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Contents

This Issue in Brief

Union wage rates averaged $1.19 per hour in 1927 compared with an average of slightly less than $1.15 in 1926, according to the annual survey recently completed by the Bureau of Labor Statistics covering most of the time-work trades in 66 important industrial cities (p. 1).

The actual case of a steel worker struggling to support a wife and eight children on $3.44 per day was discussed at length at a recent session of the Catholic Conference on Industrial Problems. The company employing the man reported that he was earning more than the average laborer in the plant. The discussion at the conference covered a wide range but there was no agreement as to proper remedial measures (p. 34).

The serious effects of low earnings upon the health of workers and their families is shown in a summary of various studies dealing with this subject. These studies, which cover the different economic groups and which have been made by various agencies, indicate clearly that while sickness is, of course, not limited to the poor, both sickness and death are much more frequent among those with low incomes than among those with incomes adequate to comfortable living (p. 38).

That high wages may mean low prices but high profits, and that a worker's income should be sufficient to provide for his cultural life as well as for his physical needs, were two of the interesting points in a recent address by Mr. Owen D. Young, chairman of the board of directors of the General Electric Co. The portion of the address dealing particularly with labor and industrial relations is given in full on page 45.

The estimated average cost of building one-family and two-family dwellings in 257 identical cities of the United States increased steadily from 1921 to 1926, the increase in both cases being 19 per cent, according to information obtained in the studies of building permits made by the Bureau of Labor Statistics. In the case of multi-family dwellings the figures for 1921 and 1926 were practically the same, the peak having been reached in 1924. A comparison of costs in the first half of 1927 in 14 cities having a population of 500,000 or over showed that St. Louis had the lowest cost for one-family dwellings, Buffalo for two-family dwellings, and Los Angeles for multi-family dwellings, while the Borough of Manhattan had the highest cost for each class. More detailed information is given on page 94.

Industrial accidents increased in severity in 1926 as compared with 1925 in 18 of the 24 industries for which comparable data are available. This unfortunate result is probably attributable in part to the speeding up of production without corresponding increase in safety activities (p. 60).

The hazardous nature of many industrial processes is often not realized by either employers or workers. This is illustrated by the conditions discovered in a stove-enameling plant in which practically

all the men were exposed to a serious lead hazard. The most ordinary precautions against poisoning were not observed, and as a result a large percentage of the workers showed the effects of the exposure. Although it might seem that the shocking conditions found in this plant were exceptional, it is said that the situation might be duplicated in almost any industrial center. Especially in plants where lead is used incidentally in one process only, it may be handled as though it were a perfectly harmless substance and workers may be continually exposed to lead poisoning without being aware of the fact (p. 83).

That the problem of unemployment is not insolvable was the conclusion reached by the conference on unemployment held at Bryn Mawr College in July under the auspices of the trade-union movement of Philadelphia. However, "any far-reaching solution involves not only advance planning but also the cooperation of labor and management and the consumer in a common task." Suggested remedies are given in the account of the conference on page 122.

The child-labor program recently formulated by the National Association of Manufacturers for the further protection of employed children 14 and 15 years of age provides for (1) an employment certificate under State authority, (2) physical examinations by physicians designated by the State, (3) the completion of the sixth school grade, (4) a minimum of four hours a week of continued education, (5) a maximum of 48 working hours per week for all children under 16 and a prohibition of night work before 7 a. m. or after 9 p. m., and (6) strengthening the laws forbidding employment of children in hazardous occupations (p. 110).

A large copper refining company increased its output 10 per cent concurrently with a reduction in the number of employees from 578 to 233, during the period 1918 to 1927. The company further states that with contemplated improvements not more than 100 men should be needed to maintain present production (p. 30).

The New Zealand child endowment act of 1926 is analyzed by a New Zealander on page 111. He holds that if such a measure is to be justified it must be simply in the interest of child welfare and not for the purpose of changing the birth rate. He also points out that in considering the dangers of family allowances due weight should be given to actual present evils.

The 1927 congress of the International Federation of Trade Unions showed the majority of the membership opposed to cooperation with the Russian labor organizations. The International Federation of Trade Unions has a membership of some 13,000,000 in 25 countries. A brief review of its history, with an account of the 1927 congress, is given on page 9.

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Increase in Union Wage Rates in 1927

Summary

UNION wage rates have continued into 1927 the steady increase which has been almost uninterrupted during the past 20 years, according to the annual survey just completed by the Bureau of Labor Statistics. This survey covered most of the time-work trades in 66 important industrial cities, and included over three-quarters of a million organized workers.

The average hourly rate in 1927 for all the trades covered was $1.19, as compared with $1.15 in 1926, or an average increase of 4 cents per hour. This upward movement was very general among the various organizations, but the amount of increase was by no means uniform and some trades suffered slight losses. Thus, of the 73 time-work trades covered by the survey, 64 obtained increased wages in 1927 as compared with 1926, while the remaining 9 showed slightly lower average rates in 1927 than in 1926. The showing by principal trade groups is as follows:

TABLE 1.—AVERAGE HOURLY WAGE RATES IN SPECIFIED TRADES IN 1926 AND 1927 AND INCREASE, 1927 OVER 1926

Trade groups	Average hourly wage rate		Increase, 1927 over 1926
	1926	1927	
Bakers	$0.925	$0.957	$0.032
Building trade workers	1.278	1.323	.045
Chauffeurs, teamsters, and drivers	.663	.704	.041
Granite and stone cutters	1.330	1.321	[1].009
Laundry workers	.441	.432	[1].009
Linemen	.993	.991	[1].002
Longshoremen	.835	.817	[1].018
Printing and publishing:			
Book and job	.997	1.021	.024
Newspaper	1.155	1.190	.035
Motormen and conductors	.662	.682	.020
Average for all trades [2]	1.148	1.190	.042

[1] Decrease.
[2] Not including pieceworkers or street-railway motormen and conductors.

Coincident with the rise in wage rates there was a further reduction in hours of labor, the average in 1927 being 45.2 hours per week. Excluding street railway employees, for whom hours of labor were not obtained, the chauffeurs, teamsters, and drivers had the longest regular working week—namely 54.7 hours—while of the 73 time-work trades covered 58 averaged less than 45 hours per week. The plasterers, as a group, had the shortest regular full-time working period per week, 42.1 hours, many of their local unions being on a flat 5-day, 40-hour week.

Comparing conditions in 1927 with those in the pre-war year 1913, union wage rates per hour show an increase of 159.5 per cent and full-time hours a week a decrease of 7.6 per cent.

The detailed report follows.

Union Scales of Wages and Hours of Labor in May, 1927, by Occupations

IN THE September, 1927, issue of the Labor Review preliminary data gathered by the Bureau of Labor Statistics relating to the union scales of wages and hours of labor were given for 20 trades as found in 40 cities. This article gives the results of the final compilations, by occupations, for 835,924 members of organized trades located in 66 of the principal cities of the United States as of May 15, 1927.

The study covers the bakery trades, the building trades, chauffeurs and teamsters, and drivers, the stone trades, laundry workers, linemen, longshoremen, the printing trades, and motormen and conductors on street railways. All of these trades are employed at time rates except some of the lathers and composing-machine operators. The study does not purport to cover all time-work trades, but it does cover most of the time-work trades that are found in industrial cities.

Aside from time-work trades there are many trades employed wholly or mostly at piece rates. These trades frequently have a multitude of piece rates practically impossible to incorporate in a general tabulation and difficult to understand by anyone not familiar with the particular industries. The limitations of the present study therefore should be kept in mind in using the figures.

The grand average rate for all trades included in this study, not including pieceworkers and street railway employees, increased from $1.148 per hour in 1926 to $1.190 in 1927. In all trades taken collectively the hourly union wage rate on May 15, 1927, was higher in the United States than in any preceding year, being 3.7 per cent higher than on the same date in 1926, 127.3 per cent higher than in 1917, 159.5 per cent higher than in 1913, 174.8 per cent higher than in 1910, and 189.2 per cent higher than in 1907. In other words, union wage rates per hour were nearly three times as much in 1927 as in 1910, and more than 2½ times as much as in 1913.

All hourly rates have been converted to equivalent weekly rates and all weekly rates have been reduced to equivalent hourly rates. Taken collectively, weekly rates in 1927 were 3.2 per cent higher than in 1926, 114.3 per cent higher than in 1917, 140.8 per cent higher than in 1913, 153 per cent higher than in 1910, and 163.1 per cent higher than in 1907. Because of reductions in hours of labor, weekly rates have not increased to the same extent as hourly rates. In 1927 the regular hours of labor were five-tenths of 1 per cent lower than in 1926,

6.1 per cent lower than in 1917, 7.7 per cent lower than in 1913, 8.7 per cent lower than in 1910 and 10 per cent lower than in 1907.

Table 2 shows by index numbers the change in union wage rates and hours of labor from 1907 to 1927, the base (100) being 1913. These index numbers include all trades and all cities covered in preceding years except street-railway motormen and conductors. Rates of wages per hour were obtained for 57,289 street-railway motormen and conductors, but their hours of labor are so variable that no attempt was made to report them. These occupations are omitted from all three columns of the index numbers below, as of necessity they could not be included in the second and third columns. Piece rates are omitted from these index numbers because hourly rates can not be computed. Pieceworkers, however, and street-railway motormen and conductors are included in the grand total of organized membership shown on p. 2.

The number of trades and cities included in the data has varied from year to year.

TABLE 2.—INDEX NUMBERS OF UNION WAGE RATES AND HOURS OF LABOR IN THE UNITED STATES AS OF MAY EACH YEAR, 1907 TO 1927

[1913=100]

Year	Index numbers of—			Year	Index numbers of—		
	Rate of wages per hour	Full-time hours per week	Rate of wages per week, full time		Rate of wages per hour	Full-time hours per week	Rate of wages per week, full time
1907	89.7	102.6	91.5	1918	132.7	97.0	129.6
1908	91.0	102.1	92.5	1919	154.5	94.7	147.8
1909	91.9	101.9	93.3	1920	199.0	93.8	188.5
1910	94.4	101.1	95.2	1921	205.3	93.9	193.3
1911	96.0	100.7	96.5	1922	193.1	94.4	183.0
1912	97.6	100.3	97.7	1923	210.6	94.3	198.6
1913	100.0	100.0	100.0	1924	228.1	93.9	214.3
1914	101.9	99.6	101.6	1925	237.9	93.0	222.3
1915	102.8	99.4	102.3	1926	250.3	92.8	233.4
1916	107.2	98.8	106.2	1927	259.5	92.4	240.8
1917	114.2	98.4	112.4				

Table 3 shows the average union-wage rates per hour, average full-time working hours per week, the number of quotations on which 1927 averages are based, and index numbers of hourly rates for the years 1922 to 1927. The index numbers for the years back to 1907 may be found in Bulletin No. 431 of this bureau, but are omitted here for want of space. For some trades data were not collected as early as 1913, hence there can be no index numbers for them on a 1913 base.

In computing an average rate each rate quoted is multiplied by the number of union members having such rate. The products are added and the sum divided by the grand total membership; in other words, the rates are weighted by the number of union members. This membership is furnished the bureau for this sole purpose and is held strictly confidential.

The rates for a city may enter into an average one year because the trade has an effective wage scale, but may drop out the next year because the trade can not enforce its scale or because the union has

disbanded. Hence the grand average may, possibly, vary to a greater extent than the rate in any city reporting for both years. The index numbers are computed from these averages. Index numbers have not been computed for the several industry groups, except for the building trades shown on page 8. In Table 3 hourly rates only are considered. Equivalent weekly rates do not exactly parallel hourly rates because of changes in working hours.

TABLE 3.—AVERAGE WAGE RATES PER HOUR, 1926 AND 1927, AVERAGE FULL-TIME HOURS PER WEEK, 1927, AND INDEX NUMBERS OF HOURLY RATES FOR SELECTED YEARS, BASED ON 1913

Trades	Number of quotations May, 1927	Average rate of wages per hour		Index numbers of rates of wages per hour [1913=100]						Average hours per week May, 1927
		May, 1926	May, 1927	May, 1922	May, 1923	May, 1924	May, 1925	May, 1926	May, 1927	
Bakery trades										
Bakers	273	$0.925	$0.957	267.0	276.6	283.5	293.4	277.2	286.8	47.7
Building trades										
Asbestos workers	37	1.247	1.309	(1)	(1)	(1)	(1)	(1)	(1)	43.9
Bricklayers	67	1.565	1.603	168.4	191.1	202.2	213.4	226.4	231.9	43.8
Sewer, tunnel, and caisson	13	1.914	2.101	149.0	159.6	167.3	187.1	199.2	218.6	43.5
Building laborers	46	.851	.854	213.9	218.1	242.4	231.6	254.9	255.8	44.8
Carpenters	65	1.267	1.311	183.1	204.0	218.3	222.8	238.4	246.7	44.0
Millwrights	12	1.207	1.389	(1)	(1)	(1)	(1)	(1)	(1)	43.9
Parquetry floor layers	13	1.439	1.422	220.6	222.0	222.0	215.7	253.1	250.2	43.7
Wharf and bridge	14	1.255	1.317	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Cement finishers	56	1.321	1.379	174.7	191.2	211.4	212.6	226.9	236.8	44.0
Helpers	3	1.038	1.060	216.7	223.4	248.3	260.8	288.0	294.1	44.0
Composition roofers	37	1.267	1.302	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Helpers	5	.932	.750	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Elevator constructors	45	1.382	1.433	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Helpers	44	1.002	1.033	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Engineers, portable and hoisting	110	1.336	1.379	168.0	185.5	197.2	205.7	217.2	224.2	45.1
Glaziers	29	1.239	1.323	(1)	(1)	(1)	(1)	(1)	(1)	44.1
Hod carriers	42	1.002	1.026	197.1	215.4	224.9	251.5	273.8	280.4	44.1
Inside wiremen	59	1.339	1.396	190.4	197.1	220.5	232.4	244.6	255.0	44.0
Fixture hangers	14	1.216	1.206	192.2	205.6	221.8	220.8	234.7	232.7	43.9
Lathers:										
Piece work	21	[2]7.230	9.336	(1)	(1)	(1)	(1)	(1)	(1)	43.7
Time work	63	1.434	1.492	180.5	199.3	215.1	234.5	240.6	250.3	43.4
Marble setters	51	1.417	1.448	157.3	178.0	186.1	190.0	212.3	217.0	44.0
Helpers	15	.996	.990	200.1	216.2	234.3	222.5	246.7	245.2	44.0
Mosaic and terrazzo workers	14	1.240	1.291	(1)	(1)	(1)	(1)	(1)	(1)	43.9
Painters	65	1.305	1.345	199.1	218.7	230.5	243.1	257.5	265.4	42.6
Fresco	10	1.199	1.335	197.2	206.5	194.1	220.0	220.1	245.1	41.7
Sign	43	1.530	1.566	194.3	210.0	239.2	241.5	240.4	247.2	42 6
Plasterers	64	1.595	1.628	173.5	193.2	216.1	219.8	236.1	241.0	42.1
Laborers	36	1.058	1.068	192.6	212.0	227.8	243.1	257.2	259.7	42.3
Plumbers and gas fitters	64	1.381	1.409	168.2	185.6	202.4	206.6	222.7	227.2	43.9
Laborers	10	.957	.975	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Sheet-metal workers	53	1.291	1.330	187.5	201.9	221.7	229.3	244.8	252.2	44.0
Ship carpenters	8	.969	.860	(1)	(1)	(1)	(1)	(1)	(1)	44 1
Slate and tile roofers	23	1.466	1.535	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Steam and sprinkler fitters	74	1.376	1.415	167.6	175.6	201.5	212.2	229.7	236.2	43.9
Helpers	39	.906	.947	226.1	240.1	266.0	273.7	289.7	302.8	44.0
Stone masons	54	1.545	1.563	179.7	212.5	225.2	229.5	253.1	256.0	44.0
Structural-iron workers	72	1.358	1.464	166.6	178.4	202.5	204.5	218.5	235.5	44.0
Finishers	41	1.372	1.420	168.2	174.7	193.7	197.9	220.7	228.5	44.0
Tile layers	57	1.389	1.454	159.2	174.0	197.5	202.3	212.0	221.9	44.0
Helpers	20	.968	.979	217.4	222.4	242.2	248.9	269.8	272.9	44.0
Average for building trades	1,608	1.278	1.323							43.7
Chauffeurs and teamsters and drivers										
Chauffeurs	358	.657	.703	191.2	197.7	205.6	223.5	226.3	242.1	54.2
Teamsters and drivers	178	.673	.706	212.7	224.9	244.7	254.3	256.6	269.1	55.8
Average for chauffeurs and teamsters and drivers	536	.663	.704							54.7

[1] No data for 1913.

[2] Per 1,000 laths.

TABLE 3.—AVERAGE WAGE RATES PER HOUR, 1926 AND 1927, AVERAGE FULL-TIME HOURS PER WEEK, 1927, AND INDEX NUMBERS OF HOURLY RATES FOR SELECTED YEARS, BASED ON 1913—Continued

Trades	Number of quotations May, 1927	Average rate of wages per hour		Index numbers of rates of wages per hour [1913=100]						Average hours per week May, 1927
		May, 1926	May, 1927	May, 1922	May, 1923	May, 1924	May, 1925	May, 1926	May, 1927	
Granite and stone trades										
Granite cutters	62	1.250	1.242	208.6	212.7	214.2	216.8	244.1	242.6	44.0
Stone cutters	54	1.404	1.400	181.8	198.3	212.9	221.9	241.9	241.2	44.0
Average for granite and stone trades	116	1.330	1.321							44.0
Miscellaneous										
Laundry workers	53	.441	.432	(1)	(1)	(1)	(1)	(1)	(1)	47.8
Linemen	42	.993	.991	(1)	(1)	(1)	(1)	(1)	(1)	46.1
Longshoremen	44	.835	.817	195.9	209.2	238.5	239.9	242.0	236.7	44.7
Printing and publishing: Book and job										
Bindery women	51	.489	.522	233.6	244.2	247.6	250.5	235.6	251.5	44.8
Bookbinders	82	.975	.996	211.2	224.0	233.9	236.6	240.8	246.0	44.6
Compositors	69	1.085	1.105	223.4	228.5	238.5	237.4	242.1	246.6	44.0
Electrotypers	59	1.209	1.223	227.4	241.6	250.6	249.7	252.2	255.2	45.5
Machine operators:										
Piece work	1	[3].160	[3].150	98.7	101.4	101.4	101.4	108.1	101.5	44.0
Time work	64	1.121	1.162	200.0	203.8	212.9	211.7	215.2	223.0	44.0
Machine tenders (machinists)	22	1.195	1.234	198.4	200.2	214.4	210.4	219.9	227.1	44.0
Machinist operators	34	1.085	1.148	167.0	169.8	171.6	183.7	179.2	189.6	43.9
Photo-engravers	47	1.218	1.276	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Press assistants and feeders	150	.827	.837	238.0	266.2	263.8	278.8	281.9	285.3	44.3
Pressmen:										
Cylinder	151	1.119	1.121	200.8	216.7	223.1	225.9	230.5	230.8	44.4
Platen	112	.932	.941	226.5	235.8	242.9	244.3	255.8	258.3	44.4
Average for printing and publishing: Book and job	825	.997	1.021							44.3
Printing and publishing: Newspaper										
Compositors:										
Day work	84	1.120	1.149	176.3	177.9	189.0	193.9	196.7	201.8	45.9
Night work	72	1.249	1.290	176.2	178.2	187.5	187.4	193.4	199.7	45.1
Machine operators, day work:										
Piece work	9	[3].154	[3].150	120.5	125.0	117.8	135.8	138.5	134.9	42.9
Time work	81	1.135	1.176	180.6	183.1	193.4	198.0	201.6	208.9	45.2
Machine operators, night work:										
Piece work	8	[3].169	[3].160	106.0	112.3	110.9	113.7	118.6	112.3	43.3
Time work	72	1.260	1.268	174.1	175.5	186.4	189.5	195.7	196.9	44.9
Machine tenders (machinists)										
Day work	66	1.089	1.144	180.2	180.9	191.5	185.3	185.2	194.4	45.9
Night work	56	1.203	1.275	172.4	173.0	183.0	178.4	176.5	187.1	44.9
Machinist operators:										
Day work	11	1.038	1.070	165.5	166.8	180.7	178.7	171.9	177.2	46.5
Night work	8	1.109	1.204	160.4	151.1	164.5	156.8	161.1	174.9	45.6
Photo-engravers:										
Day work	40	1.213	1.266	(1)	(1)	(1)	(1)	(1)	(1)	44.0
Night work	34	1.557	1.541	(1)	(1)	(1)	(1)	(1)	(1)	41.7
Pressmen, web presses:										
Day work	121	1.013	1.066	180.3	182.4	199.4	208.2	212.2	223.3	46.8
Night work	103	1.155	1.220	167.7	169.6	193.2	200.6	198.5	209.7	42.6
Stereotypers:										
Day work	61	.992	1.007	171.8	174.9	180.4	184.5	188.1	191.0	47.0
Night work	55	1.138	1.141	172.7	178.6	182.8	188.4	187.9	188.4	43.0
Average for printing and publishing: Newspaper	880	1.155	1.190							45.2
Motormen and conductors	199	.662	.682							(4)
Average for all trades [5]	4,563	1.148	1.190	193.1	210.6	228.1	237.9	250.32	259.5	45.2

[1] No data for 1913.
[3] Per 1,000 ems.
[4] Not reported.
[5] Not including piece workers or street railway motormen and conductors.

Table 4 shows the per cent of increase in weekly wage rates in 1927 as compared with specified years, beginning with 1907, the earliest year for which data are available. For lack of space the years 1908 to 1912, inclusive, 1914, 1915, 1916, 1918, and 1920 are omitted. The figures are not index numbers, but may be converted into index numbers. The first line of the table shows that the weekly rate of bakers in 1927 was 203.2 per cent higher than in 1907. This means that the rate was slightly more than 3 times as much in 1927 as in 1907. Read as index numbers, the 1907 figures would be 100, and that for 1927 would be 303.2.

In all the 35 trade classifications for which data reach back that far, weekly rates more than doubled between 1907 and 1927 and in three more than trebled.

Comparing 1927 full-time wages per week with those of 1926, the changes noted in individual trades are as follows: Bakers' wage rates show an increase of 3.1 per cent. In the building trades, 35 occupations show increases, while 5 show decreases. Of those occupations showing increases only two increased 10 per cent or more—carpenters: millwrights, 13.6 per cent; and painters: fresco, 10 per cent. The balance of the increases ranged from five-tenths of 1 per cent to 8.6 per cent. A few of the larger increases follow: Asbestos workers increased 5 per cent; bricklayers: sewer, tunnel, and caisson, 8.6 per cent; engineers, portable and hoisting, 5.4 per cent; glaziers, 6.9 per cent; structural iron workers, 7.8 per cent. Those occupations showing decreases were: Carpenters: parquetry floor layers, 1.4 per cent; composition roofers, 19.5 per cent; inside wiremen: fixture hangers, 1.2 per cent; marble setters' helpers, seven-tenths of 1 per cent, and ship carpenters, 11.3 per cent. Chauffeurs' wages show an increase of 4.2 per cent, while wages of teamsters and drivers increased 4.5 per cent. Wages in the granite and stone trades decreased slightly, those of granite cutters decreasing five-tenths of 1 per cent and of stonecutters three-tenths of 1 per cent. Linemen show a very slight increase while laundry workers and longshoremen show decreases—2 per cent for laundry workers and 3.6 per cent for longshoremen. In the book and job printing trades all occupations showed some increase, ranging from less than one-tenth of 1 per cent for cylinder pressmen to 6.3 per cent for machine tenders (machinists). Bindery women's wages increased 5.8 per cent, machinist operators' wages, 5.6 per cent, and photo-engravers' wages, 4.7 per cent. In the newspaper printing trades all the occupations showed some increase except photo-engravers, night work, which showed a decrease of one-tenth of 1 per cent. The increases ranged from eight-tenths of 1 per cent for machine operators, night work, and stereotypers, day work, to 6.6 per cent for machinist operators, night work. Machine tenders' (machinists) wages, increased 4.9 per cent for day work and 5.4 per cent for night work; pressmen's, web presses, wages increased 4.9 per cent for day work and 5.1 per cent for night work.

TABLE 4.—PER CENT OF INCREASE IN FULL-TIME RATES OF WAGES PER WEEK IN 1927 AS COMPARED WITH SPECIFIED PRECEDING YEARS

Trade	Per cent of increase in full-time rates of wages per week in 1927 as compared with—									
	1907	1913	1917	1919	1921	1922	1923	1924	1925	1926
Bakery trades										
Bakers	203.2	158.0	126.0	49.7	3.8	7.2	4.4	1.4	[1] 1.4	3.1
Building trades										
Asbestos workers	[2]	[2]	122.1	65.7	26.1	35.0	30.2	16.6	12.2	5.0
Bricklayers	135.8	127.7	114.1	79.6	33.5	36.9	20.6	14.5	8.2	1.9
Sewer, tunnel, and caisson	[2]	116.0	108.9	90.7	41.0	45.0	35.4	29.2	15.5	8.6
Building laborers	152.7	136.2	111.6	62.5	12.6	20.6	17.5	6.3	10.9	.5
Carpenters	165.7	143.7	112.6	69.8	25.2	33.6	20.8	12.8	10.6	3.4
Millwrights	[2]	[2]	105.6	58.6	23.5	29.9	18.7	10.6	17.8	13.6
Parquetry-floor layers	[2]	135.2	101.9	66.2	13.7	13.5	13.0	13.4	16.6	[1] 1.4
Wharf and bridge	[2]	[2]	129.1	95.2	33.8	50.2	32.4	23.0	12.1	4.9
Cement finishers	144.0	126.3	112.9	74.1	24.9	34.8	23.3	11.5	11.0	4.1
Helpers	233.9	192.1	176.9	109.0	30.1	35.8	31.8	18.5	12.8	2.2
Composition roofers	[2]	[2]	139.6	90.8	29.2	35.1	26.1	15.2	11.7	2.8
Helpers	[2]	[2]	81.9	50.6	7.2	10.5	7.8	4.0	[1] 1.3	[1] 19.5
Elevator constructors	[2]	[2]	112.7	73.0	27.5	36.5	28.4	14.3	9.3	3.7
Helpers	[2]	[2]	138.9	86.1	27.8	34.3	28.1	16.2	11.1	3.1
Engineers, portable and hoisting	[2]	118.6	106.2	68.7	28.1	36.6	24.3	16.8	11.6	5.4
Glaziers	[2]	[2]	[2]	91.0	34.8	34.3	27.3	20.5	8.8	6.9
Hod carriers	186.7	178.5	138.6	75.3	18.0	42.2	30.0	24.6	11.7	2.4
Inside wiremen	174.9	146.7	120.6	74.5	26.0	33.7	29.1	15.5	9.6	4.1
Fixture hangers	[2]	122.5	94.7	60.6	14.6	20.3	12.8	5.0	4.8	[1] 1.2
Lathers	[2]	142.6	123.1	86.6	29.2	37.1	24.0	15.1	5.6	3.5
Marble setters	135.2	115.0	110.5	80.9	34.9	37.8	21.8	16.5	14.2	2.1
Helpers	[2]	144.8	129.2	92.0	13.8	22.3	13.3	4.6	10.1	[1] .7
Mosaic and terrazzo workers	[2]	[2]	122.9	98.7	31.0	34.9	31.6	11.4	6.0	3.9
Painters:										
Building	189.6	152.5	117.9	69.6	24.7	32.5	20.9	14.8	8.3	3.0
Fresco	[2]	131.4	99.7	64.3	21.3	26.4	20.8	24.8	13.1	10.0
Sign	[2]	134.7	121.5	68.9	21.3	22.3	15.7	3.8	2.5	.7
Plasterers	136.7	127.6	115.3	77.4	29.2	34.3	19.9	7.1	5.7	1.6
Laborers	168.0	145.6	121.1	68.7	13.9	29.7	17.6	10.0	2.6	.9
Plumbers and gas fitters	146.0	122.7	111.1	70.4	25.4	32.4	22.4	12.2	9.9	1.9
Laborers	[2]	[2]	[2]	56.1	14.4	14.7	9.7	1.6	1.2	.7
Sheet-metal workers	181.0	145.2	121.7	73.7	24.3	34.0	24.5	13.5	9.7	2.7
Ship carpenters	[2]	[2]	40.1	4.1	[1] 6.2	2.3	[1] 8.8	[1] 16.8	[1] 3.0	[1] 11.3
Slate and tile roofers	[2]	[2]	135.1	89.4	33.5	39.7	25.4	13.1	8.2	4.7
Steam and sprinkler fitters	162.4	129.4	110.9	73.5	37.6	40.5	34.2	17.0	11.1	2.6
Helpers	250.6	197.1	164.4	93.1	37.6	34.0	26.1	13.8	10.6	4.7
Stone masons	167.1	152.7	131.3	89.4	32.3	42.1	20.2	13.6	11.5	1.0
Structural-iron workers	158.6	132.7	113.4	65.2	28.1	41.3	32.1	16.3	15.2	7.8
Finishers	[2]	128.9	111.1	67.3	24.8	35.8	30.8	18.0	16.4	3.5
Tile layers	[2]	117.7	105.3	83.4	37.1	39.8	27.5	12.2	9.7	3.7
Helpers	[2]	166.4	146.4	98.6	18.7	26.6	22.7	12.7	9.6	1.2
Chauffeurs and teamsters and drivers										
Chauffeurs	[2]	100.4	83.6	37.6	14.9	20.3	15.6	10.8	4.1	4.2
Teamsters and drivers	[2]	140.1	113.7	52.3	20.4	24.9	19.1	11.1	7.7	4.5
Granite and stone trades										
Granite cutters	162.6	141.8	121.9	57.8	16.3	17.4	14.5	13.3	11.8	[1] .5
Stone cutters	147.3	138.1	116.2	72.0	27.2	32.6	21.6	13.2	8.4	[1] .3
Miscellaneous										
Laundry workers	[2]	[2]	72.0	32.7	3.6	2.9	3.8	3.8	[1] 3.0	[1] 2.0
Linemen	[2]	[2]	[2]	[2]	5.2	13.7	8.9	4.4	4.6	.1
Longshoremen	[2]	79.7	51.1	20.6	[1] .7	11.9	4.7	[1] 8.1	[1] 3.6	[1] 3.6

[1] Decrease. [2] No data.

