and recommendations, 10 pages; cooperative railroading, 3 pages; manual training, 3 pages; labor organizations, 2 pages; industrial statistics, 45 pages; railroad statistics, 14 pages; strikes, 1 page; pearl-button industry, 27 pages.

COOPERATIVE RAILROADING.—This chapter relates to the progress made by the Illinois Central Railroad Company in its system of selling on the installment plan shares of stock to employees.

MANUAL TRAINING.—This chapter consists of extracts from the report of the instructor of manual training in the schools of West Des Moines, giving an outline of the courses of study and system of instruction, and a brief account of manual training in the public schools of Mason City.

LABOR ORGANIZATIONS.—Brief mention is made of the general condition of labor organizations in the State.

INDUSTRIAL STATISTICS.—Tables are given showing the returns, by counties and industries, of the various individuals, companies, firms, and corporations in the State employing 5 or more persons each, such establishments being required by law to make returns. The statistics presented show the number of male and female employees, the number of apprentices, the total yearly wages paid, and the number of weeks in operation for 1,311 establishments in 1897 and 1,625 establishments in 1898. The following is a recapitulation of the returns for the entire State for the years 1896, 1897, and 1898:

STATISTICS OF ESTABLISHMENTS EMPLOYING 5 OR MORE PERSONS, 1896, 1897, AND 1898.

Items.	1896.	1897.	1898.
Establishments reporting	1,752	1,311	1,625
Total employees:			
Males.....	40,854	40,127	45,006
Females.....	7,732	7,696	9,800
Apprentices.....	687	582	623
Aggregate wages paid.....	\$17,369,622	\$17,656,724	\$19,623,892
Average weeks in operation:			
Full time with full force.....	40	44	45
Short time with reduced force.....	8	5	4
Weeks during which business was suspended.....	4	3	3

The above figures show a general improvement in business activity in the State during 1898 as compared with the preceding years.

RAILROAD STATISTICS.—Tables are given showing, by groups of occupations, for the years 1897 and 1898, the number of officials and other employees in the service of the railroad companies, and their total yearly and average daily earnings as obtained from the reports of the railroad commissioners. During 1897, 26,690 persons were employed by the railroads in the State, of whom 118 were general officers. In 1898 there were 30,009 persons employed, of whom 119 were general officers.

STRIKES.—In 1897, 18 strikes were reported, involving 1,191 persons and resulting in a wage loss of \$49,344. The average duration of the strikes was 13 days. Sixteen of these strikes were due to wage disputes. In 1898, 11 strikes were reported, involving 739 persons, and resulting in a wage loss of \$63,540. They lasted an average of 18 days, and were all due to wage disputes.

THE PEARL-BUTTON INDUSTRY.—This chapter consists mainly of an extract from a report of the United States Fish Commission regarding the pearl-button industry.

VIRGINIA.

First Annual Report of the Bureau of Labor and Industrial Statistics of the State of Virginia, for the Years 1898 and 1899. Archer P. Montague, Commissioner. xi, 420 pp.

The law^(a) creating the present bureau was approved March 3, 1898, and as this report was presented to the governor September 1, 1899, the work of the bureau for the two years is given in one report. The commissioner of labor has power under the law to require the furnishing of information for the use of the bureau.

The present report relates to the following subjects: Letter of transmittal, introduction, etc., 8 pages; agricultural and county statistics, 133 pages; principal cities, 14 pages; manufactures, 207 pages; penal institutions, reformatories, etc., 5 pages; organized labor, 7 pages; steam and electric railway employees, 11 pages; coal mines, 3 pages; newspapers, 2 pages; laws and court decisions relating to labor, 30 pages; recommendations, 4 pages.

AGRICULTURAL AND COUNTY STATISTICS.—In this chapter a description is given of each county, showing among other things the character of the land surface and soil, water courses, per cent of land under cultivation, character of products, wages, etc., and statistical tables showing crop products, prices, and cost of production, and the assessed valuation of real and personal property in 1898.

^a For a copy of this law see Bulletin No. 18, pages 778, 779.

PRINCIPAL CITIES.—An account is given of the location, transportation facilities, chief industries, schools, churches, etc., of each of the 15 principal cities of the State.

MANUFACTURES.—The statistics presented embrace chiefly comparative data for the years 1896 and 1897 regarding capital invested, stock used, goods made, persons employed, wages paid, proportion of business done, days in operation, etc.

The following summary of manufactures is given in the report:

Of the 1,182 blank forms sent to the operators of manufacturing plants, 690 were returned. Of these, 394 were tabulated, and the remaining 296 were found to be insufficient for use, either in consequence of the meager data contained therein, or the fact that certain of the establishments were not in active operation during the period covered. These untabulated reports represented an aggregate capital invested in business of \$374,640.

Of the 394 tabulated reports, 109 were from incorporated companies and 285 from private firms. The aggregate capital invested in business amounted to \$22,691,799.75, and the total value of all goods manufactured during the year 1897 was \$22,872,659.09. The total number of days worked in 1896 and 1897 were 86,501 and 94,262, respectively. The total amount paid in wages in the mechanical departments in 1896 was \$5,039,673.31; in 1897 it was \$6,406,528.42, or an increase of \$1,366,855.11. The total amount paid for rent was \$111,576.31; for taxes, \$149,514.86, and for insurance, \$143,072.25, a total of \$404,163.42. The average amount paid for office help per month was \$78,379.64, or \$940,555.44 per year. This office help included 466 managers and foremen, 241 salesmen and 4 salesladies, 167 male and 11 female bookkeepers, 191 male and 11 female clerks, and 29 male and 19 female stenographers.

ORGANIZED LABOR.—The following table gives some of the important facts reported by labor organizations in the State:

HOURS OF LABOR AND AVERAGE DAILY WAGES OF MEMBERS OF LABOR ORGANIZATIONS, AND AVERAGE DAYS WORKED DURING 1898, BY OCCUPATIONS.

Occupations.	Unions reporting.	Membership.	Hours of labor per day.	Average daily wages.	Average days worked during 1898.
Barbers.....	1	7	12	\$1.67	316
Blacksmiths.....	1	81	9	2.35	288
Boiler makers and shipbuilders.....	1	124	10	2.62	306
Brick masons.....	1	40	9	4.00	(a)
Car builders, railway.....	1	61	10	1.60	275
Cigar makers.....	2	126	8	1.73	260
Engineers, railway.....	2	194	12	4.35	360
Firemen, railway.....	7	161	11	1.91	320
Machinists.....	5	864	10	2.38	295
Molders.....	2	130	9	2.57	230
Painters and decorators.....	1	35	9	2.50	228
Plumbers, gas fitters, etc.....	1	36	9	2.75	(a)
Printers.....	2	(a)	9	2.25	230
Tailors.....	1	25	(a)	(a)	(a)
Tinners.....	1	35	9	2.00	306
Trainmen.....	1	67	10	1.85	365
Total.....	30	δ 1,436			

a Not reported.

δ Not including 2 printers' unions, membership not reported.

RAILWAY EMPLOYEES.—Statistics are given showing the number of persons employed, days worked, and wages paid by each of the 25 principal steam railroads operating in the State, as reported by the railway commissioner. There was a total of 23,649 persons employed by these companies, exclusive of general officers, receiving during the year \$11,491,350.88 in salaries and wages, or \$1.61 per employee per day.

Returns from 14 electric railways were obtained directly by the bureau. The following table gives the total number of employees, average hours of labor, and wages per day as reported by the companies:

AVERAGE HOURS OF LABOR AND WAGES OF EMPLOYEES OF 14 ELECTRIC STREET RAILWAYS, BY OCCUPATIONS.

Occupations.	Em- ployees.	Hours of labor per day.	Wages per day.	Occupations.	Em- ployees.	Hours of labor per day.	Wages per day.
Electricians.....	20	11.4	\$2.18	Blacksmiths.....	7	10.4	\$1.79
Foremen.....	19	10.5	2.38	Painters.....	8	10.5	2.40
Motormen.....	267	11.5	1.57	Trackmen.....	70	10.0	1.05
Conductors.....	247	11.0	1.50	Track oilers.....	8	10.5	1.08
Engineers.....	32	11.0	2.20	Laborers.....	63	10.2	.99
Firemen.....	34	11.1	1.34	Coal passers.....	10	10.5	1.03
Machinists.....	12	11.0	2.23				
Woodworkers.....	7	10.4	1.90	Total.....	804	.....	.....

COAL MINES.—This chapter contains a brief account of the coal mining industry in the State and statistics of coal production in 1896 and 1897.

NEWSPAPERS.—Statistics are given showing the hours of labor and daily wages of employees in each of 11 newspaper offices in the State.

THIRTEENTH REPORT ON THE ANNUAL STATISTICS OF MANUFACTURES IN MASSACHUSETTS.

The Annual Statistics of Manufactures, 1898. Thirteenth Report. xxvii, 311 pp. (Issued by the Bureau of Statistics of Labor, Horace G. Wadlin, Chief.)

The present report contains, in addition to the statistics of manufactures regularly presented, a monograph on the history and present condition of the textile industries. The contents of this report are arranged as follows: Statistics of manufactures, 111 pages; selected industry presentations, 43 pages; analysis, 55 pages; the textile industries, 51 pages; industrial chronology, 47 pages.

MANUFACTURES.—The statistics presented are mainly based upon the returns made for 1897 and 1898 by 4,701 identical establishments representing 80 industries in the State. No attempt was made to include all the manufacturing establishments in the State, but a sufficient number of leading typical establishments are given to show the general trend of industrial progress.

The 4,701 establishments considered were conducted, in 1898, by 3,464 private firms and 1,172 corporations, a decrease of 1.28 per cent in the number of private firms and an increase of 2.63 per cent in the number of corporations as compared with 1897. There was likewise a decrease in the number of partners from 5,572 in 1897 to 5,424 in 1898, and an increase in the number of stockholders from 46,407 in 1897 to 46,872 in 1898. The average number of partners to a private firm in 1898 was 1.57 and the average number of stockholders to a corporation was 39.95. The private firms and corporations enumerated were managed by 52,251 persons in 1898, of whom 5,424, or 10.38 per cent, were partners and 46,827, or 89.62 per cent, were stockholders.

The following tables show the aggregate capital invested, the value of goods made and work done, the value of stock used, and the wages paid during the years 1897 and 1898 for each of the 9 leading industries, for the remaining 71 industries collectively, and for all of the 4,701 identical establishments:

CAPITAL INVESTED AND GOODS MADE AND WORK DONE IN 80 INDUSTRIES, 1897 AND 1898.

Industries.	Estab-lish-ments.	Capital invested.			Goods made and work done.		
		1897.	1898.	Per cent of increase.	1897.	1898.	Per cent of increase.
Boots and shoes	644	\$23, 200, 068	\$22, 414, 665	a 3. 39	\$104, 042, 441	\$107, 188, 460	3. 02
Carpetings	12	6, 784, 921	6, 582, 652	a 2. 98	6, 364, 709	6, 016, 943	a 5. 46
Cotton goods	169	113, 437, 432	112, 702, 330	a. 65	88, 272, 454	88, 374, 783	. 12
Leather	95	6, 281, 541	6, 588, 029	4. 84	19, 317, 480	19, 647, 769	1. 71
Machines and machin-ery	359	32, 677, 927	32, 686, 813	. 03	26, 979, 408	28, 964, 913	7. 36
Metals and metallic goods	380	17, 367, 796	17, 191, 783	a 1. 01	21, 702, 203	23, 328, 223	7. 49
Paper and paper goods ..	80	20, 546, 478	20, 783, 967	. 91	18, 131, 435	20, 104, 855	10. 88
Woolen goods	142	27, 792, 875	26, 980, 024	a 3. 10	29, 622, 054	31, 683, 903	6. 79
Worsted goods	35	16, 802, 284	17, 166, 388	2. 17	24, 694, 793	25, 818, 780	4. 55
Other industries	2, 785	148, 448, 785	150, 432, 302	1. 34	278, 441, 315	289, 795, 264	5. 98
Total	4, 701	413, 290, 097	413, 373, 953	. 02	612, 568, 342	640, 871, 843	4. 62

a Decrease.

STOCK USED AND WAGES PAID IN 80 INDUSTRIES, 1897 AND 1898.

Industries.	Estab-lish-ments.	Stock used.			Wages paid.		
		1897.	1898.	Per cent of increase.	1897.	1898.	Per cent of increase.
Boots and shoes	644	\$65, 182, 608	\$67, 386, 674	3. 38	\$23, 560, 417	\$23, 904, 714	1. 46
Carpetings	12	3, 898, 404	3, 638, 475	a 6. 67	1, 695, 379	1, 431, 921	a 10. 80
Cotton goods	169	50, 857, 306	47, 294, 087	a 7. 01	27, 193, 335	26, 294, 240	a 3. 31
Leather	95	14, 532, 557	14, 929, 168	2. 73	2, 679, 496	2, 640, 868	a 1. 44
Machines and machin-ery	359	9, 276, 096	10, 142, 326	9. 34	9, 505, 410	10, 068, 181	5. 92
Metals and metallic goods	380	9, 845, 655	10, 734, 998	9. 08	6, 634, 101	6, 842, 531	3. 14
Paper and paper goods ..	80	10, 175, 492	11, 166, 843	9. 74	3, 493, 736	3, 719, 611	6. 46
Woolen goods	142	17, 415, 255	19, 184, 735	10. 16	7, 052, 842	7, 205, 613	2. 17
Worsted goods	35	15, 070, 371	15, 923, 830	5. 66	4, 655, 439	4, 789, 376	2. 89
Other industries	2, 785	158, 060, 200	162, 445, 281	2. 77	51, 606, 233	53, 314, 948	3. 31
Total	4, 701	354, 314, 944	362, 846, 417	2. 41	137, 986, 438	140, 212, 103	1. 61

a Decrease.

The above tables show that in the 4,701 establishments, taken as a whole, there was an increase in each of the four items, namely, capital invested, goods made, stock used, and wages paid. Of the 9 leading industries, 3 show an increase in each of these items, 5 show an increase in only part of the items, while 1, carpetings, shows a decrease in each of the four items.

A comparison of the increase or decrease of the total production each year since 1886, as shown by the present and former reports, is given in the following table:

INCREASE OR DECREASE IN VALUE OF GOODS MADE AND WORK DONE, BY YEARS, 1886 TO 1898.

Years.	Number of establishments considered in each year compared.	Increase in value of goods made and work done in each year as compared with the previous year.		Years.	Number of establishments considered in each year compared.	Increase in value of goods made and work done in each year as compared with the previous year.	
		Amount.	Per cent.			Amount.	Per cent.
1886 and 1887...	1, 027	\$13, 919, 859	5. 29	1892 and 1893 ..	4, 397	a \$51, 793, 852	a 8. 10
1887 and 1888...	1, 140	11, 163, 095	3. 61	1893 and 1894 ..	4, 093	a 56, 793, 448	a 10. 27
1888 and 1889...	1, 364	9, 553, 992	2. 45	1894 and 1895 ..	3, 629	43, 043, 021	9. 13
1889 and 1890...	3, 041	22, 838, 970	4. 37	1895 and 1896 ..	4, 609	a 31, 376, 727	a 5. 51
1890 and 1891...	3, 745	3, 063, 053	1. 33	1896 and 1897 ..	4, 695	16, 996, 553	3. 04
1891 and 1892...	4, 473	33, 180, 865	5. 37	1897 and 1898 ..	4, 701	28, 303, 501	4. 62

a Decrease.

An examination of the above table shows that from 1886 to 1892, inclusive, there was an increase each year in the value of goods produced and work done in the industries considered; in 1893 and 1894 there was a decline; in 1895, an increase; in 1896, another decline; and in 1897 and 1898 increases are again noted.

The average number of employees and their average yearly earnings in 1897 and 1898 in the 4,701 identical establishments are shown in the table following. The persons included are wage-earners only, the officers, clerks, or other salaried persons not being considered.

AVERAGE NUMBER OF EMPLOYEES AND AVERAGE WAGES IN 80 INDUSTRIES, 1897 AND 1898.

Industries.	Estab-lish-ments.	Average number of em-ployees.			Average yearly earnings.		
		1897.	1898.	Per cent of in-crease.	1897.	1898.	Per cent of in-crease.
Boots and shoes	644	50,055	51,897	3.68	\$470.69	\$460.62	a 2.14
Carpetings	12	4,623	4,203	a 9.09	347.26	340.69	a 1.89
Cotton goods	169	81,195	81,385	.23	334.91	323.08	a 3.53
Leather	95	5,597	5,465	a 2.36	478.74	433.23	.94
Machines and machinery	359	18,261	18,658	2.17	520.53	539.62	3.67
Metals and metallic goods	380	13,444	13,450	.04	493.46	508.74	3.10
Paper and paper goods	80	8,510	8,797	3.37	410.55	422.83	2.99
Woolen goods	142	19,285	19,438	.79	365.72	370.70	1.36
Worsted goods	35	12,975	13,107	1.02	358.80	365.44	1.85
Other industries	2,785	112,833	116,269	3.05	457.37	458.54	.26
Total	4,701	326,778	332,669	1.80	422.26	421.48	a .18

a Decrease.

The average number of persons employed as wage earners in all of the establishments considered was 326,778 in 1897 and 332,669 in 1898, an increase of 5,891 persons, or 1.80 per cent. Seven of the 9 leading industries show an increase in 1898 as compared with 1897, the greatest relative increase being 3.68 per cent, in the boot and shoe industry. The carpetings industry shows the greatest relative decrease, or 9.09 per cent.

The average yearly earnings per individual employed in the 4,701 establishments was \$422.26 in 1897 and \$421.48 in 1898, a decrease of \$0.78, or 0.18 per cent. Six of the 9 leading industries show an increase and 3 a decrease in this average. The greatest relative increase was 3.67 per cent, in the machines and machinery industry, and the greatest relative decrease was 3.53 per cent, in the cotton goods industry.

The following table shows, for the 80 industries, the percentage of males and females of the whole number employed at each specified weekly rate of wages.

PER CENT OF MALES AND FEMALES OF THE WHOLE NUMBER EMPLOYED AT SPECIFIED WEEKLY WAGES IN 80 INDUSTRIES, 1897 AND 1898.

Weekly wages.	1897.		1898.	
	Males.	Females.	Males.	Females.
Under \$5	38.90	61.10	38.60	61.40
\$5 or under \$6	37.44	62.56	39.33	60.67
\$6 or under \$7	47.72	52.28	48.32	51.68
\$7 or under \$8	57.53	42.47	58.21	41.79
\$8 or under \$9	64.92	35.08	67.22	32.78
\$9 or under \$10	81.47	18.53	82.35	17.65
\$10 or under \$12	86.83	13.17	86.69	13.31
\$12 or under \$15	94.01	5.99	93.30	6.70
\$15 or under \$20	97.41	2.59	97.65	2.35
\$20 or over	98.64	1.36	98.86	1.14
Total	66.40	33.60	66.31	33.69

Of the whole number of persons reported as receiving less than \$5 per week in 1898, 38.60 per cent were males and 61.40 per cent were females. The proportion of males in each class increased as the wages advanced, while the proportion of females decreased correspondingly. The proportion of females in 1898 in the 4,701 establishments shows a very slight increase over the proportion in 1897.

The fluctuations in the different wage classes are shown in the following table, the total number of males, females, and both sexes, respectively, being each considered as representing 100 per cent and the number of employes in each class constituting parts of this aggregate:

PER CENT OF THE TOTAL MALES AND FEMALES AT SPECIFIED WEEKLY WAGES IN 80 INDUSTRIES, 1897 AND 1898.

Weekly wages.	1897.			1898.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under \$5	8.52	26.45	14.54	9.12	28.57	15.67
\$5 or under \$6	5.71	18.88	10.14	6.18	18.78	10.42
\$6 or under \$7	8.64	18.70	12.02	8.62	18.16	11.84
\$7 or under \$8	9.37	13.67	10.81	9.55	13.49	10.88
\$8 or under \$9	9.12	9.74	9.33	9.10	8.74	8.98
\$9 or under \$10	12.18	5.48	9.93	12.22	5.15	9.84
\$10 or under \$12	14.20	4.26	10.86	14.01	4.24	10.72
\$12 or under \$15	16.60	2.09	11.73	15.78	2.23	11.22
\$15 or under \$20	11.88	.63	8.10	11.73	.56	7.96
\$20 or over	3.78	.10	2.54	3.69	.08	2.47
Total	100.00	100.00	100.00	100.00	100.00	100.00

The class in which the proportion of the sexes was about the same each year is that receiving \$8 or under \$9 per week. The percentages of males in this class in 1897 and 1898 were 9.12 and 9.10, respectively, and of females, 9.74 and 8.74, respectively. The number of female employees, as expressed in percentages, shows an increase in 1898 as compared with 1897 in only two classes, namely, under \$5, and \$12 or under \$15, and a decrease in each of the other classes.

The per cent of business done of the maximum capacity of the establishments and the number of days in operation in 1897 and 1898 are shown in the following table:

PER CENT OF BUSINESS DONE AND AVERAGE DAYS IN OPERATION IN 80 INDUSTRIES, 1897 AND 1898.

[The per cent of business done represents the relation of the actual production to the greatest amount of goods that can be turned out with the present facilities, the latter being considered as 100 per cent.]

Industries.	Estab- lish- ments.	Per cent of busi- ness done of maximum capac- ity of establishments.		Average days in operation.	
		1897.	1898.	1897.	1898.
Boots and shoes	644	61.35	59.88	285.88	286.80
Carpetings	12	67.33	66.83	243.78	223.08
Cotton goods	169	81.83	84.42	286.50	293.08
Leather	95	62.97	61.43	291.83	290.44
Machines and machinery	359	55.11	57.77	275.71	283.71
Metals and metallic goods	380	57.65	59.14	273.17	230.79
Paper and paper goods	80	75.70	81.23	271.18	281.95
Woolen goods	142	78.82	75.77	285.45	279.58
Worsted goods	85	82.63	76.74	293.58	266.50
Other industries	2,785	58.52	59.25	284.32	287.29
Total	4,701	60.60	61.19	284.05	286.28

The average proportion of business done of the total capacity in all the establishments in 1897 is represented by 60.60 per cent and in 1898 by 61.19 per cent, a slight advance in the latter year. Five of the 9 leading industries show a decrease and 4 an increase in this proportion.

The average number of days in operation in all establishments considered was 284.05 in 1897 and 286.28 in 1898, a slight increase during the latter year. Five of the 9 leading industries show an increase in the average days worked in 1898 and 4 a decrease.

The next table presents, for the year 1898, the actual product per \$1,000 of capital invested in each of the 9 leading industries, the average product per employee, the percentage of industry product paid in wages, and the percentage devoted to other expenses.

INDUSTRY PRODUCT, WAGES, AND PROFIT AND EXPENSES IN 9 SPECIFIED INDUSTRIES, 1898.

[By "industry product" is meant the actual result of the productive forces in the industry; that is, the added value created above the value of stock and materials consumed. The values presented in this table under the designation "industry product" are obtained by deducting from the total value of goods made and work done in each industry the value of stock used, the difference being added value or actual product due to the industry. In the division of the proceeds of each industry, one part of this industry product is paid to the labor force in the form of wages, this being labor's share of the product. The balance constitutes a fund from which are paid freights, insurance, interest on loans (credit capital), interest on stock (fixed or invested capital), rents, commissions, salaries, etc.; in fact, all expenses other than those for stock and wages. The remainder, if any, is the profit of the employer. The entire balance of the industry product remaining after the deduction of the amount paid in wages becomes a "profit and minor expense fund," and is thus designated in the table. Of course it will be understood that the term "minor expense" is relative. The expenses paid out of this balance are in themselves considerable in amount, and are only to be classed as minor in comparison with the generally larger amounts expended for materials (stock) and wages.]

Industries.	Industry product.	Wages.	Profit and minor expense fund.	Industry product.		Percent of industry product—	
				Per \$1,000 of capital.	Average per employee.	Paid in wages.	Devoted to profit and minor expenses.
Boots and shoes	\$39,801,786	\$23,904,714	\$15,897,072	\$1,775.70	\$766.94	60.06	39.94
Carpetings	2,378,468	1,431,921	946,547	361.32	565.90	60.20	39.80
Cotton goods	41,080,646	26,294,240	14,786,406	364.51	504.77	64.01	35.99
Leather	4,718,601	2,640,868	2,077,738	722.27	863.42	55.97	44.08
Machines and machinery	18,822,587	10,068,181	8,754,406	575.85	1,008.82	53.49	46.51
Metals and metallic goods	12,598,225	6,842,531	5,750,694	732.51	936.30	54.34	45.66
Paper and paper goods..	8,988,012	3,719,611	5,218,401	431.08	1,016.03	41.62	58.38
Woolen goods	12,449,168	7,205,613	5,243,555	402.28	640.46	57.88	42.12
Worsted goods.....	9,894,950	4,789,876	5,105,074	576.41	754.94	48.41	51.59

The largest industry product per \$1,000 of capital invested is shown in the boot and shoe industry, namely, \$1,775.70, while the smallest, \$361.32, is found in the carpetings industry. When the percentage of industry product paid in wages is considered, that of cotton goods leads, with 64.01 per cent, and the paper goods industry ranks lowest, the percentage being 41.62.

THE TEXTILE INDUSTRIES.—This monograph contains a brief historical sketch of the introduction of textile manufacturing in Massachusetts and statistics showing the development and present condition of the industry. A comparative table is given showing the value of textile goods made in Massachusetts at the time of each National and State census from 1837 to 1898, the year 1837 indicating the first State census and the year 1898 a return of manufacturing statistics. Other tables are given showing the number of establishments engaged and the value of goods made in each branch of the textile industry in 1895 and 1898, and the value of goods made in 1895 and 1898 by cities and towns and in 1898 by selected cities.