TABLE 4.—PER CENT OF INCREASE IN FULL-TIME RATES OF WAGES PER WEEK IN 1927 AS COMPARED WITH SPECIFIED PRECEDING YEARS—Continued

Trade	Per cent of increase in full-time rates of wages per week in 1927 as compared with—									
	1907	1913	1917	1919	1921	1922	1923	1924	1925	1926
Printing and publishing, book and job										
Bindery women	[2]	[2]	117.9	51.0	2.1	6.8	2.7	1.2	.2	5.8
Bookbinders	144.5	128.2	110.8	47.1	9.9	15.4	9.4	4.9	3.5	1.7
Compositors	154.9	126.5	111.0	56.3	9.7	9.8	8.3	3.5	3.9	1.9
Electrotypers	175.0	147.4	118.7	81.6	14.9	14.4	6.4	2.9	2.3	1.3
Machine operators	123.6	105.5	97.2	50.2	11.0	11.1	9.4	5.3	5.1	3.7
Machine tenders (machinists)	[2]	108.6	101.4	49.3	14.0	14.1	13.3	5.0	7.8	6.3
Machinist operators	[2]	79.4	72.9	45.5	15.0	13.1	12.0	10.7	3.0	5.6
Photo-engravers	[2]	[2]	107.8	68.6	24.5	23.4	22.3	14.2	11.3	4.7
Press assistants and feeders	193.2	162.6	138.4	58.6	14.4	18.7	6.8	6.6	2.3	1.3
Pressmen:										
Cylinder	140.5	112.4	100.7	50.0	10.0	13.7	5.9	2.9	2.0	[3]
Platen	159.7	137.8	117.7	61.1	8.9	9.1	8.8	5.4	4.8	1.0
Printing and publishing, newspaper										
Compositors:										
Day work	123.6	100.6	91.8	53.1	15.1	12.7	11.8	3.8	3.9	2.5
Night work	112.8	98.4	91.6	52.2	15.7	11.2	9.9	5.9	5.8	2.7
Machine operators:										
Day work	124.8	105.4	95.8	54.5	18.0	13.3	11.8	7.3	4.8	3.2
Night work	109.3	96.2	88.1	48.8	15.5	10.6	9.6	5.2	3.8	.8
Machine tenders (machinists):										
Day work	[2]	94.4	89.8	41.1	9.2	7.5	7.1	1.9	4.7	4.9
Night work	[2]	85.9	82.3	37.8	8.8	7.1	6.8	1.6	3.9	5.4
Machinist operators:										
Day work	[2]	75.2	68.7	56.6	8.7	7.8	6.9	[1] 1.7	4.0	2.7
Night work	[2]	79.5	74.5	51.5	12.3	8.3	14.2	5.9	9.6	6.6
Photo-engravers:										
Day work	[2]	[2]	96.8	59.3	19.7	14.9	16.1	11.3	7.5	4.3
Night work	[2]	[2]	110.0	64.0	25.8	18.4	18.5	14.0	11.2	.1
Pressmen, web presses:										
Day work	149.0	121.8	112.6	61.9	20.4	20.5	19.2	11.3	7.0	4.9
Night work	128.7	117.8	111.0	57.3	18.9	17.9	17.3	9.4	5.3	5.1
Stereotypers:										
Day work	115.3	88.6	79.8	53.6	11.2	10.2	8.2	5.1	2.7	.8
Night work	106.1	87.8	79.9	53.4	9.9	9.5	6.7	4.0	2.2	1.0

[1] Decrease. [2] No data. [3] Less than one-tenth of one per cent increase.

Because of the wide interest in building operations and the resultant inquiries to the bureau for wage changes in building trades as a group, the table below is published:

TABLE 5.—INDEX NUMBERS OF UNION RATES OF WAGES PER HOUR IN THE BUILDING TRADES

[1913=100]

Year	Index numbers	Year	Index numbers
1913	100	1921	200
1914	102	1922	187
1915	103	1923	207
1916	106	1924	224
1917	113	1925	233
1918	126	1926	248
1919	145	1927	257
1920	197		

The International Federation of Trade-Unions

By Fritz Kummer, Stuttgart

EVEN before the World War the trade-union movement had established a common meeting place. The foundation was laid in Copenhagen in the year 1901, when officials of several national federations met at a Danish workers' congress. At this congress the practicability of an international organization was discussed. This discussion was informal, but it was agreed to hold a meeting if possible every two years, and the duty of arranging for the first meeting was assigned to the president of the German trade-union federation, Carl Legien. Out of this developed gradually the International Secretariat, with its offices in Berlin. This secretariat was, however, for several years not much more than an exchange place for information for the affiliated organizations. It was not until 1913 that a real organization was established and regular publications issued.

That the usefulness of an international center was more and more recognized is indicated by the increasing membership of the organizations affiliated with the secretariat. In 1904 there were 15 organizations with 2,477,000 members; in 1913, 17 organizations with 7,702,000 members. But even the rapidly increasing membership could not overcome the hesitancy as regards acting in important international affairs. The International Secretariat therefore limited itself principally to supplying the affiliated organizations with trade-union and industrial information.

Changes Resulting from the War

AFTER the war a fundamental change occurred. The four years of war had disorganized the industries of most of the European States, crippled business, shattered faith in the political authorities, and severed the business and moral unity of the nations. The working classes fervently wished to set aside the consequences of the war and to reestablish peaceful relations among the peoples of the various nations. The worker saw in the trade-unions the means of fulfilling this desire. The workers streamed into the unions, whose membership doubled and even tripled in one or two years. This increased greatly the belief in the power of the trade-union movement to fulfill the hopes of the working classes.

Above everything the war had taught the need of an international organization of the greatest possible strength. The workers had become conscious that only by the unified action of the labor organizations in all countries could the industrial chaos be ended and a repetition of the war be prevented. Then the treaty of Versailles brought new problems to the trade-unions. An international labor office was to be established, where the workers could work together for the betterment of labor. The necessity of solving these problems operated to reestablish more firmly the International Federation of Trade-Unions, which had been almost destroyed during the war.

Reorganization in 1919

WHEN the trade-unions met in 1919 for the first time after four years of estrangement, mutual faith was naturally by no means fully restored. In order to permit as far as possible the new international from suffering under this lack of mutual trust, and in order to make easier the way to unity among the countries estranged by the war, the headquarters of the new trade-union international was transferred from Berlin to Amsterdam. This transfer of the central office to neutral Holland proved very advantageous. It increased the cohesiveness of the international very greatly and improved very much the relations of the affiliated organizations to each other.

The International Federation of Trade-Unions—the official name of the new organization—began its life with 23,170,000 members. Its international significance, however, was greater than is expressed by the number of its members. For in 1919, the industrial and political powers of Europe had no international relations worthy of the name. This was true especially of the political organizations and parties of the working classes. Thus, it was the trade-union which first united them after the war, and their union comprised an extraordinarily numerous membership. The fact that the solidarity of the workers of all countries developed so quickly and so strongly led to an exaggerated belief in the power of the trade-union. One expected more from the international than it could fulfill. There were also assigned to the organization purely political and economic-political problems of the first magnitude. Thus, to refer to only two matters, it was to be the medium for the socialization of the means of production and it was to lead the fight against war and militarism.

Successes and Failures

IN order to be able to carry out such tasks, correspondingly greater administrative machinery was established in Amsterdam, including the publication of a regular journal in German, English, and French. It can not be denied that the new international has done much to bring together the trade-unions and for the peaceful relationship of the peoples of different countries, and that it has done much to strengthen the idea of the solidarity of the workers. Also, it has persistently led the propaganda against war, and with this object in view arranged an international peace conference at The Hague in 1922, the only one of its kind. In addition, the representatives of the international have worked earnestly and not without results for the betterment of the conditions of labor at the numerous assemblies of the International Labor Office at Geneva. But, everything considered, the great expectations which existed at the founding of the international organization have been only partially fulfilled, expecially as regards political and economic-political questions. The activity of the international has been limited more and more to purely trade-union problems.

This limitation is due to several circumstances. The most important is the economic poverty of Europe and the consequent diminution in the membership of the International Federation of Trade-Unions. European industry was shattered by the war, the

people impoverished, and commerce interrupted. The colossal loss in men and property overburdened the economic life of the people. In addition there came to several countries, as to Russia, Germany, Hungary, and Italy, internal unrest and uncertainty as to the near future. The consequence was a partial paralysis of production, unemployment, and depreciation of the money. Unemployment and inflation emptied the treasuries of the trade-unions and took away hundreds of thousands of members. In the period in which they became numerically and financially weaker, however, the employers joined together and organized strong national associations, which soon entered into friendly relations with the associations of other countries. Out of these international relations of the employers there issued a more or less unified and strong opposition to the struggles of the trade-unions. The trade-union international not being able to overcome this strengthened resistance, its activities followed the line of least resistance and returned to purely trade-union tasks.

The decline in membership is therefore chiefly responsible for the international's inability to accomplish as much as its partisans expected of it. The extent of this decline is indicated in the following figures: In 1919 there were 23,170,000 members; in 1921, 21,991,000; in 1923, 16,530,000; in 1925, 13,445,000. That is to say, in seven years there was a decrease in membership of 9,725,000. The decrease was due in part to the fact that several organizations, as the American Federation of Labor, withdrew from the international after 1919; the principal loss in membership, however, was among the European trade-unions.

Present Membership

ACCORDING to the latest report of the secretariat of the International Federation of Trade-Unions, its membership is distributed as follows:

	Members		Members
Belgium	552, 094	Poland	224, 423
Bulgaria	14, 803	Rumania	33, 093
Denmark	239, 704	Sweden	384, 617
Germany	4, 582, 366	Spain	235, 007
France	605, 250	Switzerland	149, 997
Great Britain	4, 365, 619	Czechoslovakia	356, 386
Italy	[1] 234, 520	Hungary	125, 024
Yugoslavia	27, 156	Palestine	18, 663
Latvia	16, 679	Argentina	82, 574
Luxemburg	13, 398	Canada	106, 412
Lithuania	18, 486	South Africa	60, 660
Memel	1, 401		
Holland	189, 686	Total	13, 445, 533
Austria	807, 515		

This table shows that the membership is drawn almost entirely from Europe, only a very small number, namely 268,309, being from countries outside of Europe. In the trade internationals, however, the percentage of overseas members is somewhat greater.

The national federations constitute the foundation of the International Federation of Trade-Unions. That is to say, a trade-union can belong to the international only through the federation of its

[1] 1924 figures.

country, although there are certain exceptions to this rule. In addition, however, the trade-unions are not only internationally associated through their national federations, but the organized workers in particular trades or industries have associated themselves in special trade internationals. A trade-union may be accepted into these internationals only when it is already affiliated with the International Federation of Trade-Unions through its national federation. Exception, however, may be made when a trade-union belongs to a national federation which is not considered unfriendly to the international federation.

There are 27 trade organizations in the International Federation of Trade-Unions, namely:

	Members		Members
Building trades workers	775, 103	Food and drink trades	692, 661
Clothing trades workers	322, 510	Lithographers and engravers	47, 748
Miners	1, 688, 497	Painters	181, 413
Bookbinders	80, 603	Metal workers	1, 728, 421
Printers	184, 036	Public service employees	437, 310
Diamond workers	21, 276	Post office and telegraph workers	466, 005
Factory workers	694, 272	Clerical employees	720, 201
Hair dressers	9, 155	Shoe and leather workers	351, 000
Glass workers	92, 165	Stone workers	107, 240
Wood workers	637, 197	Tobacco workers	105, 059
Hotel and restaurant employees	65, 843	Textile workers	956, 999
Hatters	57, 352	Transport workers	2, 145, 950
Pottery workers	80, 196		
Agricultural workers	373, 542		
Teachers	90, 000	Total	13, 111, 754

Each one of these trade organizations has its own secretariat, often has its own journal published in several languages, and may hold special congresses where questions of international trade interest, mutual help in wage struggles, support for traveling members, and the like are handled. The trade internationals are autonomous as regards their organization and activity. They work hand in hand with the International Federation of Trade-Unions in order to put into effect the resolutions of the international congresses. Every year, upon invitation of the executive of the International Federation of Trade-Unions, a conference of the international trade-unions is held simultaneously with the international committee of the International Federation of Trade-Unions. Here the reports of activities of the executive of the International Federation of Trade-Unions and the program of action for the coming year are discussed, and at the international congresses of the International Federation of Trade-Unions the secretaries of the trade internationals participate in counsel and in voting.

Importance of 1927 Congress

THE International Federation of Trade-Unions holds a congress every three years. This year one was held at Paris from August 1 to 6. There were in attendance 159 delegates, 41 representatives of the trade internationals, and guests from other organizations. This congress was of the greatest significance as it made very important changes in the character of the organization. The most important of these changes were: (1) The office of the international is trans-

ferred from Amsterdam to some other country, and (2) in future there is to be only one general secretary in place of the former three secretaries. The congress did not decide in what country the office was to be located nor who the one secretary was to be, these matters being left to the international committee, which is to assemble in the near future.

Transfer of Central Office from Amsterdam

THE reasons why the central office was transferred to Amsterdam have already been noted. But while there were advantages, disadvantages also developed very soon. First, none of the three world languages were spoken in Holland, and this made administration difficult and costly. Secondly, Holland did not possess any of the great industries, and its geographical location was not convenient. Finally, and above everything else, the Amsterdam atmosphere was not favorable to the working together of the three secretaries. All of these difficulties the congress thought could be removed by transferring the offices to a more favorable location. Therefore, none of the former secretaries were reelected; but one, Mr. Sassenach, was chosen to conduct the business of the bureau until the election of the general secretary.

Dispute over Presidency

THE president of the international, Mr. A. A. Purcell, was not reelected, although he was again proposed by the British delegation, which expressly demanded the election of Purcell and declared it would leave the congress if another English representative than Purcell were chosen. Notwithstanding this, the congress elected to the presidency, in place of Mr. Purcell, his fellow-countryman Mr. Hicks. The English delegation did not take part in this election. The reason for the persistence of the congress in this matter lay in the utter difference of opinion between Purcell and the majority of the organization as regards its relation to the communist trade-unions. Mr. Purcell has often given expression to his diverging attitude, as at the convention of the American Federation of Labor two years ago and also at the opening of the present congress of the international. Naturally, no delegate at the congress had thought of denying Mr. Purcell the freedom of his opinions, but the majority believed that at the head of the international there should be a man who more nearly represented its views and who in his official statements as president was in harmony with the executive committee.

In addition to Mr. Hicks the following were elected to the executive committee: Leipart (Germany), Madsen (Denmark), Tayerle (Czechoslovakia), Jouhaux (France), and Mertens (Belgium).

International Help in Labor Conflicts

IN addition to the organization changes, which consumed two-thirds of the time of the congress, the congress occupied itself with several questions which may be of general significance. First to be mentioned is the rule regarding international help in wage controversies. The Austrian delegation proposed that a fund should be established—an international war fund—to which every organization

should contribute a fixed amount regularly and from which every organization involved in a great conflict could obtain as much as it had contributed, and under certain conditions more than it had contributed, such additional payment, however, to be regarded only as a loan which was to be paid back. The congress, however, did not warm up to this proposal, its resolution on this point being as follows:

When a more important movement of a trade or industry is concerned, the participating trade or industry union may appeal for help to its international trade secretariat, which is thereupon authorized to transmit the appeal to all the affiliated organizations.

The International Federation of Trade-Unions shall participate in an international relief action only when several trade or industrial unions of a country are simultaneously involved in an industrial conflict of such an extent that requisite means for its carrying on can not be raised in the country or from the international trade secretariats, to which the participating organizations belong.

International relief action shall be given only when the members of the aided organizations are affiliated to the International Federation of Trade-Unions, in so far as the special political relations of the country do not make this impossible.

Another resolution concerning international help was as follows:

International relief action can only be instituted upon the proposal of the national federation, to which the organizations to be aided belong. The executive committee of the international is to decide whether such action shall be undertaken.

In unusual cases the national federation concerned may request the international to prevent the transportation of certain goods to the country in which the conflict is taking place. In such cases it must be established that in the country itself every effort is being made to make impossible the importation and transportation of the goods.

Demand for Ratification of Eight-hour-day Convention

THE eight-hour day or the shortening of the working time has been discussed at all workers' congresses in Europe in recent years, and also at the present congress of the International Federation of Trade-Unions. In most of the European countries the eight-hour day is in general effect and in part of them is established by law, as in Belgium, Austria, Switzerland, Scandinavia, etc. In Germany the eight-hour day was lost in 1923, in the period of inflation. Since then, however, the trade-unions in general have won it back and more than eight hours a day is now worked in only a few industries. Nevertheless, the German Government refuses to ratify the Washington agreement, that is to say, to make the eight-hour day again a matter of law. The English Government also refuses to ratify this agreement. In France the agreement was ratified some time ago, with the proviso, however, that it should not become effective until the German Government should also ratify. Through this attitude in the three principal industrial States the eight-hour day is threatened in the other countries, and the struggles of the trade-unions for a shorter workday made difficult. These are the considerations which the congress sought to clarify in a resolution.

The congress demands again of the Governments the immediate ratification of the Washington eight-hour convention. It opposes strongly the conclusion of a separate agreement by the Governments without reference to the International Labor Office. The London agreement (between the labor ministries of Germany, England, and France) shows the danger of a misinterpretation and therewith a change for the worse in the Washington convention.

The congress therefore calls attention to the fact that the Washington convention contains provisions which are universally to be regarded as minima only. * * * The congress expresses the view that no good reason now exists against a general ratification of the convention. It therefore instructs the executive committee of the International Federation of Trade-Unions to take measures for a simultaneous intervention favorable to ratification in the countries concerned.

The trade-unions will be able to hold the eight-hour day only when the workers themselves have the will to carry it through. * * * The best support and help in the struggle for the eight-hour day, and with it the greater freedom and greater share of culture it brings the worker, will always be his trade-union.

Opposition to War and Militarism

FROM the very beginning the International Federation of Trade-Unions has led in the fight against war and militarism. It has supported this fight by a lively propaganda in all countries where it has members, and called a peace congress in 1922 in The Hague. The unbroken activity of the trade-unions for the freedom of the people and against militaristic armament, however, has not hindered the governments of almost all European States from preparing for a new war as ardently, perhaps more ardently, than before the war. This preparation consumes a considerable portion of the wealth which labor produces. The sums which are spent for militarism might go for increasing the cultural opportunities of the under classes. These are the reasons which influence the pacifist-inclined trade-union international in the discussion of the question of opposition to war and militarism. The results of the discussion were set forth in the following resolution of the congress:

The congress declares that the labor movement is the decisive factor in the struggle for peace and the most important element in the bringing together of the various peoples. It alone embodies the power to render null the war plans of the ruling classes. The congress demands therefore that all war opponents and friends of solidarity among the peoples further the activities which the labor organizations are leading in the struggle against inflammatory war propaganda.

The congress considers therefore that it is the duty of the International Federation of Trade-Unions to carry on a continuous peace propaganda. It urges especially the mothers and the leaders of the young to instruct the rising generation in the spirit of peace, to inspire it with the principles of humanity and brotherhood, in order that in the near future the reconciliation of peoples will be an accomplished fact.

The congress draws attention to the fact that the peace treaties, which have disarmed certain countries, bind the governments which have signed these treaties to disarm themselves. In this spirit and in order to begin the work of general disarmament, the congress urges that the national federations take the necessary steps by which the representatives of their countries in the League of Nations will prepare measures which will put an end to the private manufacture of weapons and war materials and place the traffic in weapons and war materials under international control.

Need of a Universal Language

AT the congresses of such an organization as the International Federation of Trade-Unions where the delegates come from countries with 18 different languages, the question of mutual understanding is, as can easily be understood, a very serious matter. Although many delegates speak one language other than their mother tongue, nevertheless the speeches and decisions must as a rule be translated in three languages, and even, as was the case in Paris, at

times in four or five languages. This not only takes much time and is expensive, but generates numerous misunderstandings, even when the translations are perfect. In order to prevent this difficulty, the congress resolved "to investigate the possibility of the employment of one specified language or auxiliary language as the language to be used for the proceedings of the International Federation of Trade-Unions, and to study what can be done by the International Federation of Trade-Unions to make unnecessary the time-consuming and laborious translation at the international congresses."

The originator of this proposal evidently had in mind the introduction of an artificial language, Esperanto. However, according to the resolution, which was carried by a narrow majority, the choice of some other language for the congresses is possible, provided the investigation of the matter does not develop insuperable difficulties.

The Unionization of Labor in China

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IN reviewing the situation as a whole, we find that the unionization movement in China is characterized by smooth progress and remarkable development in the south or Kwangtung Province, with a weaker and uneven development in the north, due to lack of education, inherent docility, and militaristic suppression in the latter area, and in the Yangtze Valley, conditions vary between those of the two extreme sections. But through the efforts of the Nationalist Party, organization is developing rapidly, and it is probable that in a few years the entire area will be as well organized as is Kwangtung.

The attitude of employers, apart from that of certain philanthropists, is generally that of opposition to the introduction of modern unions, especially with regard to trade-unionism. The Chinese employers point out that it is already very difficult for them to meet the strong competition of foreign capitalists in China, due to the business experience and political advantages of the latter class; and if they are to suffer from costly labor regulations from which their foreign competitors are to be exempt because of their special privileges, it will be impossible for them to cope with the situation, and the result will be the collapse of national industry. With this situation confronting China, she would find strict labor legislation impossible to enforce, unless foreign concessions be subjected to the same legislation.

The policy of the Government in dealing with the problem of unionization differs widely in the northern and southern sections. The Southern Government deems it a part of its duty to provide: 1. Labor regulations and laws guaranteeing the right to form unions and the right to strike; 2. Regulations for unions; 3. Limitations of working hours to 54 a week; 4. Social insurance; 5. Minimum wages; 6. Schools for workers, etc., as declared by the Southern Government in October, 1926. The Northern Government has hesitated to come out on the side of the laborers in the matter of legal protection, but has provided a favorable union law. However, this was against the will of the more conservative statesmen, on the ground that the bolshe-

vistic elements had taken an active part in the great railway strikes. In view of this fact, the militarists in the northern districts have frequently applied an iron hand in suppressing unions, and have thus retarded the development of the unionization movement. Yet it is unfair to say that the Northern Government is unwilling to improve the conditions for workers, since it merely shrinks from the danger of a "red" revolution.

The workers themselves, although they are beginning to understand the advantages enjoyed by laborers in western countries, do not at this time aspire to securing similar conditions. Ten hours' work each day and a daily wage of one dollar are the extreme limits of their claims. They would even be disposed to trust the Chinese employers were it not for the foreign employers, whom they are apt to think hard and grasping and in whom they have little confidence.

If we attempt further to visualize the unionization movement from a critical viewpoint, we will find that the south and the Yangtze Valley have made rapid progress as indicated by the number of unions formed. As a matter of fact, judging from the standpoint of the occidental unions, China is still quite inferior in organization. Only a few are well organized, for illiteracy prevails among the working classes, and the masses are handled by a few radical leaders. The National Workers' Conference at Canton in 1922, and the attempts of railway men to form a national union of railway men in 1923 show some tendency toward national organization. Probably the anticipation of certain enlightened workers will be fulfilled under the régime of Kuomintang Party in the near future, but there are certain weaknesses in connection with the organization of Chinese unions which are causes for alarm. In a number of the so-called unions no actual unity exists among the members. When cases arise which demand cooperation, the leaders of such organizations can hardly induce the rank and file to act. Oftentimes only handbills and telegrams are sent out in the name of the unions. These factors stand in the way of further development. The family system and the old Pon Kou system have not entirely died out. No intercourse or relation exists among the unions which are already formed. The ancient guilds are still at work, and only a few labor leaders possess a working knowledge of how to organize unions and stimulate a unity of purpose. Some of the unions are handled by political demagogues for their own interest.

Origin of Modern Trade-Unionism

UNDER the spur of industrial evils in China such as bad housing conditions, low wages, and long working hours, and also the rising cost of living and the depreciation of the copper currency, the workers began to turn toward organization as a means of bettering their general welfare. This activity was accentuated by a nationalist feeling, and probably, to a certain degree, by socialistic propaganda. Western trade-unionism sprang up within the industrial sections of China and gradually penetrated even into small towns where modern factories were in operation. This movement dates back to the armistice, but the conflict of interest between capital and labor in

the form of demands for wage increase and shorter hours preceded that by many years. The first strikes made their appearance in China in 1913, but they did not result in unionization, for Chinese large employers of labor met the situation honestly and tactfully, and of their own accord initiated social-service work, organized factory medical services, shortened the hours, and increased the pay, and dealt willingly with the leaders of the workers. As a result strikes prior to the armistice were weak and ineffective and practically never accompanied by violence.

In 1917 labor newspapers and other publications appeared in Shanghai, Canton, Hankow, and other big cities contemporaneously with the publication of the so-called "New Thought Tide," or socialistic, literature, and they became quite effective. The continued influx of foreign capital, under the inducement of big profits, aroused a nationalist feeling and the Chinese laboring classes, awakened by students and press, became more and more articulate.

In disputes between Chinese employers and their workmen foreigners have been amazed at the frequency with which settlements are arrived at by arbitration. On the other hand where employers steadily resisted the demands of the workers, as in the case of the foreign ship owners of Hong Kong and their Chinese seamen, significant strikes followed. Due to the fact that the organization of the ancient guilds was very effective in presenting certain principles of unionism, together with the common ties of Chinese traditions and their educational and social ideals, there was a natural response to a common appeal. Moreover, the student movement in 1919 exerted a significant influence in stimulating the organization of unions, though these were not limited to laboring classes; for instance, many unions patterned after the students' union arose but the trade or craft unions were more rapid in development.

From the armistice to 1921, approximately 200,000 factory workers were organized into various unions in different cities. Of all the workers these were the most successful in their efforts to secure higher wages and better working conditions, and their unions were the most efficiently conducted of all the labor organizations then in China. Next in numerical strength were the miners and railway men, numbering 185,000. The agricultural workers, always more conservative than craftsmen, were the least organized. Among these organized laborers higher pay, better treatment, and recognition of unions were the common demands in their strikes, such strikes being most prevalent in Canton, with Shanghai coming next, and the northern Provinces last. In some industries of the interior cities where handicraft conditions still exist, the workers to-day are satisfied with the old guild system for the regulation of wages, output, prices, and hours of labor. In a few instances the guild is undergoing a process of modernization, either by the application of union rules or by separating the employers and the employees, which is done in two ways; for example, in the Incense and Toilet Articles Guild of Peking, the employers and employees, though belonging to the same organization, hold separate meetings, while in the case of the Shoemakers' Guild in Peking, separate organizations for employers and for employees are formed.

However, the old-fashioned guild system still exerts considerable influence, and controls members by methods similar to those of the guilds in Europe during the Middle Ages. It works alongside the modern union. So it will be well to divide our discussion into two divisions, namely, the ancient type and the modern union.

Ancient Types of Organization

THERE are two kinds of organization of the ancient type; viz., the "Pon Kou," or local group, system, and the guild system.

The so-called Pon Kou system has three distinctive types: 1. Artisan groups, in which organization is based on apprenticeship. The employer controls the whole group, and the purpose of the organization is merely to secure internal cooperation. Such a group may also be called an apprenticeship group. 2. Craftsmen groups, the basis of organization being either trade or locality. The chief point of difference from the artisan groups is that the members of such an organization are all laborers and no employing class is involved. 3. Local groups, the organization being based upon the locality from which the workers come. In certain respects, it is similar to the system of the guild; but in this organization only laborers are eligible to membership, while in the guilds both employers and employees are entitled to join. Examples of such organization are numerous, including the Fukien groups, Kwangtung groups, and others, membership in which is limited to those who come from Fukien or Kwangtung Province and work in the factories or other establishments where the groups are located.

As a whole, the scope and sphere of activities of these ancient organizations, or Pon Koce, are narrow and without any far-seeing purposes. Each organization works for its own interest and benefit, and such motives of self-interest often lead to conflict among the workers themselves. Their activities are of no benefit to the modern labor movement, and sometimes impede its development and progress. Although these old groups still exist in certain sections of China, as industry is further developed they will be forced to dissolve or to reorganize themselves into modern unions.

There is a type of organization among the farmers bearing some resemblance to the Pon Kou system. Laborers on the farm usually combine in small groups of from 25 to 100 men, under the direction of a so-called "headman" and his assistants. When labor is needed the employer makes a contract with the headman, who sends workers for the job. The headman also undertakes to collect bills and to divide the gross receipts with his men on an agreed ratio, which varies in different communities. As the headman usually knows local conditions, his information on employment and labor is fairly accurate. In the absence of employment bureaus such as exist in the western countries, this organization, though antiquated, is highly useful in lessening unemployment in seasonal labor such as agriculture. But this system is much less desirable in industrial cities. Since the introduction of modern industry, the so-called "headman" has become a labor broker, due to the fact that in cities thousands of laborers are needed instead of the 25 to 100 needed on the farms. Instead of rendering services to his fellow men in matters of em-

ployment the headman has degenerated into an exploiter of the workers for his own personal profit.

He supplies labor in the same manner that a contractor supplies coal, hides, or sand—so much labor for a certain period for a given amount. In case of strikes, the headman often receives a substantial bonus from the employer to bring about a peaceful settlement of difficulties, and as this settlement usually includes a higher wage, he also gets a larger sum in commissions, fines, etc., from the workers. The most pronounced effects of this system are less efficiency and the breaking down of initiative among the laborers.

The second type of ancient organization is the guild. As the guild system exercises a predominating influence in Chinese trades, it deserves very careful study. The buildings of these guilds are most conspicuous in every city, like the schools and churches in the United States. The origin of the guild system dates back several centuries. It is said that when it was first organized, its foundation principle was mutual aid and protection. The organization of craft guilds varies with trades and localities. As a rule, the manager is elected annually, together with several committee men, all of whom serve without pay. Each of the committee men take charge of the guild for one month, thus keeping the chairmanship in rotation. The executive secretary is the only paid officer in the organization.

The authority of the guild is very extensive. Disputes arising between employers and employees are always first referred to the guilds for settlement. The manager and the committee sit as judges, with two or three experts as advisers. At first the Chinese Government assumed a laissez-faire attitude toward industrial disputes and left the guild to formulate laws regarding trade matters, and so decisions were rendered by the guilds. Now the courts, as well as the guilds, are appealed to as tribunals for settling labor disputes, but owing to the craftsman's inability to pay lawyers' fees and his aversion to legal technicalities, the guilds are often preferred. This is one of the reasons why the guild system still maintains its position in China, though it is being gradually superseded by unions.

The influence of the guilds on Chinese industries has been tremendous. They have protected the craftsmen and the coolies from oppression by the landed aristocrats and political demagogues, and have saved Chinese trade and labor from being crushed by foreign competition. In a protest against a grievance, the laboring classes unhesitatingly follow the decision of the guilds, and when facing a common competition, the tradesmen and the coolies stand firm. The foreign capitalists have succeeded only by the constant influx of capital, and the natives have maintained their industries largely through organization.

However, the ancient guild can hardly meet the needs of modern industry because of the defects inherent in the system. It greatly limits freedom of action, and prevents one who might become a captain of industry from asserting himself. Under it a man of perspicacity and shrewdness finds little room for the expression of business initiative or the exercise of creative intelligence. He has no alternative but to blindly follow the guild regulations; otherwise he will suffer a common boycott for violating guild rules. Besides, as there is no national guild the boundaries of the Province limit develop-

ment, regional bias, as in the "Pon Kou system," often leading to wasteful competition and rendering cooperation impracticable. So, in a strike for their rightful place in industrial life, the workers have come to have more faith in modern unions than in guilds; and trade-unionism is gradually gaining ground, though these ancient organizations still exist.

Labor Organization of Modern Type

IN considering labor organization in China, it must not be taken for granted that there is uniformity in all localities. Broadly speaking, China may be divided into three zones—the Kwangtung Province or south, the Yangtze Valley, and the north—and for convenience we will deal separately with the movement in each of these sections. In the south, or Kwangtung Province, through the encouragement of the Koumintang Party and also because of earlier contact with western people, unionism almost measures up to western standards in many respects. In the Yangtze Valley district, the situation is more complicated, unions in certain localities being better developed than in others. In the north the movement for organization of the workers is decidedly weak, because of suppression by northern militarists and the lack of development of industries.