In presenting the textile statistics for 1898 a new system of classification of textile branches was adopted, in order to make the figures

comparable with those of the United States census. The following table shows the value of goods made in Massachusetts in 1895 and 1898 in each branch of the textile industry on the basis of the classification adopted in 1898:

VALUE OF GOODS MADE IN TEXTILE INDUSTRIES, 1895 AND 1898.

Industries.	Value of goods made.		
	1895.	1898.	Per cent of in-crease.
Carpetings.....	\$6, 631, 659	\$5, 298, 216	α 20. 11
Cordage and twine.....	4, 937, 180	4, 917, 489	α . 40
Cotton goods.....	95, 661, 548	89, 702, 330	α 6. 23
Flax, hemp, and jute goods.....	3, 064, 737	3, 451, 650	12. 62
Hosiery and knit goods.....	5, 367, 404	5, 183, 760	α 3. 42
Print works, dye works, and bleacheries.....	22, 409, 660	20, 531, 893	α 8. 38
Silk and silk goods.....	4, 043, 189	4, 629, 757	14. 51
Woolen goods.....	33, 087, 490	33, 734, 793	1. 96
Worsted goods.....	21, 761, 261	25, 926, 280	19. 14
Total.....	196, 964, 178	193, 376, 163	α 1. 82

α Decrease.

The above figures show the value of goods made in the purely textile branches, such nontextile industries as oil-cloth manufacturing, dyeing, bleaching, and cleansing of clothing, etc., which had been classed under textile branches in the census of 1895, having been omitted. It will also be noticed that the figures presented are only for the value of goods made, and not for work done.

It will be seen from the above table that there was a falling off of 1.82 per cent in the value of textile products in 1898 as compared with 1895. The decrease in value of products was 20.11 per cent in the carpetings industry, 8.38 per cent in print works, dye works, and bleacheries, 6.23 per cent in cotton goods, 3.42 per cent in hosiery and knit goods, and 0.40 per cent in cordage and twine. On the other hand, there was an increase in the value of goods made of 19.14 per cent in worsted goods, 14.51 per cent in silk and silk goods, 12.62 per cent in flax, hemp, and jute goods, and 1.96 per cent in woolen goods.

This monograph further contains statistics of exports and imports of textile materials and fabrics, the production of cotton and wool in various countries, the production and consumption of cotton in and exportation from the United States from 1791 to 1898, the number of spindles, looms, cards, and combs in use in the various States of the Union in 1896 and 1898, and the estimated number of spindles in operation in the various countries of the world during the commercial season ending 1898. This information was obtained mostly from official, but to some extent, also, from private, sources.

RECENT FOREIGN STATISTICAL PUBLICATIONS.

DENMARK.

Danmarks Haandværk og Industri ifølge Tællingen den 25 Maj, 1897.
Udgivet af Statens Statistiske Bureau. 68*, 214 pp.

The present work of the Danish statistical bureau is based on census returns for May 25, 1897, of manufacturing industries and handicrafts. The main part of the report consists of a series of 13 tables containing the detailed results of the enumeration. These tables are preceded by a comprehensive analysis and by a reproduction of the schedules of inquiry used and instructions issued in the prosecution of the work of enumeration.

The inquiry included in its scope all the manufacturing establishments and the persons engaged in the same, both as employers and employees. The data are not shown for individual localities, but are grouped for Copenhagen, for other cities and towns collectively, for the rural districts, and for the whole of Denmark. In the industry classification the data are shown for 11 principal and 233 minor groups of industries. The statistical presentation shows, in various combinations, the number of establishments, the number having mechanical motive power, the character and amount of such power, the quantity and value of products in certain establishments having mechanical motive power, the persons occupied in all establishments according to the character of employment, the age, sex, conjugal condition, and birthplace of the wage workers, the number of wage workers engaged in home work, and persons occupied in manufacturing in prisons, hospitals, and asylums.

The enumeration disclosed the existence of 77,256 manufacturing establishments in Denmark on May 25, 1897, employing a total of 270,622 persons either as employers or employees. Following is a summary of the more important results of the enumeration:

Total establishments.....	77, 256
Principal establishments.....	62, 308
Accessory establishments.....	14, 948
Establishments using mechanical motive power	7, 139
Establishments using wind or water	3, 134
Establishments using steam, gas, petroleum, hot air, or electricity.....	4, 005

Total personnel	270, 622
Proprietors, superintendents, and managers	78, 031
Overseers, foremen, clerks, and salesmen.....	8, 854
Messengers and other inferior salaried employees	7, 129
Wage workers proper.....	176, 608
Male wage workers.....	139, 848
Female wage workers.....	36, 760
Wage workers under 14 years of age.....	4, 672

Of the 77,256 establishments enumerated 62,308 were conducted as the principal business of the owners, and 14,948 were conducted in connection with and accessory to some other manufacturing, commercial, or agricultural enterprise. Of the 270,622 persons engaged in manufacturing and handicraft occupations 78,031 were heads of establishments, either as proprietors, superintendents, or managers; 8,854 were overseers, foremen, clerks, and salesmen; 7,129 were messengers and other inferior salaried employees, and 176,608 were wage workers.

In the presentation regarding age, sex, conjugal condition, etc., only those persons were considered who are classed as wage workers (*Arbejdere*). The 176,608 wage workers enumerated were employed in 34,697 establishments, 42,559, or over one-half of the establishments, employing no wage workers proper. In the following table the establishments are grouped according to the number of wage workers employed, the number of persons and percentage of each class of occupations being given for each group:

PERSONS EMPLOYED IN MANUFACTURING ESTABLISHMENTS, BY OCCUPATIONS, AND NUMBER OF WAGE WORKERS TO AN ESTABLISHMENT, MAY 25, 1897.

Establishments employing—	Estab-lishments.	Proprietors, superintendents, and managers.		Overseers, foremen, clerks, and salesmen.		Messengers and other inferior salaried employees.		Wage workers.		Total persons employed.
		Num-ber.	Per cent of total persons employed.	Num-ber.	Per cent of total persons employed.	Num-ber.	Per cent of total persons employed.	Num-ber.	Per cent of total persons employed.	
No wage workers	42, 559	42, 293	98. 7	209	0. 5	364	0. 8	.....	.....	42, 866
1 wage worker	13, 471	13, 273	47. 7	392	1. 4	661	2. 4	13, 471	48. 5	27, 797
2 wage workers	7, 817	7, 819	31. 7	476	1. 9	729	3. 0	15, 694	63. 4	24, 658
3 wage workers	4, 138	4, 125	23. 5	448	2. 5	572	3. 3	12, 414	70. 7	17, 559
4 wage workers	2, 360	2, 425	19. 1	385	3. 0	452	3. 6	9, 440	74. 3	12, 702
5 wage workers	1, 465	1, 499	15. 8	296	3. 1	374	3. 9	7, 325	77. 2	9, 494
6 to 10 wage workers..	2, 835	3, 042	11. 6	1, 103	4. 2	1, 000	3. 8	21, 073	80. 4	26, 218
11 to 20 wage workers..	1, 384	1, 652	7. 0	1, 163	4. 9	844	3. 6	19, 946	84. 5	23, 605
21 to 50 wage workers..	802	1, 113	3. 9	1, 562	5. 6	724	2. 6	24, 662	87. 9	28, 061
51 to 100 wage workers.	250	417	2. 0	1, 117	5. 4	716	3. 5	18, 402	89. 1	20, 652
Over 100 wage workers.	165	352	1. 0	1, 544	4. 2	639	1. 7	34, 241	93. 1	36, 776
Administrative personnel of establishments conducted in common .....	.....	21	.....	159	.....	54	.....	.....	.....	284
Total	77, 256	78, 031	28. 8	8, 854	3. 3	7, 129	2. 6	176, 608	65. 3	270, 622

Of the establishments employing wage workers, the per cent of wage workers of the total persons employed increased steadily, while the per cent of heads of establishments diminished with the size of the establishment. The per cent of salaried employees likewise increased with the size of the establishment, but in establishments employing over 100 wage workers a decrease in this proportion is noticeable.

In the table following the establishments employing wage workers are grouped according to the number of wage workers employed, the number and per cent of establishments and of wage workers in each group being shown:

NUMBER AND PER CENT OF WAGE WORKERS IN ESTABLISHMENTS GROUPED ACCORDING TO NUMBER OF WAGE WORKERS EMPLOYED, MAY 25, 1897.

Establishments employing—	Establishments.		Wage workers.	
	Number.	Per cent of total.	Number.	Per cent of total.
1 to 5 wage workers.....	29,251	84.30	58,284	33.00
6 to 10 wage workers.....	2,835	8.17	21,073	11.93
11 to 20 wage workers.....	1,384	3.99	19,946	11.29
21 to 50 wage workers.....	802	2.31	24,662	13.97
51 to 100 wage workers.....	260	.75	18,402	10.42
Over 100 wage workers.....	165	.48	34,241	19.39
Total.....	34,697	100.00	176,608	100.00

It will be seen from the two preceding tables that establishments manufacturing on a small scale still largely predominate in Denmark. It is shown in the first place that 42,559 establishments employed no wage workers, consisting as a rule simply of a handicraftsman working on his own account. Of the 34,697 establishments employing wage workers, 29,251, or 84.30 per cent, employed from 1 to 5 each, and only 165, or 0.48 per cent, employed over 100 wage workers each. Of the wage workers enumerated 58,284, or 33 per cent, were employed in establishments having from 1 to 5 each, and 34,241, or 19.39 per cent, in establishments having over 100 wage workers each. Of the 165 establishments having over 100 wage workers each, 22 were State or communal institutions.

With regard to the 11 principal groups of industries, it appears that the group of furniture and building trades embraces the largest number of persons, namely, 63,208. Next in order were the groups of clothing and toilet articles with 55,419 persons, food products with 47,386 persons, and machinery, metals, and metallic goods with 38,801 persons. This is shown in the table following.

ESTABLISHMENTS AND PERSONS EMPLOYED, BY INDUSTRIES, MAY 25, 1897.

Industries.	Estab-lish-ments.	Persons employed.				Total.
		Proprie-tors, su-perin-tendents, and man-a-gers.	Over-seers, fore-men, clerks, and sales-men.	Messen-gers and other inferior salaried em-ployees.	Wage workers.	
Food products	11, 801	11, 237	2, 910	2, 722	30, 517	47, 386
Textiles	4, 358	4, 452	682	259	12, 533	17, 926
Clothing and toilet articles	23, 557	23, 907	1, 690	1, 531	28, 291	55, 419
Furniture and building trades	19, 781	19, 716	516	587	42, 389	63, 208
Wooden ware	4, 896	4, 839	310	299	8, 119	13, 567
Leather and leather goods	227	252	68	33	1, 227	1, 580
Glass and earthenware	1, 757	1, 823	355	140	13, 700	16, 023
Machinery, metals, and metallic goods	9, 383	9, 637	1, 256	606	27, 302	38, 801
Chemical and technical industries	666	690	555	265	5, 115	6, 625
Paper and paper goods	82	105	170	92	2, 057	2, 424
Printing, publishing, etc	1, 248	1, 368	342	595	5, 353	7, 663
Total	77, 256	78, 031	8, 854	7, 129	176, 608	270, 622

The presentation regarding sex shows that of the 176,608 wage workers 139,848, or 79.2 per cent, were males, and 36,760, or 20.8 per cent, were females. The number of female wage workers exceeded the number of male wage workers in the textile and in the clothing industries, the percentages of the female of the total wage workers in those industries being 62.1 and 52.4, respectively. In the paper and paper goods group of industries the sexes were about equally divided. The proportion of females was smallest in the furniture and building trades group, being but 0.6 per cent of the total number of wage workers in that group of industries.

The age was reported in the case of 171,013 of the 176,608 wage workers enumerated. Of this number 4,672 were 10 and under 14 years of age, 26,555 were 14 and under 18 years of age, 29,495 were 18 and under 22 years of age, and 110,291 were 22 years of age or over. The following table shows, according to sex, the number and proportion of wage workers in each age period:

NUMBER AND SEX OF WAGE WORKERS, BY AGE PERIODS, MAY 25, 1897.

Age periods.	Males.		Females.		Total wage workers.
	Number.	Per cent of total reporting age.	Number.	Per cent of total reporting age.	
10 and under 14 years	3, 820	2. 8	852	2. 5	4, 672
14 and under 18 years	23, 036	16. 9	3, 519	10. 2	26, 555
18 and under 22 years	21, 611	15. 8	7, 884	23. 0	29, 495
22 years or over	88, 227	64. 5	22, 064	64. 3	110, 291
Total reporting age	136, 694	100. 0	34, 319	100. 0	171, 013
Not reporting age	3, 154	.....	2, 441	.....	5, 595
Total wage workers	139, 848	.....	36, 760	.....	176, 608

Of the children of 10 and under 14 years of age employed as wage workers, 3,820 were males and 852 were females. The proportion of

children of the total wage workers in any industry group was greatest in the paper and paper goods group, namely, 9.9 per cent, although by far the largest number of children were employed in the food-products group, or 2,409 out of a total of 4,672 children employed in all industries. The smallest proportion of children employed as wage workers, or 0.4 per cent, was in the furniture and building trades group of industries. Of 22,064 female wage workers 22 years of age or over, 8,722, or 39.5 per cent, were married.

With regard to home work, the enumeration shows that of the 176,608 wage workers 12,585 worked at their own homes. This home work was done largely by females, 9,786, or 26.6 per cent of all female wage workers, being thus employed. The following table shows by sex and age periods the number and per cent of wage workers employed at home work:

WAGE WORKERS EMPLOYED AT HOME WORK, BY SEX AND AGE PERIODS, MAY 25, 1897.

Age periods.	Males.			Females.		
	Total.	Employed at home.		Total.	Employed at home.	
		Num-ber.	Per-cent.		Num-ber.	Per-cent.
10 and under 14 years	3, 820	8	0.2	852	125	14.7
14 and under 18 years	23, 086	17	.1	3, 519	143	4.1
18 and under 22 years	21, 611	110	.5	7, 884	581	6.7
22 years or over	88, 227	2, 505	2.8	22, 064	6, 827	30.9
Age not reported	3, 154	159	5.0	2, 441	2, 160	88.5
Total wage workers.....	139, 848	2, 799	2.0	36, 760	9, 786	26.6

The population of Denmark at the time of this enumeration of manufacturing establishments was estimated to be 2,291,000. The number of wage workers over 10 years of age therefore constituted 7.7 per cent of the entire population.

There were 1,916 inmates of prisons, hospitals, asylums, etc., engaged in manufacturing, of whom 1,447 were males and 469 were females.

With regard to the motive power the enumeration shows that of the 77,256 establishments considered 3,134 were operated by wind or water power, and 4,005 by steam, gas, petroleum, hot air, or electricity, the power in 270 of the latter being supplemented either regularly or occasionally by wind or water power. Establishments having mechanical motive power employed 76,500, or 43.3 per cent, of the wage workers enumerated.

FRANCE.

Statistique des Grèves et des Recours à la Conciliation et à l'Arbitrage Survenus Pendant l'Année 1898. Office du Travail, Ministère du Commerce, de l'Industrie, des Postes et des Télégraphes. xviii, 334 pp.

The present report for 1898 is one of a series of annual publications on strikes, and conciliation and arbitration, issued by the French

bureau of labor. The information is presented in form similar to the the preceding annual reports.

STRIKES.—The year 1898 was marked by a decided increase in the number of strikers, although the number of strikes was but slightly greater than in 1897. The report shows that in 1898 there were 368 strikes affecting 1,967 establishments and participated in by 82,065 strikers. Of the latter 71,348 were men, 7,955 were women, and 2,762 were children. These strikes resulted in a total loss of 1,216,306 working days, in which are included 155,934 days lost by 5,900 persons who were not strikers, but who were thrown out of employment as a result of strikes. The average time lost per striker was 15 days.

In the preceding year, 1897, there were 356 strikes, affecting 2,568 establishments and involving 68,875 strikers, resulting in a loss of 780,944 working days or 10½ days per striker. The large number of strikers in 1898 was due mainly to a strike of excavators in Paris followed by a general strike in the building trades, which together involved over one-half of all the strikers reported.

As regards the results of the disputes in 1898, 75 strikes, involving 10,594 strikers, were successful; 123 strikes, involving 32,546 strikers, were partly successful, and 170 strikes, involving 38,925 strikers, failed. While the proportion of successful strikes was slightly greater than in 1897, the proportion of strikers who succeeded was considerably smaller. This was due to the failure of the above-mentioned general strike in the building trades.

The following table shows the per cent of strikes of total strikes and the per cent of strikers of total strikers that succeeded, succeeded partly, and failed, as compared with similar data for 1897:

RESULTS OF STRIKES, 1897 AND 1898.

Result of strikes.	Strikes.		Strikers.	
	1897.	1898.	1897.	1898.
Succeeded	19.10	20.38	28.80	12.91
Succeeded partly	34.27	53.42	41.77	59.66
Failed	46.63	46.20	29.43	47.43
Total	100.00	100.00	100.00	100.00

In 211 of the 368 strikes reported, the participants were either all or in part members of trade unions. Six labor organizations were created while strikes were in progress, and in two strikes, one of which failed, and the other was compromised, the employees were obliged by their employers to leave their labor organizations. In 113 strikes the employers were organized. Regular aid was given by labor organizations for the relief of strikers in 32 strikes, and in the case of 41 strikes the intervention of labor organizations was accepted by employers.

Of the 368 strikes reported 286 involved but 1 establishment each,

26 involved from 2 to 5 establishments, 27 from 6 to 10 establishments, 17 from 11 to 25 establishments, 4 from 26 to 50 establishments, 5 from 51 to 100 establishments, and the 3 remaining strikes involved over 100 establishments each.

The two following tables show the number of strikes, strikers, and establishments involved, according to the results of the strikes, as well as the number of working days lost, and the proportion that the number of strikers is to the total number of working people, according to 17 groups of industries:

STRIKES IN 1898, BY INDUSTRIES.

Industries.	Succeeded.		Succeeded partly.		Failed.		Total.	
	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.
Agriculture, forestry, and fish-eries	2	8	3	46	2	55	7	109
Mining	4	4	4	4	4	6	12	14
Quarrying	2	6	4	7	3	13	9	26
Food products	2	2	5	107	6	6	13	115
Chemical industries	1	1	2	3	.....	.....	3	4
Paper and printing	7	16	.....	.....	7	7	14	23
Hides and leather goods	3	12	11	26	19	20	33	58
Textiles proper	25	147	37	50	42	46	104	243
Clothing, cleaning, and uphol-stry .....	.....	.....	1	7	5	19	6	26
Woodworking	2	2	4	20	7	25	13	47
Building trades (woodwork)	2	21	2	74	2	8	6	103
Metal refining .....	.....	.....	.....	.....	1	1	1	1
Metallie goods	6	20	19	76	33	33	58	129
Precious-metal work .....	.....	.....	1	1	.....	.....	1	1
Stone, earthenware, and glass	4	16	6	10	6	6	16	32
Building trades (stone, tile, excavating, etc., work)	14	67	21	854	23	45	58	966
Transportation and handling	1	6	3	4	10	60	14	70
Total	75	323	123	1,289	170	350	368	1,967

STRIKERS AND DAYS OF WORK LOST BY ALL PERSONS AFFECTED BY STRIKES IN 1898, BY INDUSTRIES.

Industries.	Strikers in—			Total strikers.	Strikers per 1,000 working people. (a)	Days of work lost by all persons affected.
	Success-ful strikes.	Partly success-ful strikes.	Strikes which failed.			
Agriculture, forestry, and fisheries	390	360	306	1,056	0.66	3,875
Mining	1,321	576	2,468	4,365	b 27.80	23,579
Quarrying	290	491	615	1,396	(c)	19,041
Food products	59	1,205	239	1,533	12.09	8,731
Chemical industries	868	614	.....	1,482	27.53	758
Paper and printing	179	.....	101	280	2.89	1,304
Hides and leather goods	102	1,039	680	1,821	14.56	13,952
Textiles proper	4,864	4,807	2,388	12,509	17.32	232,563
Clothing, cleaning, and upholstery .....	.....	140	120	260	.87	2,569
Woodworking	97	601	347	1,045	4.43	23,271
Building trades (woodwork)	310	443	76	829	(d)	3,793
Metal refining .....	.....	.....	500	500	5.24	2,800
Metallie goods	292	3,632	1,681	5,605	18.58	140,239
Precious-metal work .....	.....	31	.....	31	44	1,020
Stone, earthenware, and glass	748	231	208	1,187	11.12	13,877
Building trades (stone, tile, excavating, etc., work)	724	18,085	27,629	46,438	e 109.79	713,349
Transportation and handling	350	291	1,067	1,708	f 7.22	6,530
Total	10,594	32,546	38,925	82,065	f 16.07	1,216,306

a Census of 1891.

b Includes quarrying.

c Included in mining.

d Included in building trades (stone, tile, excavating, etc., work).

e Includes building trades (woodwork).

f Relates to all industrial working people in France.

Out of a total of 368 strikes, the largest number, 104, occurred in the textile industry. If, however, the extent of the labor disputes is measured by the number of persons involved, the building trades (stone, tile, excavating, etc., work) greatly exceeded any of the other groups, 46,438 out of a total of 82,065 strikers belonging to this group of industries. Next in importance with regard to the number of strikers were the groups of textiles proper with 12,509, metallic goods with 5,605, and mining with 4,365 strikers. A majority of the strikers succeeded in the chemical, paper and printing, and stone, earthenware, and glass industries, while in the groups of mining, metal refining, building trades (stone, tile, excavating, etc., work), and transportation and handling over one-half of the strikers failed.

Considering the number of persons actually engaged in the various industries according to the census of 1891, it is shown that the relative prevalence of strikes was greatest in the building trades (wood, stone, tile, excavating, etc., work), 109.79 out of every 1,000 employees having taken part in labor disputes during the year. The two groups of mining and quarrying and the group of chemical industries came next with 27.80 and 27.53 strikers per 1,000 employees, respectively.

In the two following tables the strike data are shown by causes:

STRIKES IN 1898, BY CAUSES.

[A considerable number of strikes were due to two or three causes, and the facts in such cases have been tabulated under each cause. Hence the totals for this table necessarily would not agree with those for the preceding tables.]

Cause or object.	Succeeded.		Succeeded partly.		Failed.		Total.	
	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.	Strikes.	Estab-lish-ments.
For increase of wages	32	176	58	1,106	78	242	168	1,524
Against reduction of wages.....	16	131	15	19	24	44	55	194
For reduction of hours of labor with present or increased wages.....	10	168	6	20	12	52	28	240
Relating to time and method of payment of wages, etc.....	16	57	8	93	15	21	39	171
For or against modification of conditions of work.....	12	21	9	79	12	15	33	115
Against piecework.....	8	91	1	1	5	19	14	111
For or against modification of shop rules.....	12	14	7	7	10	10	29	31
For abolition or reduction of fines.....	4	5	3	2	6	7	13	14
Against discharge of workmen, foremen, or directors, or for their reinstatement.....	5	5	2	2	22	26	29	33
For discharge of workmen, foremen, or directors.....	7	7	5	5	20	20	32	32
Against employment of women.....	1	1	.....	.....	3	3	4	4
For limitation of number of apprentices.....	1	8	2	8	1	1	4	17
Relating to deduction from wages for the support of insurance and aid funds.....	5	96	2	11	5	5	12	112
Other.....	4	4	2	681	8	34	14	719

STRIKERS AND DAYS OF WORK LOST BY ALL PERSONS AFFECTED BY STRIKES IN 1898, BY CAUSES.

[A considerable number of strikes were due to two or three causes, and the facts in such cases have been tabulated under each cause. Hence the totals for this table necessarily would not agree with those for the preceding tables.]

Cause or object.	Strikers in—			Total strikers.	Days of work lost by all persons affected.
	Successful strikes.	Partly successful strikes.	Strikes which failed.		
For increase of wages.....	4,235	24,513	7,103	35,851	562,117
Against reduction of wages.....	2,404	1,715	1,750	5,869	165,226
For reduction of hours of labor with present or increased wages.....	1,350	979	1,149	3,478	27,082
Relating to time and method of payment of wages, etc.	3,800	952	1,154	5,906	51,268
For or against modification of conditions of work.....	2,776	1,738	541	5,055	34,019
Against piecework.....	891	58	178	1,127	13,244
For or against modification of shop rules.....	2,208	761	893	3,862	32,153
For abolition or reduction of fines.....	785	1,145	740	2,670	32,468
Against discharge of workmen, foremen, or directors, or for their reinstatement.....	316	66	1,715	2,097	23,624
For discharge of workmen, foremen, or directors.....	1,101	644	2,097	3,842	44,900
Against employment of women.....	4	.....	89	93	1,861
For limitation of number of apprentices.....	140	171	22	333	2,893
Relating to deduction from wages for the support of insurance and aid funds.....	1,236	120	773	2,129	105,933
Other.....	513	16,515	27,468	44,496	700,965

Strikes due to wage disputes, either for an increase or against a reduction of wages, continued in 1898, as in the preceding year, to be the most numerous, 223 strikes, involving 41,720 strikers, being due to this cause. By far the greater number of persons engaged in strikes on account of wages were partly successful, or 26,228 out of a total of 41,720 strikers. Of the others engaged in wage disputes, 6,639 succeeded entirely and 8,853 failed. Of the other important causes of strikes, those relating to time and method of wage payments and to modifications of conditions of work were most prevalent. Persons involved in strikes on account of these causes were largely successful. On the other hand, those involved in strikes for or against the discharge of workmen, foremen, etc., or for their reinstatement, and against the employment of women, were largely unsuccessful.

The next two tables show the results of strikes according to their duration and according to the number of strikers involved, respectively:

STRIKES AND STRIKERS IN 1898, BY DURATION OF STRIKES.

Days of duration.	Strikes.				Strikers.			
	Succeeded.	Succeeded partly.	Failed.	Total.	Succeeded.	Succeeded partly.	Failed.	Total.
7 or under.....	57	79	106	242	5,693	8,958	4,557	19,208
8 to 15.....	13	16	31	60	3,300	1,974	5,017	10,291
16 to 30.....	3	13	19	35	185	2,673	27,502	30,360
31 to 100.....	2	13	13	28	1,416	18,807	1,726	21,949
101 or over.....	.....	2	1	3	.....	134	123	257
Total.....	75	123	170	368	10,594	32,546	38,925	82,065

DURATION OF STRIKES IN 1898, BY NUMBER OF STRIKERS INVOLVED.

Strikers involved.	Strikes.				Days of duration.				
	Suc- ceeded.	Suc- ceeded partly.	Failed.	Total.	1 to 7.	8 to 15.	16 to 30.	31 to 100.	101 or over.
25 or under	24	21	77	122	93	15	12	2	.....
26 to 50	14	31	39	84	53	15	6	9	1
51 to 100	12	26	24	62	41	11	5	4	1
101 to 200	12	22	18	52	33	6	7	5	1
201 to 500	7	14	9	30	18	8	2	2	.....
501 to 1,000	5	8	1	14	4	4	2	4	.....
1,001 or over	1	1	2	4	.....	1	1	2	.....
Total	75	123	170	368	242	60	35	28	3

As in the preceding year the strikes were mostly of short duration, 242 of the 368 strikes lasting 7 days or less, 60 lasting from 8 to 15 days, 35 from 16 to 30 days, 28 from 31 to 100 days, and 3 lasting more than 100 days.

Over one-half of the strikes involved 50 strikers or less each. The smaller strikes, involving 25 strikers or less each, were mostly failures, while most of the larger strikes were either wholly or partly successful. Of the 18 strikes involving more than 500 strikers each, 6 succeeded, 9 succeeded partly, and 3 failed.

CONCILIATION AND ARBITRATION.—The law of December 27, 1892, regarding conciliation and arbitration^(a) in trade disputes was applied in 94 cases during the year, and in 2 cases before work was suspended. As there were in all 368 strikes during the year, these 94 cases constitute 25.54 per cent of all disputes. The proportion for the 5 preceding years, taken collectively, in which the law was applied, was 21.53 per cent. In the 94 cases the initiative in demanding the application of the law was taken by the employees 57 times, by the employers 3 times, by both employers and employees twice, and in 32 cases the initiative was taken through the intervention of the justices of the peace.

As regards the results of the application of the law, it was found that in 4 of the 94 cases work was resumed before committees of conciliation were constituted. In 2 of these the employees abandoned their claims, in 1 they were successful, and in the fourth case they obtained employment elsewhere. In 38 of the remaining 90 cases the demands for conciliation were refused, in 32 cases by employers, in 1 by the employees, and in 5 cases by both employers and employees. In 4 of these 38 cases the workmen renounced their demands, receiving partial satisfaction in one instance. In the remaining 34 cases of refusal of conciliation strikes were declared, 3 of which were successful, 10 partly successful, and 21 failed.

Deducting the 42 cases above considered from the total number, there remain 52 cases, for the settlement of which 52 committees of con-

^a For a copy of this law see Bulletin No. 25, pages 854-856.

ciliation were created. In 18 of these cases the disputes were settled directly by the committees of conciliation, in 2 cases they were settled by arbitration, and in 2 other cases they were adjusted by the parties themselves after having had recourse to committees of conciliation. This leaves 30 cases in which the attempted conciliation and arbitration failed and strikes resulted or continued, which succeeded in 3 cases, succeeded partly in 15, and failed in 12.

The following statement gives a summary of the cases in which recourse was had to the law of 1892 regarding conciliation and arbitration, and the results of such recourse in 1898 and for the preceding five years collectively:

SUMMARY OF CASES IN WHICH RECOURSE WAS HAD TO CONCILIATION AND ARBITRATION, 1893 TO 1897 AND 1898.

Items.	1893 to 1897.	1898.
Total number of strikes.....	2,262	368
Cases in which the law of 1892 was applied.....	a 487	94
Disputes settled—		
Before the creation of committees of conciliation.....	41	4
After refusal of demands for conciliation.....	26	4
Directly by committees of conciliation.....	b 129	18
By arbitration.....	16	2
Directly by parties after having had recourse to conciliation.....	9	2
Total cases settled through the application of the law.....	218	30
Strikes resulting or continuing—		
After refusal of demand for conciliation.....	145	34
After failure of recourse to conciliation and arbitration.....	c 122	30
Total cases of failure after application of the law.....	268	64

a The 487 cases of recourse to the law relate to but 486 disputes.

b There were but 126 disputes settled by committees of conciliation, 3 of them being counted twice because 2 committees were formed in each of these 3 cases.

c Figures here apparently should be 123; those given, however, are according to the original.

From the above summary it will be seen that there were, in 1898, 30 cases in which disputes were settled directly or indirectly through the application of the law of 1892, and 64 cases where recourse to the law proved fruitless, a showing which is somewhat unfavorable when compared with the figures for the five preceding years.

Of the 30 disputes settled as a result of the application of the law, 4 were favorable to the demands of the employees, 20 resulted in a compromise, and 6 were unfavorable to the employees. Of the 64 disputes which continued after the failure of attempts at conciliation and arbitration, 6 succeeded, 25 succeeded partly, and 33 failed.

ITALY.

Atti della R. Commissione d' Inchiesta sui Rapporti fra le Società esercenti le tre principali reti di strade ferrate del Regno e il loro Personale. Volume I, 563 pp.; Volume II, 588 pp.; Volume III, 590 pp.; Volume IV, 518 pp.

This elaborate report is the result of an investigation undertaken by a commission instituted by a royal decree, dated July 30, 1896, for

the purpose of investigating the relations between the companies operating the three principal railway systems in Italy and their employees. The commission consisted of 13 members selected from among the members of both houses of the Italian Parliament, Government officials, and the presidents of the chambers of commerce of Turin and Florence. Although originally appointed for 4 months, its work was of such magnitude that subsequent decrees extended its term to December 31, 1898.

The investigation has special reference to the manner in which the companies carried out that part of their contract of July 1, 1885, which relates to the treatment to be accorded employees after the management of the roads passed from the Government into the hands of the private companies. The railroads coming under this investigation include what are known as the Mediterranean, the Adriatic, and the Sicilian systems.

Volume I contains the report proper of the commission, while the other three volumes consist of the papers and documents accompanying the report. In the prosecution of its work the commission adopted every means at its command, through schedules of inquiry, the taking of testimony, and otherwise, to study the subject under investigation, the information being obtained from the officials, employees, and others who were in a position to aid in the work. The report of the commission consists of three parts. The first part is devoted to the relations of the company and its employees with regard to the terms of the contract, the second part with regard to the public service, while the third part contains the recommendations of the commission.

The particular terms of the contract which constitute the special object of the inquiry provide that the companies accept as employees all persons designated by the Government as being in the active railway service at the time of the transfer, referred to in the report as the organic roll (*ruolo organico*); that in regulating the assignments and wages, the companies will have due regard to the functions, merits, and seniority of the employees then in service; that the organic roll of employees must be submitted to the Government for examination as to its conformity with the terms of the agreement, and that the regulations regarding promotions, suspensions, discharges, etc., before going into force must be submitted to the Government for examination.

The first part of the report, which relates to the observance of the terms of the contract, takes up and discusses in turn each item, such as the roll of employees, their employment, wages, promotion and discharge, rules and regulations, provident institutions, etc., giving in each case a review of the commission's work and its conclusions. The same form was observed in the second part of the report, relating to the management with regard to the good of the public service. Under this head are considered the sufficiency of the force employed, the

hours of labor of employees, their efficiency, causes of discontent, labor disputes, etc.

The conclusions of the commission were generally adverse to the railway companies, showing in many cases a disregard of the terms of the contract, and a justification of the discontent on the part of the employees and others. The commission recommended, among other things, the annual submission of a list of employees and wages to the Government, the adoption of uniform regulations by the 3 companies, the appointment of a Government commission to see that a sufficient number of employees are engaged to meet the needs of the public service, the governmental regulations concerning the efficiency of employees, the establishment of a minimum of 7 hours of continuous rest per day for employees, etc. The commission also recommended that the Government provide the necessary safeguards against the violations of the terms of the contract, or the provisions regarding the numerical sufficiency of the personnel, their efficiency, etc. In general, therefore, the commission recommended a greater governmental supervision over the relations between the companies operating the 3 great railway systems and their employees than had been exercised before.

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, immaterial matter, needed simply by way of explanation, is given in the words of the editorial reviser.]

DECISIONS UNDER STATUTORY LAW.

CONSTITUTIONALITY OF STATUTE—COAL MINE INSPECTION—*Chicago, Wilmington and Vermilion Coal Co. v. People*, 54 *Northeastern Reporter*, page 961.—Action was brought by the people of the State of Illinois against the above-named coal company to recover the fees due under the law for the inspection of the company's mines. A judgment against the company was rendered in the circuit court of Sangamon County, Ill., and thereupon the company appealed the case to the supreme court of the State, which rendered its decision October 16, 1899, and affirmed the judgment of the circuit court.

Judge Phillips, in delivering the opinion of the supreme court, which sufficiently shows the facts in the case, used the following language:

Section 29 of article 4 of the constitution is as follows: "It shall be the duty of the general assembly to pass such laws as may be necessary for the protection of operative miners, by providing for ventilation when the same may be required, and the construction of escape-ment shafts, or such other appliances as may secure safety in all coal mines, and to provide for the enforcement of said laws by such penalties and punishments as may be deemed proper." This provision requires the legislature to pass such laws as may be necessary, etc., and leaves to that body the determination of the policy of the State as to what legislation is necessary to conform to its requirements. The legislature has seen proper, in the act entitled "An act providing for the health and safety of persons employed in coal mines," approved May 28, 1879, and in force July 1, 1879, and by the amendments thereto, to require certain duties to be done and performed by the owner, operator, or manager of a coal mine. Section 11 provides for the division of the State into districts, for the appointment of inspectors, and prescribes their duties and fixes their salaries. This latter section was amended in 1895. Prior to that time the inspector was paid wholly by the State, but after the amendment of 1895, and by the amendment of 1897, it was provided that fees might be charged, which were required to be paid by the mine owner. It is these two amendatory statutes which the appellant contends are unconstitutional, as placing a burden that is unreasonable and unjust onto the mine owner.

The object and purpose of the statute are the protection of miners working in coal mines. While the act is an effort on the part of the general assembly to strictly comply with section 29 of article 4 of the constitution, by providing for the ventilation of mines, the construction of escapement shafts, and such other appliances as shall secure safety in all coal mines, the general assembly has seen proper to include a provision for the preparation of maps and the filing of the same with the chief mine inspector of the district, and that on neglect or default of the owner to make such map the inspector may make the same at his expense, and this is one of the requirements of the statute which has been held constitutional by this court.

To a much greater extent the provisions of section 11, which prescribe the duties of the inspector, and require his reports and statements to be posted in a conspicuous place, showing the condition of the mine and what, in his judgment, is necessary for the protection of the lives and health of persons employed in such mine, etc., call for an exercise of the police power of the State. The examination of the condition of the mine would also necessarily require the inspector to examine and report as to whether the manner of construction of escapement shafts, air shafts, and the ventilation of the mine is in conformity with the requirements of the statute. Inspections are necessary in determining health and quarantine laws, and also with reference to the examination of articles to be used as food, and it never has been held that a provision looking to the inspection of certain articles that may be offered for sale for the purposes of human food, or a law providing for inspection with reference to health, required an improper exercise of the police power. Nor could it be held that the provision of the statute with reference to the appointment of inspectors for coal mines, who are to discharge the duties imposed upon them by section 11, does not call for a proper exercise of the police power of the State. The very purpose and object of the statute are in regard to the health and safety of miners, and requiring that mine owners should permit an inspection of their mines for this purpose is but an exercise of such police power.

We do not understand the contention of the appellant to be, however, that these provisions of the statute call for an improper exercise of the police power, but understand the contention is that the provisions of the statute which require a fee to be paid for such inspection by the mine owner require an improper exercise of the police power.

With a recognition of the fact that under the police power the legislature has the right to provide for the inspection of mines, it may also provide for the payment of fees for such inspection, and may place the burden of the payment of such fees on the business that requires the employment of men in such dangerous and hazardous work, to an equal extent as it may place the burden on commerce in the shipment of grain, and appeals much more strongly for a proper enforcement of this character of law by proper inspection than the mere protection of trade. If an inspection is to be had, it is attended with expense. The expense thus incurred is imposed because of the peculiar dangers of the surrounding situation, and subserves not only the interest of the miners, but alike protects the mine owner, and hence the burden of the payment of the fee can be properly imposed upon the mine owner without violating any provision of the constitution.

Appellant contends that legislation, under the provisions of section 29 of article 4, can only be had with reference to ventilation and escapement shafts. Such contention can not be sustained, because that section requires legislation for a particular purpose, having in view the safety of miners, and submits to the legislature the policy to be pursued for the accomplishment of that end, and which can not lightly be interfered with by a court. Appellant, from the position taken, seems to disregard the fact that the legislature may legislate, under the police power which it possesses, outside of the mere mandates of that provision of the constitution. The contention is entirely too narrow. Judgment affirmed.

CONSTITUTIONALITY OF STATUTE—EIGHT-HOUR LAW—MINES AND SMELTERS—*In re Morgan*, 58 *Pacific Reporter*, page 1071.—This was an original application to the supreme court of Colorado by one Thomas A. Morgan for a writ of habeas corpus. The decision of said court was rendered July 17, 1899, and the petition for such writ was granted.

The statement of facts in the case shows the following:

At a preliminary examination before a justice of the peace upon a charge of contracting to labor in a smelter in excess of eight hours per day, the defendant was committed to jail in default of giving the required bail, and to secure his liberty has filed in this court his petition for a writ of habeas corpus. The prosecution was under section 2 of "An act regulating the hours of employment in underground mines and in smelting and ore reduction works, and providing penalties for violations thereof," passed by the twelfth general assembly, the material provisions of which are embraced in the first two sections:

"SECTION 1. The period of employment of workmen in all underground mines or workings shall be eight (8) hours per day, except in cases of emergency, where life or property is in imminent danger.

"SEC. 2. The period of employment of workmen in smelters and in all other institutions for the reduction or refining of ores or metals shall be eight (8) hours per day, except in cases of emergency, where life or property is in imminent danger."

Section 3 makes the violation of the foregoing provisions a misdemeanor, and provides the penalty therefor. (Sess. Laws, 1899, c. 103.) The following sections of the constitution are referred to in the opinion:

Article 2—

"SECTION 1. That all political power is vested in and derived from the people; that all government of right originates from the people, is founded upon their will only, and is instituted solely for the good of the whole.

"SEC. 3. That all persons have certain natural, essential, and inalienable rights, among which may be reckoned the right of enjoying and defending their lives and liberties; that of acquiring, possessing, and protecting property, and of seeking and obtaining their safety and happiness.

"SEC. 28. The enumeration in this constitution of certain rights shall not be construed to deny, impair, or disparage others retained by the people."

Article 5—

“SECTION 25. The general assembly shall not pass local or special laws in any of the following enumerated cases, that is to say: * * * [Subdivision 23.] Granting to any corporation, association, or individual any special or exclusive privilege, immunity, or franchise whatever. [Subdivision 24.] In all other cases where a general law can be made applicable no special law shall be enacted.”

The opinion of the supreme court was delivered by Chief Justice Campbell, who, after stating the facts in the case, as above, continued in the following language:

The petitioner challenges the validity of the statute, as inhibited by the foregoing clauses of the organic law. The position of the attorney-general is that it was passed as a health regulation, and may be vindicated as coming within the range of the police powers of the State. Four years before it became an act this court, to an inquiry of the house of representatives of the tenth general assembly as to the constitutionality of a bill reading “Eight hours shall constitute a legal day’s work for all classes of mechanics, workingmen, and laborers employed in any mine, factory, or smelter of any kind whatsoever in the State of Colorado,” replied that it was “not competent for the legislature to single out the mining, manufacturing, and smelting industries of the State and impose upon them restrictions with reference to the hours of their employees from which other employers of labor are exempt.” And it was further said that the section “violates the right of parties to make their own contracts—a right guaranteed by our bill of rights.” (In re Eight-hour bill, 21 Colo., 29; 39 Pac., 328.) The twelfth general assembly must have been aware of this, and another decision concerning the power of the legislature to pass what is called a “coal-screening bill”—the opinion being reported in 21 Colo., 27, and 39 Pac., 431 (In re House bill No. 203)—in which this species of legislation was condemned as hostile to the constitution. But, wholly disregarding these decisions, binding alike on all departments of government, it proceeded to enact the measure now before us. Though it affords no justification for such legislative action in defiance and against the solemn decision of this court, we presume the excuse that might be offered therefor is that, after these decisions were handed down, in a sister State [Utah] an act in the same language was passed and approved by its highest court, and, as is claimed, sanctioned by the Supreme Court of the United States. [See *Holden v. Hardy*, U. S. Department of Labor Bulletin No. 10, page 387; *State v. Holden*, U. S. Department of Labor Bulletin No. 11, page 508; and *Holden v. Hardy*, U. S. Department of Labor Bulletin No. 17, page 625.]

The question presented for our determination is, Does the act under which the petitioner is being prosecuted violate any constitutional provision? In this resolution the provisions of our own constitution must govern. Decisions of other jurisdictions defining the limits of legislation under their constitutions are not always to be followed elsewhere, upon the supposition that the same limitations everywhere prevail. A comparison of many other constitutions with ours shows that the latter probably contains more restrictions upon the power of the legislature than are to be found in any other instrument.

Except as to the penalty, the act is identical in terms with a law of Utah, which, in three cases in the supreme court of that State, has

been held valid; and in two of the cases, on writ of error from the Supreme Court of the United States, the judgment of the State court has been affirmed.

In the constitution of Utah there is an entire article (16) devoted to the rights of labor. For our present purpose, sections 1, 6, and 7 only need be here reproduced. They are:

“SECTION 1. The rights of labor shall have just protection through the laws calculated to promote the industrial welfare of the States.

“SEC. 6. Eight hours shall constitute a day's work on all works or undertakings carried on or aided by the State, county, or municipal governments; and the legislature shall pass laws to provide for the health and safety of employees in factories, smelters, and mines.

“SEC. 7. The legislature, by appropriate legislation, shall provide for the enforcement of the provisions of this article.”

While disclaiming any expression of opinion as to whether the act in question might or might not be upheld as an exercise of the police power, which, though unexpressed in the constitution, resides in every sovereign State, the supreme court of Utah clearly grounded its decision upon the mandatory nature of the foregoing section 6. The imperative command thereof was thought to operate both upon the legislature and the courts—upon the legislature as an express injunction requiring the enactment of legislation to protect the health of the classes enumerated, and upon the courts as an implied restriction, withdrawing from them an inquiry into such legislation as should be passed in obedience to that command, upon which investigation, in the absence of the constitutional limitation, and with respect to such legislation as comes within the range of the general police power, the court might enter to ascertain if it accords with the constitution.

After quoting from a number of authorities the chief justice continues as follows:

In the light of these authorities it is clear: First, that the decision of the supreme court of Utah in construing the Utah statute is not an authority here, for the reason that the decision there was based entirely upon the mandatory nature of a provision of the Utah constitution which is not present in our organic act; second, in affirming the judgment of the Utah court, the decision of the Supreme Court of the United States in the Holden cases is not a precedent for this court in construing our act, for the reason that the sole question before the Federal court was whether or not the Utah act violated the Federal Constitution. If, however, it could be maintained that this affirmance was in effect a determination that the Utah law was in harmony with the Utah constitution, the decision of the Federal court would not be an authority here, because we have no such constitutional provision.

The extent and meaning of the act in question are not difficult of ascertainment, though it is not a model of statutory composition. That it operates as a limitation both upon the employer and the employee seems clear. It forbids a certain kind of employment. There can be no employment without the concurring acts of him who contracts for employment and of him who contracts to be employed. Both are within the inhibitions of the enactment, and if it is valid each is liable to the penalty for making the forbidden contract. The petitioner, therefore, as a laboring man, is prohibited from entering into a con-

tract to work in a smelter more than eight hours in any one day. If in our constitution there was, as there seems to be in that of Utah, a specific affirmative provision enjoining upon the general assembly the enactment of laws to protect the health of the classes of workmen therein enumerated, it might be that acts reasonably appropriate to that end would not be obnoxious to that provision of our constitution forbidding class legislation. The two provisions should be construed together so as to harmonize, if that be possible under sound canons of construction, and the general clause forbidding class legislation might be regarded as qualified by the special one which authorizes such legislation in respect to the enumerated classes. Article 16 of our constitution is devoted to mining and irrigation, and section 2 directs that "the general assembly shall provide by law for the proper ventilation of mines, the construction of escapement shafts, and such other appliances as may be necessary to protect the health and secure the safety of the workmen therein." These regulations manifestly embrace only such reasonably necessary mechanical appliances as will secure the end in view, and do not include other kinds of health regulations. We have no constitutional provision which authorizes the legislature to single out workmen in underground mines and smelters and impose upon them restrictions as to the number of hours they shall work at these industries, from which workmen in all other departments of industry are exempt.

The act is equally obnoxious to the provisions of our bill of rights set out in the statement which guarantee to all persons their natural and inalienable right to personal liberty, and the right of acquiring, possessing, and protecting property. Liberty means something more than mere freedom from physical restraint. It includes the privilege of choosing any lawful occupation for the exercise of one's physical and mental faculties which is not injurious to others. The right to acquire and possess property includes the right to contract for one's labor. The latter is essentially a property right. That this act infringes both the right to enjoy liberty and to acquire and possess property seems too clear for argument. While not conceding that this limitation is not permissible, counsel for respondent, as we understand them, recognize the fact (but, if they do not, the same is only too apparent) that these natural rights are violated by the provisions of the act. The limitation is claimed to be warranted on the ground that these and all other constitutional guaranties must yield to the paramount and sovereign right of the State to exercise its police power to protect the public health, and to this, the principal question in this proceeding, we now address ourselves.

Starting then with the premise, which is practically admitted to be true, that this act contravenes the constitutional provisions quoted in the statement, let us see if, notwithstanding this conflict, it can be justified as a valid exercise of the police power. It is difficult to define, or with precision to describe, the police power. Prof. Tiedeman in his work on the Limitations of Police Power, in section 1, says: "The object of government is to impose that degree of restraint upon human actions which is necessary to the uniform and reasonable conservation and enjoyment of private rights. * * * The conservation of private rights is attained by the imposition of a wholesome restraint upon their exercise—such a restraint as will prevent the infliction of injury upon others in the enjoyment of them." He fur-

ther quotes with approval the language of Judge Redfield in the case of *Thorpe v. Railroad Co.*, 27 Vt., 140: "This police power of the State extends to the protection of the lives, limbs, health, comfort, and quiet of all persons, and the protection of all property within the State. According to the maxim, 'Sic utere tuo ut alienum non lædas' [one must so use his own as not to injure others], which being of universal application, it must of course be within the range of legislative action to define the mode and manner in which everyone may so use his own as not to injure others." And Prof. Tiedeman immediately follows this quotation with the statement that: "Any law which goes beyond that principle—which undertakes to abolish rights, the exercise of which does not involve an infringement of the rights of others, or to limit the exercise of rights beyond what is necessary to provide for the public welfare and the general security—can not be included in the police power of the government." It thus appears that, in proceeding under this power, the legislature must choose proper subjects for its exercise, and must observe constitutional limitations just as closely as when it enacts laws pertaining to the public revenue, or provides for the exercise of the power of eminent domain.

In the light of these principles every act of this character must be tested. While invoking as a warrant for this act that phase of the police power extending to the public health, its supporters do not claim that its real and primary object is to protect the public health, or the health of that portion of the community in the immediate vicinity, or affected by the operation of smelters. Were the object of the act to protect the public health, and its provisions reasonably appropriate to that end, it might be sustained; for in such a case even the constitutional right of contract may be reasonably limited. But the act before us is not of that character. In selecting a subject for the exercise of the police power, the legislature must keep within its true scope. The reason for the existence of the power rests upon the theory that one must so use his own as not to injure others, and so as not to interfere with or injure the public health, safety, morals, or general welfare. How can an alleged law that purports to be the result of an exercise of the police power be such in reality when it has for its only object, not the protection of others, or the public health, safety, morals, or general welfare, but the welfare of him whose act is prohibited, when, if committed, it will injure him who commits it, and him only? What we mean to decide is that in a purely private lawful business, in which no special privilege or license has been granted by the State, and the carrying on of which is attended by no injury to the general public, it is beyond the power of the legislature under the guise of the police power to prohibit an adult man who desires to work thereat from working more than eight hours a day, on the ground that working longer may, or probably will, injure his own health.

The result of our deliberation is that this act is an unwarrantable interference with, and infringes the right of both the employer and employee in making contracts relating to a purely private business in which no possible injury to the public can result; that it unjustly and arbitrarily singles out a class of persons, and imposes upon them restrictions from which others similarly situated and substantially in the same condition are exempt; and that it is not, under our constitution, a valid exercise of the police power of this State, either in the subject selected or in the reasonableness of the regulation.