Unionization in the South or Kwangtung Province

THE south deserves the credit of starting the labor movement and its progress along the line of unionization is bound to be rapid. The student agitation of the spring of 1919 led to the formation of 26 modern labor unions. Under the impetus furnished by a successful strike early in 1920 by the Mechanics' Union in Hong Kong, one of the strongest groups, more than a hundred new unions sprang up within a few months. Most of these were quite small, and some of the smallest, feeling the need of counsel, have sought it from the Y. M. C. A. The activities of these unions vary, among their activities being the observance of Labor Day, support of strikers, contributions to the Russian famine relief, support of free schools and evening classes for workers and their children, and the publishing of various periodicals. Numerous saving clubs and unemployment bureaus have been established,

As in other countries trade-unionism was not legally recognized at first, for the article of the Provisional Criminal Code, relating to the labor question, is purely repressive and a denial of the right to strike. It provides that "When workmen engaged in the same business combine in a strike the ringleader shall be punished with imprisonment for a period not severer than the fourth degree, or detention, or fine of not more than $300, and each of the others shall be punished with detention or a fine of not more than $30." Fortunately the Kuomintang Party, under the leadership of Dr. Sun Yat-sen, encouraged the organization of unions among the workers, and gradually labor organizations obtained a legal status, and unions increased every year.

Another strong impetus to the unionization of labor in south China, especially in Canton, was the strike of seamen from January 13 to March 5, 1922. It was the most severe of the labor struggles in south China, for it completely paralyzed the trade and industry of the

British colony. Nearly 200 steamers, with an aggregate tonnage of about 300,000, were tied up in the harbor. Toward the end of the strike practically the entire Chinese population of Hong Kong had joined the 30,000 seamen. On February 1, the Hong Kong Government issued an order in council declaring the seamen's union illegal and ordering its headquarters closed and its signboard removed. On March 6 this order was rescinded and the signboard replaced. The seamen secured increases of from 15 to 30 per cent in wages, practically the equivalent of their demands. It is said that the southern Government did a great deal to support this movement, and that otherwise the strike would have failed. The Hong Kong Government was much blamed for its failure to appreciate the significance of labor union development in south China in time to cope with it with intelligence.

In 1922 there were, it is estimated, nearly 400,000 members in the Federation of Laborers of Canton, an organization formed after the strike. The majority of the members are workers in the old native industries rather than in the modern forms of industry. At the same time the Mutual Aid Society of Canton was organized under the leadership of Hsieh Ying Pai, a former student in American colleges. The society claims a membership of 50,000, it conducts two newspapers and hospitals for workers, and plans to open schools for the workers.

In May of the same year (1922) the first national labor conference in China met in Canton. There were 160 delegates from 12 important cities, representing over 300,000 workers in some 200 unions. The chief centers represented at this conference were the cities of Canton and Shanghai, and the Provinces of Shangtung, Honan, and Hupeh. The railway unions were also represented. Ten resolutions were passed, the most important of which were that all the unions should pledge each other financial support in case of strikes; that unions should stand for an eight-hour day; that the labor movement should be economic in character rather than political; that a constitution and the organization of a permanent national federation of labor should be formulated, including plans for the second national labor conference. This conference aimed at a permanent organization of trade-unions to be on an industrial rather than a craft basis. While the immediate result was unimportant with the exception of one union being formed at Canton, still the conference was significant as being the first in the history of the labor movement in China.

An example of an industrial union formed under the principle of the conference, is the Metal Workers' Union of Canton, organized in 1923. Its membership, about 160,000, now includes all of the metal workers of Canton and the neighboring towns. There are 10 departments in the organization, namely, those for machinists, electricians, stokers, founders, turners, draftsmen, molders, steel workers, modelers, and copper workers. Its program aims at the industrial, economic, social, and educational improvement of the members. Among other things, the plans of the organization provide for the publication of a monthly and weekly paper, the erection of a technical school, a sanitarium for tubercular laborers, a convalescent home for aged workers, a general hospital, a savings bank, a model factory for mechanics, and a kindergarten for the children of the workers. The

political and social conditions in Canton and vicinity have prevented a part of the program from being put into full operation, and some of these lines of work have been held in abeyance.

Since the first labor conference strikes have increased each year. In 1922, in a period of nine months, there were 52 strikes at Canton only one of which proved successful and that was due chiefly to the support of Dr. Sun Yat-sen. His influence in the activities of labor has resulted in a united attitude among the laboring classes toward unionization.

In 1924 the number of trade-unions in Hong Kong increased to 200 and in Canton to 300, some of which became very powerful in handling strikes and boycotts. This increase in labor unions affected the neighboring Provinces and districts, as may be seen from the following report of British consul to Swatow: "Trade-unionism had greatly developed of late years, more specially since the shipping strike in Hong Kong in 1922. Practically every branch of labor has now its union"; and also from the report of Consul Hewlett (Great Britain) in 1924: "Servants in foreign employ in Amoy combined two years ago to secure a raise in wages; the chair bearers have united and secured a raise in chair hire; the sampan men work in closest cooperation, and, at an injustice to one of their members, all the other men will cease work."

In 1925, with the further development of labor organizations the absence of union rules made itself felt while conflicts occurred, and regulations were drawn up at the request of the workers' organizations in the Kwangtung Province which were very wide in scope. These organizations include manual laborers and intellectual workers of both sexes, and even public officials. Since the general strike of 1925, organizations of labor have became more active because of the cooperation of the working classes with the student class and the Government in the nationalist movement. At the time a number of peasants organized trade-unions sometimes abused their rights by making unjust demands and resorting to violence, and on December 14, 1926, the Kwangtung Provincial Government decided to restrict and regulate the actions of workmen, issuing the following decree:

> It is the desire of the Government to protect the interests of the workers, but of late laborers of bad character, taking advantage of complications among their number, are committing arbitrary acts, which will mislead labor movements. Hence, the Government has issued the ordinance, but the ordinance by no means aims at the oppression of rightful labor movement.

The second national labor conference was held in Canton in May of 1925. It decided to create a general labor union of China in order to organize all the workers in the nation and to promote their general welfare. Membership was to be corporate rather than individual. Representatives of federations of labor unions were to become ipso facto members of the General Labor Union, while representatives of single unions might become members on the recommendation of the officers of the General Labor Union. The aims of the General Labor Union were to be: (*a*) To promote labor organizations in China; (*b*) to direct and unify the labor movement; (*c*) to promote friendship and education among the workers; (*d*) to formulate common aims and policies; (*e*) to arbitrate in labor disputes, especially between unions; and (*f*) to establish relations with international labor organi-

zations. There was to be an executive committee of 25 members elected annually at the conference of the representatives of member unions. The decisions of the annual conference of the representatives and of the executive committee were to be binding on all member unions. Under the executive committee there were to be a secretariat and a department of organization, of publication, and of finance. Other important resolutions of the conference were in favor of: 1. The federation of laborers and farmers; 2. The federation of laborers and farmers with soldiers; 3. The promotion of workers' education; and 4. The consolidation of labor unions in Canton and Shanghai. However, these decisions can have no far-reaching effect on the laboring classes as there were dissenting opinions. Some unions pointed out that the conference was dominated by radicals, and others stated that the conference was "unrepresentative of the Chinese proletariat as a whole."

In May of the year following (1926) the third national labor conference was held at Canton. Four hundred delegates, representing 1,240,000 organized workers, belonging to 400 unions in 19 Provinces, were present. Resolutions were passed on the following subjects: Organization of the labor movement; reorganization and working of trade-unions; objects and program of the economic struggle; strikes; the relations between workers and peasants; workers' education; young workers and the trade-union movement; unemployment; cooperation; labor legislation; and the right of association and conditions of work, etc.

The question might be raised as to why the development of trade-unionism is faster in Kwangtung than anywhere else. It is said that Canton presents a favorable field for labor activities for the following reasons:

1. The Southern Government has been sympathetic toward the laboring classes.
2. The Cantonese people have had a closer and more intimate contact with the West.
3. The Cantonese possess more of a fighting spirit and are more contentious than the peoples of other Provinces.
4. The purchasing power of the Cantonese is, on the average, higher than that of the peoples of other sections in China; hence economic conditions favor labor organizations.
5. In the Kwangtung Province climatic conditions permit the land to be under cultivation practically the whole year. Hence the striking laborer can often, through his family connections, return to the land when necessity forces him to obtain his sustenance from sources other than his work.

Unionization in the Yangtze Valley

THE other section noted for activity of labor is the district around the Yangtze River, including the two industrial Provinces of Hupeh and Kiangsu. The workers of Hupeh have made considerable effort to organize themselves, receiving encouragement from their comrades in Kwangtung, especially following the success of the Hong Kong shipping strike. Toward the end of 1922 they set up a workers' federation, including 24 trade-unions and about 40,000 members. About the same time the workers on the Peking-Hankow

Railway, formed a trade-union, with local sections. At Shanghai, according to a report of the Economic Information Bureau of the Chinese Government, 47 trade-unions were created in 1922, and about 80,000 workmen are members of trade-unions. The movement also includes 30,000 coolies, 50,000 dockers, and about 5,000 drivers. At one of the unions at Shanghai, T. S. Chen, a Chinese socialist, said in an address: "Labor is now awakened to the realization that human physical endeavor is not a commodity, and that the workers' person, health, and safety must be protected by the capitalist on the one hand and by society on the other." Since then Chinese laboring classes have felt a new dignity, and are entering into labor activities.

The progress of organization in Shanghai was blocked for a time by the policy of the Chinese authorities in the Kiangsu Province, in which Shanghai is situated. Freedom of association was forbidden, the police could break up any meeting of workmen for whatever purpose they might be gathered, and trade-unions were not allowed to exist. The Shanghai municipal council police department, administered by foreigners, assumed the same attitude and allowed no meetings in the International Settlement which might be construed to have a political significance. The result was that, while unions did exist, they were driven to secrecy. At the National Assembly of the Labor Organization, held in Shanghai in 1922, a program was drawn up for presentation to the Government, demanding that strikes be declared legal. At the end of 1923 the Peking Government, under which Shanghai and other central sections were then controlled, submitted to Parliament regulations authorizing workers to associate in trade-unions and granting such unions a legal status. Although the incessant civil wars prevented general legislation, the Provincial governments around the Yangtze Valley enacted their own legislation concerning labor unions, and labor activities in such Provinces as Hunan became very marked; not only legal recognition was secured but certain recognition was accorded union representatives by large companies.

Due to the rapid growth of unions, dissension appeared among their leaders, which diminished their power. The extreme group wished to have no dealings with the more conservative section, and in so embryonic a movement this split was particularly disastrous. Also, the mass of the people are unable to read Chinese characters, which means that they must rely for their information upon rumor or word of mouth.

However, 75 well-regulated unions were formed in 1924, as reported by the British consul. Meanwhile a General Labor Union was formed at Shanghai, and all the members of the unions at Shanghai became subject to its rules and regulations. Membership was open to all Chinese workers. The rules state that if any member of the union has cause for complaint against any factory owner because of harsh treatment or injury the matter shall be reported to the union, which will investigate and, if necessary, take up the question and negotiate on behalf of the injured member. Disputes between members which have not been taken to court will be adjusted by the union. All important matters concerning membership and the union are to be reported to the committee of the General Union, etc. In 1925 the union suffered a blow from the

acts of Gen. Chang Tso Ling, who closed the union and seized all the documents of the organization. After the troops of Chang withdrew from Shanghai the General Labor Union reopened.

In the year following, another disaster confronted the union. The continuous strikes in Shanghai irritated Sun Chuan Fan, the military governor of Kiangsu, and he ordered the General Union to be "sealed" or closed again. After that the labor movement in Shanghai remained inactive for a time, but after the news of the victories of Gen. Chiang Keh Shek, the leader of the Kuomintang, or Nationalist Party, was brought to the laboring classes, they felt that their day of emancipation had come and became restless again, for the Kuomintang was and is noted for its sympathy toward labor. The Federation of Street Unions held a meeting in December, 1926, at which a committee of six persons was appointed to arrange the reorganization of the General Labor Union. Permanent headquarters were established and the General Union was reopened in defiance of the official orders of Governor Sun Chuan Fan. Soon afterward the police seized all documents of the union and placed seals upon the doors, in spite of the laborers' protests. The union was compelled to remove to other quarters. A resolution was passed threatening another general strike in case of further suppression.

By the victory of the Kuomintang, unions in all central China received a strong impetus; for instance, the trade-union members in the Wu Han district increased to 240,000. Practically all types of workers were organized, even servants in native homes. The significance of the movement is illustrated by the demands of the Servants' Union at Siantan, Hunan:

> An employer who wishes to dismiss a servant shall first take the matter up with the union, telling his reasons. If the union approves, the servant may be dismissed. In case of improper conduct the matter shall be reported to the union and the servant admonished by the same. No servant shall be employed who does not belong to the union. Disagreements between employer and employee shall be settled by the union. In the case of a grievance a servant has the right to petition the union to uphold him in his case; if the reasons of the grievance warrant such action the union may take the matter up with the Government in order to obtain further help. No servant may instigate a strike without the consent of the union.

Thus the strongest element of the labor movement since 1926 has come to be unionization. For instance, among the demands of the Wing-on employees during the strike which started on the 15th of January, 1927, is this: "The company shall recognize that the Wing-on Labor Union has the sole right to represent the workers as a whole." During another significant strike early in 1927, against the Tramway Co. we find the demand that "Our federation shall be recognized by the company as the representative of workmen, and foreigners shall not be allowed to hit or dismiss Chinese workmen from the federation unless with permission." These instances show the increased power of the unions in Shanghai in dealing directly with employers. At the same time, the employers' associations slow up the progress by breaking away from the old guilds in order to balance their power of bargaining with that of the employees. The conflict of interests between capital and labor has made the Government feel the necessity of stepping in, and the political committee of the Southern Government in the Wu Han district early organized a committee of arbitration. The members of this committee consist

of the representatives of the General Labor Union and delegates of the Kuomintang Party, of the Chamber of Commerce representing the employers, of the political committee of the southern Government, and also of the police department. The purpose of this committee is to settle industrial disputes between the employers and employees.

Another committee of arbitration is found in Shanghai. Its regulations were drawn by T. Y. Yu, councilman of the Shanghai Chamber of Commerce. Sixty members are selected, consisting of representatives of chambers of commerce in Shanghai and surrounding districts, of the General Labor Union, and of the various trade guilds. The committee is vested with power to settle all industrial disputes, its aim being to maintain peace between the two classes.

Unionization in the North

UNIONIZATION in the north is least developed and the movement comparatively weak, only the railway men having strong unions. The reason for this is that there are only a few enlightened labor leaders in North China. Public authorities adopt suppressive measures in dealing with labor. Workers having any real knowledge of unions are found chiefly among those who participated in the World War. So the Returned Laborers' Union, composed of workmen who returned from France, merits particular attention. Besides attempting to improve conditions of employment, the union has a program of wide scope. While in Europe, these workers abstained from drinking and gambling and sent their savings to support elementary schools in their home villages, and the organization now feels the wisdom of encouraging temperance among laborers. It has isolated itself from politics in order to insure free and unhampered development along industrial lines. The union published a declaration at the time of organization as follows:

Aims.—The principal aims of the union shall be to cooperate with the workers to strengthen collective bargaining, to increase common knowledge through frequent association, and to promote a cordial but nonpartisan friendship.

Resolutions.—The members are resolved not to drink alcohol, or to visit prostitutes, or to gamble or to smoke opium or use its derivatives.

Claims.—The union claims the right to strike for improved working conditions, and the right to hold meetings or to make public speeches for promoting public welfare of the workers.

The union elects a chairman, a secretary, a treasurer, and 10 councilmen to take charge of various activities of the organization. This is probably the first union with progressive ideas in North China.

Among other unions those growing out of the guilds are unimportant. Among them is the Lu-an Industrial Union of Peking, an amalgamated organization of several crafts formerly organized in independent guilds, including carpenters, bricklayers, blacksmiths, masons, and painters. Before the reorganization the craft line between the guilds was very rigid, so that members of one guild could not handle the jobs of those of another guild. Under the new organization more cooperation is allowed among the craftsmen. The union itself secures building contracts from the Government and distributes them to various members by lot. If a member loses money on the contract so secured, he may be reimbursed by the union on showing

good cause. If a member has difficulty in collecting debts or is involved in litigation, he may appeal to the union for assistance. The organization also regulates wages and working hours and gives aid to unemployed.

Another type of union, or group of organizations in the nature of clubs, has had a unique growth. The Tanshan Club is one of the best examples. It is located in Tanshan, a pioneer community of industry in North China. About 285 years ago, the inhabitants of the district began to operate coal mines by primitive methods. In 1878, the western method was introduced in the Tanshan Mine, it becoming the first modern mine in China. The increase of workmen led to the formation of a self-government club for the purpose of providing a recreation place for the workers. In 1905 a slight conflict with the laborers from Kwangtung Province resulted in the dissolution of the club. A separate Kwangtung Provincial Guild was then formed for fraternal meetings. After the student movement in 1919, the employees of the Peking-Mukden Railway machine shop organized a union to improve working conditions as well as to equip themselves with an elementary education. This stimulated similar organizations on the part of the employees of the colliery. The general organization of the miners was gradually strengthened and to-day they have a reading room, a school for teaching the phonetic system of the Chinese language, and a magazine to popularize the use of phonetics. Thus the Tanshan workmen, numbering over 30,000, with more than 30 years of experience in industrial life, have realized the importance of cooperation and combination. The more recent organizations, with broad educational programs, clearly aim at equipping themselves with common intelligence for maintaining a balance of bargaining power with the capitalists.

The organizations referred to serve to show that while labor activities in North China are more or less identified with the old guilds, and the laboring classes are more conservative and moderate in their attitude than are their comrades in the south and the Yangtze Valley, it is not because they are slow to adopt the modern idea of unionism from Western countries, but rather due to the fact that their environment restricts them to inactivity. Moreover, the high-handed policy of the authorities of the northern Provinces is well known to the workers. When the railway men on the different Chinese lines, at the beginning of the year 1923, decided to hold a conference for amalgamating and for founding a national union of railway men, the Peking Hankow Railway workers were told by the Chengchow police authorities that they had received orders from Wu Pei Fu, a powerful general, forbidding such a conference. Representatives were sent to Wu to obtain permission but were unsuccessful. Nevertheless, they proceeded with the conference. The police interfered, headquarters of the union were "sealed," and the delegates dispersed the following day. The workers were ordered to go back to work, and upon their refusal Wu Pei Fu ordered their leader, Liu Tsian Chien, and other active workers shot. After this all of the branches of the Railway Workers' Union were temporarily closed. The news spread over the country and stirred up the laborers against the northern militarists. When support was denied them in China they appealed to other countries wherein labor had met with a measure of

success and denounced militarism as even worse than industrial exploitation.

However, there are bright pages to be found in the record of the unionization movement in North China. Seeing that the chief agitation was along the line of health and safety of the workers, the Ministry of Communications, anticipating further developments, began taking the initiative in health and social welfare legislation. The measures passed included life insurance, health and accident insurance, and a pension system for the benefit of the 125,000 railway employees in China. In addition, the ministry now provides an elementary education for railway workmen. This educational program provides for the establishment of schools, lecture groups, railway libraries, and railway daily newspapers. As the labor organization movement is dependent upon the leaders, it is the purpose of the ministry to enlighten the laborers in order that they may not be misguided by any of their leaders.

PRODUCTIVITY OF LABOR

Labor Productivity in Copper Refining

DATA regarding output per man per day has been furnished the Bureau of Labor Statistics by one of the large copper refining companies. These data give comparative employment and output in January, 1918, which was the peak employment period, and August, 1927, which is reported to have been a fairly average month. The figures show that during this period of nine years the number of men employed was reduced from 578 to 233, with a coincident increase of about 10 per cent in total output. The company further states that with contemplated improvements completed not more than 100 men should be needed. The detailed figures for 1918 and 1927 are as follows:

	January, 1918	August, 1927
Pounds refined copper produced	9, 165, 628	10, 142, 766
Tons concentrates smelted per man per day	0. 43	1. 30
Tons total material smelted per man per day	0. 78	1. 67
Pounds refined copper per man per day	610	1, 612

The reduction in personnel, it is stated, included both skilled and unskilled labor.

Productivity of Labor of Seamen

A DECREASE during recent years in the number of persons necessary to operate a given tonnage of shipping and a change in distribution of personnel among the different departments of a ship were brought out in the census of seamen on seagoing vessels taken by the British Government on March 31, 1926. This census, the results of which were published in the Board of Trade Journal (London) for July 14, 1927, included only the seamen actually employed on the day the information was obtained, on seagoing vessels other than yachts and fishing vessels registered in the United Kingdom, the Isle of Man, and the Channel Islands.

The relatively diminished personnel of the navigating department and the increased relative importance of the catering staff in steam and motor shipping are shown in the following table giving the number of persons employed per 100,000 net tons on April 3, 1911, and on March 31, 1926:

NUMBER OF PERSONS PER 100,000 NET TONS OF STEAM AND MOTOR SHIPPING APRIL 3, 1911, AND MARCH 31, 1926

Department	Apr. 3, 1911	Mar. 31, 1926
Deck	815	713
Engine room	828	767
Stewards	446	505
Other	43	99
Total	2, 132	2, 084

It is pointed out that the decrease in the number of persons employed in the engine room may be attributed partly to the increased use of fuel oil by steamships and partly to the increased employment of motor vessels. Other causes for the changes in distribution are the change from tramps to liners and the increase in the average size of ships. The increase in the personnel of the "other" group is said to be principally due to the inclusion of wireless operators in this group, but partly also to the increase in musicians and other specialists engaged to provide social and other amenities on the luxury type of passenger vessel.

Machines for the Harvesting of Cotton

COTTON picking has always been a hand process and has given employment to a very large amount of labor in the cotton-growing States. Many attempts have been made to invent machines to do this work, but up to the present apparently none of these attempts has been commercially successful. Recently the International Harvester Co. has devised and is now trying out certain cotton-picking machines which it believes to be both mechanically and commercially practicable. These experiments will be watched with much interest, as the perfecting of cotton-picking machinery may not only have an important effect in increasing labor productivity and reducing labor cost, but through the displacement of labor it may have a great effect upon the whole economic and social life of the cotton-growing States.

The following description of the new machines has been furnished by the company:

Type of Machinery

IN order to meet the varying conditions of soil and climate in the cotton-growing areas of the South it has been necessary to devise three types of machines. These are:

A picker of the spindle type for the lowlands and other sections of the old South where the entire crop can not be picked at one time, due to a long season and uneven ripening.

A stripper or boller for harvesting upland cotton, as it is usually called, which is cotton that matures quickly and ripens evenly.

A cotton cleaner for cleaning stripped cotton and bolls.

Description of Cotton Picker

THE picker is still looked upon as semiexperimental. Only a limited number have been produced this year and these have been placed in various sections of the South where they will be operated during the fall and winter and results carefully watched.

The machine is what is known as the spindle type, having two picking cylinders set vertically, each carrying a large number of spindles which work horizontally and are close enough together for at least one of them to come in contact with every open boll on the plant.

The two picking cylinders and doffers are suspended by pendulum and spring floating action. The picking mechanism floats in all direc-

tions and thus adapts itself to the variations in the cotton row and the ground, thereby obviating the need of accurate guiding of the wheels of the machine and eliminating danger of breakage of spindles and injury to the cotton plants.

As the picker is pulled along over the cotton row by the tractor, two large gathering shoes on the front of the machine pick up the spreading branches of the plant and place them in a position for the picking spindles on the two cylinders. The spindles revolve rapidly, at the same time moving backward on the cylinder in a horizontal position at exactly the same speed that the picker moves forward. The cotton in the open bolls winds around the spindles and is carried back to the doffers where the cotton is released by a quick reverse action of the spindle as it passes between two sections of the doffer.

Each section of the doffer is equipped with a small set of brushes on the upper and lower sides. Each spindle passes between the two sets of these brushes which clean the spindle of cotton at the time when the reverse action of the spindle takes place.

The next operation is to separate the cotton from dirt and trash, which is accomplished by means of a revolving disk cleaner. From this centrifugal cleaner the cotton passes on to an elevator where a cylinder and belt cleaning device continue the cleaning action. The cotton then passes into one of two large gathering bags at the rear of the machines. These gathering bags are removed when full and replaced with empty ones.

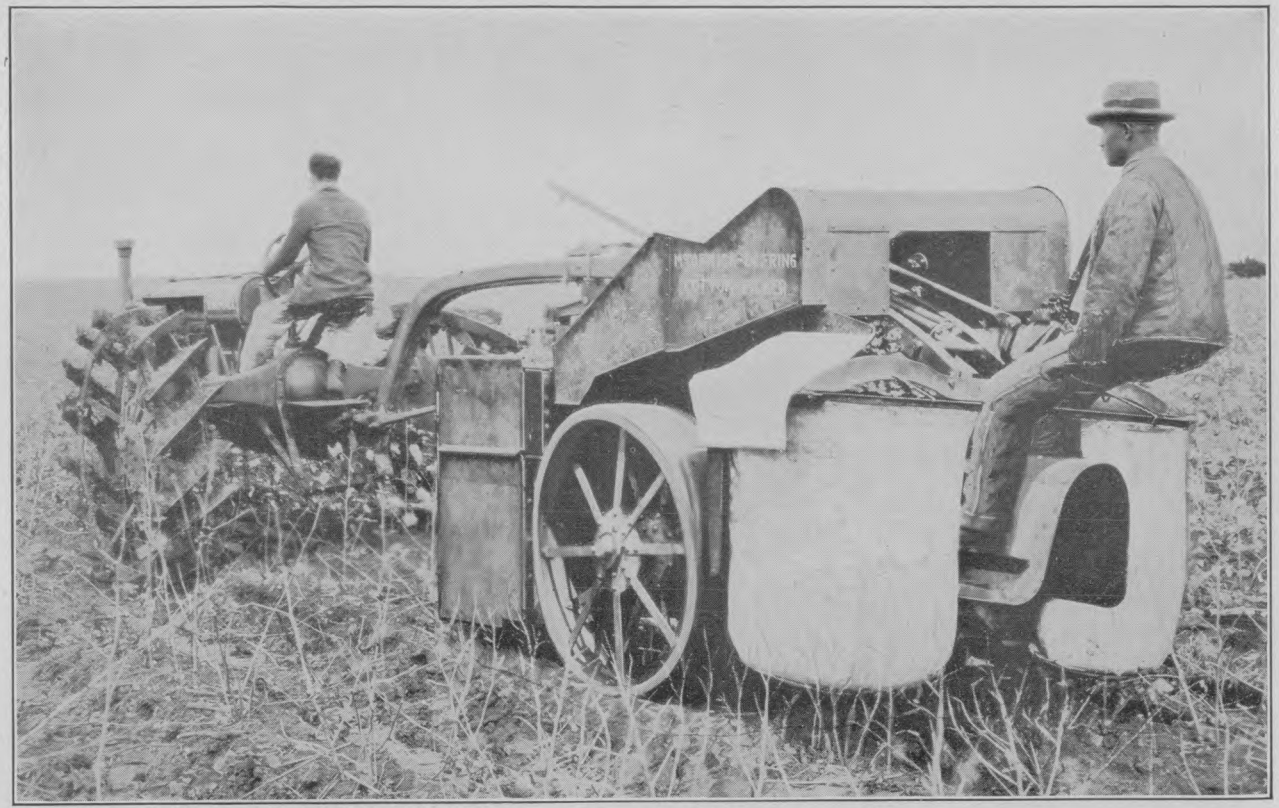
The outfit is operated by two men, one guiding the tractor and the other controlling the cotton picker. The machine with its two operators is expected to pick from two to five bales of cotton a day, which is equivalent to what two pickers could gather in from 8 to 15 days. Thus, it is estimated by the company that on the basis of present wages paid to hand pickers the machine will save from $10 to $15 a bale over hand picking. It is believed that mechanically harvested cotton will, as a rule, grade higher than the average hand-picked cotton.

Description of Cotton Stripper

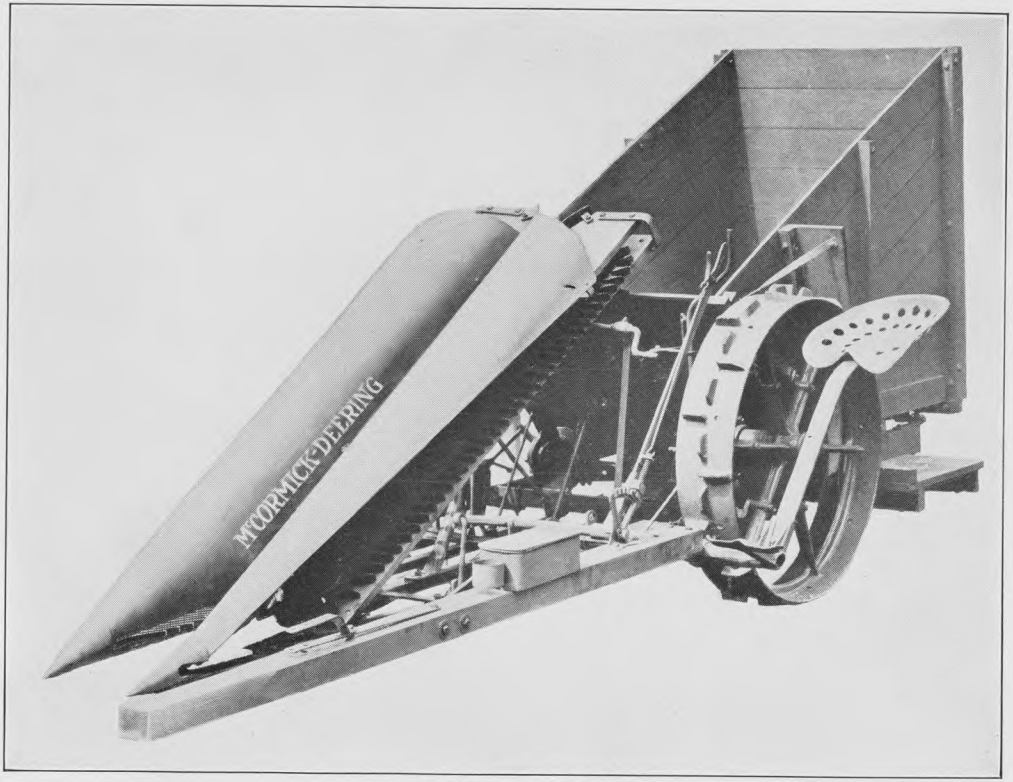
WHEREAS the picker gathers only the ripe cotton or open bolls, the stripper or boller is designed to gather the ripe cotton and also the unopened bolls in one operation. It is a very simple machine in comparison with the picker and can be operated either by tractor or horsepower. The stripper has a pair of long dividers, similar to the dividers on a corn binder, which pass one on each side of the cotton row. These dividers are adjustable up and down and are operated close to the ground.

As the machine is drawn forward, the dividers guide the cotton plants between two stripping chains immediately back of the dividers. A series of stripping fingers on these chains strip the bolls from the plant and deliver them into a gathering box at the rear. Spring bars and leaf springs known as picker fingers are located immediately below the stripping chains. These fingers gather and retain any loose cotton that is not in the bolls.

When the gathering box is filled with bolls, it is dumped on a large piece of canvas located at convenient points in the field where a cleaning machine may be located.



COTTON PICKER AND TRACTOR IN FIELD OF COTTON



COTTON STRIPPER

The stripper, and tractor, as in case of the picker described above, is operated by two men, and is expected also to gather from two to five bales of cotton a day, depending upon the yield and condition of the field.

Description of Cotton Cleaner

THE cotton cleaner used in connection with the stripper is a self-contained, power-operated stationary machine to which the bolls and stripped cotton are brought after being dumped from the stripper. The cleaner is of the spindle type and consists of a revolving drum having spindles of the same type as the cotton picker previously described.

The stripped cotton is delivered into a hopper and then passed through a feeder which delivers the bolls at a uniform rate to the boll-breaking device which opens the closed or unripe bolls without injuring the fiber. The cotton is next passed on to the spindle drum where the spindles pick up only the lint, all other material being ejected. The cotton is removed from the spindle by doffers in the same manner as on the picker, and the lint is pneumatically conveyed to a wagon or cotton house where it is then ready for the gin.

Thousands of bales of cotton are left in the field each year in the unopened bolls or "bollies." It is believed by the company that with the cleaner and the stripper, which may be taken into the field late in the fall following hand pickers or the mechanical cotton picker, the cotton in these "bollies" can be harvested, adding considerably to the grower's income.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

The Problem of the Unskilled Laborer with a Large Family

THE case of Matt Jones, steel-mill laborer, endeavoring to support a wife and eight children [1] on a daily wage of $3.44, was a subject of extended discussion at the recent Detroit meeting of the Catholic Conference on Industrial Problems. This particular case was used, of course, merely as a rather vivid example of a situation which it was agreed was not unusual. The discussion covered a wide range, but there was no agreement as to the proper remedial measures to be taken or recommended.

The problem presented to the meeting was an actual case which came before the Catholic Central Charity Bureau in Chicago, and was described as follows:

> The family we will call Jones, consisting of father, named Matt, age 37 years; mother, Helen, age 39 years, and the following children: Tom, 13 years; Mary, 10; Mandy, 9; Annie, 7; Katie, 5; Rosie, 3; Joe, 2; Helen, 6 months.
>
> The father is a naturalized citizen of the United States. He is employed with a large steel company and earning $3.44 a day, and came to our office to supplement his earnings.
>
> A letter was written to the steel company asking if they would give Mr. Jones an opportunity to earn more money so that he could support his large family. A reply was received from the general superintendent of the steel company, addressed to the Central Charity Bureau, 126 North Desplaines Street, Chicago:
>
> "We have your letter of July 29, in regard to Matt Jones, and would advise that we have personally looked into his case and give you attached hereto a report from our labor superintendent:
>
> "'Referring to your favor of August 1, and the attached communication from the Central Charity Bureau, beg to advise that this man is employed as a gasman in No. 1 Merchant Mill, and is at the present time earning $3.44 per day. During this present week when No. 1 Merchant Mill is down he is employed as an ashman in the boiler house earning $3.42 per day.
>
> "'Mr. Jones first entered our service on June 26, 1920, and was dropped from our roll on July 24th, 1920; investigation by our 'look-up' man disclosed that he had accepted a position with the Iroquois Iron Co. He returned again to our service on May 1, 1922, and has been continuously in our employ and has worked steadily ever since. He worked during this period, including July 29, 81 days, earning $295.95, or an average of $3.65 per day.
>
> "'Our records show that he has nine children, the oldest one being born February 10, 1908 and the youngest on February 5, 1921.
>
> "'You can readily see that he is making more money than the average laborer in the plant and his length of service with the company is of such short duration that I believe a promotion from a laborer at $3.12 a day to a gas man at $3.44 a day shows that we have advanced him as rapidly as it is possible to do so.
>
> "'Yours truly,
>
> "'SUPERINTENDENT LABOR DEPARTMENT.
>
> "You will note that he is now earning $3.44 a day on an eight-hour day, and we have promoted him about as far as we can in view of his short term of employment with us, keeping in mind fairness to the other workmen in the plant.

[1] Some of the documents in the case refer to 9 children, the difference being probably due to the differing dates to which reference is made.

"We appreciate your interest in cases such as this and, of course, we realize that the wage paid to an unskilled laboring man is a very meager amount with which to endeavor to support a wife and family of nine children, but the difficulty with the present times, as we see it, is this: We are engaged in the manufacture of a product that goes largely to the farmer, and on the basis of the wages we are paying, we can't make a product at low enough cost that the farmer will buy, except in very sparing quantities, at our cost price. Yet, the cost of living in a city or industrial district is kept up so high by street-car fares being high, rents being high, which affect the cost of repairs to shoes and everything else and this on account of the high wages paid in the production of street-car transportation or flat buildings and business houses, etc., that our employees, making a product for the farmer, are at a great disadvantage.

"The farmer has been obliged to go back to almost pre-war prices for his products, he wants to buy our products at practically pre-war prices, and at the present time we are paying 50 per cent above the pre-war labor rates; yet, it is a very small amount for an ordinary unskilled laboring man to keep a family of a wife and nine children on, and the natural proposition in the minds of most people is that the man should be paid a living wage, but the next question is, "What is a living wage?" If the industry in which he is employed and his efforts are being consumed will not permit of any greater wage, and at the same time produce a product that can be sold to the prospective customer, that fact will fix the wages that can be paid in that industry, and if other lines of work were brought to an even level so that this laborer could get for a dollar what he ought to get, he would undoubtedly have a living wage, or else the industry in which he had been working ought to be stopped entirely and people do without the product. That could hardly be the result in such a basic industry as ours, that of producing steel for agricultural implements.

"Yours truly,

"STEEL COMPANY,
"By GENERAL SUPERINTENDENT."

The discussion opened with a general description of the development of the family allowance and child endowment systems in other countries as a means of meeting the particular difficulty of wage earners with large families. In certain European countries, notably France and Belgium, the family-allowance system has been introduced in many industries. Under this plan, sometimes referred to as the social-wage plan, the basic wage of the worker is supplemented by an additional allowance proportioned to the number of children. In New Zealand and New South Wales, recent legislation has sought to meet the same problem by direct State endowment to low-paid wage earners with families above a determined size. Under this plan, there is no connection between the State payments and the regular wages of the workers.

Commenting on these practices, Dean William J. Engelen, S. J., of St. Johns College, Toledo, Ohio, held that the family-allowance system in France and Belgium was of undoubted value in those countries "if for no other reason that it helps to overcome the Malthusian tendencies which strongly prevail there." He was of the opinion, however, that a state system of family allowances is not socially sound. With reference to the assumption of such a function by national Governments he asked, "Must we not fear this new duty of the State will also suggest increased rights of the State in the matter of education? We come dangerously near to socialistic principles and we tread on dangerous ground."

He suggested, however, a form of insurance which would raise wages "that are temporarily and on account of temporary necessity too low or which are insufficient in exceptional cases. Such insurance would substitute dignified justice for sweet and kind but humiliating charity." Such social insurance would not of necessity

be State insurance. Preferably it should not be State insurance but "at least sanctioned and supervised by the State."

"Should not the payment of a living wage to the workers be charged against industry before dividends are paid?" was one of the questions put to the conference by Dr. J. E. Hagerty, of the Ohio State University. He voiced the hope that the time would soon come when industries which can not pay living wages shall be considered parasitic. In regard to the steel mill superintendent's statement concerning the economic relations between the steel mill producer and the farmer, Doctor Hagerty said that "the farmer has stupidly authorized the Government to protect the steel mill producer without seeking corresponding benefits for himself." The speaker contended, that the steel producer is entitled to no sympathy because the product he sells in this instance is bought by a producer who, unlike himself, enjoys no direct benefits from the United States Government.

Joseph Murphy, chairman of the employees' representatives of the Lackawanna plant of the Bethlehem Steel Corporation, urged, as steps toward a more equitable distribution of wealth and income, the placing of an honest value on investment and the abolition of stock watering and stock melon cutting. He also advocated that the high-paid workers share a portion of their wages with their fellow laborers who hold less advantageous jobs.

Estimates worked out from the budgets of various relief organizations were presented by Dr. Francis J. Haas, Marquette University, Milwaukee. These figures included no provision for medical care or future contingencies. According to such estimates Doctor Haas stated that the Matt Jones family, in order to secure the bare necessaries of life during the summer, would have to spend $155.24 per month apportioned as follows: For food, $72.04; clothing, $40.70; rent, $25; summer fuel, $3; household supplies, including replacements of kitchen utensils, dishes, bedding, etc., $10; car fare, $3; gas or electric light $1.50. The income of Matt Jones being $89.44, the deficit was $65.80. "There should be no delay on the part of the relief agency in making up the deficit in the family budget."

Miss Louise McGuire, of the National Catholic Service School faculty, reported that "the social worker is chronically confronted with the problem of how best to handle" situations similar to that of Matt Jones. "To supplement wages is to keep down wages." Furthermore, no charity bureau, she said, could possibly meet its obligations if it inaugurated such a scheme. "Sheer numbers would overwhelm it. It is estimated that 12,000,000 wage earners are just about one week removed from the line of dependence." If, however, the incomes of families like that of Matt Jones are not supplemented, "the obvious results are sickness, either chronic or acute, probably malnourishment, tuberculosis, delinquency."

The speaker briefly reviewed the attempts made by poor families to help themselves by taking in lodgers in already overcrowded houses, by mothers leaving their little ones and going out to work, and by the children becoming wage earners at the earliest possible age. She also declared that the experience of social workers in the mothers' aid divisions confirms the public statement made by John Fitzpatrick of the Chicago Federation of Labor that "children of

Chicago widows had a better chance in life and greater opportunity than the children of workingmen."

Miss McGuire said that "communities have in a sense subsidized wages" and in this connection she submitted some statistics on the staggering expenditures of New York and Chicago social and charitable agencies.

Should we call the Jones family abnormal and have recourse to private charity relief? Can we ask an employer to establish a minimum wage on the basis of a family of 10? After raising these questions Miss McGuire proposed that in cases like that of Matt Jones aid be given in regular amounts, the matter being handled on an individual basis, and that strict files be maintained for use in the compiling of statistically indisputable facts.

The ultimate solution of the problem, she thought, would seem to point to family grants similar to those provided under the New Zealand and New South Wales child endowment acts.

The situation of Matt Jones and his family is the situation of thousands of similar unskilled workers in "prosperous America," Leo Keller, statistician for the Brotherhood of Maintenance-of-Way Employees, told the delegates. A wage of $3.44 per day or 43 cents per hour, Mr. Keller said, "is, if anything, in excess of the average wage paid unskilled workers throughout the United States." By way of illustration he said: "More than 200,000 section men on Class I railroads to-day receive an average of less than 36 cents an hour, equivalent to $2.88 for an eight-hour day, and for the year 1926 there were 22,315 crossing watchmen guarding our lives seven days a week at railroad crossings for a monthly wage of $75, which is equivalent to $2.50 per day for a 30-day month." Wages in America to-day, he stated, are not fixed on the basis of justice or the needs of the family, but by superior economic power. Where the bargaining strength of the workers' organization is superior, wages are raised and where the preponderant power is in the employers' hands increases are refused or wage reductions put into effect "regardless of the inadequacy of the wage structure thus established." Mr. Keller acknowledged that intensive and amicable cooperation of employers and workers would result in an increase in production for everybody concerned and he thought it fortunate that such practice is gaining recognition in this country more rapidly at present than ever before. But labor organizations, he stated, such as the Brotherhood of Maintenance-of-Way Employees find it no easy task "to 'sell' cooperation to men with empty stomachs."

Mr. Keller expressed his inability to see the consistency of denying unskilled workers a higher wage on the basis that it would be an injustice to the poor farmer. He felt that "some means * * * must be and, of course, can be found to allay the economic misery of both." Realizing that even highly philanthropic individual employers can not pay wages greatly in excess of their competitors, he stressed the desirability of employers cooperating "more intensively with each other * * * to eliminate some of the shamefully inadequate wages now paid unskilled laborers."

Dr. John A. Ryan, director of the social action department of the National Catholic Welfare Conference, who was chairman of the session, stated that no matter what line the discussion regarding this

particular family might take "it is certain that the great majority of unskilled laborers of the United States do not receive family living wages and it is also certain that this deplorable condition is economically unnecessary."

A decent living for a man and wife and three small children can not be managed in any large city of the country on less than $1,500 a year. Yet we are informed by the United States Bureau of Labor Statistics that the average wage of the 200,000 unskilled railroad employees is only $17 a week, while the average in the sawmills is $17.77 and in the bituminous coal industry $22.78 a week. We are further informed that in only three of our large industries is the average weekly wage above $25 a week.

Doctor Ryan also declared that the problem of providing the people in America with the means of a decent living was no longer a production problem but a "problem of increasing the consuming power of the masses so that more of the goods that are produced or could be produced will be sold."

It is quite evident, he said, that the solution of this problem would be advantageous to industry as well as to the masses of workers. So obvious is it that our capacity for production outstrips our capacity to get goods consumed, so manifest is it that industry can not keep going if there is not a wide and great diffusion of purchasing power that employers are at present promulgating the doctrine of high wages. They are aware that they need a large consuming power in the laboring classes.

The situation is this: Those classes in the community who have the power to consume more, have not the desire; those classes that have the desire, have not the power; therefore, the problem is to give the latter the required increase of consuming power; the class that needs most such an increase is the great body of unskilled laborers who now receive less than living wages; therefore, both industry and humanity called for the establishment, universally, of a minimum standard of decent living.

Effect of Low Income upon Health

AN ARTICLE in the August, 1927, Labor Review (pp. 1–3) drew attention to the extremely low wages of certain groups of unskilled laborers in the United States. It was there shown that the average full-time earnings of unskilled male laborers in several districts was less than $15 per week, and in some instances less than $12 per week. No information is available regarding the family responsibilities of these workers. Many undoubtedly had only themselves to care for, but many others, it may be assumed, were married and had families to support.

One of the serious social effects of such low earnings as those referred to is the effect upon health. Sickness is, of course, not limited to the poor, but numerous studies indicate clearly that both sickness and death are much more frequent among those with low incomes than among those with incomes adequate to comfortable living. The present article brings together the substance of these studies, the data being taken from the convenient summary and analysis recently published by the United States Public Health Service.[1]

[1] United States Public Health Service. Public health bulletin No. 165: Economic status and health. Washington, 1927.

Sickness Studies by Various Agencies

AMONG public agencies which have made studies bearing on this question are the United States Public Health Service and the Bureau of Labor Statistics and the Children's Bureau of the United States Department of Labor, while the mortality statistics of different countries and various other studies deal with one or another of the phases of this problem.

Sickness surveys have been made by the Public Health Service in several communities. In a study carried out in Hagerstown, Md., in November, 1921, data were secured as to the sickness prevalence in 1,751 households. The family income was not ascertained, but the economic status of the family was estimated by the agent from appearances and from the occupation of the household head, and the families were classed as well-to-do and comfortable, moderate, and poor and very poor. The cases of sickness per 1,000 persons were 40.1 for the lowest economic group, 37.6 for those in moderate circumstances, and 32.2 for the highest group.

Even more striking differences were shown by a study of the prevalence of disabling sickness in seven cotton-mill villages in the South, which was made in 1916. The case rate per 1,000 persons canvassed was 70.1 for families in which the half-month income per adult male unit was less than $6, decreasing with increased income to 18.5 per 1,000 for those having an income for each adult of $10 and over. This study was extended the following year to cover about 10,000 persons in 24 villages. The rates for sickness prevalence and the percentage of workdays lost, adjusted according to age, showed that both decrease as income increases. A continuous record of the sickness in one village, kept in 1918 from March through November, also showed significant differences between the income groups, and although the rate for influenza did not follow quite the same course as the rate for all sicknesses combined the lowest income group did show a decidedly higher rate from this cause than the other two classes. Both the 1916 and 1917 studies showed more illnesses of long duration in the lower income group. The presence of a considerable amount of pellagra in the villages accounted for part of this difference, but as pellagra is considered to be a vitamin deficiency disease the economic factor is of importance.

A study by Emmet of the disability among members of a sick-benefit association, published in the Labor Review, November, 1919, and March, 1920, shows the disability by occupation of the members of the fund. Disability from accidents which accounted for 28 per cent of the total number of cases and 24 per cent of the disability is included in the data. A comparison of the rates by three principal occupation groups—professional, trade, and clerical; skilled; and unskilled—shows that the annual average number of disabled persons between the ages of 25 and 59, per 1,000 members, was 158 for the first group, 221 for the second group, and 278 for the third. These figures were adjusted to the age distribution of the male white population of the United States in 1910.

Several studies of mortality rates in different places and for different periods show consistently higher death rates among the lower income groups. These studies included one by Chapin of the mortality in

Providence, R. I., in 1865, among those families paying income tax and those whose incomes were not high enough to be taxed; a study of class mortality statistics in Dublin, Ireland, for the year 1911, in which the professional and independent class, the trade and commercial class, and wage earners were compared, and a comparison of the mortality among the families of the British peerage and the British population in general during the first half of the nineteenth century.

Causes of Adult Mortality According to Economic Status

THE diseases which occur more frequently as a cause of death among the unskilled laboring classes than among the higher paid classes, as shown by an analysis of the mortality statistics for England and Wales, which are published decennially, are the respiratory diseases, including phthisis, nonpulmonary tuberculosis, valvular disease of the heart, aneurysm, cerebral hemorrhage, and hernia. On the other hand, diabetes, gout, the digestive diseases, angina pectoris and arteriosclerosis occur with greater frequency among the professional and salaried class than among either the skilled or unskilled groups. Thus it is seen that nearly all the major causes of death vary inversely to economic status. While the importance of constitutional or hereditary factors as compared with the environmental factors can not be determined from these statistics, it does not seem reasonable to assume that the poor are so constituted that they are especially susceptible to some diseases while they offer exceptional resistance to others, but it would seem to be rather the environmental factor which is the more important.

Relation of Child Sickness and Mortality to Economic Status

A STUDY by the Public Health Service of absence from school in certain cities in Missouri in 1919–20 showed a consistently higher sickness rate among the children of the lower paid workers in all age groups between the ages of 6 and 16. A similar study of sickness among school children in Florida in 1921–22 showed the same general tendency for absence on account of sickness to increase with the decrease in economic well-being.

Comparison of child mortality rates among specific occupational groups and in various cities and counties shows that there is a constant tendency for the mortality to increase among the children of the lower paid groups of workers, although in some cases this tendency was not quite so marked in rural communities. In regard to specific diseases it appeared that diphtheria and scarlet fever vary less in the different classes than measles and whooping cough, both of which occur more frequently among the poorer children.

A study of infant mortality in five cities, made by the United States Children's Bureau, which gives the mortality rates by earnings of the father and nativity of the mother, shows that there is a general decrease in mortality as the earnings of the family increase and that this holds true for children of native, foreign, and colored workers.

Comparison of the deaths among children in England and Wales, by cause, shows that the greatest difference as between classes is found in the common infectious diseases, these being 107 per cent

greater among the working class as a whole than in the professional and salaried class, followed by diarrhea and enteritis, while the developmental and wasting diseases show the least variation as between the different economic classes.

Important factors in the death rate of infants which are associated with income are congestion of the household, sanitation, and other conditions which are very closely associated with poverty. The education of the mother is also an important factor, as comparison of the rates for literate and illiterate mothers shows a much higher rate among children of the latter.

An important point brought out by these studies is that while there is no great difference between the death rates for the different economic classes among infants under one month of age, for infants over that age the rate in the United States in the lowest income group is ten times the rate in the highest income group, suggesting that the difference lies not so much in the inherited make-up of these children as in the environmental conditions.

Although these data are scattering and are for varying periods the practical uniformity in the results in showing a higher sickness incidence and mortality rate for both children and adults among the lower paid income groups indicates that sufficient income to insure reasonable physical comfort, proper nourishment, and care in the event of sickness is of the utmost importance.

Industrial Relations in the Pottery Industry

A SHORT study of industrial relations in the pottery industry, by Donald Kennedy, of the University of Pittsburgh, is presented in the Journal of Political Economy for August, 1927 (pp. 522–542), from which the following is taken.

The pottery industry is of small size, having in 1923, according to the Census of Manufactures, only 36,824 employees and a total product valued at a little over $114,000,000. The plants, also, are small, a typical plant employing from 100 to 250 workers, while 40 per cent of the product is made in plants having a total yearly production valued at between $100,000 and $500,000.

Industrial relations in the industry have been influenced by six economic factors—the importance of labor in the manufacturing process, the localization of the industry, the absence of seasonality, the influence of the tariff, the domestic competitive situation, and technological changes.

The principal occupations in the production of pottery are skilled, the work being largely handwork. In the early days of the industry the workers were English potters who came to this country, bringing with them the customs and traditions of their craft, which have been handed down so that in the trade practices of to-day as to method of payment, length of working-day, quantity of work to be finished in a day, and hiring of helpers, many of these old customs have been retained. The pottery workers are therefore a conservative skilled group, who have in their skill a big factor in determining bargaining power.

Despite the gradual change in process which has been taking place, the industry requires a high proportion of labor, as compared with other industries such as iron and steel. The labor cost of manufacturing white ware at the last date cost figures were published—the beginning of the war—was 58.8 per cent of the total cost, and to-day it is estimated to be above 50 per cent. For the industry as a whole the proportion is somewhat lower due to the greater development of the casting method in the production of sanitary ware. The workers are therefore a big factor in the productive process, and through their union are in a position to demand and secure recognition and cooperation from the producer.

The fact that the industry is localized in Ohio and New Jersey, the centers of location being East Liverpool, Ohio, and Trenton, N. J., has had an important influence on industrial relations in the industry, as the concentration of large bodies of workers in these centers has afforded a constant opportunity for discussion of problems and working out of policies and has resulted in a strong union. It has also facilitated the organization of producers' associations, because of the ready contacts afforded.

There is no seasonal fluctuation in the industry, the minimum number employed in 1914 being 93.6 per cent of the maximum and in 1923 87.5 per cent, and consequently problems connected with seasonal production are nonexistent.

The pottery industry is a protected industry, there being a tariff of from 30 to 70 per cent ad valorem on imported goods. This protection is regarded as necessary because American production costs are in some cases 100 per cent higher than costs of producers in England, Germany, France, Austria, and Japan. The importance of the tariff as a factor in industrial relations is shown in the fact that cuts in duties in 1894 and in 1913 immediately resulted in decreased domestic output and industrial strife.

In the domestic competitive situation the chief factor has been the existence of manufacturers' associations. Until 1923 there were two associations, the United States Potters' Association and the Sanitary Potters' Association, the members of the former manufacturing general ware (earthenware or white ware, common colored ware, and porcelain and china) and of the latter sanitary ware, such as washstands, bathtubs, lavatories, and drinking fountains. This grouping is based on nature of product, similarity of interests, and character of production problems. Since 1923 only the former association has functioned.

The United States Potters' Association has been in existence for 20 years. It controls 99.9 per cent of the production of hotel china, 64 per cent of the production of china and porcelain, and about 80 per cent of the production of white ware. It has committees on labor relations, research, manufacturers' cost, art and design, kiln and fuel production, transportation, and machinery, which are active in the interests of all the members. The harmonious relations between the manufacturers is an important factor in their ability to deal with the union.

The Sanitary Potters' Association was disbanded in 1923 as the result of Government suit, but the case has been appealed and is now in the United States Supreme Court. At that time it controlled

82 per cent of the production of sanitary ware and had been in existence for over 23 years, so that harmonious relations and cooperation prevailed among the manufacturers in this branch of the industry, and there was an authoritative organization to deal with the employees as to wages and working conditions.

While the industry has remained largely one of handwork, in the last 15 years there have been developments in technique which have had an important bearing on industrial relations. The successful introduction since the war of casting of products of a certain type has eliminated the element of skill entirely, as after three weeks' experience unskilled men can make more pieces per day by this method than a skilled worker can make by hand after three years' apprenticeship. The process can be used only in making hollow pieces, so that it is in the sanitary-ware branch of the industry that it is most important.

The replacement of the old beehive kiln with the modern tunnel kiln has also eliminated a skilled occupation, the kilnman, whose work was intermittent, the old kiln being charged full before firing and then discharged after cooling, and involved heavy lifting. In the tunnel kiln the operation is continuous, new cars of ware constantly entering the kiln and fired cars constantly leaving it at the other end of the tunnel, and the work of the tender is unskilled and continuous.

The pottery workers' present organization, the National Brotherhood of Operative Potters, was formed in December, 1890, though before then both the potters and sanitary-ware workers had been organized under the Knights of Labor and in independent unions. The sanitary-ware workers did not enter the present organization till 1899. Before this there had been unsettled labor conditions and many strikes, but in 1900, with a union representing all the skilled workers in the industry, the workers were able to negotiate an agreement and a uniform wage scale, which was the beginning of a period of peaceful cooperation and effective collective bargaining, lasting until 1922.

The National Brotherhood of Operative Potters is composed exclusively of operative potters who are members of locals. In isolated localities a local including all workers may be organized, but in places where there are a number of plants the men working in each of the skilled occupations are organized into a union. The brotherhood is really, therefore, a quasi-industrial union at the top and a trade-union at the bottom. As the union was formed for the skilled workers few unskilled workers belong to the union and their wages are not set in the agreement. Consequently, in 1923, there were only 9,100 union members among the 36,824 workers in the industry. The brotherhood has always based its power on control of the skilled workers and has never asked for a closed shop.

The basis of industrial relations between the union and the manufacturers' association has been the agreements negotiated biennially, there being one for each branch until 1922. Wages were not revised, either upward or downward, until the war, when on account of the high cost of living increases were granted each year from 1916 to 1920, reaching as high as 69 and 75 per cent in some occupations in the general-ware branch and from 52 to 55 per cent in the sanitary-

ware branch. The first reduction, 17 per cent, in the general-ware branch was in 1921, due to the depression of that year. As the locals in the sanitary trade would not allow the question of wages to be brought before a conference committee in 1921, though there was a provision in the agreement permitting it, the manufacturers could not secure a reduction then, and when the wage conference met at its regular time in 1922 there was a deadlock which ended in a strike.

One reason for the success of the agreements for so many years was that the employers, because of the protective tariff and cooperation among themselves and also because of increasing business activity and rising prices, were in a position to be generous in granting increases in wages.

There are two standing committees, one for general ware and one for sanitary ware, which can be appealed to for interpretation of the agreements, adjustment of grievances, and making of new rates in the interval between agreements. Each committee is composed of 6 men, 3 elected by the union and 3 appointed by the manufacturers' association. Matters brought before a committee of this kind are necessarily disposed of by collective bargaining, as no provision is made for arbitration. The association and the union are both pledged to enforce the decisions of the committee.

A controversy as to a piece rate does not come before the standing committee until it has been considered by the local union, after an unsuccessful conference between the manufacturer and the local shop committee has been had, and one side has referred it to the committee. In each case an attempt is made to settle the case strictly on its merits, the decisions being based on the amount paid in other plants for the same article or, if the article is not being made elsewhere, on its likeness to existing pieces. The amount earned by men on like jobs is also considered. Arguments are heard on both sides, and if a unanimous decision can not be obtained there is a splitting of the difference.

The success which attended the making of the biennial agreements and the settlement of disputes by collective bargaining and the resulting industrial peace in the industry for so many years was mainly due to the acceptance of the principle which is so clearly stated in the 1920 wage scale of the Sanitary Potters' Association and the National Brotherhood of Operative Potters:

> The cardinal principle of the agreements * * * is that there shall be no strike or lockout in the case of a dispute. To carry out these principles both sides must understand that they are not privileged to interpret the agreements to suit themselves, neither are they privileged, if matters don't suit them, to stop work. In no case shall there be a suspension of work in any pottery.

In 1922 this basic principle was not followed, a major strike occurring in each branch of the industry, resulting in the weakening of the union and the breaking up of many of its locals.

In the 1922 wage conference of the general-ware branch of the industry the union representatives were determined to get back 7 per cent of the 17 per cent wage cut of 1921 but the manufacturers refused. Neither side would give in and a strike was called for October 1, 1922. After several futile conferences, the union, construing a statement of the manufacturers that they would be more willing to deal with men who were their workmen than with strikers

as a promise to meet it part way in its demand, ordered the men back to work. In all about 17,000 employees were out for 63 days. The belief of the union that a wage increase had been promised put the producers and leaders in a difficult position and after many conferences a raise of 4.2 per cent was granted. The union thus secured a part of its wage demand and was able to maintain its organization and power, and to continue its relations with the employers as to collective bargaining and negotiation of agreements, so that it came out of the strike in fairly good condition.

In the sanitary trade the situation resulted differently. As the union had in the depression of 1921 refused to consider a reduction of wages the manufacturers were not in a mood for compromise when it came time to make the 1922 agreement. The union leaders, however, thought as business was picking up the employers would be willing to renew the old agreement rather than have a strike. The conference was a failure. After an investigation of the situation by union leaders, especially as to possibilities of casting, a compromise of a 10 per cent reduction was secured. Opposition arose in the union membership, however, especially among the younger and more radical element, which not having participated in the strikes prior to the era of collective bargaining, did not realize the hardships of a strike and the advantages of collective bargaining. The members also failed to understand the possibilities of the casting process in fighting a strike and, ignoring the advice of their leaders, refused the compromise and a strike was ordered for November 1, 1922. While some of the potteries continued operations, others closed down to install the casting process, and in three weeks inexperienced men were casting more pieces per day than the skilled pressers had made and were carrying on the work in other departments with increasing success. The employers, thereupon, after one or two unsuccessful attempts at reconciliation, refused to deal with the union and the strike was a failure, the union calling off the strike on June 20, 1923, and the men getting what work and whatever terms they could.

Thus, the author says, after a period of over 20 years of peaceful and successful settlement of wage disputes in a protected, cooperative industry, such harmonious relations came to an end through changing technique, business depression, and radical leadership.

An Employer's View of High Wages and Industrial Relations

IN A recent address, which has been widely commented upon, Mr. Owen D. Young, chairman of the board of directors, General Electric Co., expresses his belief that high wages may mean low prices but high profits, and that a worker's income should be sufficient to provide for his cultural life and not merely for his physical needs. Furthermore, he expresses the hope that some day the great business enterprises will really belong to those who, in whatever capacity, are giving to them their lives and their efforts.

The address was delivered at Harvard University on June 4, 1927. The portion of the address which dealt particularly with the subject of labor and industrial relations is reproduced on pages 46 to 49.[1]

[1] Harvard Business Review, Cambridge, Mass., July, 1927.

"As business widened in area, it increased in size. It was no longer possible for one man to be the whole business. His capital was not enough—his labor was not enough—his knowledge was not enough. For the individual, we substituted the partnership, and finally as the enterprise grew, we displaced the partnership with the modern corporation. Into these we have brought together larger amounts of capital and larger numbers of workers than existed in cities once thought great. We have been put to it, however, to discover the true principles which should govern their relations. From one point of view, they were partners in a common enterprise. From another, they were enemies fighting for the spoils of their common achievement. In dealing with this problem, there has been much misunderstanding and frequently want of sympathy. The organization has not always functioned well, and even to-day in that field we have great problems yet unsolved.