CONSTITUTIONALITY OF STATUTE—PAYMENT OF WAGES—VALIDITY OF AGREEMENT FOR EXTENSION OF TIME FOR PAYMENT OF WAGES ON CONSIDERATION OF PART PAYMENT—*Skinner v. Garnett Gold-Mining Co.*, 96 *Federal Reporter*, page 735.—This was an action by attachment originally brought in the superior court of Sierra County, Cal., to recover from the above-named defendant corporation for labor performed by the plaintiff, one Skinner, and on assigned claims for labor performed by others. The case was transferred to the United States circuit court for the northern district of California, on the ground that the defendant was a foreign corporation, having been organized under the law of West Virginia. The plaintiff relied upon the provisions of chapter 170 of the acts of California of 1897, page 231, an act relating to the payment of wages. The defendant alleged that said act was unconstitutional, and, while admitting that it owed the amount for which the suit was brought, claimed that an agreement was entered into between the plaintiff and his assignors and the defendant to wait a certain time for all wages earned prior to a certain date, and that under said agreement, as to such wages, the action had been prematurely brought. The decision of the circuit court was rendered September 6, 1899, and a judgment was rendered in favor of the plaintiff.

In the course of the opinion of said court, delivered by Circuit Judge Morrow, the following language was used:

The title of the act the benefit of which has been claimed by plaintiff, and the constitutionality of which defendant contests, reads:

“An act requiring every corporation doing business in this State to pay their employees, and each of them, at least once in each and every month, the wages earned by such employee; to limit the defenses which may be set up by such corporation to assignments of wages, set-off or counter claims, or the absence of such employees at the time of making payment, and in case of such absence the wages are payable upon demand; to prohibit assignments of wages for the purpose of evading the provisions of this act and agreements to accept wages at longer periods than as herein provided as a condition of employment; to fix a penalty for this violation of the provisions of this act by such corporation, and to provide for the disposition of any fines recovered from corporations violating the same.”

The purpose of the act is expressed in section 1, which provides that—

“Every corporation doing business in this State shall pay at least once a month each and every employee employed by such corporation in transacting or carrying on its business or in the performance of labor for it the wages earned by such employee during the preceding month: *Provided, however,* That if at the time of payment any employee shall be absent or not engaged in his usual employment he shall be entitled to said payment at any time thereafter upon demand.”

The provisions of all the sections of this act, with the exception of sections 2 and 6, are referred to in the title as quoted above. Section 2 provides:

“A violation of any of the provisions of section one of this act shall entitle each of said employees to a lien on all the property of said cor-

poration for the amount of their wages, which lien shall take preference over all other liens except duly recorded mortgages or deeds of trust; and in any action to recover the amount of such wages or to enforce said lien the plaintiff shall be entitled to a reasonable attorney's fee, to be fixed by the court, and which shall form part of the judgment in said action, and shall also be entitled to an attachment against said property. An unrecorded deed shall be no defense to such actions."

Section 6 is as follows:

"All wages earned by any employee engaged in the service of any corporation in this State shall be paid in lawful moneys of the United States or in checks negotiable at face value on demand."

The constitution of California (section 24, art. 4) declares that "every act shall embrace but one subject, which subject shall be expressed in its title." Defendant contends that, since the provisions of sections 2 and 6 of the above act are not specifically referred to in its title, these two sections are unconstitutional. The unconstitutionality of these two sections, even if established, does not invalidate the entire act, but merely the sections involved. Section 24, art. 4, of the constitution of California also provides:

"But if any subject shall be embraced in an act which shall not be expressed in its title, such act shall be void only as to so much thereof as shall not be expressed in the title."

It will be observed that we are not concerned with section 6 in the present controversy, and it may therefore be omitted from consideration. The subject of the act is comprised in section 1, which enacts that corporations shall pay their employees regularly each month. The other sections contain provisions designed to secure compliance with section 1, and section 2 provides a penalty for the violation of this section. Two sections in this act (sections 2 and 7) provide against violation of its provisions. It is evident that these sections are intended to enforce compliance with the regulations of the act regarding its subject comprised in section 1, and there is consequently no reason why their provisions should have found expression in the title of the act.

Defendant further attacks the statute in question upon the ground that it contravenes the following provisions of the constitution of the State: (1) Section 13, art. 1: "No person shall * * * be deprived of life, liberty, or property without due process of law." (2) Section 1, id.: "All men * * * have certain inalienable rights, among which are those of * * * acquiring, possessing, and protecting property." (3) Section 21, id.: "Nor shall any citizen or class of citizens be granted privileges or immunities which, upon the same terms, shall not be granted to all citizens." (4) Fourteenth amendment to the Constitution of the United States: "Nor shall any State deny to any person within its jurisdiction the equal protection of the law." Defendant contends that the statute discriminates unreasonably against corporations and destroys the liberty and property of private contracts in several of its provisions. Section 2 of the act, *supra*, is regarded by defendant as an unjust discrimination against corporations.

The opinion at this point refers to and comments on a case cited by the defendant, and then continues in the following words:

It will be perceived that the case under discussion bears no resemblance to the case cited above. In that case there was a direct attack

upon the property of corporations, an attempt to make corporations submit to a system of taxation different from that generally employed in this State, and to saddle them with more than their proper share of the burdens of State taxation. In this case no peculiar burden is imposed. The statute in question merely provides for the payment of wages already due at certain regular periods, and lays down regulations framed to secure compliance with its provisions in this respect.

The court here refers to an act concerning the payment of wages passed by the legislature of California in 1891 (St. Cal. 1891, p. 195), cites and quotes from several decisions of the California supreme court, in which said act was declared to be unconstitutional, and then goes on to say:

The statute of 1897 appears to dispose of the constitutional objection urged against the act of 1891. The statute of 1891 was declared unconstitutional because of its arbitrary classification of laborers, according to which those who were employed by the week or month enjoyed advantages over those not so employed. The statute of 1897 provides specifically that all employees of corporations shall be paid at least once a month, and makes no such discrimination as the statute of 1891, but entitles all employees of corporations to the same remedies. The question here is whether the statute of 1897 so discriminates between corporations and other persons as to render it unconstitutional for that reason.

The court here refers to a case decided in a Federal court holding a certain statute of the State of Tennessee to be unconstitutional, and then continues in the following language:

The statute in the above Tennessee case was properly considered as discriminating against railroad corporations. It professed to provide "for the regulation of railroad companies and persons operating railroads in this State," and in so providing it discriminated as regards penalties and in other respects against corporations operating railroads. Such a statute can not be regarded as parallel with the California statute under consideration. The California statute imposes certain legal duties upon corporations in general, and makes certain provisions intended to secure the performance of these duties by corporations. This interpretation of the statute as not being a special law is in accord with the decisions of the supreme court of this State.

The constitution of this State contains the usual provisions concerning corporations, and provides that:

"All laws now in force in this State concerning corporations, and all laws that may be hereafter passed pursuant to this section, may be altered from time to time or repealed." (Article 12, section 1.)

Under this provision the act of 1897 must be held as a legitimate exercise of the plenary power of the legislature to modify, by general laws, within reasonable limits, the rights and privileges which corporations of the State possess as such; and this legislation may be justified upon the ground that the purposes of the State in creating corporations will be the better accomplished by such amendment.

Defendant's contention that the statute of 1897 unjustly discriminates against corporations can not be sustained in regard to the provisions of sections 1 and 2 of that statute. There is no discrimination

involving the breach of any of the constitutional enactments invoked by the defendant. The provisions that corporations shall have a regular monthly pay day, and that the employees of a corporation shall, in the event of a violation of the provisions of section 1 by the corporation, be entitled to a lien on the property of the corporation, taking precedence of all other liens except recorded mortgages and deeds of trust; to a reasonable attorney's fee if he is obliged to bring an action at law to recover his wages, and to an attachment against the property of the corporation, and that an unrecorded deed shall not be a defense to such an action, are not such as unjustly discriminate against the defendant.

Defendant further contends that the act is unconstitutional upon the ground that it deprives the employee and the corporation of the liberty and property of making contracts, without due process of law. In the course of its argument in this respect defendant attacks various sections of the statute of 1897 other than sections 1 and 2 of that statute. Plaintiff, however, bases his action upon these two sections, and the remaining sections may therefore be left out of consideration in this case. As far as these two sections are concerned there does not appear to be good ground for the contention of defendant. Section 1 provides for the monthly payment of wages which have been already earned, and which are due from the corporation to the employee, and section 2 provides penalties in case such provision is not complied with. It does not appear in what respects defendant is deprived of any liberty in making contracts by reason of these enactments. They simply constitute an effort to secure the regular payment to the employee of a corporation, by such corporation, of the wages to which he is entitled by virtue of his work performed, and an effort to make his legal remedy for the irregular payment of such wages as little troublesome and as little expensive as possible. The contention of defendant as to the unconstitutionality of the statute must be denied.

Defendant also urges that the action is premature as to the sum of \$1,814.48, or "back pay," claimed therein. Defendant admits indebtedness to that extent, but argues that under the terms of an agreement made by the parties on or about the 8th of October, 1897, plaintiff and his assignors agreed to wait until the following February for one-half of their wages due on August 23, 1897, the other half of which "back pay" they received upon the 8th of October, 1897, at the same time that they entered into the agreement to wait. This action was commenced on December 17, 1897, prior to the time for the expiration of the alleged agreement. A copy of the pay roll of the Garnett Gold Mining Company was admitted in evidence. This pay roll contained nine parallel columns, namely: The first column, "Names;" the second, "Total amt. due wages;" the third, "Board deducted;" the fourth, "No. of days;" the fifth, "Cash paid;" the sixth, "Balance due;" the seventh, "Paid on $\frac{1}{2}$;" the eighth, "Bal. payable six months from Aug. 23, '97;" and the ninth and last, "Received payments. Bal. payable 6 mos. Accepted." The plaintiff and his assignors signed their names in the last column. It is contended by defendant that this constitutes an agreement on the part of plaintiff and his assignors to wait until February, 1898, for the balance of the amounts due them. Plaintiff denies that any such agreement was made, and his evidence was to the effect that when he signed the alleged agreement he thought he was receipting an ordinary pay roll. The evidence of defendant's

witnesses was altogether unsatisfactory upon the point whether plaintiff and his assignors were informed of the character of the alleged agreement, and that it differed from an ordinary pay roll. But, even conceding the fact of the agreement, plaintiff urges that such an agreement, if made, is merely a nudum pactum, and can have no legal value for want of consideration. Defendant maintains that there was good consideration for the agreement, and alleges that suits have been brought for "back pay" by some of plaintiff's assignors, and that the company had informed the men that, unless the six months' extension was given and all the suits dismissed, the company could do nothing more, and litigation would have to take its course. Defendant claims that the benefit derived by the men from this settlement was sufficient consideration to support the agreement. Section 1605 of the Civil Code of California defines "consideration" as follows: "Any benefit conferred, or agreed to be conferred, upon the promisor by any other person, to which the promisor is not lawfully entitled, or any prejudice suffered or agreed to be suffered by such (other) person, other than such as he is at the time of consent lawfully bound to suffer, as an inducement to the promise, is a good consideration for a promise."

It can not be maintained that plaintiff and his assignors had any benefit conferred upon them by such an agreement as is here set forth by defendant. Half of their wages was overdue, and it was the duty of defendant to pay such wages upon demand. The promise to perform that duty after an interval of six months can not be called good consideration for the agreement. The supreme court of this State, in the case of *Sullivan v. Sullivan*, 99 Cal., 187, 193; 33 Pac., 862, 864, declares: "It is well settled that neither a promise to perform a duty nor the performance of a duty constitutes the consideration of a contract."

The plaintiff is entitled to a reasonable attorney's fee, to be fixed by the court (section 2, act March 29, 1897; St. Cal., 1897, p. 231), which shall form part of the judgment in said action. I am of the opinion that the attorney's fee should be fixed at \$300, and such will be the order. A judgment will therefore be entered for the plaintiff for the amount claimed and attorney's fee of \$300 and costs.

CONSTITUTIONALITY OF STATUTE—STORE ORDERS, SCRIP, ETC., ISSUED IN PAYMENT OF WAGES TO BE REDEEMED IN CASH—*Harbison v. Knoxville Iron Co.*, 53 *Southwestern Reporter*, page 955.—Action was brought by Sam Harbison against the above-named company in the chancery court of Knox County, Tenn. A decree was rendered for the plaintiff, Harbison, and the same was affirmed on appeal by the court of chancery appeals. The defendant company then appealed the case to the supreme court of the State, which rendered its decision November 8, 1899, and affirmed the decrees of the lower courts.

The opinion of the supreme court, delivered by Judge Caldwell, shows the facts in the case as well as the reasons for the decision, and the following is quoted therefrom:

The defendant is a domestic corporation, engaged in the manufacture and sale of iron and in the mining and sale of coal. It employs

about 200 laborers, and has one regular pay day each month, being that Saturday which is nearest to the 20th of the particular month. On this day each employee is paid in cash the amount due him up to the 1st day of the month, but never up to the day of payment. On every Saturday in the month, however, the defendant holds itself in readiness to pay all of its employees the full amount then due them if they will receive it in orders for coal at 12 cents per bushel; and the afternoon of every Saturday, from 1 o'clock to 5 o'clock, is set apart for that purpose. About 75 per cent of all the wages earned by the laborers is paid in these coal orders. The orders are in the following form: "Let bearer have — bushels of coal, and charge to my account. [Signed] ——. Accepted —, 1899. Knoxville Iron Company." The complainant purchased 614 of these orders, aggregating \$1,678, and thereafter presented them to the defendant on a regular pay day, and demanded payment in cash. Payment being refused, he brought this suit to collect the several orders. He bases his action on sections 1 and 2 of chapter 11 of the acts of 1899. [See laws of Tennessee, page 452, post.]

The company defends upon three grounds: (1) That the act does not apply to a case like this; (2) that complainant is not a bona fide holder, and (3) that the act is unconstitutional. These defenses will be considered in the order named.

1. The substance of the first contention is that by a correct construction it must be held that "all persons, firms, corporations, and companies using coupons, scrip, punchouts, store orders, or other evidences of indebtedness to pay their or its laborers or employees" means only such persons, firms, corporations, and companies as are accustomed to use coupons, scrip, punchouts, store orders, or other evidences of indebtedness to pay their or its laborers or employees, and as so use them arbitrarily; and that the defendant has no such custom, and is, therefore, not included in the terms of the act. No reason is perceived by the court for so restricting and limiting the broad and unqualified words of the statute. The evident intention of the legislature was to include every person, firm, corporation, and company using coupons, scrip, punchouts, store orders, or other evidences of indebtedness to pay their or its laborers and employees, whether such use be habitual and arbitrary or only occasional and without constraint. But if this were not true, the defendant is included by its own construction. The court of chancery appeals found that the defendant is so accustomed to use coal orders that it in that "way pays off about 75 per cent of the wages earned by its employees," and that its course of business in that respect is one "whereby employees are systematically, in the main, settled with in coal orders instead of cash, and where, though there is no compulsion in form, yet in fact, by holding back their wages, such a motive power is brought to bear upon their freedom of choice as to practically amount to coercion;" that "the facts of the case show a species of compulsion whereby the defendant takes advantage of the necessities of the improvidence of its employees, and so places them in a position where they feel compelled to take their wages in coal orders." So that by the true construction, and also by that suggested by the defendant, it is included in the provisions of the statute.

2. It is next contended that complainant is not a bona fide holder, because he purchased the coal orders sued upon at a discount of 15 cents on the dollar. It is true that complainant gave only 85 cents on

the dollar for these orders, but that does not prevent him from being a bona fide holder within the meaning of the statute. He made the purchases upon the open market, fairly and honestly, and gave 10 cents more on the dollar for the orders than they had usually sold for. To constitute him a bona fide holder it is only necessary that he should have bought the orders fairly, honestly, and for a reasonable price, in good faith, as contradistinguished from bad faith. The suggestion that complainant's recovery, if allowed at all, should be limited to the price paid, is conclusively answered by the provisions of the statute that the redemption or recovery shall be for "the face value of such scrip, punchouts, coupons, store orders, or other evidences of indebtedness."

3. Finally, it is said that the act abridges the right of contract, and for that reason it is challenged as repugnant to that part of section 1 of the fourteenth amendment to the Constitution of the United States which declares that no State shall "deprive any person of life, liberty, or property without due process of law," and to that part of section 8 of article 1 of the constitution of Tennessee which declares that "no man shall be * * * deprived of his life, liberty, or property but by * * * the law of the land." A corporation is a "person" within the provision against deprivation of life, liberty, or property "without due process of law," and it is a "man" within the provision against deprivation of liberty or property otherwise than by "the law of the land." Hence the defendant, which is a corporation, is entitled to the protection guaranteed by both provisions. The "liberty" contemplated in each provision means not only the right of freedom from servitude, imprisonment, or physical restraint, but also the right to use one's faculties in all lawful ways, to live and work where he chooses, to pursue any lawful calling, vocation, trade, or profession, to make all proper contracts in relation thereto, and to enjoy the legitimate fruits thereof. "Property," as the word is there used, signifies not only those tangible things of which one may be the owner, but everything he may have of an exchangeable value. It includes the right to acquire and dispose of property and to make all lawful contracts essential to those ends, and such contracts are entitled to the same protection as the property itself. The right of contract is undoubtedly an inherent part of the right of liberty and also of the right of property, and deprivation of it is equally forbidden. But none of them are unlimited rights. All are subject to the law's control, and may at any time be abridged or enlarged, or even destroyed, within constitutional bounds. None of them can be affected or taken away except by "due process of law" or the "law of the land;" yet all of them may be curtailed or destroyed by that means. The declaration against deprivation "without due process of law," or otherwise than by the "law of the land," necessarily implies that deprivation may be rightly accomplished and justified by such process or law. What, then, is "due process of law," or the "law of the land?" The two phrases have exactly the same import, and that which is entitled to recognition as the one is to be recognized as the other also. The present statute, if valid, is "the law of the land" as to the provisions thereof, and that which is accomplished by it is done "by due process of law." All valid laws, statutory and otherwise, now existing in this State constitute the aggregate body of our present "law of the land," and each part, each separate law that is complete in itself, may properly be called the "law of the

land" as to the matter or matters embraced therein. Some of these laws are old and some are new. They are constantly changing, and for that reason it is impossible to formulate a definition that will at all times include everything that may be or come within, and exclude everything that may be or fall without, the true meaning of the phrase, "law of the land."

It is sufficient, for the purposes of this case, to say that legislation is not open to the charge of depriving one of his rights without "due process of law" if it be general in its operation upon the subjects to which it relates, and is enforceable in the usual modes established in the administration of government with respect to kindred matters—that is, by process or proceedings adapted to the nature of the case. When applied to general legislation, the clause "law of the land" was defined in our earlier cases to mean a general and public law equally binding upon every member of the community; but by our later cases it is defined to mean a law which embraces all persons who are or may come into like situation and circumstances; and when applied to special or class legislation it means, in addition, that "the classification must be natural and reasonable, not arbitrary and capricious." Though operating equally on all persons in like condition, while in existence, the "law of the land" on no subject can be truly said to be immutable. On the contrary, it is always subject to change, by diminution or enlargement, by repeal or substitution, as different and new conditions arise; otherwise there could be no advance in legislation or legal development, and the legislative department of the government would be wholly unnecessary and superfluous. The law is, in fact, a progressive science, and its growth must be allowed to keep pace with the advance of civilization.

When first adopted in Magna Charta, the phrase "the law of the land" had reference to the common and statute law then existing in England; and when embodied in our Constitution it referred to the same common law as previously modified, and so far as suited to the wants and conditions of our people in a new country. At present "the law of the land" embraces the same body of laws as still further modified; those parts validly cut off being now excluded, and those validly added being now included. Every valid statute of the State now in existence, whenever enacted in the present "law of the land" in respect to the subject-matter of that statute, and every existing enactment passed with due form and ceremony, and not in conflict with some provision of the State or Federal constitution, is a valid statute; and no statute otherwise valid is unconstitutional because affecting one's life, liberty, or property, if when being general, it embraces all persons who are or may be in like situation and circumstances; or when, being special, it is, in addition, natural and reasonable in its classification; or, as otherwise expressed: "If it be general in its operation upon the subjects to which it relates, and is enforceable in the usual modes established in the administration of government with respect to kindred matters" (*Dent v. West Virginia*, 129 U. S., 124; 9 Sup. Ct., 234; 32 L. Ed., 626). Confessedly, the enactment now called in question is in all respects a valid statute, and free from objection as such, except that it is challenged as an arbitrary interference with the right of contract, on account of which it is said that it is unconstitutional, and not the "law of the land," or "due process of law."

The act does undoubtedly abridge or qualify the right of contract,

in that it requires that certain obligations, payable in the first instance in merchandise, shall in certain contingencies be paid in money. Yet it is as certainly general in its terms, embracing equally every employer and employee who is or may be in like situation and circumstances, and it is enforceable in the usual modes established in the administration of governments with respect to kindred matters. Under the act the present defendant may issue weekly orders for coal as formerly, and may pay them in that commodity, when desired by the holder; but, instead of being able, as formerly, to compel the holder to accept payment of such orders in coal, the holder may, under the act, compel defendant to pay them in money. In this way, and to this extent, the defendant's right of contract is affected. Under the act, as formerly, every employee of the defendant may receive the whole of [or] a part of his wages in coal orders, and may collect the orders in coal, or transfer them to some one else for other merchandise or for money. His condition is bettered by the act, in that it naturally enables him to get a better price for his coal orders than formerly, and thereby gives him more for his labor; and yet, although the defendant may not in that transaction realize the expected profit on the amount of coal called for in the orders, it in no event pays more in dollars and cents for the labor than the contract price.

The scope and purpose of the act are thus indicated: The legislature evidently deemed the laborer at some disadvantage under existing laws and customs, and by this act undertook to ameliorate his condition in some measure by enabling him, or his bona fide transferee at his election, and at a proper time, to demand and receive his unpaid wages in money, rather than in something less valuable. Its tendency, though slight it may be, is to place the employer and employee upon equal ground in the matter of wages, and, so far as calculated to accomplish that end, it deserves commendation. Being general in its operation, and enforceable by ordinary suit, and being unimpeached and unimpeachable upon other constitutional grounds, the act is entitled to full recognition as the "law of the land" and "due process of law" as to the matters embraced, without reference to the State's police power. Furthermore, the passage of the act was a legitimate exercise of police power, and upon this ground also the legislation is well sustained. The first right of a State, as of a man, is self-protection, and with the State that right involves the universally acknowledged power and duty to enact and enforce all such laws, not in plain conflict with some provision of the State or Federal constitution, as may rightly be deemed necessary or expedient for the safety, health, comfort, and welfare of its people.

Besides the amelioration of the employees' condition * * * the act was intended and is well calculated to promote the public peace and good order, and to lessen the growing tendency to strife, violence, and even bloodshed in certain departments of important trade and business. In the case of *Holden v. Hardy*, already referred to (169 U. S., 392; 18 Sup. Ct., 383; 42 L. Ed., 780), the court held that a statute of Utah, making it a misdemeanor to employ laborers to work under the ground or in smelters for a period of more than eight hours per day, except in cases of emergency, was valid as a police regulation. In that case, as in this one, the counsel of the employer urged that the act worked a peculiar hardship upon the employee, in that it violated his right to contract as he pleased. To that contention the court aptly replied:

“The argument would certainly come with better grace and greater cogency from the latter class. But the fact that both parties are of full age, and competent to contract, does not necessarily deprive the State of the power to interfere where the parties do not stand upon an equality, or where the public health demands that one party to the contract shall be protected against himself. The State still retains an interest in his welfare, however reckless he may be. The whole is no greater than the sum of all the parts, and when the individual health, safety, and welfare are sacrificed or neglected the State must suffer.”

The court here mentioned certain acts touching the question of contracts between employers and employees which had been passed by many of the States, and cited numerous decisions thereon, and then continued as follows:

The act before us is perhaps less stringent than anyone considered in any of the cases mentioned. It is neither prohibitory nor penal; not special, but general; tending toward equality between employer and employee in the matter of wages; intended and well calculated to promote peace and good order, and to prevent strife, violence, and bloodshed. Such being the character, purpose, and tendency of the act, we have no hesitation in holding that it is valid, both as general legislation, without reference to the State's reserved police power, and also as a wholesome regulation adopted in the proper exercise of that power.

CONSTITUTIONALITY OF STATUTE—TRADE-MARKS, ETC., OF TRADE UNIONS, ETC.—*State v. Bradt*, 53 *Southwestern Reporter*, page 942.—George M. Bradt was indicted in the circuit court of Hamilton County, Tenn., for the alleged violation of certain provisions of chapter 107 of the acts of 1897, relating to the trade-marks, etc., of trade unions, associations of workmen, etc. The judge of the circuit court quashed the indictment on the ground that the act above referred to was unconstitutional and the State thereupon appealed to the supreme court of the State, which rendered its decision November 20, 1899, and affirmed the action of the lower court.

From the opinion of the supreme court, delivered by Judge Caldwell, the following is taken:

The indictment is in good form. It contains three counts, the first being preferred under section 1, the second under section 2, and the third under section 6 of the act mentioned. The indictment is undoubtedly good if the act is a valid law; otherwise, it is bad, having no other law to rest upon.

The court here recited the title of the act as follows:

“An act to provide for the filing and recording, by any person or association, or union of workmen, of a label, trade-mark, term, design, device, or form of advertisement for the purpose of designating or making known or distinguishing any goods, wares, or other products of labor, as having been made, manufactured, produced, or put on sale by such person, association, or union of workmen, or

by a member of such union or association; and to prohibit the counterfeiting or imitation or unauthorized use of such label, trade-mark, term, design, device, or form of advertisement, and to prescribe punishment for a violation of the provisions of this act."

The court at this point quoted the act in full and then continued as follows :

The objection urged by defendant's counsel against the validity of the enactment is found in the contention that it violates the second clause of section 17 of article 2 of the State constitution, which declares that "no bill shall become a law which embraces more than one subject, that subject to be expressed in the title." The objection is a fatal one, for the act, as framed, embraces three subjects; that expressed in the title and two others. The subject expressed in the title is only "the filing and recording of labels, trade-marks, etc., and their protection," while the act treats of that subject in sections 3 and 4, and of another subject, "adopting and using labels, trade-marks, etc., not filed and recorded and their protection," in sections 1, 2, 5, and 6, and of still another subject, "the unauthorized use of the name or seal of one person by another," in the seventh section. It may be that a title could have been framed in such general language as to express one general subject embracing and warranting all the legislation found in the body of this act, but that was not done. On the contrary, the title actually employed is self-limiting and restrictive. It relates alone to the filing and recording of labels, trade-marks, etc., and their protection, and by its narrow terms limits the legislation permissible thereunder to that narrow subject. Obviously, the subject, as expressed in the title, is not broad enough in its scope to include the other subjects embraced in the act, hence their presence brings the legislation within the prohibition of the constitution, and renders it null and void.

CONSTITUTIONALITY OF STATUTE—WEIGHING OF COAL AT MINE—*State v. Wilson*, 58 *Pacific Reporter*, page 981.—Henry Wilson was convicted for the violation of section 1 of chapter 188, acts of Kansas of 1893, in a district court of that State. From a judgment of the court of appeals of Kansas for the southern department, eastern division, affirming the judgment of the district court, he appealed to the supreme court of Kansas, which rendered its decision November 11, 1899, and affirmed the decisions of the lower courts: The statute regulating the weighing of coal at the mine, for a violation of which Wilson was convicted, and the constitutionality of which was affirmed in the above-mentioned decisions, reads as follows:

SECTION 1. It shall be unlawful for any mine owner, lessee, or operator of coal mines in this State, employing miners at bushel or ton rates, or other quantity, to pass the output of coal mines by said miners over any screen or other device which shall take any part from the value thereof before the same shall have been weighed and duly credited to the employees and accounted for at the legal rate of weights as fixed by the laws of Kansas.

SEC. 2. The weighman employed at any mine shall subscribe an oath or affirmation, before a justice of the peace or other officer authorized to administer oaths, to do justice between employer and employee, and to weigh the output of coal from mines in accordance with the provisions of section 1 of this act. Said oath or affirmation shall be kept conspicuously posted in the weigh office, and any weigher of coal, or persons so employed, who shall knowingly violate any of the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction, shall be punished by a fine of not less than twenty-five nor more than one hundred dollars for each offense, or by imprisonment in the county jail for a period not to exceed thirty days, or by both such fine and imprisonment.

SEC. 3. The miners employed by or engaged in working for any mine owner, operator, or lessee in this State shall have the privilege, if they so desire, of employing at their own expense a check-weighman, who shall have like rights and privileges in the weighing of coal as the regular weighman, and be subject to the same oath and penalties as the regular weighman.

SEC. 4. Any person or persons having or using any scale or scales for the purpose of weighing the output of coal at mines so arranged or constructed that fraudulent weighing may be done thereby, or who shall knowingly resort to or employ any means whatever, by reason of which such coal is not correctly weighed and reported in accordance with the provisions of this act, shall be deemed guilty of a misdemeanor, and shall, upon conviction, for each offense be punished by a fine of not less than two hundred dollars nor more than five hundred dollars, or by imprisonment in the county jail for a period not to exceed sixty days, or by both such fine and imprisonment.

SEC. 5. Any provisions, contract, or agreement between mine owners or operators thereof and the miners employed therein whereby the provisions of section 1 of this act are waived, modified, or annulled shall be void and of no effect; and the coal sent to the surface shall be accepted or rejected, and if accepted shall be weighed in accordance with the provisions of this act; and right of action shall not be invalidated by reason of any contract or agreement.

SEC. 6. The provisions of this act shall also apply to the class of workers in mines known as loaders, engaged in mines wherein mining is done by machinery. Whenever the workmen are under contract to load coal by the bushel, ton, or any quantity the settlement of which is had by weight, the output shall be weighed in accordance with the provisions of this act.

The decision of the supreme court was not unanimous, Justice Smith dissenting. The syllabus of the opinion of the majority of the judges, which was prepared by the court, reads as follows:

1. "An act to regulate the weighing of coal at the mine," being chapter 188 of the laws of 1893, is constitutional and valid as a proper exercise of the police power. It does not purport to prevent the operators of coal mines and the miners employed by them from making such agreements as they choose concerning the amount of wages to be paid, or in any wise infringe upon the freedom of contract.

2. Where miners are employed at bushel, ton, or other quantity rates, it is a valid requirement of the law that the output of coal mined by them shall not be passed over any screen or other device which

shall take any part from the value thereof before the same shall have been weighed and duly credited to the employees and accounted for at the legal rate of weights. Information is by this means furnished to the miner by which he may act intelligently, and rest his demand for wages upon the calculated results of what he has accomplished in the past. It also affords the operator knowledge, from the use of which wages may be adjusted based upon known facts. Such law is further beneficial in that it supplies the public with statistics showing the total amount of coal produced in the State.

In a strong dissenting opinion Judge Smith used the following language:

The construction applied to this law by the majority of the court seems to me to be a provision of legislative intent, and we need not go beyond the language of its several sections to ascertain that the obvious and sole purpose of the enactment was to control and restrict the right of contract.

The judge at this point reviewed and quoted from the provisions of the act and then said:

The obvious meaning is that if a miner contracts to take out coal for, say, one dollar per ton for all screened coal mined by him, he must be paid one dollar per ton for the mine run—that is, the total weight of the substance extracted from the earth by him having a marketable value—and all contracts for determining the amount of his compensation on any other basis, when he works by ton or quantity rates, are invalidated. It means that, when the miner makes a contract to take out coal at so much per ton for screened coal, the bargain does not bind him; that when he sues his employer for wages the court must give him judgment, not on the contract, but, finding the weight of all coal he has taken out (both screenings and lump), the gross product is to be credited to him, and compensation given on the basis of its weight. Section 5 can certainly have no reference to a right of action brought by a miner to recover wages computed on the basis of screened coal, for he had such a right of action independent of the statute. But it was manifestly the purpose of the act to give the miner a right of action to recover his wages computed on the basis of coal weighed in accordance with the provisions of the law—that is, computed on the basis of coal weighed before screening—and that notwithstanding any contract to the contrary. This seems to me to be the plain, palpable, and obvious meaning of the statute.

In determining legislative intent we have the right to consider the nature of the demands upon the lawmakers which induced legislation for the remedy of an existing evil. We know that the demand for such legislation was based upon the claim that coal miners were not paid enough for their labor; that they were at the mercy of the operators, who, by screening the product, robbed them of a portion of the proceeds of their labor, which should have been paid for. The object was to right this wrong, and to this end the statute under consideration was passed. To rule otherwise is a wresting of obvious language from its purpose. No clamor rang in the ears of the lawmakers from oppressed and starving miners demanding a law which would furnish them with statistics, when they were crying for bread.

As against the remote probability that the act, as interpreted by the

majority, will result in any benefit to the miner is the certainty that the public at large will suffer by its enforcement if the quantity or ton rate of payment prevails. The total output of coal in the State for the year 1898 was, in round numbers, 3,860,000 tons. It is estimated that about one-third of the production is slack coal, which goes through the screens. The cost of this compulsory weighing must be added to the price of the fuel, which the consumer (the public) is compelled to pay in order that it may be known with mathematical certainty how many tons the mines of the State have yielded. This tribute is exacted from the consumers of Kansas coal to satisfy the contention that the law contemplates some other object than the regulation of wages.

In justifying this legislation as a proper exercise of the police power, I think that power has been unwarrantably extended. Such power must have relation to the health, comfort, safety, or necessities of the people. It can not include matters which are connected merely with the convenience of the public. In the case of *Millett v. People* (Ill. Sup.), 7 N. E., 631-636, the supreme court of Illinois passed upon the validity of an act quite similar to this, relating to the weighing of coal at the mines. In holding the law unconstitutional, as infringing upon the right to contract, the court answered the argument that the act might be defended on the ground that it required the keeping of a public record for the information of the public. Schofield, J., says: "We recognize fully the right of the general assembly, subject to the paramount authority of Congress, to prescribe weights and measures and to enforce their use in proper cases, but we do not think that the general assembly has power to deny to persons in one kind of business the privilege to contract for labor and to sell their products without regard to weight, while at the same time allowing to persons in all other kinds of business this privilege, there being nothing in the business itself to distinguish it in this respect from any other kind of business. And we deny that the burden can be imposed on any corporation or individual, not acting under a license or by virtue of a franchise, of buying property and hiring labor merely to furnish public statistics, unless upon due compensation to be made therefor."

In my judgment the design of the framers has been misconstrued and perverted. A law thought by them to be endowed with strength and virility, aiming at the correction of abuses in the field of labor, has been disfigured by its interpreters, its true purpose denied. Strange and imaginary reasons are put forward as excuses for its existence, and explanations made of its utility which are highly fanciful and speculative. By a process of refined construction its original identity has been effectively destroyed, until recognition by its creators is now impossible.

EMPLOYERS' LIABILITY—CONSTRUCTION OF STATUTE—CONTRIBUTORY NEGLIGENCE—*Whitcomb v. Standard Oil Co.*, 55 *Northeastern Reporter*, page 440.—Action was brought in the circuit court of Porter County, Ind., by James E. Whitcomb against the above-named company to recover damages for injuries incurred by him while in the employ of said company. Judgment was rendered in favor of the defendant company, and the plaintiff, Whitcomb, appealed the case to

the supreme court of the State, which rendered its decision November 28, 1899, and affirmed the judgment of the lower court.

The opinion of the court was delivered by Chief Justice Hadley, and the syllabus of the same, which sufficiently shows the facts in the case, reads as follows:

Plaintiff, a brakeman in defendant's employ, whose hand was mashed by being caught between deadwoods while coupling cars in defendant's yard, testified that there was nothing to prevent his seeing that both the cars coupled had deadwoods, and that he could have seen the deadwoods perfectly if he had looked. *Held*, that his injury might have been avoided by the exercise of due care.

Coemployees' liability act (Act 1893, page 294), section 1 [section 7083, Annotated Statutes of 1894], which makes every railroad or other corporation operating in the State liable for damages for personal injury suffered by any employee while in its service who is in the exercise of due care and diligence, when such injury is caused by any defect in the plant, tools, or machinery in use by such corporation, which is the result of negligence; or when such injury results from the negligence of any person in the service of such corporation to whose order the injured employee was bound to conform, and did conform, does not relieve an employee of any such company from that caution and care of himself required by the common law.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—BREACH OF MASTERS' DUTY—FELLOW-SERVANTS, ETC.—*Kansas City, Fort Scott and Memphis Railroad Co. v. Becker*, 53 *Southwestern Reporter*, page 406.—Action was brought by William Becker against the above-named railroad company for personal injuries sustained by him while in the employ of the defendant as a locomotive fireman. The evidence showed that he was injured by the turning of the step on the left-hand side of his engine as he jumped upon it in order to get on the engine cab, the engine being at the time in motion. A judgment in favor of the plaintiff, Becker, was rendered in the circuit court of Craighead County, Ark., and the defendant company appealed the case to the supreme court of the State, which rendered its decision June 17, 1899, and affirmed the decision of the lower court.

From the opinion of the supreme court, delivered by Judge Battle, the following is quoted:

The maintenance of the steps in good repair and safe condition was intrusted to two employees of the defendant. It was the duty of the engineer, when his engine was on the road and away from Thayer, to examine and keep the steps in safe condition by means of the tap at the end of the rod, for which purpose he was provided with the necessary tools. It was also his duty, when he ran his engine into the roundhouse at Thayer, where the engines operated on the road between Thayer and Memphis, on their return from the latter place, were inspected and repaired, to report any defects in his engine which

needed repairing, and blanks were furnished him for the purpose. At Thayer was a machinist, named Johnson, whose duty it was to inspect the lower part of the locomotives, including the steps, when they came in, as a protection against any neglect of the engineer. Johnson also made repairs. The bad condition of engine numbered 30, if attributed to the fault of any one, was due to the negligence of one or both of these employees.

The railroad of appellant is built and operated in part in this State. In regard to such railroads the constitution provides as follows: "All railroads which are now or may hereafter be built and operated, either in whole or in part, in this State, shall be responsible for all damages to persons and property, under such regulations as may be prescribed by the general assembly." (Article 17, section 12.)

The court here recited in full sections 6249 and 6250 of the Digest of Arkansas, the law regulating the liability of railroad corporations for injuries of their employees, and then continued as follows:

The effect of these statutes is to limit the risk assumed by an employee on account of the acts or omissions of persons in the service of the same employer to the neglect of those who are fellow-servants within the meaning of the statutes, and to impose upon the master the duty to protect him against the neglect of all other fellow-employees in the discharge of their duties, and to render the employer liable in damages for injuries suffered on account of the failure to discharge this duty.

The appellant was and is subject to and governed by these statutes, and is liable to its employees in tort for injuries caused by the failure to discharge any duties growing out of them.

At the request of the appellant, and with the consent of the appellee, the court instructed the jury that Bennett, the engineer, and appellee, the fireman [Becker] were fellow-servants at the time the injury occurred. Now appellant's counsel says: "If we admit * * * that Bennett, the engineer, did not inspect this step at Memphis, and did not apply the usual test to ascertain its condition, and that he was negligent, it being admitted in this case by the record that Bennett and the plaintiff were fellow-servants, then we submit that there is no room for reasonable minds to differ on the proposition that Bennett's negligence was the direct and promoting cause of this injury, because, but for his negligence (admitting that he was negligent, and admitting that the step was defective at Memphis), the injury could not have happened, and his negligence, if he was negligent, was not a contributing cause, but was the direct, immediate, last moving, and approximate cause of the accident." * * * But this is not correct. The trial court told the jury that if they found that the step by which the appellee was injured was defective, that Johnson negligently failed to discover that it was in that condition, that his negligence contributed to the injury, and that he was not a fellow-servant of Becker, to return a verdict in favor of appellee. If such findings were true, Johnson's negligence was a proximate cause of the injury; for there is no evidence that he fastened the step when the engine was at Thayer, the last time before the accident occurred. He testified that he did not. The failure of the engineer to fasten the step did not render the negligence of Johnson harmless or less effective, but left it free to

work the injury it was lying in wait to inflict. The injury was probably the result of the concurring negligence of the two employees, and may not have occurred in the absence of either. It is no defense, however, for the appellant to prove that the negligence of the engineer contributed to it.

The court here stated in effect that the company complained because the lower court refused to instruct the jury that the plaintiff and Johnson, the machinist, were fellow-servants, and that therefore the company was not liable for the negligence of Johnson, and then continued as follows:

Were Johnson and Becker fellow-servants? Under the statutes of this State four conditions must concur to constitute different employees of the same railroad company fellow-servants: First, they must be engaged in the common service of the railway company. Second, while so engaged they must be working together to a common purpose. Third, neither of them must be intrusted by the railway company with any superintendence or control over their fellow-employees. Fourth, they must be engaged in the same department of service.

Did the relations of Johnson and Becker conform to all these conditions? Johnson was an inspector and repairer of all appellant's engines at Thayer, about 50 or 60 in number, and Becker was a fireman on one of them. Johnson's duty was to inspect the engines in the roundhouse, and make such repairs as he could in the way of screwing up bolts and nuts and putting in springs and other work. His [Becker's] chief duties were performed on his engine while on the road. Johnson was in the mechanical department, and subject to the authority of the roundhouse foreman, and Becker, while on the road in the discharge of his duties, was in the transportation department, and subject to the authority of the superintendent of the same. As they were not working together in the same department at the time the accident occurred, it follows that they were not fellow-servants at the time when Becker was injured, and that the instruction asked for by the appellant to the contrary effect was properly refused. Judgment affirmed.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—CONSTRUCTION OF STATUTE—*Benson v. Chicago, St. Paul, Minneapolis and Omaha Ry. Co.*, 80 *Northwestern Reporter*, page 1050.—This action was brought in the district court of Hennepin County, Minn., by Andrew Benson to recover damages from the above-named railway company for injuries incurred while in its employ. His right to such damages depended upon the construction of a section of chapter 220 of the acts of Wisconsin of 1893, which reads as follows:

Every railroad or railway company operating any railroad or railway, the line of which shall be in whole or in part within this State, shall be liable for all damages sustained within this State by any employee of such company, without contributory negligence on his part; first, when such injury is caused by any defect in any locomotive, engine, car, rail, track, machinery, or appliance required by said company to be

used by its employees in and about the business of such employment, when such defect could have been discovered by such company by reasonable and proper care, tests, or inspection, and proof of such defect shall be presumptive evidence of knowledge thereof on the part of such company; second, or while any such employee is so engaged in operating, running, riding upon, or switching passenger or freight or other trains, engines, or cars, and while engaged in the performance of his duty as such employee, and which such injury shall have been caused by the carelessness or negligence of any other employee, officer, or agent of such company in the discharge of, or for failure to discharge his duties as such.

The district court rendered a judgment for the defendant company after a hearing, and Benson appealed the case to the supreme court of Minnesota, which rendered its decision December 11, 1899, and affirmed the decision of the lower court.

The opinion of the supreme court was delivered by Judge Brown, and the syllabus of the same, which clearly states the facts in the case, reads as follows:

Defendant was engaged in repairing its track at a point in the State of Wisconsin, and employed a large number of men in and about such work, including plaintiff. Boarding cars were kept and maintained at or near the work, at which such employees were boarded and lodged. As the work progressed the men became farther removed from the boarding cars, and at their request and for their convenience defendant furnished them hand cars on which to transport themselves to and from their work. Defendant did not manage the boarding cars, nor operate nor have control of the hand cars. Such hand cars were operated exclusively by the men, and they had full charge and control thereof. A collision occurred between two of such hand cars while the men were transporting themselves thereon to the boarding cars for their dinner, and plaintiff was injured. The collision was caused by the negligence of the employees in charge of one of such cars, and plaintiff was free from fault. *Held*, that the employees were not, within the purpose and meaning of chapter 220, Laws Wis., 1893, at the time of such collision and injury, engaged in the discharge of their duties under their employment, and defendant is not liable.

DECISIONS UNDER COMMON LAW.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—DUTIES OF THE MASTER—*Galveston, Houston and San Antonio Ry. Co. v. Hughes et ux.*, 54 *Southwestern Reporter*, page 264.—Edward P. Hughes and wife brought suit in the district court of El Paso County, Tex., to recover damages for the death of their son, W. E. Hughes, who was killed while in the employment of the above-named railroad company. A judgment was rendered for the plaintiffs, and the company appealed the case to the court of civil appeals of the State, which rendered its decision November 1, 1899, and affirmed the decision of the district court.

The opinion was delivered by Judge Fly, and from the same the following, sufficiently stating the facts in the case, is quoted:

The deceased, an inexperienced young man, whose inexperience was known to appellant, applied for and obtained from appellant employment in its switch yard in El Paso. About two hours after his employment deceased, while performing the duties incumbent upon him, got his foot fastened in an unblocked frog and was run over and crushed in such a manner by appellant's cars that he died.

The testimony clearly demonstrated that deceased had been in the employ of appellant about two hours at the time of his death; that he was inexperienced and unacquainted with the dangers of his employment, and that appellant knew of his inexperience. The rule is: "If there are any dangers, either latent or patent, of which the master has knowledge, either actual or presumed, which the employee, either from his youth, inexperience, want of skill, or other cause, does not, or is presumed not to, understand or comprehend, they must be made known to him by the master; and this duty of the master is the same as to the machinery or appliances used or to be used by him. It is presumed that the master, or the person placed in charge of a hazardous business or department thereof, is familiar with the dangers, latent or patent, ordinarily accompanying the business which he has in charge. The obligation is not discharged by informing the servant generally that the service in which he is engaged is dangerous, and more especially is this so when the servant is a person who neither by experience nor by education has, or would be likely to have, any knowledge of the perils of the business, either latent or patent. In such case the servant should be informed not only that the service is dangerous, but of the perils of a particular place and the particular or peculiar dangers that attend the service, if any." (Bailey, Mast. Liab., pages 111, 112.)

Ordinarily a person who accepts employment from another assumes all ordinary risks incident thereto and can not recover for injuries resulting therefrom; and doubtless, in the absence of knowledge on the part of the employer of an applicant for employment coming within the exceptions furnished by youth, inexperience, or want of skill, the employer could assume that he was not within the exceptions, and would not be under obligations to warn him of the dangers incident to his employment; but in this case appellant knew deceased was inexperienced, and its yard master recognized the necessity of instructing him as to the work, but for some reason failed to do it.

It was in proof, and we find, that unblocked frogs and guard rails are dangerous to persons working in switch yards, and that this was unknown to deceased and was known to appellant, but it gave no warning to deceased, although it knew him to be inexperienced. The evidence was sufficient to establish negligence on the part of appellant, and that deceased was not guilty of contributory negligence.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—FELLOW-SERVANTS, ETC.—*New England Railroad Co. v. Conroy*, 20 *Supreme Court Reporter*, page 85.—This was an action against the above-named railroad corporation brought by one Conroy, a brakeman in its employ,

to recover damages for personal injuries caused by the negligence of the conductor of one of its trains. It was brought before the Supreme Court of the United States upon a certificate from the United States circuit court of appeals for the first circuit for answer to questions as to whether a conductor was (1) a fellow-servant of a brakeman, or (2) whether he was a vice-principal, for whose negligence his employer is responsible.

The decision of the Supreme Court was rendered December 4, 1899, to the effect that the conductor and brakeman aforesaid were fellow-servants. In the opinion of the Supreme Court, Mr. Justice Shiras, who delivered the same, laid down the common-law rule of fellow-servants or coemployees as interpreted by the court, and the following is quoted therefrom:

There is a general rule of law, established by a great preponderance of judicial authority in the English and in the State and Federal courts, that one who enters the service of another takes upon himself the ordinary risks of the negligent acts of his fellow-servants in the course of the employment. But there have been conflicting views expressed in the application of this rule in cases where the employer is a railroad company or other large organization, employing a number of servants engaged in distinct and separate departments of service; and our present inquiry is whether the relation between the conductor and the brakeman of a freight train is that of fellow-servants, within the rule, or whether the conductor is to be deemed a vice-principal, representing the railroad company in such a sense that his negligence is that of the company, the common employer.

Unless we are constrained to accept and follow the decision of this court in the case of *Chicago, M. and St. P. R. Co. v. Ross*, 112 U. S., 377; 28 L. Ed., 787; 5 Sup. Ct. Rep., 184, we have no hesitation in holding, both upon principle and authority, that the employer is not liable for an injury to one employee occasioned by the negligence of another engaged in the same general undertaking; that it is not necessary that the servants should be engaged in the same operation or particular work; that it is enough to bring the case within the general rule of exemption if they are in the employment of the same master, engaged in the same common enterprise, both employed to perform duties tending to accomplish the same general purposes, or, in other words, if the services of each in his particular sphere or department are directed to the accomplishment of the same general end; and that, accordingly, in the present case, upon the facts stated, the conductor and the injured brakeman are to be considered fellow-servants within the rule.

At this point the court cited and quoted from several of the cases in which the above principles were enunciated, and then continued in the following language:

Without following further the history of this subject in the courts of the several States, we may state that, generally, the doctrine there upheld is that of the cases herein previously cited, except in the courts of the States of Ohio, Kentucky, and perhaps others, in which the rule seems to obtain that while the master is not liable to his servant for any injury committed by a servant of equal degree in the same

sphere of employment, unless some negligence is fixed on the master personally, yet that he is liable for the gross negligence of a servant superior in rank to the person injured, and is also liable for the ordinary negligence of a servant not engaged in the same department of service.

Leaving the decisions of the State courts and coming to those of this court, we find the latter to be in substantial harmony with the current of authority in the State and English courts. From this statement the case of *Chicago, M. and St. P. R. Co. v. Ross*, 112 U. S., 377; 28 L. Ed., 787; 5 Sup. Ct. Rep., 184, must perhaps be excepted, and to it we shall revert after an examination of our other cases.

The court here referred to and quoted from a number of leading cases decided by itself, and then continued as follows:

Without attempting to educe from these cases a rule applicable to all possible circumstances, we think that we are warranted by them in holding in the present case that, in the absence of evidence of special and unusual powers having been conferred upon the conductor of the freight train, he, the engineer, and the brakeman must be deemed to have been fellow-servants within the meaning of the rule which exempts the railroad company, their common employer, from liability to one of them for injuries caused by the negligence of another. This conclusion is certainly sound unless we are constrained to hold otherwise by the decision in *Chicago, M. and St. P. R. Co. v. Ross*, 112 U. S., 377; 28 L. Ed., 787; 5 Sup. Ct. Rep., 184, already referred to.

In so far as the decision in the case of *Ross* is to be understood as laying it down, as a rule of law to govern in the trial of actions against railroad companies, that the conductor merely from his position as such is a vice-principal, whose negligence is that of the company, it must be deemed to have been overruled, in effect if not in terms, in the subsequent case of *Baltimore and O. R. Co. v. Baugh*. [149 U. S., 368; 13 Sup. Ct. Rep., 914.]

At this point the court quoted quite largely from the opinion of the court in the *Baugh Case*, above, delivered by Mr. Justice Brown, and then continued as follows:

Accordingly the conclusion reached was that, although the party injured was a fireman, who was subject to the orders and control of the engineer, in the absence of any conductor, there was no liability on the company for negligence of the ad interim conductor.