The Cultural Wage

"GRADUALLY we are reducing the area of conflict between the two. Slowly we are learning that low wages for labor do not necessarily mean high profits for capital. We are learning that an increasing wage level is wholly consistent with a diminishing commodity price level. We are learning that productivity of labor is not measured alone by the hours of work, nor even by the test of physical fatigue in a particular job. What we need to deal with are not the limits to which men may go without physical exhaustion, but the limits within which they may work with zest and spirit and pride of accomplishment. When zest departs, labor becomes drudgery. When exhaustion enters, labor becomes slavery. Zest is partly a matter of physical condition, but it is also largely influenced by mental reactions. These are common to all of us in every position. Are we doing well with our lives? Are we providing for our families—not merely clothes and food and shelter while we are working, but an insurance for them when our working time is ended either by age, disability, or death? Are we providing more cultural opportunities for ourselves and our children? In a word, are we free men? Here in America, we have raised the standard of political equality. Shall we be able to add to that, full equality in economic opportunity? No man is wholly free until he is both politically and economically free. No man with an uneconomic and failing business is free. He is unable to meet his obligations to his family, to society, and to himself. No man with an inadequate wage is free. He is unable to meet his obligations to his family, to society, and to himself. No man is free who can provide only for physical needs. He must also be in a position to take advantage of cultural opportunities. Business, as the process of coordinating men's capital and effort in all fields of activity, will not have accomplished its full service until it shall have provided the opportunity for all men to be economically free. I have referred elsewhere to the cultural wage. I repeat it here as an appropriate term with which to measure the right earnings of every member of a sound society competent and willing to work.

The "Hired Men" of Industry

"ZEST in labor is influenced by another mental reaction well known to us all but too frequently neglected. Is a man working for himself or is he a hired man? It has been assumed that with the evolution of business into large organizations, it was necessary to increase the percentage of hired men. That feeling was encouraged by our old habit of thinking. Capital was the employer, buying labor as a commodity in the cheapest market and entitled to all the profits of the undertaking. Managers were considered the paid attorneys of capital to devise ways and means to squeeze out of labor its last ounce of effort and last penny of compensation. Is it any wonder that in this land of political freedom men resented the notion of being servant to a master? Capital justified its action on the plea that it took all the risk. Many men, however, knew from their own experience that they also took a risk in this common business undertaking. With the greater division of labor, it was essential that a man be trained for a highly specialized job. In order to obtain the benefit of his training, he had to take employment in a plant which could use it. He accordingly moved into that community. He bought his home—he made his friends—he established his family and social connections. All of his relationships in life were there. If that business failed and the plant were closed, it was not alone the invested capital which suffered. That man, if no other job in his highly specialized field existed in the community, must move. His home must be sold, his ties broken, and perhaps too late in life he must attempt to take up again the forming of new friends elsewhere. Is it any wonder that he resented the notion that capital takes all the risks?

Labor and Management

"FORTUNATELY, we are making great progress in America in these difficult relationships. We are trying to think in terms of human beings—one group of human beings who put their capital in, and another group who put their lives and labor in a common enterprise for mutual advantage. We are learning as one result of our widespread prosperity that the human being who puts his capital in is no longer the gentleman of the cartoonist in need of fat-reducing exercises. It is rather the lean school-teacher, the small merchant, the carpenter, the blacksmith, who are trying to conserve and increase their surplus earnings, as a guaranty fund against disaster. Or if it be not they directly, then it is most likely to be the insurance company and the savings bank which is investing the savings of millions of our people of all classes in the capital of widely diversified concerns. We think of managers no longer as the partisan attorneys of either group against the other. Rather we have come to consider them trustees of the whole undertaking, whose responsibility is to see to it on the one side that the invested capital is safe and that its return is adequate and continuous; and on the other side that competent and conscientious men are found to do the work and that their job is safe and their earnings are adequate and continuous. Managers may not be able to realize that ideal either for capital or labor. It is a great advance, however, for us to have formulated that objective and to be striving toward that goal.

Participation of Labor in Control

"PERHAPS some day we may be able to organize the human beings engaged in a particular undertaking so that they truly will be the employer buying capital as a commodity in the market at the lowest price. It will be necessary for them to provide an adequate guaranty fund in order to buy their capital at all. If that is realized, the human beings will then be entitled to all the profits over the cost of capital. I hope the day may come when these great business organizations will truly belong to the men who are giving their lives and their efforts to them, I care not in what capacity. Then they will use capital truly as a tool and they will be all interested in working it to the highest economic advantage. Then an idle machine will mean to every man in the plant who sees it an unproductive charge against himself. Then every piece of material not in motion will mean to the man who sees it an unproductive charge against himself. Then we shall have zest in labor, provided the leadership is competent and the division fair. Then we shall dispose, once and for all, of the charge that in industry organizations are autocratic and not democratic. Then we shall have all the opportunities for a cultural wage which the business can provide. Then, in a word, men will be as free in cooperative undertakings and subject only to the same limitations and chances as men in individual businesses. Then we shall have no hired men. That objective may be a long way off, but it is worthy to engage the research and efforts of the Harvard School of Business.

"The fact that such a condition is not here to-day is not chargeable, as so often alleged, to the selfishness or dominance of capital. It is not due to the fact that the workers together have not adequate resources to margin the capital which they seek. It is due, in my judgment, solely to the unwillingness of men to assume responsibility and take a risk in such a cooperative undertaking. Most men yet prefer a fixed income without risk to a share in the profits of the enterprise with the responsibility which that involves. Gradually, however, we are making our advance. Men are becoming both wage earners and investors. As workers, they seek the most for their labor. As investors, they seek the largest returns from their capital. The ownership of great concerns, under the impetus of our present prosperity, is being widely spread, and in some instances is largely held by the workers.

The Problem of Unemployment

"THEN, too, we must deal with this question of unemployment, which I regard as the greatest economic blot on our capitalistic system. There is no answer except that the managers of business have not yet learned how to make their system function so that men willing and able to work may do so. There is no limit to the consumption of the world. It is limited only in its individual compartments. We can not eat more than so much bread or meat. We can not wear more than so many clothes, and so we may have overproduction in individual lines. But there are innumerable wants of men yet unserved, and as long as culture grows, these wants will outrun our

capacity to produce the things to satisfy them. The world does not owe men a living, but business, if it is to fulfill its ideal, owes men an opportunity to earn a living."

Labor Conditions in the Philippine Islands [1]

THE labor supply of the Philippines has been classified into groups of which the six most important are the Visayan, Tagalog, Ilocano, Bicolano, Pangasinan, and Pampangan groups. These are all of Malay blend with traces of the Indonesian type and a later addition of Chinese, Spanish, or American blood in some instances. There is frequently a resemblance between the dialects spoken by the various groups although they are distinct from each other. The Tagalog dialect is more or less widespread, probably because it is the language spoken in and around the city of Manila, which is the center of commerce and learning and the gathering place for people from the different Provinces. Manila is populated chiefly by Tagalogs, but considerable numbers of the other groups are to be found there, as well as Chinese, Europeans, Americans, Japanese, and representatives of various other nationalities.

Occupational Groups

THE number of laborers in principal occupational groups has been estimated by the bureau of labor at 2,587,401, of which 1,594,360 are adult males, 619,290 adult females, and 643,751 minors of both sexes. Agriculture employs the largest number of laborers and accounts for about 2,547,572 of the total. The laborers engaged in commerce and transportation, of which there are 118,178, make up the second largest group. The various trades and industries comprise the third largest group and employ about 113,171 laborers, followed by the fishing industry, in which 5,830 laborers are employed. This last figure, however, includes only those working for others and takes no account of the far greater number of fishermen working on their own account and who furnish the bulk of the fish caught in the Philippines. The insular government employees, including skilled and unskilled laborers, rank next, with a total of 12,850, closely followed by those engaged in forestry, who number 11,763. The mining industry, with a total of 3,037, employs the least number of laborers among the principal occupational groups.

Asiatic Immigration

Chinese

THE Asiatic immigrants to the Philippines are principally Chinese, Japanese, Hindus, Turks, and Syrians, and of these the Chinese are the most numerous. Long before the arrival of the Spaniards Chinese traders had access to the Philippines, and many of them remained in the islands.

[1] Extracts from U. S. Bureau of Foreign and Domestic Commerce report. Trade promotion series No. 52: The Philippine Islands—a commercial survey, by O. M. Butler. Washington, 1927.

In 1898, however, the Chinese exclusion act in force in the United States was made applicable to the Philippines, and in 1903, when the first census of the islands under the American sovereignty was taken, there were 41,035 Chinese residents. This number had increased to 43,802 in the census of 1918, and at present it is estimated that there are 44,239 Chinese residents in the Philippines.

The Chinese in the Philippines are not inclined to agricultural pursuits, although a number engage in gardening and ordinarily do not long remain as manual workers. They are found in all the Provinces except the Batanes Islands and the sub-Provinces of Apayao, Bontoc, Ifugao, and Kalinga of the Mountain Province. The great majority of the Chinese residents are engaged in commercial pursuits, and it is estimated that they handle between 65 and 75 per cent of the merchandise distribution in the Philippines. The remainder of the Chinese residents are employed as carpenters, shipwrights, molders, and cobblers. They often intermarry with the natives.

Japanese

Japanese began to settle in the Philippines about the end of the sixteenth century, and in the census of 1918 there were about 7,806 Japanese residents in the Philippines. The present estimate is placed at 8,294. The Japanese immigrants have of recent years settled chiefly in Davao, on the island of Mindanao, and more than half of the present number may be found in that Province. The Japanese engage in agriculture, fishing, gardening, carpentry, and cabinetmaking. A few have refreshment parlors in the principal towns, and a considerable number of Japanese dry-goods stores have also been established, chiefly in Manila. Unlike the Chinese, the Japanese seldom intermarry with the Filipinos.

Hindus, Syrians, and Turks

The Hindus are for the most part engaged as night watchmen, although some have established dry-goods stores. The Syrians and Turks are generally merchants located in Manila, Iloilo, Zamboanga, and Cebu.

Labor Supply

ABOUT six years ago there was an agitation among a number of the planters for the liberalization of the laws which restrict the entrance of Asiatic laborers into the Philippine Islands. This movement was the result of the difficulties encountered by the planters in recruiting laborers for their needs, and it was then their general belief that the local supply of labor was not sufficient to meet the demands of the various industries. The insular bureau of labor contends, however, that the supply of labor is more than ample and that the difficulties encountered were the results of various factors, among which were the lack of method and organization in recruitment, the low standard of wages offered, and the unsatisfactory terms and conditions imposed by landowners upon the laboring class. According to the census of 1918 there were registered 3,893,544 laborers, of which only an average of 2,098,741 were regularly employed in agricultural, commercial, transportation, and manufacturing pursuits,

and the bureau of labor reports that there is at present a total of 2,857,401 wage earners in the islands.

The most prominent factors that determine the supply of labor are the following: (1) The inequality of the distribution of population; (2) the methods of recruitment; (3) the character of crops raised in the areas which constitute the source of labor supply and in the regions where the demand exists; (4) the distance between the demand and the source of supply and the availability of cheap and speedy transportation facilities; (5) the rates of compensation offered.

The densely populated Provinces of Ilocos Norte, Ilocos Sur, and Cebu furnish the highest percentage of labor moving to other places, not only for temporary but also for permanent employment.

Seasonal Movement of Labor

THE Philippines are essentially agricultural and various kinds of seasonal crops are raised, of which the most important are sugar cane, abaca or manila hemp, rice, tobacco, and coconuts.

The planting and milling seasons in Negros Occidental, the center of the sugar industry, draw thousands of laborers from the neighboring Provinces of Antique, Iloilo, and Cebu. These laborers work in the sugar mills and on the plantations, ordinarily remaining there during the milling season, which usually lasts from November to April, or longer. About 11,000 laborers are needed during this season and the scarcity of work hands which is sometimes felt is explained by the bureau of labor as the result of unorganized recruitment. Employment of laborers in the coconut and abaca regions is fairly steady and there is very little seasonal movement of labor to these regions, particularly southern Luzon and the eastern Visayas. During the dry season considerable numbers of laborers move from the islands of Cebu, Bohol, and Siquijor of the Visayas to Mindanao to work in the coconut and abaca plantations there. The sugar plantations in Mindoro draw their supply from Capiz and in part from Pampanga. The rice region of central Luzon needs temporary labor during the planting and harvesting seasons, which is supplied chiefly from the Ilocos Provinces and the Province of La Union in northern Luzon. About 5,000 additional laborers are obtained in this way. The rice crop in the Ilocos Provinces matures early and enables the Ilococano laborers to move as far south as Pampanga and Laguna in time to work there during the sugar-milling season. The tobacco region in northern Luzon also draws an additional supply of labor from the Ilocos Provinces for the planting and harvesting season, which lasts from January to May. About 2,000 laborers move from the Ilocos Provinces to the tobacco regions for this work.

Filipino Emigration

Emigration to Hawaii [2]

THE Hawaiian Sugar Planters' Association established an office in Manila during the year 1909, with a branch at Cebu, for the purpose of recruiting Filipino laborers for Hawaiian sugar plantations. Systematic recruitment was at first begun in Manila and the

[2] A full account of the practice of recruiting Filipino laborers for work in Hawaii was contained in the Labor Review for October, 1926 (pp. 4–9).

Visayas and later was extended to the Provinces of northern Luzon. In 1915 the Philippine government thought it expedient to regulate this drain on the labor supply, and legislation was approved requiring that the bureau of labor supervise all such contracts, prevent the employment of minors, and take such action as might be necessary to insure the health of the laborers during transit. During the years 1909 to 1914, both inclusive, 19,039 Filipino laborers emigrated to Hawaii and only 159 returned to the islands. By the end of 1925 a total of 74,666 Filipinos had emigrated to Hawaii, and of this number 15,517 returned to the Philippines. A considerable number of Filipino laborers have also emigrated to the United States, some of them direct and others through Hawaii, while still others have gone to other foreign countries.

Interisland Migration

Interisland migration has been in progress in the Philippines for many years. The general trend of this migration has varied somewhat with the different groups. The Visayans ordinarily move from the densely populated regions of Bohol, Cebu, and Panay and settle in Mindanao, Samar, Leyte, and Negros. The Ilocanos migrate from the western coast of Luzon to the Cagayan Valley and the Mountain Province in northern Luzon and to the Provinces of Pangasinan, Tarlac, Nueva Ecija, and Zambales, of central and western Luzon. The Tagalogs migrate to neighboring territories in the interior which are unoccupied and also to the Provinces of Nueva Ecija, Tarlac, and Zambales, in Luzon, and to the island of Mindoro. The Bicolanos settle in the unoccupied regions of the Bicol Provinces and the islands of Masbate and Samar.

Agricultural Colonization

Legislation was enacted during the early part of 1914 designed to bring about a better redistribution of the population, in order to encourage small land holdings among the people and increase the production of foodstuffs and other agricultural products. This legislation provided for the establishment and maintenance of agricultural colonies and the recruitment of home seekers, and facilitated the migration of colonists from densely populated to sparsely settled regions.

Recruitment of colonists for the different agricultural colonies of the government, however, was abandoned in 1917 as a result of the refusal of the legislature to appropriate the necessary funds. The colonists carried on the work that had been begun under the direction of the government and have to-day attained a fair degree of success in their ventures, aside from the benefit derived by the people from the cultivation of hitherto idle and unproductive lands.

Home Seekers and Contract Laborers

A further appropriation was made in 1918 for the encouragement of intermigration by the recruitment of home seekers in densely populated regions for shipment to sparsely populated areas. A number of recruiting districts were established, but actual recruitment was limited to the more densely populated Provinces, and in

Provinces where the industrial and agricultural activities demanded a great number of workers certain restrictions were made. Contract laborers were also recruited to supply the seasonal demand on the plantations and in industry. During the years 1918 to 1925, both inclusive, 13,983 home seekers were recruited and shipped and 8,708 laborers were contracted for and furnished.

Working Conditions

Wages

THE greater part of the manufacturing in the Philippine Islands before industrial activities were introduced consisted of home industries. There were only a few industrial establishments, such as a rice mill, a number of small sugar mills, a sugar refinery, and several plants producing lumbang (candlenut) oil. Aside from these establishments and the farms, laborers ordinarily worked under some form of profit sharing. The current rates of daily wages paid to unskilled laborers ranged from 12 to 15 cents, and skilled laborers received from 18 to 30 cents. The standard rates were raised as a result of the sudden increase of the foreign trade of the islands shortly before the American occupation, and unskilled laborers were paid an average of 18 cents a day. Since American occupation the general tendency has been to demand the highest wages obtainable, as a result of the constant advance in the cost of the prime necessities and the reduced purchasing power of money. The standard of living and the wage scale in the Philippines is now so high, compared with other parts of the Far East, that several industries, otherwise practicable, can not be made profitable in competition with similar industries in near-by countries, because of the greater labor costs in the islands. The following table submitted by the bureau of labor will show the present minimum, average, and maximum rates of wages being paid to the various classes of laborers in the Philippines.

DAILY WAGE RATES PAID TO LABORERS IN THE PHILIPPINE ISLANDS

[In Philippine pesos; one peso equals $0.50 United States currency]

Trade or industry	Males			Females			Minors		
	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum
Unskilled laborers:									
Agricultural	0.53	0.82	1.29	0.33	0.50	0.76	0.22	0.40	0.71
Other	.50	.92	1.55						
Skilled laborers: [1]									
Rice-mill employees	.50	1.48	5.00						
Sugar-mill employees	.50	1.38	4.00	.30	.85	1.50			
Oil-mill employees	1.00	2.01	4.75			2.00			
Cigar makers	.50	1.49	3.42	.33	1.05	2.00	.30	.71	1.20
Embroidery workers	.70	1.66	4.00	.33	1.05	2.50	.50	.73	1.00
Retail-store salesmen	1.00	2.00	2.40						
Printers	.60	2.70	6.90						
Compositors	.80	3.00	6.90						
Hand (typesetters)	.60	1.35	2.50						
Machine (linotypists)	2.00	4.50	7.00						
Pressmen	.80	1.90	3.00						
Messengers	1.00	1.37	1.75						
Employees of shoe factories	.83	2.50	6.00	.50	1.06	2.00	.40	.85	1.50
Locomotive engineers	2.00	2.70	3.50						
Mine workers	.60	1.88	6.00						

[1] Hemp strippers receive from 50 to 60 per cent of the hemp stripped.

Working Hours

There are no laws in the Philippines regulating the working hours of wage earners other than an act limiting the labor of persons below the age of 16 years to 7 hours daily or to a total of 42 hours weekly, to be served between 6 a. m. and 6 p. m. The Administrative Code of 1917 requires not less than six and one-half hours of work daily in the government offices, but at present the government bureaus work seven hours a day except Saturday and three months during the hot season, when the offices are closed every day at 1 o'clock. Court sessions are regularly held during five hours each working-day except Saturday, when sessions last for three hours only. Public-school teachers are required to devote a total of five hours a day to school work during five days of each school week. The majority of the business houses are open from 7 a. m. until 5 p. m., with a noon recess of two hours. In the trades and industries working hours range from 8 to 10 hours a day.

Living Costs

The census taken in 1918 reported that the cost of living had increased by 59 per cent compared with 1910, and in 1920 the increase was 104 per cent on the same basis, chiefly as a result of the abnormal situation created by the World War. Living costs in 1925 were generally lower than the 1920 figure by 13 per cent, but higher than that for 1918 by 12 per cent. The different items of a budget of daily expenses for a family of two adults and three minors in Manila for the year 1926 have been placed by the bureau of labor as follows:

Rent	$0. 13
Food	. 645
Clothing	. 08
Light and fuel	. 065
Primary school	. 055
Miscellaneous	. 135
Total	1. 16

The daily expenses of a single laborer were estimated to amount to half of the estimate above listed. Expenses in other towns of the Philippines during 1925 were given as 91 cents for a family of five and as 42½ cents for a single laborer. This budget purports to cover only actual necessities, with the exception of the school allowance, but is perhaps somewhat above the minimum amount on which a family can live. A comparison of this budget with the average wage scale shown in the table (p. 53) indicates that with both adults receiving the average daily wage for unskilled laborers the total income would be only about 75 cents, United States currency, and considerably under the budget.

The range between the prices of actual necessities, as understood by the native laborer, and the refinements of life is much greater in the Philippines than in the United States. Apart from the native food products and a few minor articles, little is produced in the islands and all other commodities must be imported. More than half of these imports (including such items as textiles for clothes, leather for shoes, iron and steel products, paper, toilet preparations,

and novelties, as well as large quantities of canned fish) are brought in from the United States and pay no duty, but the original price is nevertheless increased by the freight charges from the point of origin to the Philippines and by miscellaneous incidental charges, including the commissions of various middlemen and high interest charges on the capital invested while the shipment is in transit.

Labor Organizations

THERE were no labor organizations in the Philippines during the early days of Spanish occupation. Two societies of laborers were formed in the city of Manila at the beginning of the nineteenth century, but these were organized more for religious purposes than for the material betterment of their members, and somewhat later a few mutual-aid societies were organized with the object of protecting members in case of sickness or death. Labor associations for defense, resistance, or positive action, such as strikes or lockouts, or labor syndicates and trade-unions as were known in the United States were completely unknown in the Philippines. Radical changes were made after the occupation of the islands by the Americans, and the first of the modern labor unions was organized in 1902, but was dissolved in 1903. A labor corporation was organized in 1908 to engage in the manufacture of cigars and cigarettes. This corporation has been successful and its present capital is placed at $250,000, of which $165,000 has been subscribed and paid in. The first labor congress was held in Manila on May 1, 1913, and representatives from all labor unions and mutual-benefit societies attended the congress. Three years later the forerunner of the present "Labor Federation of the Philippines" was organized. There are at present 114 labor organizations in the islands, 51 of which are located in Manila and the remainder scattered throughout the Provinces. There is also in existence at present an association of tenants and farm laborers under the name, "National Confederation of Tenants and Farm Laborers of the Philippines." A number of fraternal orders have also been organized recently among the laboring classes, of which the more important are the "Legionarios del Trabajo" and the "Katipunan Mipanampun," with a total of about 30,000 members each.

With the exception of an unsuccessful strike of cigar makers in 1902, organized-labor disturbances were not recorded until July, 1909. From that date to and including the year 1925 there was a total of 430 strikes and lockouts in the Philippines, involving 115,557 workers, of which 383 were declared by labor organizations and 107 by nonunionists. The wage scale was the cause of the dispute in 333 instances, and in 315 strikes the workmen won. The greatest number of disagreements occurred between 1917 and 1921, and since that period there has been an average of less than 25 strikes annually.

Agrarian Disputes

THE tenancy system in the Philippines is an institution which dates back for centuries. The system is more or less common in the rice-producing regions, where the landowner allows a number of individuals to till portions of his land and furnishes them with the money

necessary for raising and harvesting crops, which when harvested are then divided between landowner and tenants, after deducting the portion allotted for the payment of the money advanced. The attitude of the landowners to the tenants has been more or less paternal, and relations are ordinarily harmonious. Disputes have arisen, however, from time to time because of usurious practices on the part of the landowners that resulted in the abandonment of farms and crops. These disputes have assumed such serious proportions during recent years that the government intervened and in most instances brought about an acceptable adjustment of the differences.

Recommendations made by the bureau of labor for the betterment of the labor supply and conditions in the Philippine Islands consist mainly in suggested legislation tending to protect the laborers further from unfair treatment, fix better standards of wages, regulate the number of hours of service for designated laborers, amplify the present powers of that bureau, and establish a labor insurance and pension fund.

Report of British Mission on European Coal Situation

IMPRESSED by the serious difficulties which the British coal industry is facing, an English newspaper, the Daily News, sent to the Continent in the latter part of March a group of four miners' leaders and one working miner, to study the position in the principal coal fields there. The tour occupied slightly more than three weeks, and included inspection of the works in the main coal-producing regions, visits to the headquarters of the Westphalian coal syndicate, to the super-power stations, low temperature carbonization plants, the Bochum School of Mines, and headquarters of the German miners' federation, and consultations with leaders and representatives of the various interests involved. The results of the study have recently been published under the title of the "New European Coal War."

Summarizing these results, the mission concludes that a new crisis of overproduction and cut-throat competition in the whole of the European coal industry is rapidly approaching. The present productive capacity of the industry is far in excess of demand, due to the substitution of oil for coal, to the growing use of fuel-saving furnaces which use low-grade or "waste" coal, to a great increase in the German production of lignite coupled with an extensive use of lignite for producing electricity for power purposes, and to the growing use of water power. The mission anticipates before long a ruthless price war between the leading coal-producing countries, and if this develops, Germany, by reason of its large scale organization and its scientific and power developments, appears to be in the strongest position. The German miners' organizations have accepted the policy of a reorganization of the industry, but have claimed a greater share of the benefits for the workers than is accorded elsewhere. The strength of the Ruhr position is ascribed to the following features:

Its complete machinery for cooperative selling, regulating output according to demand, reducing internal price competition to the narrowest possible limits, eliminating unnecessary tolls in distribution, and pooling losses incurred on excessively competitive export contracts.

Its technical, scientific, and mechanical organization, with a constant process of adaptation, reequipment and extension.

The revenue resources of its immense by-product plants, and the sale of waste coke-oven gas to public authorities.

The almost complete interlinking of the colliery power stations with the far-reaching overland supply of the Rhine-Westphalian undertaking.

Its great capital resources, made possible by a high degree of unification of mine ownership, on which the vast and complicated coal-using organization is based.

The policy by which the revenue from all these activities goes into the coal industry as such, and not as a contribution to the profits of subsidiary companies which are regarded as outside the industry.

In addition, the industry has the advantage of a highly organized water transport system and, unlike the British industry, is not handicapped by the system of using private coal cars on the railroads.

Comparing the British situation with the German, the mission is convinced that the present policy of relying on longer hours and lower wages as a means of reducing costs is inadequate. England, however, has great natural advantages in the quality of its coal and the workability of many of its seams, and if a drastic reorganization were undertaken "we believe that the British industry could realize such economies as would make possible a complete reversal of the present policy of depressing labor conditions." Such a reorganization would mean a reduction in the number of workers, with inevitable hardship to some.

We hold strongly, therefore, that as the process is essential in the national interest as well as in that of the coal industry, it should be carried out only on a carefully considered plan, with active Government cooperation to prevent hardship to individual workers. Measures for the transfer of displaced workers to new centers of employment, provision for special unemployment benefit, special pension provision for older mine workers, are tentative suggestions.

In addition to the more obvious measures of economy involved in a consolidation of existing mines, the closing of unprofitable ventures, and the adoption of such remedies as are suggested in a previous report, the mission feels that it is essential that the reorganization shall be based on improved mechanical equipment, the elimination of the hardest and most costly forms of human toil, and constant progress in the scientific utilization of coal as a raw material for the production of power and chemical products.

The report contains an interesting description of the Westphalian syndicate and of the effect of its operations upon the producer, the industry, and the consumer, all of which the visitors believed were materially benefited by its workings.

English Limitation on Mining Recruitment

AS ONE way of dealing with the problem of unemployment in the mining industry, the British royal commission recommended in its report made early in 1926 that the Government should take steps to prevent the coming into the industry of men not previously employed as miners until there was reasonably steady employment for those already in it. In accordance with this recommendation the mining industry act of 1926 empowered the Minister of Labor, after consultation with the interests concerned, to take steps to make sure that in recruiting adult labor for the coal-mining industry preference should be given to men who had been regularly employed in the industry previous to the stoppage. No official

action in this direction has been taken by the Government, but the Mining Association of Great Britain recently announced its decision to limit employment of new workers in the manner indicated. The Ministry of Labor Gazette (London) for August, 1927, gives the text of the undertaking, of which the following paragraphs contain the principal features.

1. Save as hereinafter provided, no constituent member will, after the first day of August, 1927, engage any person over the age of 18 years, otherwise than as a student, for employment in any one of the occupations specified in the first schedule attached hereto unless that person was during the period of seven days ending on April 30, 1926, or when last before that date in regular employment, employed in one or other of such occupations. Provided that the foregoing restriction on engagement shall not apply to the employment of any disabled ex-service man in receipt of a disability pension.

2. The restriction on engagement set out in paragraph 1 shall not apply in any case where the constituent member has notified particulars of the vacancy to the nearest employment exchange and 14 days have elapsed after such notification has been received without submission by the exchange of a person suitable for filling the vacancy and qualified in accordance with paragraph 1, or the exchange has given notice to the constituent member before the expiration of the 14 days that no such person can be submitted.

Other sections of the agreement provide that when any member employs a person not qualifying under the first section he shall send particulars of the matter to the nearest employment exchange and shall also furnish monthly statements concerning the workers engaged and the number who were and who were not engaged in the industry during the period specified. There is also a provision that "any question whether employment is employment as set out in paragraph 1 shall be determined by the Minister of Labor after giving the parties an opportunity of expressing their views, and his decision will be accepted by the constituent member."

The Miners' Federation, while regarding the agreement as better than nothing, does not consider it a satisfactory substitute for governmental action and has accepted it under protest. According to a dispatch from the American consulate in London, the executive of the federation has recently issued a statement concerning the matter, from which the following paragraphs are quoted:

While taking steps to insure that restriction of workers shall apply to every colliery and as far as possible to every grade of labor covered by our membership, we were careful to give the Government no excuse for dropping the proposals or delaying them in any way.

There was distinct danger of this if we had continued to insist on a compulsory scheme, and while making it plain to the Government that we regarded statutory regulations as the only satisfactory basis for operating the proposals, we have not allowed our views in this respect to provide any excuse for delaying their operation.

Protection of Indian Workers in Argentina [1]

THE president of the Argentine Commission for the Protection of Indians has issued instructions to the inspector delegated to a large sugar plantation in that country which includes a résumé of his duties as follows:

(1) To collect information concerning the number of Indians employed and their age and sex; the manner by which they have been

[1] Argentina. Cronica Informativa del Ministerio del Interior, Buenos Aires, May, 1927, pp. 103, 104.

brought to the plantations and the provision made for their food and accommodation; (2) to supervise their working hours, the conditions under which they work, their wage rates, the cost of food and materials sold to them, medical attendance provided, etc.; (3) to endeavor to increase their wages or, if that is not possible, to attempt to reduce the prices paid by them for food and lodging; (4) to prevent the sale of arms or alcohol to the Indians; (5) to see that the workers are vaccinated on their arrival at the plantations; (6) to procure holdings of land, and animals and tools, for the Indians, in order that they may establish themselves and there await the sugar harvests; (7) to procure railway passes and good accommodations on the trains if they desire to return to their homes; (8) to make a report on the above matters at the end of the harvest season.

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INDUSTRIAL ACCIDENTS

Accident Rates for the Iron and Steel Industry, 1922 to 1926, by States

ACCIDENT rates in the iron and steel industry by individual States from 1922 to 1926, in so far as data are available, are shown in the following table.

It is desirable to suggest certain cautions which should be observed in considering this table:

1. It is not a complete presentation of the industry. Those cases are included which could be assembled without undue expenditure of time and effort.

2. Some States showed an exposure of less than 1,000 full-year workers. These have been omitted. Some States which are included have too small an exposure to be very authoritative.

3. The industry is not uniform from State to State. In some cases the heavier and more hazardous operations are in much larger volume than in other States. To have separated the record of the individual States by departments would have reduced the exposure to a point where the rates would have been of small significance.

Giving due regard to these cautions it may be said that—

1. The general trend of the rates is downward although there are some rather puzzling irregularities.

2. Those States in which accident prevention activity has been of longest duration and has been given most serious consideration have the lower rates.

3. In spite of the evident improvement in the industry as a whole, there is still a large opportunity for further progress.