That this reasoning and conclusion were inconsistent with those in the *Ross Case* is not only apparent on comparing them, but further appears in the dissenting opinion in the *Baugh Case* of Mr. Justice Field, who was the author of the opinion in the case of *Ross*.

To conclude, and not to subject ourselves to our own previous criticism of proceeding upon assumptions not founded on the evidence in the case, we shall content ourselves by saying that, upon the facts stated and certified to us by the judges of the circuit court of appeals, we can not, as a matter of law, based upon those facts and upon such common knowledge as we, as a court, can be supposed to possess, hold a conductor of a freight train to be a vice-principal within any safe definition of that relation. Accordingly we answer the first question put to us in the affirmative and the second question in the negative.

Mr. Justice Harlan delivered a dissenting opinion in language as follows:

I concurred in the opinion and judgment of this court in Chicago, M. & St. P. R. Co. v. Ross, 112 U. S., 377; 28 L. Ed., 787; 5 Sup. Ct. Rep., 184, and do not now perceive any sound reason why the principles announced in that case should not be sustained. In my judgment the conductor of a railroad train is the representative of the company, in respect to its management; all the other employees on the train are his subordinates in matters involved in such management, and for injury received by any one of those subordinates during the management of the train, by reason of the negligence of the conductor, the railroad company should be held responsible. As the conductor commands the movements of the train, and has general control over the employees connected with its operation, the company represented by him ought to be held responsible for his negligence resulting in injury to other employees discharging their duties under his immediate orders. If in such case the conductor be not a vice-principal, it is difficult to say who among the officers or agents of a corporation sued by one of its employees for personal injuries ought to be regarded as belonging to that class. Having these views, I am compelled to withhold my assent from the opinion and judgment in this case.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—NEGLIGENCE OF INDEPENDENT CONTRACTOR—*Norfolk and Western Railway Company v. Stevens*, 34 *Southeastern Reporter*, page 525.—Action was brought in the hustings court of Roanoke, Va., by Charles R. Stevens, administrator of the estate of Joseph Stevens, deceased, to recover damages from the above-named railroad company for the death of said Stevens while in its employ as a locomotive fireman, caused by the negligence of the Phoenix Bridge Company, which was putting in a new bridge over a river under a contract with the railroad company. A judgment was rendered for the plaintiff, and the defendant company carried the case upon writ of error before the supreme court of appeals of the State, which rendered its decision November 16, 1899, and reversed the judgment of the lower court upon the ground, among others, that where it is the custom of railroad companies to have certain work, not essentially hazardous, done by independent contractors, and ordinary care is used in the selection of such contractor, the railroad company can not be held responsible for injuries resulting to its employees through the negligence of such independent contractor, since the railroad company is not an insurer of the safety of its employees, but is bound only to exercise ordinary care for their safety.

The opinion of the court, delivered by Judge Keith, reads, upon this point, as follows:

It is shown in the evidence that it is the general custom of railroad companies to construct bridges as was done in this case, and that it is

not an essentially hazardous undertaking; that while it requires care to substitute a new bridge for an old one without the interruption of traffic, with ordinary care it may be done with entire safety. It further appears that the Phoenix Bridge Company is an established and reputable concern, largely engaged in such work, and has the confidence of the business public. As we have before said, the contract between the bridge company and the railroad company seems carefully to have guarded, as far as human foresight could do, against the dangers incident to the work. If the bridge company had complied strictly with its contract, the accident would not have occurred. It was due to the removal of the false work before a sufficient number of rivets had been put into the new bridge to sustain the train that undertook to pass over it. But the railroad company is not responsible for the negligence of the Phoenix Bridge Company. It is responsible only for its own negligence and that of its agents and employees, while the Phoenix Bridge Company was an independent contractor.

The railroad company is not an insurer of the safety of its employees. It is bound by law only to exercise ordinary care for their safety, no matter how hazardous the business may be in which the servant is engaged, and the degree of care in the particular case is to be ascertained by the general usages of the business.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—RELEASE OF CLAIM FOR DAMAGES—CONSIDERATION—*Potter v. Detroit, Grand Haven and Milwaukee Railway Co., 81 Northwestern Reporter, page 80.*—In the circuit court of Shiawassee County, Mich., Frank A. Potter recovered a judgment in a suit brought by him against the above-named railway company for damages for injuries incurred by him while in its employ. The company then appealed the case to the supreme court of the State, which rendered its decision December 12, 1899, and affirmed the judgment of the lower court.

In the opinion of the supreme court, delivered by Judge Montgomery, the following, showing an interesting point decided in the case, appears:

Some time after plaintiff received his injuries, and on October 31, 1892, he signed a release reciting that he had received certain injuries, as follows: "At Milwaukee Junction, while riding on a ladder of car, was knocked off by a post standing a little west of the road crossing, cutting my head and bruising my shoulder;" and, after reciting that the company denied liability, for the purpose of determining and ending the question of liability and to avoid litigation, in consideration of reemployment by the company, the release proceeds: "I do hereby waive and relinquish all claims that I may have against the said company for damages for the aforesaid injuries, and do hereby release the said company of and from all claims as aforesaid." The recited consideration for this release is "the reemployment by said company for such time only as may be satisfactory to the said company." The testimony shows that at the time when the release was signed the plaintiff was already again in the defendant's employ. No change as

to the terms of employment was made, nor was the defendant company bound to retain him in its employ for any length of time whatever. There was no consideration for the release. We discover no material error. The judgment should be affirmed.

EMPLOYERS' LIABILITY—RAILROAD COMPANIES—VICE-PRINCIPALS—
Galveston, Houston and San Antonio Railway Company v. Robinett, 54 Southwestern Reporter, page 263.—Action was brought in the district court of Bexar County, Tex., by D. C. Robinett against the above-named railroad company to recover damages for injuries incurred by him while in the employ of said company as a brakeman. He was injured in a collision of the train he was working on with another, through the negligence either of the superintendent of the road in issuing orders to the trains or of those immediately in charge of the trains. Besides showing the above, the testimony also showed that the plaintiff, Robinett, was not guilty of any negligence proximately contributing to his injury.

A judgment was rendered in his favor and the defendant company appealed to the court of civil appeals of the State, which rendered its decision November 29, 1899, and affirmed the judgment of the lower court. Judge Neill, in delivering the opinion of the court, spoke in part as follows:

But, apart from the question of orders, the undisputed evidence shows that a vice-principal of plaintiff caused the collision. Robinett was the brakeman, having no control over the train, and knowing nothing about the orders which controlled it. The conductor had absolute control over him, and ordered the train out. It could make no difference, so far as Robinett was concerned, whether the collision was brought about by improper orders from the superintendent or by the negligence of those in immediate charge of the trains. None of these parties were his fellow-servants, and the company was liable to him for the negligence of any or all of them.

LAWS OF VARIOUS STATES RELATING TO LABOR ENACTED SINCE JANUARY 1, 1896.

[The Second Special Report of the Department contains all laws of the various States and Territories and of the United States relating to labor in force January 1, 1896. Later enactments are reproduced in successive issues of the Bulletin from time to time as published.]

ARIZONA.

ACTS OF 1899.

ACT No. 19.—*Trade-marks of trade unions, etc.*

SECTION 1. Whenever any corporation, association, or union of workingmen have adopted or shall hereafter adopt for its or their protection any label, trade-mark, or form of advertisement announcing that goods to which such label, trade-mark, or form of advertisement shall be attached were manufactured by it or by a member or members of such union, it shall be unlawful for any person or corporation to counterfeit or imitate such label, trade-mark, or form of advertisement. Every person violating this section shall, upon conviction, be punished by imprisonment in the county jail for not less than three months nor more than one year, or by a fine of not less than one hundred dollars nor more than two hundred dollars, or by fine and imprisonment.

SEC. 2. Every person who shall use any counterfeit or imitation of any label, trade-mark, or form of advertisement of any such corporation, union, or association, knowing the same to be counterfeit or imitation, shall be guilty of a misdemeanor, and shall be punished by imprisonment in the county jail for a term of not less than three months nor more than one year, or by a fine of not less than one hundred dollars nor more than two hundred dollars, or by both.

SEC. 3. Every such association, union, or corporation that has heretofore adopted or shall hereafter adopt a label, trade-mark, or form of advertisement, as aforesaid, shall file the same in the office of the secretary of the Territory, by leaving two copies, counterparts or facsimiles thereof, with the secretary of the Territory. Said secretary shall deliver to such corporation, association, or union so filing the same a duly attested certificate of the record of the same, for which he shall receive a fee of three dollars; such certificate of record shall in all suits and prosecutions under this act be sufficient proof of the adoption of such label, trade-mark, or form of advertisement, and the right of said union, corporation, or association to adopt the same.

SEC. 4. Every person who shall use or display the genuine label, trade-mark, or form of advertisement of any such association, corporation, or union in any manner not authorized by such association, corporation, or union shall be deemed guilty of a misdemeanor, and shall be punished by imprisonment in the county jail not less than three months nor more than one year, or by a fine of not less than one hundred dollars nor more than two hundred dollars, or both.

SEC. 5. Any person or persons who shall in any way use the name or seal of any such association, corporation, or union, or officer thereof, in and about the sale of goods, or otherwise, not being authorized to use the same, shall be guilty of a misdemeanor, punishable by imprisonment in the county jail of not less than three months nor more than one year, or by a fine of not less than one hundred dollars nor more than two hundred dollars, or both.

SEC. 6. It shall be the duty of the secretary of the Territory to see that all associations, unions, or corporations enjoying the benefits of labels, trade-marks, or forms of advertisement herein described shall comply with the foregoing provisions in all respects.

SEC. 7. This act shall take effect and be in force from and after its passage.

Approved March 6, 1899.

ACT No. 34.—*Convict labor.*

SECTION 1. When any person shall be lawfully sentenced for a misdemeanor by any district court or justice of the peace to serve a certain number of days in any

county jail in this Territory, it shall be competent for the court awarding such sentence to incorporate therein a provision that the person so sentenced shall be kept at hard labor during the term of such sentence, or for any specified portion thereof as may be adjudged by said court.

SEC. 2. It shall be the duty of the keepers of said several jails within said Territory, when any such person shall be sentenced to hard labor therein, and any mode of labor shall be provided, to cause such prisoner to be kept constantly employed during every day, Sunday excepted, and when such prisoner is discharged to report to the board of supervisors of such labor, and in all such cases it shall be lawful for said custodian of such prisoner, with the consent of the board of supervisors of such county in which such jail may be situated, to provide labor for such prisoners, if they deemed it expedient and profitable to do so, either inside of said jail or outside of its limits.

SEC. 3. The several keepers of said [county] jails shall respectively have power, with the consent of the board of supervisors of said county, from time to time to cause such of the prisoners under their charge as are capable of hard labor to be employed on any of the public avenues, streets, highways, or other works, where the same will not conflict in any manner or form with free labor in the county in which such prisoners shall be confined.

In any case tried before a justice of the peace of any precinct, and the party so tried and convicted for a petit offense, and sentence given not to exceed thirty days within the jurisdiction of a justice court, and provided the party so convicted is in a precinct having a subcounty jail or calaboose, it shall be lawful for such party so convicted to be employed upon the highways, public roads or streets or avenues of the precinct in which the offense was committed.

SEC. 4. It shall be the duty of the several road overseers of this Territory to receive and work prisoners sentenced to hard labor as heretofore provided and ordered to be employed by the board of supervisors of his county, and said overseer is hereby made a special constable to regulate and control such prisoners so turned over to him for the purposes of this act, provided that such overseer shall not receive any additional compensation to that which he receives as road overseer when working such prisoners.

SEC. 6. Whenever any prisoner who shall be sentenced by any of the courts aforesaid to pay a fine, and to be committed until paid, shall be employed at hard labor pursuant to the foregoing provisions, he shall be allowed the sum of one dollar for each day's labor, to be credited on such fine, and when he shall have earned the amount of such fine he shall be discharged.

SEC. 7. All acts and parts of acts in conflict with this act are hereby repealed.

SEC. 8. This act shall take effect and be in force from and after its passage.

Approved March 14, 1899.

FLORIDA.

ACTS OF 1899.

CHAPTER 4762.—*Seats for employees in mercantile and other business establishments.*

SECTION 1. All merchants, storekeepers, and employers of male or female clerks, salesmen, cash boys, or cash girls, or other assistants in mercantile or other business pursuits requiring such employees to stand or walk during their active duties, be, and are hereby, required to furnish, at their own cost or expense, suitable chairs, stools, or sliding seats attached to the counters or walls for the use of such employees when not engaged in their active work and not required to be on their feet in the proper performance of their several duties; and such merchants, storekeepers, and employers be, and are, required to permit their said employees to make reasonable use of said seats during business hours for purposes of necessary rest, and when such use will not interfere with humane or reasonable requirements of their employment.

SEC. 2. Any merchant, storekeeper, or employer refusing or neglecting to comply with the requirements of section 1 of this act shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished by a fine of not more than one hundred dollars or imprisonment not exceeding sixty days.

SEC. 3. All laws or parts of laws in conflict with any of the provisions of this act are hereby repealed.

SEC. 4. This act shall go into effect immediately upon its passage and signature by the governor.

Approved June 3, 1899.

CHAPTER 4769.—*Convict labor.*

SECTION 4. All persons confined, or who may hereafter be confined in the county jail under sentence of a court for crime, or imprisonment for the nonpayment of costs and fines, and all persons who have been sentenced or may hereafter be sentenced in such county to the county jail for a term of one year or less, shall be worked on the roads of the county: *Provided*, That in any case the number of such persons in any county at any time be less than five, the county commissioners of such county may arrange with the county commissioners of any other county, or counties, for such an exchange of prisoners as will enable each county to thereby increase the number of prisoners at work on its public roads at any given time: *Provided*, Nothing in this act shall be construed to require convicts to be worked upon the public roads when there is no contract between counties to this effect, and the number of such convicts in any county is, in the opinion of the county commissioners, insufficient to justify the employment of guards to work them.

SEC. 5. When the county commissioners of any county shall have made provisions for the expenses of supporting and guarding, while at work on the public roads, a larger number of prisoners than can be supplied from that county, upon the application of the county commissioners of such county, the county commissioners of any other county which has not otherwise provided for the working of their convicts, or otherwise disposed of their convicts, or may hereafter dispose of their convicts, shall deliver to said county, or counties, applying for same, in the order of their application, such convicts as may be confined in the county jail, or hereafter be sentenced to such county jail: *Provided*, That the costs of guarding and maintaining such prisoners shall be paid by the county applying for and receiving the same: *Provided*, That any and all such prisoners from such other counties may, at any time, be returned to the sheriff of such other counties, at the expense of the county having received and used them: *Provided further*, That no convicts shall be sent out of the county in which they have been convicted and sentenced to work to any other county unless a contract for that purpose shall have been entered into by the boards of county commissioners of the respective counties, and arrangements made for their safe-keeping, proper care, and safe return by the employing counties to the county or counties from which such prisoners were sentenced.

SEC. 10. This act shall be in force from and after its approval by the governor.

Approved June 3, 1899.

IDAHO.

ACTS OF 1899.

Appointment and importation of nonresidents as peace officers prohibited.

(Page 9.)

SECTION 1. The governor, the sheriff of any county, any United States marshal or deputy United States marshal, mayor of a city, or other person authorized by law to appoint special deputy sheriffs, special constables, marshals, policemen, or other peace officers in this State to preserve the public peace and prevent or quell public disturbance, shall not hereafter appoint as such special deputy sheriff, special constable, marshal, policeman, or other peace officer any person who is not a citizen of the State of Idaho.

SEC. 2. Any person or persons who shall in this State unlawfully exercise or attempt to exercise the functions of, or hold himself or themselves out to anyone as, a deputy sheriff, marshal, policeman, constable, or peace officer, or any person, whether acting in his own behalf or as an officer of the law, or as the authorized or unauthorized agent or representative of another, or of any association, corporation, or company who shall bring or cause to be brought, or aid in bringing into this State any armed or unarmed police force or detective agency or force, or any armed or unarmed body of men for the suppression of domestic violence, shall be guilty of a felony, and, on conviction thereof, shall be punished by imprisonment in the State prison for not less than two (2) years and not more than five (5) years: *Provided*, That the legislature, or the executive when the legislature can not be convened, may call upon the lawfully constituted authorities of the United States for protection against invasion and domestic violence, as provided in section four (4), article four (4), of the Constitution of the United States.

SEC. 3. Any person, officer, company, association, or corporation who shall knowingly bring, or cause to be brought, or aid in bringing into this State any armed or

unarmed police force, detective agency or force, or armed or unarmed body of men for the suppression of domestic violence, shall be liable in a civil action to any person for any injury to person or property through the action or as the result of the coming or bringing into the State of such body of men, or any of them, whether acting together or separately in carrying out the purpose for which they were brought or came into the State.

SEC. 4. All acts and parts of acts inconsistent with this act are hereby repealed. *Provided*, That nothing contained in this act shall be construed to repeal by implication or otherwise any of the provisions of Chapter IV, of Title I, of Part II, of the penal code of the State.

SEC. 5. Whereas an emergency exists therefor this act shall take effect and be in force from and after its passage.

Approved February 2, 1899.

Convict labor—Penitentiary.

(Page 13.)

SECTION 2. The governor, the secretary of state, and attorney-general be, and the same are hereby, constituted a board of State prison commissioners, of which the governor shall be chairman, and said board shall have the control, direction, and management of the penitentiary of the State, and it shall be the duty of said board either by direct expenditure or by contract with a responsible person or persons to provide for the care, maintenance, and employment of all inmates confined or that may hereafter be confined in the State penitentiary: *Provided*, Said employment shall be within the limits of said penitentiary grounds, if such board shall provide by contract for the care, maintenance, and employment of the inmates of said penitentiary. Authority on behalf of the State is hereby vested with a majority of the members of said board to make and sign said contract and, in such manner as shall, in their judgment, appear to be for the best interests of the State, to arrange all the necessary details thereof, including the cost per diem to the State, the terms and time of payment, and the appointment and compensation of the warden and employees: *Provided*, That no contract shall be let to perform any labor which will conflict with any existing manufacturing industries in the State.

Said board shall have the power to make contract with the lowest responsible bidder, and shall have the privilege of rejecting any and all bids, and any such contract entered into shall provide that the discipline of the convicts shall be under the control of said board and the warden. And no contract shall be made which shall in any wise abridge or deprive the convicts of any privileges granted by law.

SEC. 7 (as amended by act approved March 9, 1899, page 433). The board shall have authority to use the labor of the convicts in the erection of a wall around the penitentiary buildings and grounds, and in the construction of irrigating and water ditches for the purpose of bringing water upon said penitentiary grounds as in the opinion of said board may be necessary for the proper cultivation of said grounds, and in making such other improvements and repairs to said buildings and grounds as they may deem proper and necessary, and in the performance of any labor in and about or in connection with the said penitentiary and penitentiary grounds or lands or works necessary for the improvement thereof.

SEC. 18. No officer or employee of the penitentiary shall be interested directly or indirectly in contracts for furnishing such penitentiary with provisions, clothing, or other articles to be used in any manner by the inmates or for the use of the institution; nor shall any or either of such officers be concerned in, or interested in any manner in contracts for buildings of any kind connected with the penitentiary, or for materials to be used in any such buildings, or in any contract for the labor of any convict; nor shall any officer or employee be permitted to receive in any way any perquisites for themselves or families, or any compensation or reward from any contractor or employee or other person. Should any officer or employee violate or willfully or negligently fail to observe the provisions and prohibitions of this section, he shall be at once dismissed from office by the board of commissioners; and further, upon conviction of such violation by a court of competent jurisdiction, he shall be fined a sum not exceeding one thousand dollars and not less than one month's pay, and shall forfeit his interest in any and all contracts or rewards which he may have received or agree to receive in violation of the provisions of this section.

SEC. 48. Whereas an emergency exists therefor this act shall take effect and be in force from and after its passage.

Approved February 2, 1899.

Employment of aliens on public works.

(Page 71.)

SECTION 3. No person not a citizen of the United States, or who has not declared his intention to become such, or who is not eligible to become such, shall be employed upon any State or municipal works; nor shall any such person be employed by any contractor to work on any public works of the State or any municipality: *Provided*, That any State prisoner may be employed within the State prison grounds and as provided in section 3, article 13, of the constitution.

SEC. 5. It shall hereafter be unlawful for any county government or municipal or private corporation organized under the laws of this State, or organized under the laws of another State or Territory or in a foreign country and doing business in this State, to give employment in any way to any alien who has failed, neglected, or refused, prior to the time such employment is given, to become naturalized or declare his intention to become a citizen of the United States.

SEC. 6. Whenever employment has been innocently given to any alien by any county government, municipal or private corporation mentioned in section 1 of this act, and complaint shall be made in writing by any person to the officers of the county government, or municipal corporation, or general manager, superintendent, foreman, or other agent of the private corporation, having charge or superintendency of the labor of such alien employee, that such employee is an alien, he shall forthwith discharge such employee from employment unless said employee shall produce his declaration to become a citizen, or his certificate of naturalization, or a duly certified copy thereof.

SEC. 7. Any public officer or any county government, or municipal corporation, or any general manager, superintendent, foreman, or other agent of any private corporation, or any contractor or agent of any company engaged in public work, who shall violate any of the provisions mentioned in this act, who shall knowingly give employment to any alien or who, having innocently given such employment, shall, on complaint being made to him by any person, fail or refuse to discharge any such employee forthwith on the failure or refusal of such employee to produce for his inspection and the inspection of the complainant his declaration of intentions to become a citizen, or certificate of naturalization as provided in section 2 of this act, shall be deemed guilty of a misdemeanor.

SEC. 8. Whereas an emergency exists this act shall take effect and be in force from and after its passage.

Approved February 2, 1899.

Hours of labor—Public works.

(Page 113.)

SECTION 1. Not more than eight hours actual work shall constitute a lawful day's work on all State, county, and municipal works: *Provided*, That nothing in this act contained shall be construed as meaning any labor except manual labor, employed by the day, and nothing in this act contained shall apply to State, county, or municipal officials, or to any employees of the State, or any county or municipality, who are paid monthly or yearly salaries.

SEC. 2. Any and all bids for work on public buildings or other public works of the State, or of any county or municipality of the State, shall expressly state and declare that all laborers and mechanics employed by the day on such buildings or public works, or in the preparation of materials to be directly used for or in the construction of such buildings or public works, shall be employed on the basis of eight hours as a lawful day's work.

SEC. 3. Whereas an emergency exists therefor this act shall take effect and be in force from and after its passage.

Approved February 6, 1899.

Repeal of act creating office of boiler inspector, etc.

(Page 180.)

SECTION 1. An act entitled "An act creating the office of boiler inspector for the State of Idaho and defining his duties, powers, and liabilities, and fixing his salary and mileage, and providing for the examination and licensing of engineers, and prescribing the duties and liabilities thereof," approved February 23, 1893, is hereby repealed.

Sec. 2. An emergency existing therefor this act shall be in force from and after its passage.

Approved February 9, 1899.

Injuring and obstructing railroads, etc.

(Page 182.)

SECTION 1. Any person or persons who shall willfully or maliciously place any obstruction on any railroad track or roadbed or street-car track in this State, or who shall loosen, tear up, remove, or misplace any rail, switch, frog, guard rail, cattle guard, or any part of such railroad track or roadbed or street-car track, or who shall tamper with or molest any such road, roadbed, or track, or who shall destroy or damage any locomotive, motor, or car on said track, or who shall otherwise interfere with the maintenance or operation of such road so as to endanger the safety of any train, car, motor, or engine, or so as to endanger or injure any passenger or person riding thereon or being about the same, shall, upon conviction thereof, be punished by imprisonment in the penitentiary for any term not exceeding twenty years nor less than five years.

Sec. 2. Any person or persons who shall within this State willfully or maliciously place any obstruction upon any railroad track or roadbed or street-car track, or shall misplace, remove, obstruct, detach, damage, or destroy any rail, switch, frog, guard rail, cattle guard, or any other part of such railroad track or roadbed or street-car track, or who shall otherwise interfere with the maintenance and operation of such road, thereby causing the death of any person, whether passenger or employee of such railroad, or street railway, or otherwise, shall, upon conviction thereof, be deemed guilty of a felony and be punished by imprisonment in the penitentiary for a term not less than five years and which may extend to the natural life of such person so found guilty, or may be tried and punished for murder; but this section shall not in any way lessen the liability of the railroad company where a wreck may hereafter occur in the State of Idaho.

Sec. 3. Whereas an emergency is declared to exist this act shall take effect and be in force from and after its approval by the governor.

Approved February 9, 1899.

Public printing to be done within the State.

(Page 183.)

SECTION 1. All printing, binding, and stationery work executed for or on behalf of the State, and for which the State contracts or becomes in any way responsible for, shall be executed within the State of Idaho, except as provided in section 3.

Sec. 2. All county printing, binding, and stationery work, executed for or on behalf of the several counties throughout the State for which the said counties contract or become in any way responsible, shall be executed within the county for which said work is done, when there are practicable facilities within the said county for executing the same; but when it shall become necessary, from want of proper facilities, to execute the work without the said county, then the same shall be executed at some place within the State of Idaho, except as provided in section 3.

Sec. 3. Whenever it shall be established that any charge for printing, binding, or stationery work is in excess of the charge usually made to private individuals for the same kind and quality of work, then the State or county officer or officers having such work in charge shall have power to have such work done outside of said county or State, but nothing in this act shall be construed to oblige any of said officers to accept any unsatisfactory work.

Sec. 4. All contracts entered into in violation of the provisions of this act shall be void.

Sec. 5. All acts or parts of acts in conflict with the provisions of this act are hereby repealed.

Sec. 6. Whereas an emergency exists therefor this act shall take effect and be in force from and after its passage.

Approved February 9, 1899.