ACCIDENT FREQUENCY AND SEVERITY RATES IN IRON AND STEEL, 1922 TO 1926, BY STATE AND YEAR

State and year	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
		Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
Alabama:													
1922	10,998	10	51	1,163	1,224	0.30	1.55	35.25	37.10	1.82	1.17	0.48	3.47
1923	11,915	7	78	1,348	1,433	.20	2.18	37.74	40.09	1.18	1.77	.87	3.82
1924	13,705	16	41	1,127	1,184	.39	1.00	27.41	28.80	2.33	1.06	.62	4.01
1925	15,244	14	46	508	568	.31	1.00	12.07	13.48	1.84	1.37	.19	3.40
1926	19,887	30	130	1,370	1,530	.50	2.18	22.95	25.63	3.02	1.56	.39	4.97
California:													
1922	4,013	3	35	711	749	.25	2.91	59.05	62.21	1.50	2.63	.80	4.93
1923	3,113	3	11	597	611	.32	1.18	63.92	65.42	1.93	1.19	.75	3.87
1924	2,901	2	16	522	540	.23	1.84	59.97	62.04	1.38	1.43	1.34	4.15
1925	3,018	1	10	278	289	.11	1.11	30.70	31.92	.66	1.56	.71	2.93
1926	2,908	-------	16	825	841	-------	1.86	95.93	97.82	-------	2.09	1.20	3.29
Colorado:													
1922	3,351	3	2	367	372	.30	.20	36.51	37.01	1.79	.27	.36	2.42
1923	4,164	7	13	462	482	.56	1.04	36.98	38.58	3.36	1.22	.76	5.34
1924	4,269	6	22	452	480	.47	1.72	35.29	37.48	2.81	1.52	.63	4.96
1925	4,243	3	14	592	609	.24	1.10	46.50	47.84	1.41	.93	.78	3.12
1926	4,507	2	13	668	683	.15	.96	49.48	50.59	.89	1.15	.71	2.75
Connecticut:													
1922	3,778	3	22	510	535	.26	1.94	44.99	47.19	1.59	1.38	.67	3.64
1923	5,307	5	34	446	485	.31	2.14	28.01	30.46	1.88	1.58	.27	3.73
1924	5,639	6	40	522	568	.35	2.36	30.85	33.56	2.13	1.31	.43	3.87
1925	7,263	5	49	778	832	.23	2.24	35.72	38.19	1.38	.28	.35	2.01
1926	2,908	1	47	366	414	.13	5.40	42.07	47.60	.68	2.47	.72	3.81
Illinois:													
1922	23,926	16	95	2,370	2,481	.22	1.32	33.02	34.56	1.34	1.00	.44	2.78
1923	40,097	39	171	3,753	3,963	.32	1.42	31.20	32.94	1.95	1.63	.55	4.13
1924	38,147	21	126	2,934	3,081	.19	1.13	26.26	27.58	1.13	.98	.21	2.32
1925	35,810	20	120	2,551	2,691	.19	1.12	23.75	25.06	1.12	1.32	.36	2.80
1926	37,574	25	114	2,916	3,055	.22	1.01	25.87	27.10	1.33	.82	.38	2.53
Indiana:													
1922	36,683	18	113	2,200	2,331	.16	1.03	20.05	21.24	.98	.95	.27	2.20
1923	22,887	12	67	1,746	1,825	.17	.98	25.43	26.58	1.05	.86	.33	2.34
1924	34,846	30	69	1,591	1,690	.29	.66	15.22	16.17	1.72	.75	.28	2.75
1925	32,743	25	86	2,110	2,221	.25	.88	21.48	22.61	1.53	.73	.31	2.57
1926	38,735	42	133	1,405	1,580	.36	1.14	12.09	13.59	2.17	.98	.22	3.37
Kentucky:													
1922	1,396	2	10	477	489	.48	2.39	113.89	116.76	2.87	1.43	1.82	6.12
1923	2,601	5	18	899	922	.64	2.31	115.22	118.17	3.84	4.31	.87	9.02
1924	1,734	1	9	144	154	.19	1.73	27.68	29.60	1.15	1.58	.39	3.12
1925	2,550	13	15	193	221	1.70	1.96	25.23	28.89	10.20	1.83	.39	12.42
1926	3,744	3	30	273	300	.26	2.67	24.37	27.30	1.60	2.57	.25	4.42
Massachusetts:													
1922	5,610	7	29	337	373	.41	1.71	19.90	22.02	2.48	1.64	.53	4.65
1923	5,018	4	26	230	260	.27	1.73	15.28	17.28	1.59	1.08	.57	3.24
1924	7,580	3	22	246	271	.13	.97	10.82	11.92	.79	1.55	.29	2.63
1925	6,645	1	7	126	134	.05	.35	6.32	6.72	.30	.33	.21	.84
1926	7,150	5	18	247	270	.23	.83	11.48	12.54	1.42	.78	.32	2.52
Michigan:													
1922	3,928	6	16	916	938	.51	1.36	77.73	79.60	3.05	1.29	.86	5.20
1923	4,399	11	19	984	1,014	.83	1.44	74.57	76.84	5.00	1.05	.93	6.98
1924	2,457	4	14	583	601	.54	1.90	79.08	81.52	3.26	3.36	.90	7.72
1925	4,869	4	8	1,093	1,105	.27	.56	74.83	75.66	1.64	.70	.92	3.26
1926	7,611	3	16	1,086	1,105	.13	.70	47.41	48.24	.79	.44	.66	1.89
Missouri:													
1922	4,676	6	12	1,632	1,650	.43	.86	116.35	117.64	2.57	1.01	1.41	4.99
1923	4,255	-------	4	903	907	-------	.31	70.74	71.05	-------	.33	.84	1.17
1924	1,284	1	8	266	275	.26	2.08	69.06	71.40	1.56	1.78	.76	4.10
1925	3,662	1	2	294	297	.09	.18	26.76	27.03	.55	.19	.34	1.08
1926	3,215	3	6	443	452	.31	.61	46.14	47.06	1.86	.68	.54	3.08
New Jersey:													
1922	6,597	1	37	625	663	.05	1.87	31.58	33.50	.30	1.20	.55	2.05
1923	7,341	-------	47	780	827	-------	2.13	35.42	37.55	-------	2.17	.57	2.74
1924	7,175	-------	47	772	819	-------	2.18	35.87	38.05	-------	2.69	.70	3.39
1925	6,923	4	31	769	804	.19	1.49	37.03	37.71	1.16	1.46	.59	3.21
1926	7,896	4	30	568	602	.16	1.26	23.96	25.38	1.01	.92	.37	2.30
New York:													
1922	9,785	11	47	1,625	1,683	.43	1.85	64.13	66.42	2.60	1.82	.99	5.41
1923	11,377	9	65	2,141	2,215	.26	1.90	62.73	64.89	1.58	1.84	.73	4.15
1924	6,903	5	51	1,107	1,163	.24	2.46	53.46	56.16	1.45	2.03	.94	4.42
1925	10,372	7	66	2,725	2,799	.22	2.12	87.58	89.92	1.35	2.35	.89	4.59
1926	9,442	7	43	1,821	1,871	.24	1.51	64.34	66.09	1.48	.90	.95	3.33

ACCIDENT FREQUENCY AND SEVERITY RATES IN IRON AND STEEL, 1922 TO 1926, BY STATE AND YEAR—Continued

State and year	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
		Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
Ohio:													
1922	51,424	42	125	5,268	5,435	0.27	.81	34.15	35.23	1.63	0.66	0.48	2.77
1923	77,979	39	201	5,763	6,003	.17	.86	24.63	25.66	1.00	.87	.39	2.26
1924	75,282	57	181	5,223	5,461	.25	.80	23.13	24.18	1.54	.98	.36	2.88
1925	86,820	33	150	5,059	5,242	.13	.58	19.42	20.13	.76	.53	.25	1.54
1926	92,678	48	172	5,630	5,850	.17	.62	20.25	21.04	1.03	.44	.23	1.71
Pennsylvania:													
1922	102,186	60	103	8,364	8,527	.20	.34	27.28	27.82	1.17	.34	.45	1.96
1923	140,259	112	244	12,188	12,544	.27	.58	28.97	29.82	1.60	.59	1.03	3.22
1924	154,800	54	244	8,382	8,680	.12	.53	18.05	18.70	.70	.34	.30	1.34
1925	149,089	75	218	9,527	9,820	.18	.49	21.30	21.97	1.01	.45	.26	1.72
1926	196,124	77	204	7,763	8,044	.13	.34	13.17	13.64	.79	.09	.20	1.08
Tennessee:													
1922	1,543	-------	4	220	228	-------	.86	47.52	48.38	-------	1.49	.69	2.18
1923	2,258	9	19	437	465	1.33	2.80	64.50	68.63	7.97	2.26	1.03	11.23
1924	1,503	3	6	77	86	.67	1.33	17.08	19.07	3.99	1.60	.25	5.84
1925	1,256	1	2	196	199	.27	.53	52.02	52.82	1.59	1.67	.69	3.95
1926	1,139	1	-----	32	33	.30	-----	9.41	9.71	1.75	-----	.13	1.88
Washington:													
1922	534	-------	6	80	86	-------	3.75	49.95	53.70	-------	5.99	.59	6.58
1923	2,258	-------	1	77	78	-------	.42	32.09	32.51	-------	.13	.50	.63
1924	1,503	-------	2	66	68	-------	1.11	36.50	37.61	-------	1.49	1.49	.88
1925	1,256	2	3	181	186	.55	.83	49.89	51.27	3.31	1.27	1.15	5.73
1926	1,348	1	6	148	155	.25	.15	37.00	38.30	1.48	.96	.48	2.92
West Virginia:													
1922	2,702	2	6	592	600	.24	.74	73.03	74.01	1.48	.84	.85	3.17
1923	9,336	8	13	749	770	.29	.46	26.74	27.49	1.71	.54	.33	2.58
1924	4,613	7	18	806	831	.51	1.30	58.24	60.05	3.03	1.53	1.70	6.26
1925	7,964	13	14	537	564	.54	.59	22.48	23.61	3.26	.67	.28	4.21
1926	14,124	12	30	1,306	1,348	.28	.71	30.87	31.86	1.70	.41	.35	2.46
Wisconsin:													
1922	5,441	-------	20	790	810	-------	1.23	48.40	49.63	-------	1.39	.73	2.12
1923	4,264	3	17	708	728	.23	1.33	55.34	56.90	1.41	1.23	.78	3.42
1924	8,321	5	47	1,275	1,327	.20	1.88	51.08	53.16	1.20	1.57	.68	3.45
1925	6,089	2	34	1,121	1,157	.13	2.18	72.02	74.33	.77	2.11	.81	3.69
1926	10,481	6	66	1,214	1,286	.19	2.10	38.66	40.95	1.14	1.76	.55	3.45

Accident Experience of Selected Industries in 1925 and 1926

IN Bulletin No. 425 of the Bureau of Labor Statistics (p. 91 et seq.) will be found the first attempt to develop frequency and severity rates [1] from the records of the States. The data on which this presentation was based pertain to the year 1925 and were drawn from 1,272 concerns located in 11 States, and employing the equivalent of 555,988 full-year workers. Similar data for the year 1926 with comparison for 1925 have now been computed and are presented below. The 1926 figures cover 2,212 concerns located in 26 States and employing the equivalent of 989,294 full-year workers.

The development of these rates is of importance from the standpoint of accident prevention, since without them there can be no adequate understanding of the meaning of the assembled data. To illustrate, in 1925, 506 casualties in the manufacture of agricultural implements occurred in the State of Indiana, while in Ohio there were 194. This may mean either that Indiana has the greater volume of

[1] The method of computing frequency and severity rates will be found in U. S. Bureau of Labor Statistics Bul. Nos. 298 and 425.

production or that the production is attended with greater hazard. When, however, the rates are determined, it is found that Indiana had in 1925 a frequency rate in the manufacture of agricultural implements of 45.20 cases per 1,000,000 hours' exposure, while Ohio had a rate of 60.02. The situation as regards actual hazard is therefore the opposite of what might have been inferred from the mere number of casualties, and, while other factors must be considered before a final conclusion can be reached, it is evident that these industrial rates do afford some real information regarding hazard which can be used in accident-prevention study.

In the years 1925 and 1926 the Bureau of Labor Statistics has been extending its accident studies into other industries than iron and steel which had been covered with reasonable completeness since 1910.

The basic information for the calculation of these rates has been derived from two sources, namely, for accident occurrence from State records and for man-hours of exposure from the division of employment of the Bureau of Labor Statistics, supplemented by certain data secured directly from the industrial concerns.

The following tables summarize the experience of the industries in the two years covered by this report. Of the 30 industries represented, 24 appear in each of the years. On comparing the rates it is found that as regards the frequency of accidents 15 industries show declining rates and 9 have rising rates. As regards the severity of accidents there is a reversal of this showing, 6 having declining rates while 18 have rising rates. Since the cost of accidents is influenced by the severity of accidents rather than by their number it is evident that the present tendency in general industry is toward greater cost.

One factor in this rising cost may be the fact that all American industry has been much influenced by the effort for increased production. This "speeding up" has not been accompanied by an equally intense effort toward accident prevention except in the case of certain large organizations in which the safety movement first took root and which have been since that time assiduous and successful in maintaining steadily improved conditions.

The showing of this report certainly indicates the need of further intensified accident-prevention activity.

TABLE 1.—ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 11 STATES, 1925, AND 30 STATES, 1926

Industry and State	Number of States or industries	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
				Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925															
Industry:	*States*														
Agricultural implements	8	55	16,295	9	78	1,050	1,137	0.18	1.60	23.31	25.09	1.10	1.26	0.42	2.78
Automobiles	8	73	189,385	56	704	4,247	5,007	.10	1.24	[1] 7.80	9.14	.59	1.02	.16	1.77
Automobile tires	3	25	20,097	4	62	3,068	3,134	.07	1.03	57.98	59.08	.40	1.06	.84	2.30
Boots and shoes	5	31	11,200	------	6	252	258	------	.18	9.88	10.06	------	.13	.19	.32
Brick	9	94	15,595	8	29	1,050	1,087	.17	.62	30.46	31.25	1.03	.73	.55	2.31
Carpets	3	19	10,999	5	33	94	132	.15	1.00	4.87	6.02	.91	1.45	.15	2.51
Chemicals	4	31	11,609	3	35	192	230	.09	1.00	5.63	6.72	.52	1.49	.18	2.19
Electrical machinery	8	71	60,653	13	229	1,170	1,412	.07	1.26	9.46	10.79	.43	1.12	.24	1.79
Flour	3	27	3,616	4	7	203	214	.37	.65	18.71	19.73	2.21	.57	.27	3.05
Foundry and machine shops	11	256	75,404	18	324	3,421	3,763	.08	1.43	23.62	25.13	.48	1.24	.43	2.15
Furniture	10	165	24,519	------	80	903	983	------	1.09	14.96	16.05	------	.79	.25	1.04
Glass	4	40	12,138	1	18	529	548	.03	.49	24.37	24.89	.16	.65	.27	1.08
Leather	5	26	9,301	2	30	182	214	.07	1.08	11.17	12.32	.43	.82	.29	1.54
Lumber—planing mills	10	64	9,852	6	58	541	605	.20	1.96	19.78	21.94	1.22	2.62	.49	4.33
Lumber—sawmills	4	22	10,223	11	24	567	602	.36	.78	18.49	19.63	2.15	.66	.48	3.29
Machine tools	7	48	6,033	1	17	332	350	.06	.94	21.09	22.09	.33	.77	.27	1.37
Paper and pulp	8	34	11,142	5	80	590	675	.15	2.39	20.47	23.01	.90	3.20	.75	4.85
Pottery	2	13	3,148	1	3	156	160	.11	.32	16.52	16.95	.64	.87	.37	1.88
Slaughtering and meat packing	3	13	28,900	15	81	1,645	1,741	.21	1.13	22.94	24.28	1.26	.94	.42	2.62
Stamped and enameled ware	3	7	1,473	------	3	75	78	------	.68	16.97	17.65	------	.54	.19	.73
Steam fittings, apparatus, and supplies	6	44	6,212	1	38	335	374	.05	2.04	31.52	33.61	.32	1.89	.74	2.95
Stoves	4	29	3,988	1	3	352	356	.08	.25	43.08	43.41	.50	.24	.45	1.19
Structural-iron work	10	60	6,524	6	42	559	607	.31	2.15	48.49	50.95	1.84	1.95	.75	4.54
Woolen goods	2	25	12,682	1	13	33	47	.03	.34	1.59	1.96	.16	.24	.05	.45
State:	*Industries*														
Illinois	13	120	51,330	21	134	[2] 1,737	1,892	.14	.87	[2] 11.28	12.29	.82	.69	[2] .27	1.78
Indiana	13	122	20,585	1	51	2,219	2,271	.02	.83	35.93	36.78	.10	.46	.50	1.06
Iowa	9	54	11,074	2	40	880	922	.06	1.20	26.49	27.75	.36	1.01	.40	1.77
Maryland	12	52	7,199	1	12	478	491	.05	.56	22.13	22.74	.28	.84	.45	1.57
Michigan	7	44	165,918	48	580	[2] 3,624	4,252	.10	1.17	[2] 7.28	8.55	.58	.90	[2] .16	1.64
Minnesota	12	60	13,744	14	55	1,141	1,210	.34	1.33	27.67	29.34	2.04	1.46	[2] .49	3.99
New Jersey	14	113	46,066	7	223	[2] 1,010	1,240	.03	1.03	[2] 4.65	5.71	.30	1.57	[2] .21	2.09
New York	15	131	70,053	26	511	[2] 1,733	2,270	.12	2.43	[2] 8.25	10.80	.74	2.79	.37	3.90

Ohio	15	161	43,213	13	120	7,043	7,176	.10	.93	54.32	55.35	.60	.93	.56	2.09
Pennsylvania	19	342	98,733	26	226	[3]	252	.26	2.23	[3]	2.48	1.54	1.66	[3]	3.20
Winconsin	11	73	28,083	12	95	[2] 1,631	1,738	.14	1.13	[2] 19.36	20.63	.85	.55	[2] .41	1.81
Total		1,272	555,988												
1926															
Industry:	*States*														
Agricultural implements	12	65	16,026	3	98	1,053	1,154	.06	2.04	21.89	23.99	.37	2.00	.45	2.82
Automobiles	11	101	251,893	65	1,102	7,740	8,907	.09	1.46	10.24	11.79	.52	1.56	.27	2.35
Auto tires	7	28	27,072	7	67	3,109	3,183	.09	.81	38.29	39.19	.52	.61	.55	1.68
Boots and shoes	10	85	45,924	5	68	781	854	.04	.49	5.67	6.20	.22	.35	.15	.72
Brick	15	135	19,014	7	67	1,251	1,325	.13	1.18	21.95	23.26	.74	1.62	.43	2.79
Carpets	4	22	12,626	1	24	162	187	.03	.63	4.01	4.67	.16	.50	.21	.87
Carriages and wagons	12	20	848		17	86	103		6.80	34.40	41.20		6.58	.71	7.29
Chemicals	10	50	16,657	9	58	584	651	.18	1.16	11.68	13.02	1.08	1.57	.41	3.06
Cotton goods	13	84	83,009	1	76	1,660	1,737	[4]	.31	6.67	6.98	.02	.26	.15	.43
Electrical machinery	10	92	75,389	11	265	2,092	2,368	.05	1.17	9.25	10.47	.29	1.05	.32	1.66
Fertilizers	10	27	3,055	6	5	259	270	.65	.54	28.15	29.34	3.93	1.03	.68	5.64
Flour	15	72	6,102	4	27	417	448	.22	1.48	22.79	24.49	1.31	1.91	.58	3.80
Foundry and machine shops	23	329	105,293	64	638	6,220	6,922	.20	2.02	19.69	21.91	1.22	1.77	.48	3.47
Furniture	19	232	36,869	3	200	1,422	1,625	.03	1.81	12.86	14.70	.16	1.51	.30	1.97
Glass	6	38	11,550	5	31	797	833	.14	.89	22.97	24.00	.87	1.01	.29	2.17
Hardware	6	19	6,246		51	161	212		2.73	8.61	11.34		1.31	.22	1.53
Leather	14	77	19,928	6	74	604	684	.10	1.24	10.10	11.44	.60	1.23	.36	2.19
Lumber—planing mills	16	131	17,223	15	144	1,192	1,351	.30	2.89	23.94	27.13	1.81	2.80	.76	5.37
Lumber—sawmills	16	90	31,543	54	176	2,122	2,352	.57	1.86	22.43	24.86	3.42	1.80	.66	5.88
Machine tools	9	85	15,134	5	64	875	944	.11	1.41	19.27	20.79	.66	1.18	.34	2.18
Paper and pulp	16	85	37,308	21	166	2,839	3,026	.19	1.53	26.03	27.75	1.16	1.66	.61	3.43
Petroleum refining	8	18	23,175	21	107	392	520	.30	1.54	5.64	7.48	1.81	1.83	.19	3.83
Pottery	8	26	8,338	2	10	276	288	.08	1.41	11.31	11.80	.49	.49	.29	1.27
Shipbuilding, steel	10	18	13,737	9	77	422	508	.16	1.39	9.30	10.85	.96	1.06	.36	2.38
Slaughtering and meat packing	14	60	46,099	15	214	4,228	4,457	.11	1.55	30.57	32.23	.65	1.51	.44	2.65
Stamped and enameled ware	10	23	13,363	3	79	355	437	.08	2.08	8.14	10.40	.45	1.31	.24	2.00
Steam fittings	11	43	13,883	2	57	1,346	1,405	.05	1.37	32.36	33.78	.29	1.33	.61	2.23
Stoves	15	48	8,433	2	34	685	721	.08	1.43	28.90	30.41	.51	1.56	.56	2.63
Structural-iron work	15	58	7,582	23	62	581	666	1.01	2.62	26.41	30.04	6.06	2.35	.72	9.13
Woolen goods	14	49	17,966	1	32	330	363	.02	.61	6.25	6.88	.11	.67	.20	.98
Total		2,212	989,294												

[1] This rate is too low, since the industry is located so largely in Michigan, which does not report temporary disabilities terminating in the first week.
[2] Data for disabilities ending in first week not available.
[3] Data for temporary disabilities not available.
[4] Less than 0.005.

TABLE 1.—ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 11 STATES, 1925, AND 30 STATES, 1926—Continued

Industry and State	Number of States or industries	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
				Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1926—Continued	*Industries*														
State:															
Alabama	4	18	10,368	1	21	[5] 314	336	0.03	0.68	[5] 10.10	10.81	0.19	0.60	[2] 0.28	1.07
California	16	108	30,921	41	148	[3]	189	.45	1.61	[3]	2.06	2.67	1.18	[3]	3.85
Georgia	10	32	23,104	4	45	[2] 471	520	.06	.64	[2] 6.73	7.43	.34	.59	[2] .16	1.09
Illinois	24	208	80,033	24	399	[2] 3,182	3,605	.10	1.66	[2] 13.25	15.01	.60	1.49	[2] .33	2.42
Indiana	22	153	39,907	12	229	3,303	3,544	.10	1.91	27.59	29.60	.60	4.55	.44	5.59
Iowa	11	51	12,105	6	39	1,024	1,069	.17	1.07	28.21	29.45	.99	.90	.54	2.43
Kentucky	11	24	7,181	------	47	1,267	1,314	------	2.19	58.93	61.12	------	1.71	.78	2.49
Maine	9	25	12,389	------	19	934	953	------	.51	25.11	25.62	------	.53	.45	.98
Maryland	20	74	13,864	5	35	826	866	.12	.84	19.86	20.82	.72	.64	.44	1.80
Massachusetts	15	156	76,568	7	50	1,980	2,037	.03	.22	8.62	8.87	.18	.16	.20	.54
Michigan	24	181	227,350	75	837	[2] 6,900	7,812	.11	1.23	[2] 10.12	11.46	.65	.85	[2] .32	1.82
Minnesota	13	66	14,048	16	104	2,645	2,765	.38	2.47	62.83	65.68	2.28	2.78	1.16	6.22
Montana	2	4	934	2	------	64	66	.07	------	2.29	2.36	4.28	------	.37	4.65
Nebraska	6	23	6,078	3	15	708	726	.16	.82	38.90	39.88	.99	1.33	.48	2.80
New Hampshire	5	15	15,253	1	5	650	656	.02	.11	14.19	14.32	.13	.07	.29	.49
New Jersey	20	126	50,102	3	344	[2] 1,237	1,584	.02	2.29	[2] 8.23	10.54	.12	2.53	[2] .19	2.84
New York	25	207	110,942	48	865	[2] 4,618	5,531	.14	2.55	[2] 13.63	16.32	.85	2.65	[2] .73	4.23
North Dakota	3	7	137	------	1	60	61	------	2.50	150.00	152.50	------	14.59	2.59	17.18
Ohio	25	192	64,430	35	189	8,343	8,567	.18	.98	42.16	43.31	1.08	.83	.56	2.42
Pennsylvania	28	327	108,060	49	291	[3]	340	.16	.94	[3]	1.10	.95	.70	[3]	1.65
South Dakota	3	4	1,080	1	10	253	264	.31	3.13	79.06	82.50	1.85	1.02	1.04	3.91
Tennessee	17	40	10,171	3	67	920	990	.10	2.20	30.16	32.46	.59	1.51	.37	2.47
Virginia	17	39	19,943	12	88	[6] 697	797	.20	1.47	[6] 11.65.	13.32	1.20	1.65	[6] .35	3.20
West Virginia	12	27	9,249	2	42	899	943	.07	1.52	32.45	34.04	.43	2.04	.51	2.97
Wisconsin	20	105	45,087	19	204	[2] 2,721	2,944	.14	1.51	[2] 20.11	21.76	.84	1.18	[2] .48	2.50
Total	------	2,212	989,294	------	------	------	------	------	------	------	------	------	------	------	------

[2] Data for disabilities ending in first week not available.
[3] Data for temporary disabilities not available.
[5] Data for disabilities ending in first two weeks not available.
[6] Data for disabilities ending in less than 10 days not available.

Table 2 indicates the trend of events in each industry, by States:

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES

Agricultural implements

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	13	2,808	-------	9	[1] 65	74	-------	1.07	[1] 7.72	8.79	-------	0.68	[1] 0.15	0.83
Indiana	9	3,732	1	17	488	506	0.09	1.52	43.59	45.20	0.54	1.38	.72	2.64
Iowa	4	418	-------	-------	38	38	-------	-------	30.27	30.27	-------	-------	.44	.44
Minnesota	5	886	2	2	20	24	.75	.75	7.53	9.03	4.52	.56	.08	5.16
New York	3	1,615	1	14	[1] 30	45	.21	2.89	[1] 6.19	9.29	1.24	3.14	[1].23	4.61
Ohio	13	1,077	4	9	181	194	1.24	2.78	56.00	60.02	7.43	3.02	.90	11.35
Pennsylvania	5	1,282	-------	3	[2]	3	-------	.78	[2]	.78	-------	.34	[2]	.34
Wisconsin	3	4,476	1	24	[1] 228	253	.07	1.79	[1] 16.98	18.84	.45	.95	[1].34	1.74
Total	55	16,295	9	78	1,050	1,137	.18	1.60	23.31	25.09	1.10	1.26	.42	2.78
1926														
California	3	448	-------	5	[2]	5	-------	3.85	[2]	3.85	-------	2.12	[2]	2.12
Illinois	21	5,357	2	29	[1] 284	315	.12	1.80	[1] 17.64	19.56	.75	1.78	[1].50	3.03
Indiana	7	1,410	-------	18	149	167	-------	4.29	35.48	39.77	-------	6.90	.90	7.80
Iowa	4	397	-------	-------	42	42	-------	-------	35.00	35.00	-------	-------	.60	.60
Kentucky	1	537	-------	5	70	75	-------	3.12	43.75	46.87	-------	.93	.55	1.48
Minnesota	3	645	-------	7	74	81	-------	3.68	38.95	42.63	-------	4.00	.61	4.61
Nebraska	2	271	-------	-------	51	51	-------	-------	63.75	63.75	-------	-------	.26	.26
New York	5	1,835	1	12	[1] 65	78	.18	2.18	[1] 11.82	14.18	1.09	2.02	[1].17	3.28
Ohio	10	1,537	-------	5	152	157	-------	1.09	33.04	34.13	-------	.94	.37	1.31
Pennsylvania	5	571	-------	-------	[2]	-------	-------	-------	[2]	-------	-------	-------	[2]	-------
Tennessee	2	329	-------	4	16	20	-------	4.00	16.00	20.00	-------	4.61	.33	4.94
Wisconsin	2	2,689	-------	13	[1] 150	163	-------	1.60	[1] 18.52	20.12	-------	.76	[1].47	1.23
Total	65	16,026	3	98	1,053	1,154	.06	2.04	21.89	23.99	.37	2.00	.45	2.82

Automobiles

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	8	2,990	2	7	[1] 45	54	0.22	0.78	[1] 5.02	6.02	1.34	0.27	[1] 0.11	1.71
Indiana	4	2,239	-------	9	176	185	-------	1.34	26.21	27.55	-------	.47	.27	.74
Michigan	25	152,620	42	549	3,210	3,801	.09	1.20	7.01	8.30	.55	.91	.14	1.60
New Jersey	5	3,113	-------	25	[1] 72	97	-------	2.68	[1] 7.71	10.39	-------	2.28	[1].19	2.47
New York	15	11,919	6	85	[1] 188	279	.17	2.38	[1] 5.26	7.81	1.01	2.42	[1].25	3.68
Ohio	5	2,202	-------	5	137	142	-------	.76	20.73	21.49	-------	1.50	.35	1.85
Pennsylvania	5	7,851	5	41	[2]	46	.21	1.74	[2]	1.95	1.27	1.22	[2]	2.49
Wisconsin	6	6,450	1	24	[1] 378	403	.05	1.24	[1] 19.53	20.82	.31	.62	[1].41	1.34
Total	73	189,385	56	704	4,247	5,007	.10	1.24	7.80	9.14	.59	1.02	.16	1.77
1926														
California	5	1,031	1	1	[2]	2	.32	.32	[2]	.64	1.94	.16	[2]	2.10
Illinois	9	3,689	1	15	[1] 66	82	.09	1.35	[1] 5.95	7.39	.54	1.25	[1].14	1.93
Indiana	9	12,581	4	81	898	983	.11	2.15	23.82	26.08	.64	9.67	.27	10.58
Michigan	29	190,210	46	677	[1] 4,766	5,489	.08	1.19	[1] 8.35	9.62	.48	.82	[1].25	1.55
New Jersey	3	2,271	1	36	[1] 88	125	.15	5.29	[1] 12.94	18.38	.88	10.94	[1].29	12.11
New York	18	11,178	-------	104	[1] 358	462	-------	3.10	[1] 10.69	13.79	-------	3.27	[1].62	3.89
Ohio	13	14,122	4	59	1,016	1,079	.09	1.39	23.96	25.44	.57	1.19	.38	2.14
Pennsylvania	9	8,524	5	45	[2]	50	.20	1.76	[2]	1.96	1.17	1.52	[2]	2.69
Tennessee	2	1,657	2	40	231	273	.40	8.00	46.20	54.60	2.41	5.17	.67	8.25
Wisconsin	4	6,630	1	44	[1] 317	362	.05	2.21	[1] 15.93	18.19	.30	1.41	[1].34	2.05
Total	101	251,893	65	1,102	7,740	8,907	.09	1.46	10.24	11.79	.52	1.56	.27	2.35