Protection of employees as members of labor organizations.

(Page 221.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to make or enter into any agreement, either oral or in writing, by the terms of which any

employee of such person, firm, or corporation, or any person about to enter the employ of such person, firm, or corporation, as a condition for continuing or obtaining such employment, shall promise or agree not to become or continue a member of a labor organization.

SEC. 2. Any person or persons or corporation violating the provisions of section 1 of this act shall be guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not less than fifty or more than three hundred dollars, or be imprisoned in the county jail for not more than six months, or by both such fine and imprisonment.

SEC. 3. Whereas an emergency exists therefor this act shall take effect and be in force from and after its passage.

Approved February 10, 1899.

Inspector of mines, etc.

(Page 221.)

SECTION 1. The office of inspector of mines for the State of Idaho is hereby created.

SEC. 2. The inspector of mines shall receive as full compensation for his services a salary of twelve hundred dollars per annum, and ten cents a mile for each mile actually traveled in the discharge of his official duties, and all necessary expenses for clerk hire, postage, stationery, printing, and the compensation of deputies: *Provided*, The total amount of such mileage and expense shall not exceed the sum of two thousand dollars for any one year; such compensation to be paid as the salary and fees of other State officers are paid. He shall hold his office for the term of two years, or until his successor is appointed and qualified. Before entering upon the discharge of his duties as inspector of mines he shall file an official bond in the sum of five thousand dollars, conditioned for the faithful performance of the duties of his office, in form and manner as are other official bonds of State officers.

SEC. 3. The inspector of mines shall not at the time of his appointment or any time during his term of office be an officer, director, or employee in or of any mining corporation in this State, or in or of any milling corporation in the State engaged in the business of smelting or reducing ores; and such inspector shall devote his whole time to the duties of his office and shall take and subscribe to the following oath:

State of Idaho, }
County of _____ } ss.

I, of _____ County, do solemnly swear that I will perform each and every duty required of me as inspector of mines for the State of Idaho; that I will at all times while acting in my official capacity fulfill the duties of such office according to law and to the best of my skill and understanding; that I will never at any time while holding the office of inspector of mines disclose to anyone, directly or indirectly, under any circumstances, any information relative to ore bodies, chutes, or deposits of ore, or the location, course, or character of underground workings, or give my opinion founded on any examination made in the performance of my official duties relative to the value of any mine or mining property, unless by permission of the person or persons in charge of the same, to all of which I pledge my sacred honor. So help me God.

Nothing in said oath, however, shall be construed to prevent such mining inspector from making full and complete statistical reports as required by law.

SEC. 4. It shall be the duty of the inspector of mines, at least once each year, to visit in person each mining county in the State of Idaho and examine all such mines therein as, in his judgment, may require examination for the purpose of determining the condition of such mines as to safety, and to collect information and statistics relative to mines and mining and the mineral resources of the State, and to collect, arrange, and classify mineral and geological specimens found in this State and to forward the same to the State school of mines.

SEC. 5. Said inspector shall have full power and authority, at all reasonable hours, to enter and examine any and all mines in this State, and shall have the right to enter into any and all mine stopes, levels, winzes, tunnels, shafts, drifts, crosscuts, workings, and machinery for the purpose of such examination; and the owner, lessor, lessee, agent, manager, or other person in charge of such mine or mines shall render the inspector such assistance as may be required by the inspector to enable him to make a full, thorough, and complete examination of each and every part of such mine or mines, and whenever, as a result of the examination of any mine (whether such examination is made in consequence of a complaint, as hereinafter provided, or otherwise) the inspector shall find the same to be in an unsafe condition, he shall at once serve or cause to be served a written notice upon

the owner, lessor, lessee, agent, manager, or other person in charge of such mine, stating in detail in what particular or particulars the mine is dangerous or insecure, and shall require all necessary changes to be made without delay, for the purpose of making said mine safe for the employees therein. Upon the neglect or refusal of any owner, lessor, lessee, agent, manager, or other person in charge so notified to comply with the requirements stated in such notice so served such owner, lessor, lessee, agent, manager, or other person in charge of such mine shall be deemed guilty of a misdemeanor, and is punishable by a fine of not more than five hundred dollars, and each day's continuance of such neglect or refusal shall be a separate offense, and in case of any criminal or civil proceeding at law against the party or parties so notified, on account of the loss of life, or bodily injury sustained by any employee subsequent to the service of such notice, and in consequence of a neglect or refusal to obey the inspector's requirement, a certified copy of the notice served by the inspector shall be prima facie evidence of the culpable negligence of the party or parties so notified.

SEC. 6. The inspector of mines shall be provided with a properly furnished office, at the statehouse in Boise City, Idaho, in which he shall carefully keep a complete record of all mines examined, showing the date of examination, the condition in which the mines were found, the manner and method of working, the extent to which the laws are obeyed, and what recommendations, if any, were ordered by the inspector.

It is hereby made the duty of the owner, lessor, lessee, agent, manager, or other person in charge of each and every mine, of whatever kind or character, within the State to forward to the inspector of mines at his office, not later than the first day of June in each year, a detailed report showing the character of the mine, the number of men then employed, and the estimated maximum number of men to be employed therein during the ensuing year, the method of working such mine and the general condition thereof, and such owner, lessor, lessee, agent, manager, or other person in charge of any mine within the State must furnish whatever information relative to such mine as the inspector of mines may from time to time require for his guidance in the proper discharge of his official duties.

SEC. 7. Whenever the inspector of mines shall receive a formal complaint in writing, signed by three or more persons, setting forth that the mine in which they are employed is dangerous in any respect, he shall, in person, visit and examine such mine: *Provided*, Every such formal complaint shall in all cases specifically set forth the nature of the danger existing at the mine and shall describe with as much certainty as is possible how much danger, apparent or real, renders such mine dangerous, and shall set forth the time when such danger was first observed, and shall distinctly set forth whether or not any notice of such defect or danger has been given by the complainants or anyone else to their knowledge to the superintendent or other person in charge of such mine, and if no such complaint has been made to such superintendent or other person in person the reason why it has not been made: *And provided further*, That all complaints shall be duly verified by the parties complaining before some officer authorized by law to administer oaths. After such complaint shall have been received by the inspector of mines, it shall be the duty of such inspector to serve a certified copy thereof, but without the names of the complainants, upon the owner, lessor, lessee, agent, manager, or other person in charge, and, as soon as possible after receiving such complaint to visit and examine such mine, and if from such examination he shall find such complaint to be just, he shall give notice in writing of the danger existing to the owner, lessor, lessee, agent, manager, or other person in charge thereof, and in such notice may, in his discretion, order such mine or workings in which such danger exists closed until such danger has been removed. The names of complainants complaining as in this section provided shall not under any circumstances be divulged to any person by said inspector, except such action be necessary in the administration of justice in the courts of the State.

SEC. 8. And it shall be the duty of the inspector of mines upon the neglect or refusal of any owner, lessor, lessee, agent, manager, or other person in charge of any mine or working, notified of the unsafe or dangerous condition of his mine, promptly to comply with the requirements of the notice served upon him, to at once notify the attorney-general of such neglect or refusal, and the attorney-general must thereupon immediately commence action in the name of the State against the party so notified for the recovery of the penalty mentioned in section 5, in any court of competent jurisdiction, and the amount so recovered shall be paid into the general school fund of the State and constitute a part thereof.

SEC. 9. With the consent and approval of the governor, the inspector of mines may appoint such deputy inspectors as in his judgment may be necessary. Such deputy inspectors shall be allowed as full compensation for all services five dollars per day for each day actually engaged in the performance of their duties.

SEC. 10. Whenever a serious or fatal accident shall occur in any mine in the State of Idaho, it shall be the duty of the owner, lessor, lessee, agent, manager, or other person in charge thereof, immediately and by the quickest means, to notify the inspector of mines or his deputy, as may be most convenient, of such accident; and upon receiving such notice the inspector or his deputy, or both, shall at once repair to the place of the accident and investigate fully the cause of such accident; and the inspector or his deputy shall be present at any coroner's inquest held over the remains of any person or persons killed in any such accident, and shall have power at such inquest to examine and cross-examine witnesses, and may have process to compel the attendance of necessary witnesses at such inquest. If the inspector or deputy inspector can not be immediately present in case of a fatal or serious accident occurring, it shall be the duty of the owner, lessor, lessee, agent, manager, or other person in charge of the mine in which such accident has occurred, to have statements made and verified by those witnessing such accident; in case of no person being present at the time of the accident, then the statement of those first present thereafter shall be taken, which statement shall be verified, and such verified statements shall be placed in the hands of the inspector or deputy inspector, upon the demand of such officer. Whenever any deputy inspector is present at any coroner's inquest and assists in the examination, he shall at the conclusion thereof at once prepare and forward to the inspector a full and detailed report of the accident, giving all information obtainable regarding the same.

SEC. 11. The duties of deputy inspectors shall only be such as are indicated in section 10 of this act; that is, to attend and act either with or in place of the inspector of mines in cases of accident, at the scene of such accident, and at coroner's inquests, and to make reports.

SEC. 12. The inspector of mines shall, on the first Monday of December of each year, file with the governor of the State a printed report giving:

First. A list of all accidents that have occurred during the year, the nature and cause of the same, together with the persons killed and injured.

Second. The number of mines visited or examined during the year; the number of mines in operation; the number of mines idle; the number of men employed; the wages paid, and the nationality of employees.

Third. The name and location of each mine in the State, which has been examined and from which the inspector has received a report as provided in section 6 of this act, and all data possible in regard to the manner of working the same; whether by shaft, tunnel, incline, or otherwise; the condition of the hoisting machinery, boilers, whims, engines, cars, buckets, ropes, and chains used in the mines; also the appliances used for the extinguishing of fires; the manner and method of working and timbering the shafts, drifts, inclines, stopes, winzes, tunnels, and upraises through which persons pass to and fro while engaged in their daily labor; the character of the exits from the mine, the methods of ventilation, and the system of signals used in the mine.

Fourth. The number and character of notices served, together with suggestions and recommendations made; the manner in which such suggestions and recommendations were complied with.

Fifth. The number of complaints received and actions therein.

Sixth. The number of prosecutions for neglect or refusal to comply with notices.

Seventh. A summary of the reports received from mine owners and deputy inspectors.

Eighth. A full statement containing all available statistical and other information calculated to exhibit the mineral resources of the State and to promote the development of the same.

Ninth. Generally, such other information and suggestions as may be deemed advisable.

SEC. 13. At the next general election held in this State, and biennially thereafter, the office of inspector of mines mentioned in this act shall be filled by election by the qualified electors of the State of Idaho as other State officers.

SEC. 14. An emergency existing therefor this act shall take effect and be in force from and after its passage.

Approved February 14, 1899.

Convict labor—Jails.

(Page 253.)

SECTION 1. Every male prisoner 18 years of age or over, who shall hereafter be legally imprisoned in any county jail upon conviction of misdemeanor, shall be liable to and shall be required to perform manual labor in and about the jail or court-house

of the county, for the betterment, improvement, cleanliness, or maintenance of the jail or court-house or the grounds upon which either of the same is located, not to exceed eight hours for each day of his imprisonment, Sundays and legal holidays excepted; and such manual labor to be so performed shall in all cases be taken and be deemed to be included in and a part of all judgments hereafter given or made directing the imprisonment of such persons in a county jail.

SEC. 2. The county commissioners of each county are hereby empowered, and it is their duty, to make orders and to prescribe proper rules and regulations consistent with economy and the safe guarding of such prisoners, for the employment of all prisoners referred to in the preceding section.

SEC. 3. The sheriff of each county is hereby required, and it is his duty, to faithfully observe and carry out all the orders, rules, and regulations of the county commissioners of his county, made or given for the employment of prisoners in his charge as herein provided.

SEC. 4. No prisoner liable to employment as herein provided shall be exempt therefrom except by reason of physical disability.

SEC. 5. Whereas an emergency exists this act shall take effect and be in force from and after its passage.

Approved February 14, 1899.

Trade-marks of trade unions, etc.

(Page 316.)

SECTION 1. Whenever any person, or any association or union of workingmen, has heretofore adopted or used, or shall hereafter adopt or use, any label, trade-mark, term, design, device, or form of advertisement for the purpose of designating, making known, or distinguishing any goods, wares, merchandise, or other products of labor, as having been made, manufactured, produced, prepared, packed, or put on sale by such person or association or union of workingmen, or by a member or members of such association or union, it shall be unlawful to counterfeit or imitate such label, trade-mark, term, design, device, or form of advertisement, or to use, sell, offer for sale, or in any way utter or circulate any counterfeit or imitation of any such label, trade-mark, term, design, device, or form of advertisement.

SEC. 2. Whoever counterfeits or imitates any such label, trade-mark, term, design, device, or form of advertisement, or sells, offers for sale, or in any way utters or circulates any counterfeit or imitation of any such label, trade-mark, term, design, device, or form of advertisement, or keeps or has in his possession with intent that the same shall be sold or disposed of, any goods, wares, merchandise, or other product of labor to which or on which any such counterfeit or imitation is printed, painted, stamped, or impressed; or knowingly sells or disposes of any goods, wares, merchandise, or other product 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; or keeps, or has in his possession, with intent that the same shall be sold or disposed of, any goods, wares, merchandise, or other product of labor 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 shall be guilty of a misdemeanor and be punished by a fine of not more than one hundred dollars, or by imprisonment for not more than three months.

SEC. 3. Every such person, association, or union that has heretofore adopted or used, or shall hereafter adopt or use, a label, trade-mark, term, design, device, or form of advertisement, as provided in section 1 of this act, may file the same for record in the office of the secretary of state, by leaving two copies, counterparts or facsimiles thereof, with said secretary, and by filing therewith a sworn application specifying the name or names of the person, association, or union on whose behalf such label, trade-mark, term, design, device, or form of advertisement shall be filed; the class of merchandise and a description of the goods to which it has been, or is intended to be, appropriated, stating that the party so filing, or on whose behalf such label, trade-mark, term, design, device, or form of advertisement shall be filed, has the right to the use of the same; that no other person, firm, association, union, or corporation has a right to such use, either in the identical form or in any such near resemblance thereto as may be calculated to deceive, and that the facsimiles or counterparts filed therewith are true and correct. There shall be paid for such filing and recording a fee of one dollar. Said secretary shall deliver to such person, association, or union so filing or causing to be filed any such label, trade-mark, term, design, device, or form of advertisement so many duly attested certificates of the recording of the same as such person, association, or union may apply for, for each of which certificates said secretary shall receive a fee of one dollar. Any such cer-

tificate of record shall, in all suits and prosecutions under this act, be sufficient proof of the adoption of such label, trade-mark, term, design, device, or form of advertisement. Said secretary of state shall not record for any person, union, or association any label, trade-mark, term, design, device, or form of advertisement that would probably be mistaken for any label, trade-mark, term, design, device, or form of advertisement theretofore filed by, or on behalf of, any other person, union, or association.

SEC. 4. Any person who shall for himself or on behalf of any other person, association, or union procure the filing of any label, trade-mark, term, design, or form of advertisement in the office of the secretary of state, under the provisions of this act, by making any false or fraudulent representations or declarations, verbally or in writing, or by any fraudulent means, shall be liable to pay any damages sustained in consequence of any such filing, to be recovered by or on behalf of the party injured thereby in any court having jurisdiction, and shall be guilty of misdemeanor and be punished by a fine not exceeding one hundred dollars or by imprisonment not exceeding three months.

SEC. 5. Every such person, association, or union adopting or using a label, trade-mark, term, design, device, or form of advertisement as aforesaid may proceed by suit to enjoin the manufacture, use, display, or sale of any counterfeits or imitations thereof, and all courts of competent jurisdiction shall grant injunctions to restrain such manufacture, and may award the complainant in any such suit damages resulting from such manufacture, use, sale, or display, as may be by the said court deemed just and reasonable, and shall require the defendants to pay to such persons, association, or union all profits derived from such wrongful manufacture, use, display, or sale, and such court shall also order that all such counterfeits or imitations in the possession or under the control of any defendant in such cause be delivered to an officer of the court, or to the complainant to be destroyed.

SEC. 6. Every person who shall use or display the genuine label, trade-mark, term, design, device, or form of advertisement of any such person, association, or union, in any manner, not being authorized so to do by such person, union, or association, shall be deemed guilty of a misdemeanor, and shall be punished by imprisonment for not more than three months or by fine of not more than one hundred dollars (\$100.00). In all cases when such association or union is not incorporated, suits under this act may be commenced and prosecuted by an officer or members of such association or union on behalf of, and for the use of such association or union.

SEC. 7. Any person or persons who shall in any way use the name or seal of any such person, association, or union, or officer thereof, in and about the sale of goods or otherwise, not being authorized to so use the same, shall be guilty of a misdemeanor, and shall be punishable by imprisonment for not more than three months or by a fine of not more than one hundred dollars.

SEC. 8. Whereas an emergency exists therefor this act shall be in force from and after its passage and approval.

Approved February 18, 1899.

Arbitration of labor disputes.

(Page 319.)

SECTION 1. The governor, with the advice and consent of the senate, shall, on or before the 4th day of March, eighteen hundred and ninety-seven [*sic*], appoint three competent persons to serve as a State board of arbitration and conciliation in the manner hereinafter provided. One of them shall be an employer or selected from some association representing employers of labor; one of them shall be selected from some labor organization and not an employer of labor; the third shall be appointed upon the recommendation of the other two: *Provided, however,* That if the two appointed do not agree on the third man at the expiration of thirty days, he shall then be appointed by the governor. On or before the 4th day of March, eighteen hundred and ninety-seven [*sic*], the governor, with the advice and consent of the senate, shall appoint three members of said board in the manner above provided; one to serve for six years, one for four years, and one for two years, or until their respective successors are appointed; and on or before the fourth day of March of each year during which the legislature of this State is in its regular biennial session thereafter, the governor shall in the same manner appoint one member of said board to succeed the member whose term then expires and to serve for the term of six years or until his successor is appointed. If a vacancy occurs at any time, the governor shall in the same manner appoint some one to serve out the unexpired term; and he may in like manner remove any member of said board. Each member of said board shall,

before entering upon the duties of his office, be sworn to a faithful discharge thereof. They shall at once organize by the choice of one of their members as chairman. Said board shall choose one of its members as secretary and may also appoint and remove a clerk of the board, who shall receive pay only for time during which his services are actually required, and that at a rate of not more than four dollars per day during such time as he may be employed.

SEC. 2. The board shall, as soon as possible after its organization, establish such rules of procedure as shall be approved by the governor and senate.

SEC. 3. Whenever any controversy or difference, not involving questions which may be the subject of a suit at law or bill in equity, exists between an employer, whether an individual, copartnership, or corporation, and his employees, if at the time he employs not less than twenty-five persons in the same general line of business in any city or town or village or county in this State, the board shall, upon application as hereinafter provided, and as soon as practicable thereafter, visit the locality of the dispute and make careful inquiry into the cause thereof, hear all persons interested therein who may come before them, advise the respective parties what, if anything, ought to be done or submitted to by either or both to adjust said dispute, and make a written decision thereof. This decision shall at once be made public, shall be recorded upon proper books of record to be kept by the secretary of said board, and a short statement thereof published in the annual report hereinafter provided for, and the said board shall cause a copy thereof to be filed with the county recorder of the county where such business is carried on.

SEC. 4. Said application shall be signed by said employer or by a majority of his employees in the department of the business in which the controversy or difference exists, or their duly authorized agent, or by both parties, and shall contain a concise statement of the grievance complained of and a promise to continue in the business or at work without any lockout or strike until the decision of said board, if it shall be made in three weeks of the date of filing said application. When an application is signed by an agent claiming to represent a majority of such employees, the board shall satisfy itself that such agent is duly authorized in writing to represent such employees, but the names of the employees giving such authority shall be kept secret by said board. As soon as may be after the receipt of said application, the secretary of said board shall cause public notice to be given of the time and place for the hearing thereof; but public notice need not be given when both parties to the controversy join in the application and present therewith a written request that no public notice be given. When such request be made, notice shall be given to the parties interested in such manner as the board may order, and the board may, at any stage of the proceedings, cause public notice to be given, notwithstanding such request. Should the petitioner or petitioners fail to perform the promise made in said application, the board shall proceed no further thereupon without the written consent of the adverse party. The board shall have the power to summons as witness any operative in the departments of business affected, and any person who keeps the records of wages earned in those departments, and to examine them under oath, and to require the production of books containing the record of wages paid. Summons may be signed and oaths administered by any member of the board.

SEC. 5. Upon the receipt of such application and after such notice the board shall proceed as before provided and render a written decision, which shall be open to public inspection; shall be recorded upon the records of the board and published at the discretion of the same in an annual report to be made to the governor of the State on or before the first day of February of each year.

SEC. 6. Said decision shall be binding upon the parties who join in said applications for six months, or until either party has given the other notice in writing of his intention not to be bound by the same at the expiration of sixty days therefrom. Said notice may be given to said employees by posting the same in three conspicuous places in the shop or factory, mill, or at the mine where they work or are employed.

SEC. 7. The parties to any controversy or difference, as described in section 3 of this act, may submit the matters in dispute, in writing, to a local board of arbitration and conciliation. Such board may either be mutually agreed upon, or the employer may designate one of the arbitrators, the employees or their duly authorized agent, another, and the two arbitrators so designated may choose a third, who shall be chairman of the board.

Such board shall, in respect to the matters referred to it, have and exercise all the powers which the State board might have and exercise, and its decision shall have whatever binding effect may be agreed by the parties to the controversy in the written submission.

The jurisdiction of such board shall be exclusive in respect to the matters submitted to it, but it may ask and receive the advice and assistance of the State board.

The decision of such board shall be rendered within ten days of the close of any hearing held by it; such decision shall at once be filed with the recorder of the county in which the controversy or difference arose, and a copy thereof shall be forwarded to the State board. Each of such arbitrators shall be entitled to receive from the treasury of the county in which the controversy or difference that is the subject of the arbitration exists, if such payment is approved in writing by the board of commissioners of such county, the sum of three dollars for each day of actual service, not exceeding ten days for any one arbitration. Whenever it is made to appear to the mayor of a city or the board of commissioners of a county that a strike or lockout, such as described in section 8 of this act, is seriously threatened or actually occurs, the mayor of such city or the board of commissioners of such county shall at once notify the State board of the facts.

Sec. 8. Whenever it shall come to the knowledge of the State board, either by notice from the mayor of a city or the board of commissioners of a county, as provided in the preceding section or otherwise, that a strike or lockout is seriously threatened or has actually occurred in any county or town of the State involving an employer and his present or past employees, if at the time he is employing, or up to the occurrence of the strike or lockout was employing, not less than twenty-five persons in the same general line of business in any county or town in the State, it shall be the duty of the State board to put itself in communication as soon as may be with such employer and employees, and endeavor by mediation to effect an amicable settlement between them, or to endeavor to persuade them: *Provided*, That a strike or lockout has not actually occurred, or is not then continuing, to submit the matters in dispute to a local board of arbitration and conciliation, as above provided, or to the State board; and said State board may, if it deems it advisable, investigate the cause or causes 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 or causes and assigning such responsibility or blame. The board shall have the same powers for the foregoing purposes as are given it by section 3 of this act.

Sec. 9. Witnesses summoned by the State board shall be allowed the sum of fifty cents for each attendance and the sum of twenty-five cents for each hour of attendance in excess of two hours, and shall be allowed five cents a mile for travel each way from their respective places of employment or business to the place where the board is in session. Each witness shall certify in writing the amount of his travel and attendance, and the amount due him shall be paid forthwith by the board, and for such purpose the board shall be entitled to draw from the treasury of the State for the payment thereof any of the unappropriated moneys of the State.

Sec. 10. The members of said board shall be paid six dollars per day for each day that they are actually engaged in the performance of their duties, to be paid out of the treasury of the State, and they shall be allowed their necessary traveling and other expenses, which shall be paid out of the treasury of the State.

Sec. 11. Whereas an emergency exists therefor this act shall take effect and be in force from and after its passage.

Approved February 18, 1899.

Attorneys' fees in suits for wages.

(Page 394.)

SECTION 1. Whenever a mechanic, artisan, miner, laborer, servant, or employee shall have cause to bring suit for wages earned and due, according to the terms of his employment, and shall establish by the decision of the court or verdict of the jury that the amount for which he has brought suit is justly due, and that a demand has been made in writing at least fifteen days before suit was brought for a sum not to exceed the amount so found due, then it shall be the duty of the court before which the case shall be tried to allow to the plaintiff a reasonable attorney's fee in addition to the amount found due for wages, to be taxed as costs of suit. In a justice's court such attorney's fee shall not be more than five dollars, and in the district court not more than ten dollars, except in cases on appeal from justice's court, when the plaintiff may recover an attorney's fee not exceeding twenty-five dollars.

Sec. 2. Whereas an emergency exists therefor this act shall take effect and be in force from and after the time of its passage.

Approved February 16, 1899.

Bureau of immigration, labor, and statistics.

(Page 394.)

SECTION 1. In conformity with the requirements of section 1, article 13, of the constitution of the State of Idaho, a bureau of immigration, labor, and statistics for the State is hereby established.

SEC. 2. It shall be the duty of the governor, by and with the consent of the senate, to appoint immediately after the passage of this act a competent person as commissioner of immigration, labor, and statistics, who shall have charge of said bureau, and who shall hold his office for the term provided in said article 13 of the constitution. He shall receive a salary of \$1,800 per year and all necessary traveling expenses, not exceeding \$600 per annum, while traveling in the discharge of his official duties, to be paid as is the salary and fees of other State officers. Before entering upon the duties of his office he shall take oath for the faithful discharge of the duties thereof, the same as other State officers. The secretary of state shall provide suitable room for the use of said bureau, and furnish the necessary fuel, light, and appurtenances. All books, papers, and documents in the office of said commissioner shall be deemed public records of the State, and shall be transferred by him to his successor in office.