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Automobile tires

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
New Jersey	7	2,749	1	10	[1] 97	108	0.12	1.21	[1] 11.76	13.09	0.73	2.03	[1] 0.37	3.13
Ohio	12	14,888	3	52	2,962	3,017	.07	1.16	66.32	67.55	.40	1.06	.74	2.20
Pennsylvania	6	2,459		9	[2]	9		1.22	[2]	1.22		1.13	[2]	1.13
Total	25	20,097	4	62	3,068	3,134	.07	1.03	57.98	59.08	.40	1.06	.84	2.30
1926														
California	2	1,891	1	5	[2]	6	.18	.88	[2]	1.06	1.06	.35	[2]	1.41
Maryland	1	1,907	1	2	156	159	.16	.08	27.49	27.73	1.05	.10	.39	1.54
Massachusetts	4	4,323		4	120	124		.31	9.23	9.54		.39	.27	.66
Michigan	1	2,860	2	13	[1] 101	116	.23	1.51	[1] 11.74	13.48	1.40	.96	[1] .38	2.74
New Jersey	6	2,015		10	[1] 95	105		1.67	[1] 15.83	17.50		1.43	[1] .37	1.80
Ohio	8	11,721	2	26	2,637	2,665	.06	.71	74.91	75.68	.34	.54	.95	1.83
Pennsylvania	6	2,355	1	7	[2]	8	.14	.99	[2]	1.13	.85	.85	[2]	1.70
Total	28	27,072	7	67	3,109	3,183	.09	.81	38.29	39.19	.52	.61	.55	1.68

Boots and shoes

1925														
Illinois	5	3,336			[1] 124	124			[1] 12.39	12.39			[1] 0.19	0.19
Maryland	7	8,510			54	54			21.14	21.14			.44	.44
New York	7	2,238		4	[1] 21	25		0.60	[1] 3.13	3.73		.51	[1] .11	.62
Pennsylvania	8	2,697			[2]				[2]				[2]	
Wisconsin	4	2,079		2	[1] 53	55		.32	[1] 8.50	8.82		.14	[1] .17	.31
Total	31	11,200		6	252	258		.18	9.88	10.06		.13	.19	.32
1926														
Illinois	4	5,556		5	[1] 39	44		.30	[1] 2.34	2.64		.09	[1] .05	.14
Maryland	7	962			34	34			11.73	11.73			.27	.27
Massachusetts	28	10,772		4	81	85		.12	2.51	2.63		.05	.05	.10
Michigan	4	522			[1] 4	4			[1] 2.50	2.50			[1] .09	.09
Minnesota	3	693			20	20			9.52	9.52			.12	.12
New Jersey	4	609			[1] 6	6			[1] 3.33	3.33			[1] .07	.07
New York	10	17,220	4	51	[1] 363	418	.08	.99	[1] 7.02	8.09	.46	.72	[1] .27	1.45
Ohio	2	2,352	1	1	181	183	.14	.14	25.49	25.77	.85	.09	.18	1.12
Pennsylvania	13	3,539			[2]				[2]				[2]	
Virginia	5	1,664		2	[3] 16	18		.40	[3] 3.20	3.60		.86	[3] .06	.92
Wisconsin	5	2,035		5	[1] 37	42		.82	[1] 6.07	6.89		.49	[1] .11	.60
Total	85	45,924	5	68	781	854	.04	.49	5.67	6.20	.22	.35	.15	.72

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Brick

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	12	3,802	1	6	[1] 197	204	0.09	0.53	[1] 17.27	17.89	0.53	1.13	[1] 0.45	2.11
Indiana	10	696		1	166	167		.48	79.56	80.04		.14	.71	.85
Iowa	16	1,013	1	1	74	76	.33	.33	24.36	25.02	1.98	.10	.45	2.53
Maryland	5	470			52	52			36.88	36.88			.99	.99
Minnesota	1	57			6	6			34.90	34.90			.33	.33
New Jersey	12	1,900		8	[1] 70	78		1.40	[1] 12.28	13.68		1.01	[1] .28	1.29
New York	10	1,008	2	7	[1] 59	68	.66	2.31	[1] 19.51	22.48	3.97	1.62	[1] 1.03	6.62
Ohio	9	2,542	2	3	426	431	.26	.39	55.86	56.51	1.57	.84	.62	3.03
Pennsylvania	19	4,106	2	3	([2])	5	.16	.24	([2])	.40	.97	.30	([2])	1.27
Total	94	15,595	8	29	1,050	1,087	.17	.62	30.46	31.25	1.03	.73	.55	2.31
1926														
California	14	1,909	1	3	([2])	4	.18	.53	([2])	.71	1.05	.42	([2])	1.47
Illinois	15	3,265		15	[1] 249	264		1.53	[1] 25.41	26.94		2.46	[1] .63	3.09
Indiana	9	686		2	185	187		.95	88.10	89.05		1.60	1.22	2.82
Iowa	12	702		3	101	104		1.43	48.10	49.53		3.28	.84	4.12
Maryland	5	537	1	1	56	58	.63	.63	35.00	36.26	3.78	1.11	.62	5.52
Massachusetts	1	93			4	4			13.33	13.33			.09	.09
Michigan	2	156		1	[1] 8	9		2.00	[1] 16.00	18.00		.64	[1] .44	1.08
Nebraska	3	118			20	20			50.00	50.00			.96	.96
New Jersey	15	2,631		9	[1] 69	78		1.14	[1] 8.73	9.87		1.79	[1] .17	1.96
New York	14	1,948	1	13	[1] 109	123	.17	2.24	[1] 18.79	21.20	1.03	3.00	[1] .66	4.69
North Dakota	3	58		1	30	31		5.00	150.00	155.00		34.33	3.66	37.99
Ohio	12	2,496	2	4	413	419	.27	.53	55.07	55.87	1.60	.74	.90	3.24
Pennsylvania	26	4,128	2	14	([2])	16	.16	1.13	([2])	1.29	.97	.78	([2])	1.75
South Dakota	1	13												
Virginia	3	274		1	[3] 7	8		1.25	[3] 8.75	10.00		.91	[3] .23	1.14
Total	135	19,014	7	67	1,251	1,325	.13	1.18	21.95	23.26	.74	1.62	.43	2.79

Carpets

1925														
New Jersey	3	857		3	[1] 27	30		1.17	[1] 10.50	11.67		3.23	[1] 0.29	3.52
New York	2	5,571	3	27	[1] 67	97	0.18	1.62	[1] 4.01	5.81	1.08	2.31	[1] .13	3.52
Pennsylvania	14	4,571	2	3	([2])	5	.15	.22	([2])	.37	.88	.08	([2])	.96
Total	19	10,999	5	33	94	132	.15	1.00	4.87	6.02	.91	1.45	.15	2.51
1926														
Massachusetts	3	1,482			19	19			4.31	4.31			.08	.08
New Jersey	3	905		3	[1] 38	41		1.11	[1] 14.07	15.18		.33	[1] .29	.62
New York	5	7,799	1	17	[1] 105	123	.04	.73	[1] 4.49	5.26	.26	.64	[1] .28	1.18
Pennsylvania	11	2,440		4	([2])	4		.55	([2])	.55		.41	([2])	.41
Total	22	12,626	1	24	162	187	.03	.63	4.01	4.67	.16	.50	.21	.87

Carriages and wagons

1926														
Illinois	1	56		3	[1] 3	6		15.00	[1] 15.00	30.00		17.75	[1] 0.28	18.03
Indiana	2	94			8	8			26.67	26.67			.58	.58
Iowa	1	17			2	2			40.00	40.00			1.37	1.37
Kentucky	3	263		10	35	45		12.50	43.75	56.25		14.00	1.00	15.00
Maine	1	47		1	15	16		10.00	150.00	160.00		12.82	1.31	14.13
Maryland	2	96			6	6			20.00	20.00			.04	.04
Michigan	1	10			[1] 1	1			[1] 33.00	33.00			[1] .56	.56
Minnesota	1	27		1	7	8		10.00	70.00	80.00		3.68	2.35	6.03
New Jersey	1	18			[1] 2	2			[1] 20.00	20.00			[1] 1.30	1.30
Ohio	1	17												
Pennsylvania	2	53			([2])				([2])				([2])	
Tennessee	3	118		2	6	8		5.00	15.00	20.00		1.69	.35	2.04
Wisconsin	1	32			[1] 1	1			[1] 10.00	10.00			[1] .23	.23
Total	20	848		17	86	103		6.80	34.40	41.20		6.58	.71	7.29

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Chemicals

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Maryland	5	1,330		1	44	45		0.25	11.03	11.28		0.08	0.25	0.32
New Jersey	17	6,778	1	12	[1] 89	102	0.05	.59	[1] 4.38	5.02	0.30	.65	[1] .13	1.08
New York	7	3,236	2	22	[1] 59	83	.21	2.27	[1] 6.08	8.56	1.24	3.96	[1] .26	5.46
Pennsylvania	2	266			[2]				[2]				[2]	
Total	31	11,609	3	35	192	230	.09	1.00	5.63	6.72	.52	1.49	.18	2.19
1926														
Illinois	4	1,527	1	3	[1] 89	93	.22	.65	[1] 19.35	20.22	1.31	.29	[1] .56	2.16
Indiana	1	1,300			57	57			14.62	14.62			.18	.18
Maryland	8	1,768		2	67	69		.37	12.64	13.01		.11	.30	.41
Michigan	2	2,528	4	2	[1] 72	78	.53	.26	[1] 9.47	10.26	3.16	.28	[1] .27	3.71
New Jersey	17	3,302		15	[1] 80	95		1.52	[1] 8.08	9.60		1.57	[1] .18	1.75
New York	10	4,152	1	26	[1] 141	168	.08	2.08	[1] 11.28	13.44	.48	3.22	[1] .71	4.41
Pennsylvania	4	1,166	1	1	[2]	2	.29	.29	[2]	.58	1.72	.09	[2]	1.81
Tennessee	2	49												
Virginia	1	851	2	9	[3] 78	89	.77	3.46	[3] 30.00	34.23	4.70	7.28	[3] 1.08	13.06
Wisconsin	1	14												
Total	50	16,657	9	58	584	651	.18	1.16	11.68	13.02	1.08	1.57	.41	3.06

Cotton goods

1926														
Alabama	9	5,917		5	[4] 62	67		0.28	[4] 3.48	3.76		0.29	[4] 0.12	0.41
Georgia	12	19,369		24	[1] 290	314		.41	[1] 4.99	5.40		.25	[1] .12	.37
Indiana	2	515		1	18	19		.67	12.00	12.67		.39	.13	.52
Kentucky	2	536		1	24	25		.63	15.00	15.63		.47	.24	.71
Maine	6	6,046		7	279	286		.39	15.41	15.80		.52	.26	.78
Massachusetts	30	22,577		5	366	371		.07	5.41	5.48		.07	.13	.20
New Hampshire	5	11,345		3	373	376		.09	10.97	11.06		.03	.23	.26
New Jersey	3	3,558		7	[1] 23	30		.65	[1] 2.15	2.80		.34	[1] .05	.39
New York	2	1,413	1	4	[1] 36	41	.24	.95	[1] 8.57	9.76	1.42	1.03	[1] .52	2.97
Pennsylvania	6	2,539		3	[2]	3		.39	[2]	.39		.20	[2]	.20
Tennessee	3	3,175		6	111	117		.63	11.68	12.31		.27	.11	.38
Virginia	3	5,999		10	[3] 77	87		.56	[3] 4.28	4.84		.87	[3] .13	1.00
Wisconsin	1	20			[1] 1	1			[1] 10.00	10.00			[1] .27	.27
Total	84	83,009	1	76	1,660	1,737	[5]	.31	6.67	6.98	.02	.26	.15	.43

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.
[4] Data for temporary disabilities ending in first two weeks not available.
[5] Less than 0.005.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Electrical machinery

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	13	4,944	1	14	[1] 54	69	0.07	0.94	[1] 3.64	4.65	0.40	0.54	[1] 0.07	1.01
Indiana	3	3,080		3	184	187		.32	19.91	20.23		.10	.17	.27
Maryland	2	851			30	30			11.75	11.75			.24	.24
Minnesota	1	8			1	1			43.17	43.17			2.37	2.37
New Jersey	13	8,329	1	62	[1] 140	203	.04	2.48	[1] 5.60	8.12	.24	2.47	[1] .15	2.86
New York	9	20,454	4	74	[1] 456	534	.07	1.21	[1] 7.43	8.71	.39	1.29	[1] .33	2.01
Ohio	17	3,560		7	305	312		.66	28.56	29.22		.81	.22	1.03
Pennsylvania	13	19,441	7	69	[2]	76	.12	1.18	[2]	1.30	.72	.80	[2]	1.52
Total	71	60,667	13	229	1,170	1,412	.07	1.26	9.46	10.79	.43	1.12	.24	1.79
1926														
Illinois	20	6,908		36	[1] 147	183		1.74	[1] 7.10	8.84		1.34	[1] 0.19	1.53
Indiana	5	3,904		23	275	298		1.97	23.50	25.47		1.39	.35	1.74
Maryland	3	1,045		7	41	48		2.26	13.23	15.49		1.09	.28	1.37
Massachusetts	11	9,551	2	18	589	609	.07	.63	20.52	21.22	.42	.38	.45	1.25
Michigan	1	113			[1] 1	1			1.33	.33			[1] .08	.08
New Jersey	13	8,090	1	48	[1] 134	183	.04	1.98	[1] 5.51	7.53	.25	1.74	[1] .12	2.11
New York	10	20,800	4	104	[1] 711	819	.06	1.67	[1]11.39	13.12	.38	1.89	[1] .73	3.00
Ohio	12	3,637		8	190	198		.73	17.43	18.16		.40	.23	.63
Pennsylvania	14	21,146	4	21	[2]	25	.06	.33	[2]	.39	.38	.22	[2]	.60
Wisconsin	3	195			[1] 4	4			[1] 6.67	6.67			[1] .15	.15
Total	92	75,389	11	265	2,092	2,368	.05	1.17	9.25	10.47	.29	1.05	.32	1.66

Fertilizers

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1926														
Georgia	3	639	1	1	[1] 18	20	0.53	0.53	[1] 9.47	10.53	3.13	2.09	[1] 0.22	5.44
Illinois	1	68			10	10			[1]50.00	50.00			.62	.62
Indiana	3	105			23	23			76.67	76.67			.80	.80
Iowa	1	17												
Maryland	5	714	1	1	112	114	.48	.48	53.33	54.29	2.80	.23	1.18	4.21
Michigan	1	249			[1] 10	10			[1]14.29	14.29			[1] .57	.57
New York	2	131		1	[1] 8	9		2.50	[1]20.00	22.50		10.14	[1] 1.25	11.39
Ohio	3	255		1	27	28		1.25	33.75	35.00		.78	.55	1.33
Pennsylvania	2	142			[2]				[2]				[2]	
Tennessee	3	218			12	12			17.14	17.14			.36	.36
Virginia	3	517	4	1	[3] 39	44	2.50	.63	[3]24.38	27.51	15.48	.19	[3] .85	16.52
Total	27	3,055	6	5	259	270	.65	.54	28.15	29.34	3.93	1.03	.68	5.64

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Flour

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Iowa	6	143			9	9			20.86	20.86			0.57	0.57
Maryland	2	29		1	3	4		11.31	33.94	45.25		8.48	.90	9.38
Minnesota	19	3,443	4	6	191	201	0.39	.58	18.49	19.46	2.32	.52	.25	3.09
Total	27	3,616	4	7	203	214	.37	.65	18.71	19.73	2.21	.57	.27	3.05
1926														
Illinois	2	244		1	[1] 12	13		1.43	[1] 17.14	18.57		.41	[1] .31	0.72
Indiana	6	185		3	12	15		5.00	20.00	25.00		6.49	.31	6.80
Kentucky	4	329		2	33	35		2.00	33.00	35.00		.61	.36	.97
Maryland	4	76			14	14			70.00	70.00			1.19	1.19
Michigan	5	468		2	[1] 24	26		1.43	[1] 17.14	18.57		.43	[1] .48	.91
Minnesota	22	2,596	4	7	156	167	.51	.90	20.00	21.41	3.08	.98	.52	4.58
Montana	2	121			13	13			32.50	32.50			.14	.14
Nebraska	8	218		2	43	45		2.86	61.43	64.29		13.79	.85	14.64
New York	4	1,312		8	[1] 58	66		2.05	[1] 14.87	16.92		2.74	[1] .83	3.57
North Dakota	2	34			4	4			40.00	40.00			.26	.26
Ohio	1	38			8	8			80.00	80.00			.70	.70
Pennsylvania	4	93		[2]					[2]				[2]	
South Dakota	2	44			5	5			50.00	50.00			1.15	1.15
Tennessee	3	248		1	22	23		1.43	31.43	32.86		2.42	.23	2.65
Virginia	2	78		1	[3] 4	5		5.00	[3] 20.00	25.00		2.57	[3] .96	3.53
Wisconsin	1	18			[1] 9	9			[1] 90.00	90.00			[1] 6.83	6.83
Total	72	6,102	4	27	417	448	.22	1.48	22.79	24.49	1.31	1.91	.58	3.80

Foundry and machine-shop products

1925														
Illinois	20	10,293	1	26	[1] 239	266	0.03	0.84	[1] 7.74	8.61	0.19	0.78	[1] 0.26	1.23
Indiana	15	1,889		3	415	418		.53	73.23	73.76		.16	.78	.94
Iowa	10	2,785	1	15	316	332	.12	1.80	37.82	39.74	.72	1.38	.52	2.62
Maryland	10	1,317	1	6	155	162	.25	1.52	39.22	40.99	1.52	3.35	.64	5.53
Michigan	5	4,078	1	15	[1] 133	149	.08	1.23	[1] 10.87	12.18	.49	.94	[1] .26	1.69
Minnesota	9	1,282	1	4	70	75	.26	1.04	18.20	19.50	1.56	1.25	.41	3.22
New Jersey	21	5,672	2	55	[1] 234	291	.12	3.23	[1] 3.75	17.10	.71	2.31	[1] .41	3.43
New York	15	10,104	3	128	[1] 322	453	.10	4.22	[1] 10.62	14.94	.59	3.90	[1] .58	5.07
Ohio	29	7,629	2	17	1,326	1,345	.09	.74	57.93	58.76	.52	.46	.43	1.41
Pennsylvania	109	27,121	5	47	[2]	52	.06	.58	[2]	.64	.37	.53	[2]	.90
Wisconsin	14	3,232	1	8	[1] 211	220	.10	.82	[1] 21.76	22.68	.62	.32	[1] .43	1.37
Total	257	75,404	18	324	3,421	3,763	.08	1.43	23.62	25.13	.48	1.24	.43	2.15
1926														
Alabama	3	2,092		6	[4] 102	108		.95	[4] 16.19	17.14		.84	[4] .45	1.29
California	17	1,936	1	14	[2]	15	.17	2.41	[2]	2.58	1.03	2.91	[2]	3.94
Georgia	6	1,300	1	12	[1] 84	97	.26	3.08	[1] 21.54	24.88	1.54	2.49	[1] .48	4.51
Illinois	26	7,203	3	55	[1] 328	386	.14	2.55	[1] 15.19	17.88	.83	1.82	[1] .36	3.01
Indiana	12	2,250	2	11	399	412	.29	1.62	58.68	60.59	1.78	1.71	.82	4.31
Iowa	10	2,557	1	5	120	126	.13	.65	15.59	16.37	.78	.29	.35	1.42
Kentucky	2	640		10	87	97		5.26	45.79	51.05		5.60	.78	6.38
Maine	2	288	1	3	86	90	1.11	3.33	95.56	100.00	6.94	2.49	.78	10.21
Maryland	1	165		1	17	18		2.00	34.00	36.00		.61	.56	1.17
Massachusetts	21	6,504	2	5	206	213	.10	.26	10.56	10.92	.62	.14	.27	1.03
Michigan	26	6,375	8	15	[1] 482	505	.42	.79	[1] 25.24	26.45	2.51	.53	[1] .63	3.67
Minnesota	5	897	1	5	104	110	.37	1.85	38.52	40.74	2.23	2.27	1.18	5.68
Nebraska	3	207			48	48			80.00	80.00			2.71	2.71
New Hampshire	3	1,046		1	78	79		.32	25.16	25.48		.57	.29	.86
New Jersey	20	4,833		82	[1] 243	325		5.66	[1] 16.76	22.42		4.85	[1] .27	5.12
New York	22	16,425	14	199	[1] 844	1,057	.28	4.04	[1] 17.12	21.44	1.70	3.71	[1] 1.16	6.57
North Dakota	2	45			26	26			192.59	192.59			2.98	2.98
Ohio	40	11,829	10	40	1,897	1,947	.28	1.13	53.44	54.85	1.69	1.12	.67	3.48
Pennsylvania	85	28,547	16	109	[2]	125	.19	1.27	[2]	1.46	1.12	.98	[2]	2.10
Tennessee	2	298			39	39			43.33	43.33			.47	.47
Virginia	3	717	1	6	[3] 80	87	.45	2.73	[3] 36.36	39.54	2.79	4.65	[3] .90	8.34
West Virginia	1	343		4	86	90		4.00	86.00	90.00		7.67	1.11	8.78
Wisconsin	17	8,796	3	55	[1] 864	922	.11	2.08	[1] 32.73	34.92	.68	1.71	[1] .59	2.98
Total	329	105,293	64	638	6,220	6,922	.20	2.02	19.69	21.91	1.22	1.77	.48	3.47

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.
[4] Data for temporary disabilities ending in first two weeks not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Furniture

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	16	2,828		10	[1] 97	107		1.18	[1] 11.43	12.61		0.71	[1] 0.26	0.97
Indiana	50	6,086		11	458	469		.60	25.09	25.69		.26	.24	.50
Iowa	5	504			36	36			23.79	23.79			.19	.19
Maryland	7	422			30	30			23.72	23.72			.58	.58
Michigan	5	2,013			[1] 32	32			[1] 5.30	5.30			[1] .20	.20
Minnesota	8	634		8	38	46		4.20	19.97	24.17		2.76	.36	3.12
New York	14	2,930		23	[1] 53	76		2.62	[1] 6.03	8.65		2.70	[1] .27	2.97
Ohio	15	1,821		8	77	85		1.46	14.09	15.55		1.26	.29	1.55
Pennsylvania	32	4,393		17	([2])	17		1.29	([2])	1.29		.76	([2])	.76
Wisconsin	13	2,888		3	[1] 82	85		.35	[1] 9.46	9.81		.14	[1] .17	.31
Total	165	24,519		80	903	983		1.09	14.96	16.05		.79	.25	1.04
1926														
California	7	916		2	([2])	2		.74	([2])	.74		.65	([2])	.65
Georgia	3	500		3	[1] 9	12		2.00	[1] 6.00	8.00		2.60	[1] 0.08	2.68
Illinois	25	4,356		22	[1] 168	190		1.68	[1] 12.82	14.50		1.14	[1] .23	1.37
Indiana	52	6,418		40	453	493		2.07	23.47	25.54		1.92	.68	2.60
Iowa	4	559		1	34	35		.59	20.00	20.59		.18	.62	.80
Kentucky	3	324		1	6	7		1.00	6.00	7.00		.31	.11	.42
Maine	1	156			6	6			12.00	12.00			.15	.15
Maryland	10	649		3	34	37		1.58	17.89	19.47		.85	.31	1.16
Massachusetts	5	624			11	11			5.79	5.79			.19	.19
Michigan	37	9,052	3	48	[1] 229	280	.11	1.76	[1] 8.42	10.29	.66	1.28	[1] .27	2.21
Minnesota	9	1,002		4	93	97		1.33	31.00	32.33		1.76	.60	2.36
New Hampshire	1	103			19	19			63.33	63.33			.27	.27
New York	18	3,621		39	[1] 129	168		3.58	[1] 11.83	15.41		4.09	[1] .20	4.29
Ohio	8	496			15	15			10.00	10.00			.21	.21
Pennsylvania	25	2,923		10	([2])	10		1.14	([2])	1.14		.63	([2])	.63
Tennessee	5	910		7	102	109		2.59	37.78	40.37		1.32	.30	1.62
Virginia	2	559		5	[3] 14	19		2.94	[3] 8.24	11.18		1.34	[3] .27	1.61
West Virginia	4	485		4	22	26		2.67	14.67	17.34		1.86	.23	2.09
Wisconsin	13	3,216		11	[1] 78	89		1.15	[1] 8.13	9.28		.92	[1] .20	1.12
Total	232	36,869	3	200	1,422	1,625	.03	1.81	12.86	14.70	.16	1.51	.30	1.97

Glass

1925														
Maryland	4	1,051		2	65	67		0.63	20.61	21.24		0.19	0.31	0.50
New Jersey	6	4,632	1	7	[1] 50	58	0.07	.50	[1] 3.60	4.71	0.43	.76	[1] .10	1.29
Ohio	5	1,552		2	414	416		.43	88.93	89.36		.77	.75	1.52
Pennsylvania	25	4,903		7	([2])	7		.48	([2])	.48		.59	([2])	.59
Total	40	12,138	1	18	529	548	.03	.49	24.37	24.89	.16	.65	.27	1.08
1926														
California	2	171			([2])				([2])				([2])	
Maryland	4	1,012		1	78	79		.33	26.33	26.66		.79	.56	1.35
Ohio	6	2,249	1	6	358	365	.15	.90	53.43	54.48	.89	.73	.62	2.24
Pennsylvania	20	4,662	4	14	([2])	18	.29	1.00	([2])	1.29	1.72	1.07	([2])	2.79
Tennessee	1	210			10	10			16.67	16.67			.22	.22
West Virginia	5	3,246		10	351	361		1.03	36.19	37.22		1.39	.41	1.80
Total	38	11,550	5	31	797	833	.14	.89	22.97	24.00	.87	1.01	.29	2.17

[1] Date for temporary disabilities ending in first week not available.
[2] Date for temporary disabilities not available.
[3] Date for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Hardware

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1926														
Illinois	6	2,250		24	[1] 61	85		3.53	[1] 8.97	12.50		2.32	[1] 0.18	2.50
Maine	1	100		1	7	8		3.33	23.33	26.66		2.51	.59	3.10
Michigan	3	476		9	[1] 20	29		6.43	[1] 14.29	20.72		1.82	[1] .49	2.31
New York	1	297		2	[1] 5	7		2.22	[1] 5.56	7.78		.68	[1] .66	1.34
Ohio	3	786		4	68	72		1.67	28.33	30.00		.51	.58	1.09
Pennsylvania	5	2,337		11	[2]	11		1.57	[2]	1.57		.53	[2]	.53
Total	19	6,246		51	161	212		2.73	8.61	11.34		1.31	.22	1.53

Leather

1925														
Illinois	5	1,378		7	[1] 58	65		1.69	[1] 14.03	15.72		1.91	[1] 0.34	2.25
New Jersey	7	1,455		15	[1] 33	48		3.43	[1] 7.56	10.99		2.11	[1] .23	2.34
New York	6	763	1	3	[1] 17	21	0.44	1.31	[1] 7.43	9.18	2.62	1.84	[1] .35	4.81
Pennsylvania	14	3,870		2	[2]	2		.17	[2]	.17		.05	[2]	.05
Wisconsin	4	1,835	1	3	[1] 74	78	.18	.55	[1] 13.44	14.17	1.09	.16	[1] .28	1.53
Total	26	9,301	2	30	182	214	.07	1.08	11.17	12.32	.43	.82	.29	1.54
1926														
California	5	544	1		[2]	1	.63		[2]	.63	3.68		[2]	3.68
Georgia	1	451		1	[1] 28	29		.71	[1] 20.00	20.71		2.66	[1] .39	3.05
Illinois	7	1,594		17	[1] 79	96		3.54	[1] 16.46	20.00		3.14	[1] .61	3.75
Kentucky	1	105			5	5			16.67	16.67			.22	.22
Maryland	4	569		2	14	16		1.18	8.23	9.41		3.05	.30	3.35
Massachusetts	13	4,251	2	2	125	129	.16	.16	9.77	10.09	.94	.05	.23	1.22
Michigan	2	560		3	[1] 40	43		1.76	[1] 23.53	25.29		.89	[1] 1.47	2.36
New Jersey	10	2,286		16	[1] 60	76		2.32	[1] 8.70	11.02		1.36	[1] .29	1.65
New York	8	1,849		17	[1] 102	119		3.09	[1] 18.55	21.64		3.75	[1] .73	4.48
Ohio	1	295		1	16	17		1.11	17.78	18.89		1.36	.34	1.70
Pennsylvania	17	3,966	1	9	[2]	10	.08	.76	[2]	.84	.50	.59	[2]	1.09
Virginia	1	113			[3] 11	11			[3] 36.67	36.67			[3] 1.30	1.30
West Virginia	2	310		2	27	29		2.22	30.00	32.22		3.55	.55	4.10
Wisconsin	5	3,035	2	4	[1] 97	103	.22	.44	[1] 10.66	11.32	1.32	.65	[1] .51	2.48
Total	77	19,928	6	74	604	684	.10	1.24	10.10	11.44	.60	1.23	.36	2.19

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Lumber—Planing mills

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	8	667	2	3	[1] 28	33	1.00	1.50	[1] 14.00	16.50	6.00	2.40	[1] 0.48	8.88
Indiana	8	624		2	93	95		1.07	49.71	50.78		.32	.35	.67
Iowa	7	1,770		5	44	49		.94	8.29	9.23		1.24	.20	1.44
Maryland	5	272		1	38	39		1.23	46.55	47.78		3.68	1.15	4.83
Michigan	1	260	1	2	[1] 39	42	1.28	2.56	[1] 49.99	53.83	7.69	2.50	[1] 1.04	11.23
Minnesota	4	458			2	2			1.45	1.45			.01	.01
New York	14	2,682	1	31	[1] 84	116	.12	3.85	[1] 10.44	14.41	.75	6.03	1.51	7.29
Ohio	3	438	1	3	27	31	.76	2.28	20.53	23.57	4.56	2.28	.33	7.17
Pennsylvania	5	735		2	[2]	2		.91	[2]	.91		1.91	[2]	1.91
Wisconsin	9	1,946	1	9	[1] 186	196	.17	1.54	[1] 31.86	33.57	1.03	.80	[1] .76	2.59
Total	64	9,852	6	58	541	605	.20	1.96	19.78	21.94	1.22	2.62	.49	4.33
1926														
California	17	2,266		15	[2]	15		2.21	[2]	2.21		1.33	[2]	1.33
Georgia	2	177	1	1	[1] 9	11	2.00	2.00	[1] 18.00	22.00	11.30	1.16	[1] .57	13.03
Illinois	17	1,802	3	16	[1] 126	145	.56	2.96	[1] 23.33	26.85	3.33	4.36	[1] .62	8.31
Indiana	10	711		13	83	96		6.19	39.52	45.71		7.10	.53	7.63
Iowa	8	1,820	2	12	75	89	.36	2.18	13.64	16.18	2.19	1.36	.33	3.88
Kentucky	2	823		14	198	212		5.60	79.20	84.80		1.94	1.87	3.81
Maine	1	52			2	2			10.00	10.00			.19	.19
Maryland	8	607	1	3	50	54	.55	1.78	27.78	30.11	3.29	.76	.79	4.84
Michigan	16	1,893	2	16	[1] 159	177	.35	2.81	[1] 27.89	31.05	2.11	2.67	[1] .77	5.55
Minnesota	5	523		5	25	30		3.13	15.63	18.76		3.15	.36	3.51
New York	20	2,928	3	40	[1] 248	291	.34	4.55	[1] 28.18	33.07	2.04	5.48	[1] 1.60	9.12
Ohio	5	368			16	16			14.55	14.55			.20	.20
Pennsylvania	7	772			[2]				[2]				[2]	
Tennessee	2	338			18	18			18.00	18.00			.36	.36
Virginia	2	480	1	4	[3] 30	35	.71	2.86	[3] 21.43	25.00	4.16	3.22	[3] .48	7.86
Wisconsin	9	1,663	2	5	[1] 153	160	.40	1.00	[1] 30.60	32.00	2.40	.93	[1] .92	4.25
Total	131	17,223	15	144	1,192	1,351	.30	2.89	23.94	27.13	1.81	2.80	.76	5.37