SEC. 3. It shall be and is hereby made the duty of said commissioner to collect and compile all reliable data and information at his command concerning the climate, soil, and various resources of the State; its agricultural, horticultural, mineral, timber, and grazing lands and industries, and the development thereof; the water courses and lakes of the State in reference to irrigation, manufacturing, mechanical, and other uses; the various crop products and the adaptability of different soils and localities for the production of different crops; the number, kinds, and values of domestic animals in the State, with the useful information regarding the same; the number of public schools, educational institutions, churches, charitable and fraternal organizations; health and pleasure resorts and health statistics of the State; the number and mileage of railroads and other transportation lines; the number and capacity of irrigation canals and the lands covered by the same; the number and location of newspapers and periodicals in the State; the amount of public and school lands and that belonging to various public institutions of the State; the wages and hours of labor, both skilled and common, and its relation to capital; and, generally, any information which, if disseminated abroad, would tend to the development of the State by inducing population and capital within its borders. Said commissioner shall also inform himself in regard to suitable locations for agricultural and horticultural colonies in the State, and use all facilities at his command for encouraging and promoting desirable enterprises of this kind. To this end he shall endeavor to secure low rates of transportation favorable to immigrants by urging the cooperation of railroads and other corporations interested in the settlement of the State. He shall also open correspondence with and answer any and all inquiries from those seeking information in regard to the resources of the State.

SEC. 4. In order to enable said commissioner to secure the above-required information, he is hereby clothed with the power to call upon officers of State, county assessors, superintendents of public instruction, and other officers for such information as he may desire and deem valuable in his department.

SEC. 5. It shall be the duty of the commissioner to keep in his office for exhibit such samples of the productions of the State, including grains, grasses, fruits, vegetables, minerals, manufactured articles, and other products, as may be contributed by town and counties, without expense to the State, the same to be arranged so that each town or county shall receive due credit therefor. He shall, whenever practicable, organize and encourage local exhibits at such points as would tend to advertise the resources of the State, and, whenever funds are available for such purposes, shall also make, or cause to be made, exhibits of the products and industries of the State at such industrial and international exhibitions in other States as the governor shall direct.

SEC. 6. Said commissioner shall cause to be printed and distribute such pamphlets, circulars, cards, and maps, and to publish, from time to time, through the public press, such information as, in the judgment of said commissioner, would tend to carry out the objects sought by this act and result in the largest possible benefit to the State.

SEC. 7. Said commissioner shall receive the salary and mileage heretofore provided for, and be allowed the actual cost of the printing and supplies necessary for the publication and distribution of the matter heretofore mentioned: *Provided*, That the allowance for such printing and supplies shall not exceed the aggregate sum of two thousand dollars in any one year.

SEC. 8. The commissioner shall, on or before the first day of January in each year, transmit to the governor a full and complete report of the doings of his office (including a tabulated statement of all statistics accumulated in his office) and a detailed and itemized account of the expenses thereof.

SEC. 9. The commissioner shall collect information upon the subject of labor, its relation to capital, the hours of labor, and the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity, and assort, systematize, print, and present in annual reports to the governor, on or before the first day in January of each year, statistical details relating to all departments of labor in this State, including the penal institutions thereof, particularly concerning hours of labor, the number of laborers and mechanics employed, the number of apprentices in each trade, with the nativity of such laborers, mechanics, and apprentices; wages earned, the savings from the same; the culture, moral and mental, with age and sex of laborers employed, and number and character of accidents; the sanitary condition of institutions and other places where labor is employed, as well as the influence of the several kinds of labor, and the use of intoxicating liquors upon the health and mental condition of the laborer; the restrictions, if any, which are put upon apprentices when indentured; the proportion of married laborers and mechanics who live in rented houses, with the annual rental of same; the average number of members in the families of married laborers and mechanics; the value of property owned by laborers and mechanics, together with the value of property owned by such laborers and mechanics (if foreign born) upon their arrival in this country, and the length of time they have resided here; the subject of cooperation, strikes, or other labor difficulties, trade unions, and other labor organizations, and their effects upon labor and capital, with such other matter relating to the commercial, industrial, and sanitary condition of the laboring classes, and permanent prosperity of the respective industries of the State, as such bureau may be able to gather, accompanied by such recommendations relating thereto as the bureau shall deem proper.

SEC. 10. That the sum of \$7,500, or so much thereof as may be necessary, is hereby appropriated out of any money in the treasury, not otherwise appropriated, for the salary of said commissioner and the expenses of his office, as in this act provided, for the period of two years from and after this act shall take effect.

SEC. 11. Whereas an emergency exists this act shall take effect and be in force from and after its passage.

Approved March 2, 1899.

KANSAS.

ACTS OF 1899.

CHAPTER 24.—*Convict labor—Penitentiary twine plant.*

SECTION 1. The warden of the Kansas State penitentiary is hereby empowered, by and with the advice and approval of the board of directors of the Kansas State penitentiary, at a cost of not exceeding thirty-five thousand dollars, to purchase, erect, and maintain the necessary machinery and equipments for the manufacture of twines known as hard-fiber twine, and for the necessary repairs and betterments of the buildings for the purposes herein named.

SEC. 2. The warden of the Kansas State penitentiary, by and with the advice and approval of the board of directors of the Kansas State penitentiary, is hereby empowered to purchase a three hundred horsepower engine of approved pattern and design, together with boilers of sufficient capacity to operate the same, to be used in the operation of said plant.

SEC. 3. There is hereby appropriated, out of any funds in the State treasury not otherwise appropriated, for the purposes set forth in sections 1 and 2 of this act, the sum of forty thousand dollars.

SEC. 4. There is hereby appropriated, out of any funds in the State treasury not otherwise appropriated, the sum of one hundred and fifty thousand dollars, which shall be known as a revolving fund, which said fund shall be used only for the purpose of purchasing of raw material to be used in the manufacture of binding twine, as herein provided, and for the purpose of carrying, handling, and marketing the manufactured product until disposed of according to the provisions of this act.

SEC. 5. The money in said revolving fund shall be paid by the State treasurer upon warrants issued by the auditor of state upon verified vouchers of the warden of the Kansas State penitentiary.

SEC. 6. All moneys derived from the sale of the manufactured product shall be collected by the warden, who shall convert the same into the State treasury to the

credit of the revolving fund created by this act, and it is hereby made the duty of the said treasurer of state to carry as a separate account upon the books of his office the said revolving fund, which said fund shall be used for the payment of warrants drawn against the same by the warden of said penitentiary without further appropriation.

SEC. 7. Upon the installation of said plant and the deposit of the said one hundred and fifty thousand dollars in the State treasury to the credit of the said revolving fund, the said warden of the Kansas State penitentiary shall enter into a good and sufficient bond to the State of Kansas (to be approved by the governor) in the sum of one hundred thousand dollars, conditioned that he will faithfully perform the duties of his office and faithfully and promptly account for and pay over all moneys which may come into his possession from the sale of the manufactured product or for use in the purchase of raw material.

SEC. 8. Said warden of the Kansas State penitentiary, by and with the approval of the board of directors thereof, is hereby vested with power and authority to sell and dispose of to the best advantage of the State, giving preference to orders from residents of this State, all the manufactured product of said plant.

SEC. 9. This act shall take effect and be in force from and after its publication in the official State paper.

Approved February 21, 1899.

Published in official State paper March 1, 1899.

CHAPTER 26.—*Convict labor—Penitentiary.*

SECTION 5. The sum of four thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any money in the State treasury not otherwise appropriated, to the penitentiary, for the purpose of erecting and equipping a brick plant at the State penitentiary for the manufacture of building and vitrified brick for the State's use; and the auditor of state is hereby authorized to draw his warrant upon the treasurer of state for the amount and purposes herein stated.

SEC. 7. It shall be unlawful to allow any convict in the penitentiary to perform any labor for private citizens outside of the penitentiary grounds, for hire or otherwise, and it shall be the duty of the warden to employ the surplus convict labor in extending and repairing the State road, and upon other work exclusively for the benefit of the State.

Approved March 7, 1899.

CHAPTER 152.—*Payment of wages—Use of time checks, duebills, orders, etc., forbidden.*

SECTION 1. Any time check, duebill, order, or orders for merchandise, issued by any person, firm, or corporation to any person in their or its employ in payment of wages for labor, shall be dated at the time of its issuance, and, after fifteen days from the date of issuance, shall, at the option of the holder thereof, be payable by the maker in lawful money of the United States: *Provided*, That nothing in this act shall be construed to repeal any law now on the statute book.

SEC. 2. In the event the maker of any time check, duebill, or orders for merchandise issued in payment of wages for labor shall refuse to redeem and pay the same in lawful money of the United States, and the holder thereof brings an action to recover thereon, said maker shall be liable for double the amount of said time check, duebill, or order for merchandise to the holder thereof, together with a reasonable attorney fee, to be recovered in such action.

SEC. 3. This act shall take effect from and after its publication in the official State paper.

Approved February 28, 1899.

Published in official State paper March 8, 1899.

CHAPTER 165.—*Coal mine regulations—Shafts.*

SECTION 1. In all coal mines that are now or have been in operation or which may hereafter be put in operation in the State of Kansas, prior to the 1st day of March, 1899, and which are worked by or through a shaft, slope, or drift, and in which more than ten miners are employed in each twenty-four hours, if there is not already an escapement shaft to each and every said mine, or communication between each and every mine and some other contiguous mine, then there shall be an escape shaft or some other communication such as shall be approved by the secretary of mine industries or mine inspector, making at least two distinct means of ingress or egress for all persons employed or permitted to work in such mine. Such escape shaft or other

communication with a contiguous mine aforesaid shall be constructed in connection with every vein or stratum of coal worked in any mine, and the time to be allowed for such construction shall be four months when such mine is under one hundred feet in depth, and eight months when said mine is over one hundred and not over two hundred feet in depth, and one year for all mines over two hundred and not over three hundred feet in depth, two years for all mines over three hundred feet and not over four hundred feet in depth, three years for all mines over four hundred feet and not over five hundred feet in depth, and five years for all mines over five hundred feet in depth.

SEC. 2. Said escape shaft shall be constructed at least three hundred feet from main or hoisting shaft or any buildings connected therewith, and said escape shaft shall be provided with stairways securely fastened so as to bear the combined weight of not less than fifteen men ascending or descending the same. Said stairways shall be so constructed as not to exceed forty-five degrees of elevation by each section of said stairway, and each section shall have substantial guard rails securely fastened, and the stairways shall be separately partitioned from the parts of such shafts used as upcasts or downcasts, and the traveling ways between the bottom of main shaft and the escape shaft or stairway shall be at least five feet in height; said traveling ways shall be kept clear of all obstructions, and stagnant or standing water shall not be allowed to accumulate in any traveling way between the upcast and downcast shafts.

SEC. 3. Whenever the owner, agent, or operator of any mine shall neglect, fail, or refuse to comply with sections 1 and 2 of this act, it shall be the duty of the secretary of mine industries or State mine inspector, when apprised of this fact, to enter complaint with the county attorney of the county in which such mine or mines are located, and such county attorney shall immediately prosecute said owner, agent, or operator of said mine the same as in other cases; and in all prosecutions under this act it shall be conclusive evidence against the party charged if it shall be conclusively proved that said escape shaft was not constructed according to the provisions of this act and within the time heretofore stated. Any owner, operator, agent, or lessee who fails to comply with sections 1 and 2 of this act shall be deemed guilty of a misdemeanor, and shall on conviction be fined in a sum not less than five hundred dollars nor more than two thousand dollars, or by imprisonment not less than six months nor more than two years, or by both such fine and imprisonment.

SEC. 4. All acts or parts of acts in conflict with this act are hereby repealed.

SEC. 5. This act shall take effect and be in force from and after its publication in the official State paper.

Approved March 4, 1899.

Published in official State paper March 29, 1899.

CHAPTER 171.—*Output of coal at the penitentiary.*

SECTION 1. No coal mined at the penitentiary shall hereafter be sold on the market by contract or otherwise.

SEC. 2. The output of coal at the penitentiary mine shall be limited to the needs of the public buildings and institutions of the State.

SEC. 3. Chapter 163 of the session laws of 1897 and all other acts and parts of acts in conflict with this act are hereby repealed.

SEC. 4. This act shall take effect and be in force from and after its passage and publication in the official State paper.

Approved March 4, 1899.

Published in official State paper April 1, 1899.

MAINE.

ACTS OF 1899.

CHAPTER 3.—*Licensing of intelligence offices by municipal officers.*

Section six of chapter one hundred and fifty-six of the public laws of eighteen hundred and ninety-five is hereby amended * * *, so that said section, as amended, shall read as follows:

SECTION 6. The municipal officers of any town may, on payment of one dollar each, grant licenses to suitable persons for one year, unless sooner revoked after notice and for cause, to keep offices for the purpose of obtaining employment for domestics, servants, or other laborers, except seamen, or of giving information relating thereto, or of doing the usual business of intelligence offices. Whoever keeps such an office

without a license forfeits not exceeding fifty dollars for every day that it is so kept. The keeper of an intelligence office shall not retain any sum of money, in excess of one dollar, received from a person seeking employment through the agency of such intelligence office, unless employment of the kind sought for is actually furnished. The keeper of a licensed intelligence office shall cause two copies of this act, printed in type of sufficient size to be legible and easily read, to be conspicuously posted in each room used or occupied for the purposes of such intelligence office. Whoever violates the provisions of this act shall have the license revoked, and shall be punished by fine not exceeding twenty dollars for each offense.

Approved February 9, 1899.

CHAPTER 53.—*Penalty for aiding sailors to desert.*

SECTION 1. Whoever entices or persuades or attempts to entice or persuade, or aids, assists, or attempts to aid or assist a member of the crew of any vessel arriving in or about to sail from a port in this State to leave or desert such vessel before the expiration of his term of service therein, shall forfeit a sum not exceeding one hundred dollars for each offense and be punished by imprisonment for not more than six months nor less than thirty days, at the discretion of the court.

SEC. 2. Municipal courts and trial justices shall have original jurisdiction in all cases arising under this act.

Approved March 9, 1899.

TENNESSEE.

ACTS OF 1899.

CHAPTER 11.—*Payment of wages—Scrip, etc., issued to pay employees to be redeemed in money.*

SECTION 1. All persons, firms, corporations, and companies using coupons, scrip, punchouts, store orders, or other evidences of indebtedness to pay their or its laborers and employees, for labor or otherwise, shall, if demanded, redeem the same in the hands of such laborer, employee, or bona fide holder in good and lawful money of the United States: *Provided*, The same is presented and redemption demanded of such person, firm, company, or corporation using same as aforesaid at a regular pay day of such person, firm, company, or corporation to laborers or employees, or if presented and redemption demanded as aforesaid by such laborers, employees, or bona fide holders at any time not less than thirty days from the issuance or delivery of such coupon, scrip, punchout, store order, or other evidences of indebtedness to such employees, laborers, or bona fide holder. Such redemption to be at the face value of said scrip, punchout, coupon, store order, or other evidence of indebtedness: *Provided further*, Said face value shall be in cash the same as its purchasing power in goods, wares, and merchandise at the commissary company store or other repository of such company, firm, person, or corporation aforesaid.

SEC. 2. Any employee, laborer, or bona fide holder referred to in section 1 of this act, upon presentation and demand for redemption of such scrip, coupon, punchout, store order, or other evidence of indebtedness as aforesaid, and upon refusal of such person, firm, corporation, or company to redeem the same in good and lawful money of the United States, may maintain in his, her, or their own name an action before any court of competent jurisdiction against such person, firm, corporation, or company using same as aforesaid for the recovery of the value of such coupon, scrip, punchout, store order, or other evidence of indebtedness as defined in section 1 of this act.

SEC. 3. Nothing herein in this act contained is to be so construed as to legalize the issuance or use of scrip. All laws in conflict with this act are hereby repealed.

SEC. 4. This act [shall] take effect from and after its passage, the public welfare requiring it.

Passed March 17, 1899.

Approved March 23, 1899.

[See decision of Tennessee supreme court on constitutionality of statute, etc., page 415, ante.]

CHAPTER 38.—*Exemption from execution, etc.*

SECTION 1. Thirty dollars shall be exempt from execution, seizure, or attachment of the wages of any employee in the State.

SEC. 2. This act [shall] take effect from and after its passage, the public welfare requiring it.

Passed March 23, 1899.

Approved March 27, 1899.

CHAPTER 182.—*Protection of the wages of laborers on public works—Contractor's bond.*

SECTION 1. Hereafter no contract shall be let for any public work in this State, by any city, county, or State authority, until the contractor shall first execute a good and solvent bond to the effect that he will pay for all the materials and labor used in said contract in lawful money of the United States. The bond to be given under this section shall be for one-half of the contract price on all contracts of two thousand dollars, or under; one-half of the first two thousand dollars, and thirty-five per cent of all over that amount on all contracts between two thousand dollars and five thousand dollars; and one-half of the first two thousand dollars, thirty-five per cent on the next three thousand dollars, and twenty-five per cent on the balance on all contracts over five thousand dollars. Where advertisement is made the condition of the bond shall be stated in the advertisement: *Provided*, That this act shall not apply to contracts under \$100.

SEC. 2. Any laborer or furnisher of material may bring an action on such bond, and make recovery in his own name, upon giving security or taking the oath prescribed for poor persons as provided by law, and in the event of such suit, the city, county, or State shall not be liable for any costs accruing thereunder.

SEC. 3. If any public officer, whose duty it is to let or award contracts, shall let or award any contract without requiring bond for the payment of labor and material, in compliance with the provisions of section 1 hereof, such officer shall be guilty of a misdemeanor.

SEC. 4. The laborer or furnisher of materials, to secure advantage of this act, shall file with the public officer who has charge of the letting of any contract an itemized statement of the amount owed by the contractor for materials and labor used within thirty (30) days after the contract is completed.

SEC. 5. This act [shall] take effect from and after its passage, the public welfare requiring it.

Passed March 15, 1899.

Approved March 17, 1899.

CHAPTER 338.—*Payment of check weighmen at mines.*

SECTION 1. When miners of coal or other minerals in this State elect a check weighman or measurer, as provided by chapter 206 of the acts of March 26, 1887, the operators, company, or firm employing said miners shall, upon receiving notice in writing from the miners of said election of check weighman, withhold from each miner an equal amount, agreed upon by the miners and check weighman, and pay the same to the check weighman at each regular pay day.

SEC. 2. Upon failure of any operator, company, or firm to comply with section 1 of this act, they shall be liable to the check weighman for the full amount of his wages, and shall be guilty of a misdemeanor, and upon conviction shall be fined at the discretion of [the] court having jurisdiction.

SEC. 3. This act [shall] take effect from and after, its passage, the public welfare requiring it.

Passed April 20, 1899.

Approved April 21, 1899.

CHAPTER 358.—*Convict labor—Jails.*

SECTION 1. The judge or chairman of the county court, the county court clerk, and the sheriff of each county in the State of Tennessee are hereby constituted a board for their respective counties, whose duty it is hereby made to enter into contracts with public road commissioners or other officers or road contractors having the superintendence of working the public roads of this State, for the employment on the public roads of prisoners confined in the county jails for the nonpayment of fines and costs adjudged against them by the courts. The said contracts are to be made without delay when a prisoner is confined in the county jail, and it is hereby made the duty of those having the superintendence of the working of the public roads, or road contractors, to enter into contracts immediately with the above-named board for the employment of said prisoners.

SEC. 3. Said prisoners shall be worked on any of the public roads of the county, and the same number of hours of labor per day as required by the public road laws of the State shall constitute a day's work, and said prisoners shall be allowed seventy-five cents for each day's work in addition to twenty-five cents now allowed by law, which amount shall be credited to his fine and costs. * * *

SEC. 4. The provisions of this act shall not be construed to conflict with the provisions of chapter 123 of the acts of 1891, providing for the construction of workhouses in any county in this State, or declaring any county jail in this State a workhouse, but shall be construed as supplementary to said act of 1891, chapter 123, and this act shall apply to such counties as are not now actually working all of their prisoners confined in the county jail of this State for nonpayment of fines and costs adjudged against them, or that may hereafter not be actually working said prisoners, according to the provisions of chapter 123 of the acts of 1891.

SEC. 5. The county employment boards created by this act, of any two or more adjoining counties, when they deem it advisable, may combine the prisoners of said counties and work them on the public roads of said counties according to the rules and regulations provided for in the foregoing sections of this act.

SEC. 7. This act [shall] take effect thirty days after the adjournment of this general assembly, the public welfare requiring it.

Passed April 20, 1899.

Approved April 21, 1899.

CHAPTER 368.—*Convict labor—Jails and workhouses—Hours of labor on public roads.*

SECTION 7. All county prisoners subject to labor shall be employed hereafter, as far as practicable, upon the public highways. In counties having separate workhouses, or where the jails have been declared workhouses, the workhouse commissioners may let the convicts to contractors for road labor; in all other counties the judge or chairman of the county court may let them to contractors, who will employ them upon the highways. In either case the county authorities shall name the guards, and the prisoners shall be treated at all times with humanity. Eight hours shall be a day's work upon the highways, whether performed by convicts or free road hands. Nothing in this act shall affect the present law in regard to working county prisoners in counties having a population of 35,000 or over, by the last Federal census or any subsequent Federal census.

SEC. 11. All laws and parts of laws in conflict with this act are hereby repealed; and this act [shall] take effect from and after January 1, 1900, the public welfare requiring it.

Passed April 21, 1899.

Approved April 22, 1899.

CHAPTER 401.—*Inspection, etc., of factories and workshops.*

SECTION 1. The governor, with the consent and advice of the senate, shall appoint an officer to be known as a shop and factory inspector, who shall hold office for a term of two years or until his successor shall be appointed and qualified: *Provided*, That he may be removed at any time by the governor for cause.

SEC. 2. It shall be the duty of the shop and factory inspector to inspect all workshops and factories where machinery is used at least once every six months, and he shall have authority to enter such workshops or factories at all proper times for the purposes of such inspection. He shall, on or before the first day of January of each year, make a report to the governor of the condition as respects safety to life and health of workshops and factories visited by him, and said report shall be printed for the use of the general assembly at its regular sessions. The expense of printing said report shall be paid out of the general appropriation for printing the reports of State officers.

SEC. 3. All workshops and factories where machinery is used shall be well ventilated and kept as clean as the nature of the business will permit. The belting, shafting, gearing, machinery, and drums of all workshops and factories where machinery is used, when so placed as in the opinion of the shop and factory inspector to be dangerous to persons employed therein while engaged in their ordinary duties, shall, as far as practicable, be securely guarded.

SEC. 4. The shop and factory inspector may order the opening of all hatchways, elevator wells, and wheel holes upon every floor of any workshop or factory where machinery is used, to be protected by good trapdoors, self-closing hatches, or safety catches or other safeguards such as will insure the safety of the employees in such workshop or factory when engaged in their ordinary duties.

Sec. 5. Every person, firm, or corporation running or operating any workshop or factory where fifteen or more persons are employed at labor, shall provide separate water-closets for males and females, and keep the same in good sanitary condition.

Sec. 6. It shall be the duty of the shop and factory inspector to enforce the provisions of this act by giving proper notices to the person, firm, or corporation operating or running workshops or factories inspected by him, and also to make complaint to the attorneys-general of the respective districts of all violations of this act.

Sec. 7. Any person, firm, or corporation operating or running any workshop or factory where machinery is used, upon conviction of a violation of this act, shall be fined not less than twenty-five dollars (\$25) nor more than one hundred dollars (\$100) for each offense: *Provided*, No action shall be taken until after four weeks' notice shall have been given by the shop and factory inspector to any firm, person, or corporation operating or running a workshop or factory of the changes necessary to be made, and not then if in the meantime said changes have been made.

Sec. 8. The orders or notices given by the shop and factory inspector shall be written or printed, and signed by him officially, and served by himself or by leaving an attested copy thereof at the usual place of business of the person upon whom service is to be made, and a copy of the same shall be filed in the office of the county court clerk of the county in which the workshop or factory is located, and such copy shall be prima facie evidence that notice was given.

Sec. 9. For the inspection of each factory the inspector shall receive a fee of \$5, to be paid by the factory inspected: *Provided*, That when his fees reach \$1,500 per annum he shall cover all amount of fee above the sum of \$1,500 per annum into the State treasury: *Provided*, That this act shall apply to and have force and effect only in counties having a population of over 30,000 by the Federal census of 1890, or any subsequent Federal census.

Sec. 10. This act [shall] take effect from and after its passage, the public welfare requiring it.

Passed April 21, 1899.

Approved April 22, 1899.

RECENT GOVERNMENT CONTRACTS.

[The Secretaries of the Treasury, War, and Navy Departments have consented to furnish statements of all contracts for constructions and repairs entered into by them. These, as received, will appear from time to time in the Bulletin.]

The following contracts have been made by the office of the Supervising Architect of the Treasury:

ELLIS ISLAND, N. Y.—February 20, 1900. Contract with Daniel A. Garber, New York, N. Y., for the construction of the hospital building, except electric wiring, heating, and ventilating and elevators, \$121,319.65. Work to be completed within ten months.

COLUMBUS, GA.—March 8, 1900. Contract with Richardson & Burgess, Washington, D. C., for extension to post-office, except heating apparatus, \$29,466. Work to be completed within ten months.

TOPEKA, KANS.—March 8, 1900. Contract with Charles A. Moses, Chicago, Ill., for extension to court-house and post-office, except heating apparatus, electric wiring and conduits, \$61,130. Work to be completed within ten months.