Lumber—Sawmills

1925														
Maryland	1	20			2	2			33.17	33.17			1.18	1.18
Michigan	5	5,455	4	7	[1] 120	131	0.24	0.43	[1] 7.33	8.00	1.47	0.47	[1] .23	2.17
Minnesota	5	2,228	1	5	123	129	.15	.75	18.40	19.30	.90	.96	.50	2.36
Wisconsin	11	2,520	6	12	[1] 322	340	.79	1.59	[1] 42.59	44.97	4.76	.79	[1] 1.01	6.56
Total	22	10,223	11	24	567	602	.36	.78	18.49	19.63	2.15	.66	.48	3.29
1926														
Alabama	5	2,312	1	4	[4] 48	53	.14	.58	[4] 6.96	7.68	.86	.43	[4] .14	1.43
California	21	12,136	25	84	[2]	109	.69	2.31	[2]	3.00	4.12	1.75	[2]	5.87
Georgia	1	62			[1] 5	5			[1] 25.00	25.00			[1] .91	.91
Illinois	2	309		5	[1] 36	41		5.56	[1] 40.00	45.56		4.37	[1] .78	5.15
Indiana	1	95			21	21			70.00	70.00			1.35	1.35
Maine	4	209			38	38			63.33	63.33			.96	.96
Michigan	17	2,394	2	13	[1] 344	359	.28	1.81	[1] 47.78	49.87	1.67	1.62	[1] 2.07	5.36
Minnesota	5	1,988	9	25	756	790	1.50	4.17	126.00	131.67	9.05	6.81	3.29	19.15
Montana	2	813	2		51	53	.83		21.25	22.08	4.92		.40	5.32
Ohio	1	37	1		4	5	8.94		35.78	44.72	53.66		.67	54.33
Pennsylvania	2	1,384	2	4	[2]	6	.48	.95	[2]	1.43	2.89	1.22	[2]	4.11
Tennessee	2	861	1	1	44	46	.38	.38	16.92	17.68	2.32	.11	.29	2.72
Virginia	5	3,288	2	17	[3] 195	214	.20	1.72	[3] 19.70	21.62	1.21	1.22	[3] .69	3.12
West Virginia	4	1,299	2	7	98	107	.51	1.79	25.13	27.43	3.09	2.92	.74	6.75
Wisconsin	18	4,356	7	16	[1] 482	505	.53	1.22	[1] 36.79	38.54	3.21	1.45	[1] 1.03	5.69
Total	90	31,543	54	176	2,122	2,352	.57	1.86	22.43	24.86	3.42	1.80	.66	5.88

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.
[4] Data for temporary disabilities ending in first two weeks not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Machine tools

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	5	1,197		3	[1] 20	23		0.84	[1] 5.57	6.41		0.25	[1] 0.19	0.44
Indiana	3	124			15	15			40.32	40.32			.60	.60
New Jersey	5	477		6	[1] 19	25		4.19	[1] 13.28	17.47		3.78	[1] .29	4.07
New York	6	551	1	3	[1] 10	14	0.61	1.82	[1] 6.05	8.48	3.63	2.18	[1] .27	6.08
Ohio	19	1,763		2	238	240		.38	44.99	45.37		.48	.37	.85
Pennsylvania	7	1,119												
Wisconsin	2	802		3	[1] 30	33		1.25	[1] 12.47	13.72		.62	[1] .22	.84
Total	48	6,033	1	17	332	350	.06	.94	21.09	22.09	.33	.77	.27	1.37
1926														
Illinois	11	1,933		11	[1] 66	77		1.89	[1] 11.38	13.27		1.17	[1] .48	1.65
Indiana	3	248	1		24	25	1.43		34.28	35.71	8.06		.29	8.35
Massachusetts	15	4,917	1	2	70	73	.07	.14	4.73	4.94	.40	.06	.09	.55
Michigan	7	574	1	3	[1] 36	40	.59	1.76	[1] 21.18	23.53	3.48	.69	[1] .56	4.72
New Jersey	7	729		7	[1] 19	26		3.18	[1] 8.63	11.81		5.57	[1] .16	5.73
New York	9	1,282		23	[1] 83	106		6.05	[1] 21.84	27.89		5.46	[1] .97	6.43
Ohio	25	4,138	1	13	529	543	.08	1.04	42.66	43.78	.48	.65	.42	1.55
Pennsylvania	3	196	1	1	[2]	2	1.67	1.67	[2]	3.33	10.18	.50	[2]	10.68
Wisconsin	5	1,117		4	[1] 48	52		1.21	[1] 14.54	15.75		.98	[1] .23	1.21
Total	85	15,134	5	64	875	944	.11	1.41	19.27	20.79	.66	1.18	.34	2.18

Paper and pulp

1925														
Illinois	5	378	1		[1] 14	15	0.88		[1] 12.34	13.22	5.29		[1] 0.21	5.50
Indiana	3	560		3	50	53		1.79	29.78	31.57		0.80	3.63	4.43
Iowa	1	122		1	18	19		2.73	49.11	51.84		2.05	1.36	3.41
Michigan	1	1,179		3	[1] 73	76		.85	[1] 20.63	21.48		.25	[1] .54	.79
Minnesota	3	1,132	1	7	149	157	.29	2.06	43.89	46.24	1.77	2.12	.78	4.67
New York	12	4,597	1	58	[1] 235	294	.07	4.21	[1] 17.04	21.32	.44	6.77	[1] .67	7.88
Pennsylvania	4	1,532	1	3	[2]	4	.22	.65	[2]	.87	1.31	.30	[2]	1.61
Wisconsin	5	1,642	1	5	[1] 51	57	.20	1.01	[1] 10.35	11.56	1.22	.40	[1] .23	1.85
Total	34	11,142	5	80	590	675	.15	2.39	20.47	23.01	.90	3.20	.75	4.85
1926														
Illinois	7	523		1	[1] 16	17		.63	[1] 10.00	10.63		1.91	[1] .31	2.22
Indiana	3	307	2	3	40	45	2.22	3.33	44.44	49.99	13.00	8.13	.36	21.49
Iowa	1	113		1	14	15		3.33	46.67	50.00		7.09	.70	7.79
Maine	5	3,745		9	522	531		.80	46.61	47.41		.52	.84	1.36
Maryland	1	1,083		2	56	58		.63	17.50	18.13		.18	.59	.77
Massachusetts	13	6,008		5	208	213		.28	11.56	11.84		.34	.24	.58
Michigan	8	3,902	3	15	[1] 369	387	.26	1.28	[1] 31.54	33.08	1.53	.83	[1] 1.03	3.39
Minnesota	3	1,072	2	7	267	276	.63	2.19	83.44	86.26	3.73	1.07	1.03	5.83
New Hampshire	1	367		1	76	77		.91	69.09	70.00		.27	.93	1.20
New York	19	8,163	8	92	[1] 692	792	.33	3.76	[1] 28.24	32.33	1.95	4.30	[1] .93	7.18
Ohio	4	3,501	3	4	251	258	.29	.38	23.90	24.57	1.71	.92	.27	2.90
Pennsylvania	6	2,501	2	4	[2]	6	.27	.53	[2]	.80	1.59	.24	[2]	1.83
Tennessee	1	98		1	20	21		3.33	66.67	70.00		1.01	.05	1.06
Virginia	2	388			[3] 14	14			[3] 11.67	11.67			[3] .33	.33
West Virginia	2	476		3	108	111		2.14	77.14	79.28		3.85	1.30	5.15
Wisconsin	9	5,061	1	18	[1] 186	205	.07	1.18	[1] 12.24	13.49	.39	1.29	[1] .34	2.02
Total	85	37,308	21	166	2,839	3,026	.19	1.53	26.03	27.75	1.16	1.66	.61	3.43

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Petroleum refining

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1926														
California	3	4,460	7	7	(2)	14	0.52	0.52	(2)	1.04	3.12	0.22	(2)	3.34
Georgia	1	228	1	-----	[1] 7	8	1.43	-----	[1] 10.00	11.43	8.78	-----	[1] 0.22	9.00
Illinois	2	1,710	6	2	[1] 16	24	1.18	.39	[1] 3.14	4.71	6.97	.41	[1] .12	7.50
Indiana	1	3,614	-----	5	70	75	-----	.46	6.48	6.94	-----	.30	.14	.44
New Jersey	2	10,208	-----	66	[1] 126	192	-----	2.16	[1] 4.12	6.28	-----	2.88	[1] .10	2.98
New York	2	1,174	2	24	[1] 144	170	.57	6.86	[1] 41.14	48.57	3.40	8.26	[1] 2.01	13.67
Ohio	1	169	-----	1	29	30	-----	2.00	58.00	60.00	-----	.59	1.32	1.91
Pennsylvania	6	1,612	5	2	(2)	7	1.04	.42	(2)	1.46	6.18	.21	(2)	6.39
Total	18	23,175	21	107	392	520	.30	1.54	5.64	7.48	1.81	1.83	.19	3.83

Pottery

1925														
New Jersey	6	1,943	1	2	[1] 76	79	0.17	0.34	[1] 13.04	13.55	1.03	1.10	[1] 0.41	2.54
Ohio	7	1,206	-----	1	80	81	-----	.28	22.12	22.40	-----	.50	.31	.81
Total	13	3,148	1	3	156	160	.11	.32	16.52	16.95	.64	.87	.37	1.88
1926														
Indiana	2	303	-----	1	12	13	-----	1.11	13.33	14.44	-----	.33	.23	.56
Maryland	2	189	-----	-----	12	12	-----	-----	20.00	20.00	-----	-----	.51	.51
New Jersey	8	2,720	-----	5	[1] 114	119	-----	.61	[1] 13.90	14.51	-----	.85	[1] .36	1.21
New York	2	1,228	1	3	[1] 18	22	.27	.81	[1] 4.86	5.94	1.62	.24	[1] .29	2.15
Ohio	6	1,027	1	-----	46	47	.32	-----	14.84	15.16	1.95	-----	.15	2.10
Pennsylvania	1	277	-----	-----	(2)	-----	-----	-----	(2)	-----	-----	-----	(2)	-----
Tennessee	1	212	-----	-----	7	7	-----	-----	11.67	11.67	-----	-----	.05	.05
Virginia	1	167	-----	-----	[3] 2	2	-----	-----	[3] 4.00	4.00	-----	-----	[3] .05	.05
West Virginia	3	2,215	-----	1	65	66	-----	.15	9.85	10.00	-----	.60	.30	.90
Total	26	8,338	2	10	276	288	.08	.41	11.31	11.80	.49	.49	.29	1.27

Shipbuilding: steel

1926														
California	2	2,154	2	7	(3)	9	0.31	1.08	(2)	1.39	1.86	0.51	(2)	2.37
Illinois	1	87	-----	2	[1] 2	4	-----	6.67	[1] 6.67	13.34	-----	2.31	[1] 0.10	2.41
Maryland	2	546	-----	1	36	37	-----	.63	22.50	23.13	-----	.18	.68	.86
Michigan	2	807	1	4	[1] 39	44	.42	1.67	[1] 16.25	18.34	2.48	1.24	[1] .42	4.14
New Jersey	1	316	1	2	[1] 10	13	1.11	2.22	[1] 11.11	14.44	6.33	1.27	[1] .43	8.03
New York	4	3,044	2	24	[1] 62	88	.22	2.64	[1] 6.81	9.67	1.31	1.95	[1] .73	3.99
Pennsylvania	1	1,469	1	5	(3)	6	.24	1.19	(2)	1.43	1.42	.43	(2)	1.85
Virginia	1	4,233	2	31	[3] 112	145	.16	2.44	[3] 8.82	11.42	.94	2.12	[3] .22	3.28
West Virginia	2	199	-----	1	87	88	-----	1.67	145.00	146.67	-----	6.71	1.71	8.42
Wisconsin	2	942	-----	-----	[1] 74	74	-----	-----	[1] 26.43	26.43	-----	-----	[1] .36	.36
Total	18	13,737	9	77	422	508	.16	1.39	9.30	10.85	.96	1.06	.36	2.38

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Slaughtering and meat packing

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	7	16,412	12	41	[1] 767	820	0.24	0.83	[1] 15.58	16.65	1.46	0.50	[1] 0.33	2.29
Iowa	4	4,252		18	345	363		1.41	27.04	28.45		1.11	.40	1.51
Minnesota	2	3,236	3	22	533	558	.31	2.27	54.91	57.49	1.85	2.94	.91	5.70
Total	13	23,900	15	81	1,645	1,741	.21	1.13	22.94	24.28	1.26	.94	.42	2.62
1926														
Alabama	1	47			[4] 1	1			[4] 10.00	10.00			[4] .15	.15
Georgia	1	218		2	[1] 8	10		2.86	[1] 11.43	14.29		5.49	[1] .23	5.72
Illinois	11	22,228	7	105	[1] 1,142	1,254	.10	1.57	[1] 17.12	18.79	.63	1.61	[1] .38	2.62
Indiana	8	3,393	1	17	349	367	.10	1.67	34.22	35.99	.59	1.96	.48	3.03
Iowa	8	5,816	3	15	625	643	.17	.86	35.92	36.95	1.03	.52	.61	2.16
Kentucky	3	216		1	64	65		1.67	106.67	108.34		6.17	1.11	7.28
Michigan	4	930		3	[1] 64	67		1.07	[1] 22.86	23.93		1.08	[1] .57	1.65
Minnesota	5	3,902		35	1,077	1,112		2.99	92.05	95.04		2.86	1.15	4.01
Nebraska	5	5,098	3	13	525	541	.20	.85	34.31	35.36	1.18	1.00	.36	2.54
Pennsylvania	6	1,102			[2]				[2]				[2]	
South Dakota	1	1,023	1	10	248	259	.32	3.23	80.00	83.55	1.95	1.07	1.05	4.07
Tennessee	3	319		2	42	44		2.00	42.00	44.00		4.49	.53	5.02
Virginia	1	53			[3]				[3]				[3]	
West Virginia	1	42			5	5			50.00	50.00			.35	.35
Wisconsin	2	1,712		11	[1] 78	89		2.16	[1] 15.29	17.45		.88	[1] .33	1.21
Total	60	46.099	15	214	4,228	4,457	.11	1.55	30.57	32.23	.65	1.51	.44	2.65

Stamped and enameled ware

1925														
Indiana	2	588			24	24			13.61	13.61			0.14	0.14
Maryland	1	187		1		1		1.79		1.79		0.54		.54
Ohio	4	698		2	51	53		.95	24.34	25.29		1.00	.28	1.28
Total	7	1,473		3	75	78		.68	16.97	17.65		.54	.19	.73
1926														
California	2	108		1	[2]	1		.33	[2]	.33		2.31	[2]	2.31
Illinois	2	5,462		4	[1] 29	33		.25	[1] 1.76	2.01		.19	[1] .04	.23
Indiana	2	654		3	43	46		1.50	21.50	23.00		2.34	.23	2.57
Maryland	3	947		5	6	11		1.79	2.14	3.93		2.11	.05	2.16
Michigan	1	314		11	[1] 13	24		12.22	[1] 14.44	26.66		3.82	[1] .26	4.08
New Jersey	2	485		8	[1] 14	22		5.33	[1] 9.33	14.66		2.47	[1] .35	2.82
New York	3	1,170		18	[1] 79	97		5.14	[1] 22.57	27.71		4.12	[1] 1.45	5.57
Ohio	4	853		7	77	84		2.85	29.60	32.45		1.56	.46	2.02
West Virginia	2	606		10	49	59		5.55	27.22	32.77		2.39	.26	2.65
Wisconsin	1	2,773	3	12	[1] 45	60	0.36	1.44	[1] 5.42	7.22	2.16	1.00	[1] .16	3.32
Total	22	13,372	3	79	355	437	.08	2.18	8.14	10.40	.45	1.31	.24	2.00

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.
[4] Data for temporary disabilities ending in first two weeks not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Steam fittings, apparatus, and supplies

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Indiana	1	244	----	----	43	43	----	----	58.71	58.71	----	----	0.55	0.55
Minnesota	1	26	----	----	2	2	----	----	25.55	25.55	----	----	.40	.40
New Jersey	5	1,149	----	9	[1] 70	79	----	2.61	[1] 20.30	22.91	----	4.23	[1].56	4.79
New York	4	1,458	----	21	[1] 100	121	----	4.80	[1] 22.86	27.66	----	4.00	[1].88	4.88
Ohio	9	666	----	2	120	122	----	1.00	60.10	61.10	----	.53	.82	1.35
Pennsylvania	24	2,669	1	6	(2)	7	0.12	.75	(2)	.87	0.75	.26	(2)	1.01
Total	44	6,212	1	38	335	374	.05	2.04	31.52	33.61	.32	1.89	.74	2.95
1926														
California	2	76	----	----	(2)	----	----	----	(2)	----	----	----	(2)	----
Illinois	4	2,085	----	19	[1] 153	172	----	3.02	[1] 24.28	27.30	----	2.43	[1].63	3.07
Indiana	2	235	----	3	44	47	----	4.29	62.86	67.15	----	12.32	.41	12.73
Kentucky	1	3,257	----	3	718	721	----	.31	73.26	73.57	----	.32	.71	1.03
Massachusetts	5	1,500	----	----	57	57	----	----	12.66	12.66	----	----	.23	.23
Michigan	3	1,003	1	2	[1] 33	36	.33	.67	[1] 11.00	12.00	1.99	.19	[1].26	2.44
Minnesota	1	27	----	----	2	2	----	----	.20	.20	----	----	.47	.47
New Jersey	3	968	----	7	[1] 30	37	----	2.41	[1] 10.34	12.75	----	1.00	[1].28	1.28
New York	6	1,757	----	20	[1] 164	184	----	3.77	[1] 30.94	34.71	----	4.17	[1] 1.87	6.04
Ohio	7	878	----	1	145	146	----	.38	55.05	55.43	----	.68	.67	1.35
Pennsylvania	9	2,097	1	2	(2)	3	.16	.32	(2)	.48	.95	.17	(2)	1.12
Total	43	13,883	2	57	1,346	1,405	.05	1.37	32.36	33.78	.29	1.33	.61	2.23

Stoves

1925														
Indiana	9	572	----	1	72	73	----	0.58	41.96	42.54	----	0.17	0.54	0.71
Maryland	3	399	----	----	5	5	----	----	4.18	4.18	----	----	.14	3.14
Ohio	8	1,753	----	2	275	277	----	.38	52.30	52.68	----	.48	.49	.97
Pennsylvania	9	1,264	1	----	(2)	1	0.26	----	(2)	.26	1.58	----	(2)	1.58
Total	29	3,988	1	3	352	356	.08	.25	43.08	43.41	.50	.24	.45	1.19
1926														
Illinois	6	1,387	----	2	[1] 16	18	----	.48	[1] 3.80	4.28	----	.14	[1].13	.27
Indiana	8	612	----	2	77	79	----	1.11	42.77	43.88	----	3.59	.68	4.27
Iowa	1	54	----	----	1	1	----	----	5.00	5.00	----	----	.17	.17
Kentucky	2	151	----	----	27	27	----	----	54.00	54.00	----	----	.98	.98
Maryland	1	380	----	1	6	7	----	.91	5.45	6.36	----	.66	.21	.87
Massachusetts	3	943	----	3	64	67	----	1.07	22.86	23.93	----	1.17	.34	1.51
Michigan	2	723	1	----	[1] 45	46	.45	----	[1] 20.45	20.90	2.76	----	[1].53	3.30
Minnesota	2	304	----	7	32	39	----	7.77	35.55	43.33	----	7.84	.81	8.65
New Jersey	1	747	----	6	[1] 66	72	----	2.72	[1] 30.00	32.72	----	2.41	[1].83	3.24
New York	3	303	----	4	[1] 19	23	----	4.44	[1] 21.11	25.55	----	5.50	[1] 1.46	6.96
Ohio	8	1,028	----	5	79	84	----	1.61	25.48	27.09	----	1.65	.38	2.03
Pennsylvania	5	821	1	1	(2)	2	.40	.40	(2)	.80	2.43	.30	(2)	2.73
Tennessee	4	879	----	3	245	248	----	1.15	94.23	95.38	----	.91	1.22	2.13
Virginia	1	73	----	----	[3] 7	7	----	----	[3] 35.00	35.00	----	----	[3].62	.62
West Virginia	1	28	----	----	1	1	----	----	10.00	10.00	----	----	.65	.65
Total	48	8,433	2	34	685	721	.08	1.43	28.90	30.41	.51	1.56	.56	2.63

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

TABLE 2.—ACCIDENT FREQUENCY AND SEVERITY RATES IN SPECIFIED INDUSTRIES, 1925 AND 1926, BY STATES—Continued

Structural-iron work

State	Number of establishments	Full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
			Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total	Death	Permanent disability	Temporary disability	Total
1925														
Illinois	3	296	1	8	[1] 29	38	1.13	9.02	[1] 32.69	42.84	6.76	9.58	[1] 1.11	17.45
Indiana	5	153		1	35	36		2.17	76.07	78.24		1.30	.52	1.82
Iowa	1	66												
Michigan	2	313		4	[1] 17	21		4.26	[1] 18.09	22.35		7.98	[1] .62	8.60
Minnesota	2	354	2	1	6	9	1.88	.94	5.65	8.47	11.29	1.13	.27	12.69
New Jersey	2	100			[2]				[2]				[2]	
New York	7	929	1	11	[1] 32	44	.36	3.95	[1] 11.48	15.79	2.15	3.78	[1] .45	6.38
Ohio	16	1,419	1	5	424	430	.23	1.17	99.57	100.97	1.41	1.20	1.15	3.76
Pennsylvania	20	2,681	1	10	[2]	11	.12	1.24	[2]	1.36	.75	.45	[2]	1.20
Wisconsin	2	212		2	[1] 16	18		3.15	[1] 25.17	28.32		1.65	[1] .57	2.22
Total	60	6,524	6	42	559	607	.31	2.15	48.49	50.95	1.84	1.95	.75	4.54
1926														
California	4	466	2	3	[2]	5	1.42	2.14	[2]	3.56	8.59	.96	[2]	9.55
Illinois	4	434	1	7	[1] 45	53	.76	5.38	[1] 34.61	40.75	4.60	4.14	[1] 1.02	9.76
Indiana	5	287	2	3	86	91	2.22	3.33	95.55	101.10	13.92	13.69	1.54	29.15
Iowa	1	53		2	10	12		10.00	20.00	30.00		27.21	3.55	30.76
Maryland	1	235	1	2	11	14	1.43	2.86	15.71	20.00	8.51	.85	.31	9.68
Massachusetts	2	246			9	9			12.86	12.86			.30	.30
Michigan	3	537	1		[1] 37	38	.62		[1] 23.13	23.75	3.72		[1] 1.02	4.74
Minnesota	2	372		1	32	33		.91	29.09	30.00		.53	.48	1.01
Nebraska	2	166			25	25			50.00	50.00			.91	.91
New Jersey	1	8			[2]				[2]				[2]	
New York	6	821	5	15	[1] 44	64	2.00	6.00	[1] 17.60	25.60	12.17	4.83	[1] 1.27	18.27
Ohio	8	378	9	4	185	198	8.18	3.64	168.18	180.00	47.59	2.12	2.86	52.57
Pennsylvania	14	2,908	2	18	[2]	20	.23	2.07	[2]	2.30	1.37	1.10	[2]	2.47
Virginia	1	43		1	[3] 8	9		10.00	[3] 80.00	90.00		23.76	[3] 3.45	27.21
Wisconsin	4	628		6	[1] 89	95		3.16	[1] 46.84	50.00		1.83	[1] 1.28	3.11
Total	58	7,582	23	62	581	666	1.01	2.62	26.41	30.04	6.06	2.35	.72	9.13

Woolen goods

1925														
New Jersey	4	6,910		9	[1] 33	42		0.43	[1] 1.59	2.02		0.22	[1] 0.06	0.27
Pennsylvania	21	5,772	1	4	[2]	5	0.06	.23	[2]	.29	0.35	.26	[2]	.61
Total	25	12,682	1	13	33	47	.03	.34	1.59	1.96	.16	.24	.05	.45
1926														
California	2	191			[2]				[2]				[2]	
Georgia	2	378		1	[1] 13	14		.90	[1] 11.81	12.71		1.59	[1] .23	1.82
Maine	3	1,746			50	50			9.61	9.61			.21	.21
Maryland	2	377		1	20	21		.91	18.18	19.09		.66	.28	.94
Massachusetts	2	2,777		2	61	63		.24	7.35	7.59		.07	.26	.33
Michigan	4	694			[1] 3	3			[1] 1.42	1.42			[1] .06	.06
New Hampshire	5	2,392	1		104	105	.14		14.44	14.58	.83		.45	1.28
New Jersey	6	3,403		17	[1] 20	37		1.66	[1] 1.96	3.62		1.91	[1] .04	1.95
New York	4	1,092		5	[1] 31	36		1.51	[1] 9.39	10.90		1.67	[1] .77	2.44
Ohio	1	213			4	4			6.66	6.66			.28	.28
Pennsylvania	13	3,850		6	[2]	6		.52	[2]	.52		.69	[2]	.69
Tennessee	1	252			13	13			16.25	16.25			.15	.15
Virginia	2	446			[3] 3	3			[3] 2.30	2.30			[3] .06	.06
Wisconsin	2	155			[1] 8	8			[1] 1.60	1.60			[1] .32	.32
Total	49	17,966	1	32	330	363	.02	.61	6.25	6.88	.11	.67	.20	.98

[1] Data for temporary disabilities ending in first week not available.
[2] Data for temporary disabilities not available.
[3] Data for temporary disabilities ending in first 10 days not available.

Desirability of More Detailed Reports on Electrical Accidents

THE inadequacy of details in industrial accident reports has made difficult the assembling of statistical data which are necessary in order to determine the real cause of accidents so that possible remedies may be suggested which will result in the saving of many lives now perhaps unnecessarily sacrificed in industry. Much valuable information from a safety engineering standpoint is being withheld in the interests of brevity and because of a disinclination to take the time necessary to compile a report that might be useful in furthering safety work. The United States Bureau of Mines has recognized this situation and suggests methods of correcting it, in so far as the electrical industry is concerned, in its Information Circular No. 6046, entitled "Wanted: More detailed reports on electrical accidents," prepared by L. C. Ilsley, electrical engineer connected with the bureau.

The author suggests that it is not sufficient merely to state that a worker killed by electricity was "electrocuted"; information as to the voltage of the circuit, whether direct or alternating current was used, whether the man touched a live wire, etc., is essential if adequate preventive measures are to be undertaken. The British and United States methods of reporting these accidents are contrasted, much to the disadvantage of the latter; and examples are given to point out the differences in these methods of reporting accidents, showing how complete the British reports are.

In addition to these, a number of hypothetical accident reports are included, "not to be considered as strict guides, but merely as suggestions and reminders of the many points that should be inincluded." The following is one of these sample reports in detail, with a summary of the information covered. It is typical of the others, and gives a very good idea of the author's thought in urging greater detail in reports pertaining to the electrical branch of industry. It may, however, be readily applied to all kinds of industrial accidents, and it is believed that those plants which adopt this suggestion will profit materially in their accident prevention work because their efforts will then be directed along more effective lines.

Sample report

Trolly-wire accident: At 9 a. m., May 16, 1927, a fatal accident occurred in a room entry at the Blank mine of the Blank Co., the victim being John Doe. Death was caused by electric shock. The victim, who was a timberman, in replacing a timber touched the trolley wire with his bare hand. He was standing in water at the time. He wore leather shoes with nailed soles. His companion saw him fall and at once went for help. About 15 minutes later, first-aid men reached him and applied resuscitation for 1 hour without any sign of returning life. As far as could be learned he was in good health on the day of the accident.

The trolley circuit was 250-volt, d. c. No guard rails were used except at crossing points. The trolley in this particular entry was controlled by a section switch which could have been opened and thus render the trolley "dead" while the repair work was being done.

The author then summarizes the information that has been given as covering the following points:

1. Fatal accident.
2. Name of person killed.
3. Name of mine.
4. Name of operator.
5. Time of accident.
6. Place of accident.
7. Nature of electrical contact.
8. Where he was standing (grounded by water; also grounded through nails in shoes).
9. Fell free from wire.
10. Helper went for aid.
11. Aid arrived in about 15 minutes.
12. Resuscitation given for 1 hour.
13. No sign of returning life.
14. Voltage of current.
15. Where guards are used.
16. Circuit controlled by switch.
17. Switch could have been opened.
18. Person in good health.

INDUSTRIAL HYGIENE

Lead Poisoning in an Enameling Plant [1]

A RECENT study of the health problems of Nashville, Tenn., included a survey of the health measures and the medical service provided in industries of the city. Thirty-five industrial and commercial establishments were visited and processes which involved the use of dangerous substances were found in four instances. In only one case, however (that of a stove enameling plant), was the protection by inclosure or by exhaust ventilation considered inadequate.

A case which was diagnosed as lead poisoning in one of the local hospitals occurring shortly after this factory was first visited, it was decided to make a thorough investigation of the health conditions among employees and of working conditions in this plant. It was found that 45 men were engaged in the different operations under practically the same conditions of exposure to the lead hazard, and that both men and management were in ignorance of the dangerous conditions.

The men were advised of the danger under which they were working, with the approval of the management, and arrangements were made for them to come voluntarily to the outpatient department of the Vanderbilt University School of Medicine for examination. All but six of the employees reported for examination at the time specified.

The physical examinations, which included all the routine laboratory tests and such other special tests as were indicated by the symptoms, showed a very high incidence of poisoning. Fifteen, or 39 per cent, of the men were found to be suffering from lead poisoning in various stages; 11, or 28 per cent, were diagnosed as "probable lead poisoning"; and only 13 failed to show any evidence of the disease.

The average age of the men having unquestionable cases of lead poisoning was 27.6 years, the range being from 18 to 45 years; and the minimum time of employment was two and one-half months and the maximum time about four years.

The symptoms presented by those having definite cases of poisoning were: Colic and constipation, 13 cases; secondary anemia, 11; motor disturbance, 8; lead line, 5; weakness of the extensors of fingers or of both wrists and fingers, 4; diffuse arteriosclerosis, 3; inequality of diameter of the pupils, 2; and diminished knee jerk, cardiac dilatation and hypertrophy, and sclerosis of the retinal arteries, each one case. Examination of the blood showed stippling of the red blood cells in all of the 15 men.

[1] Journal of the American Medical Association, Oct. 1, 1927, pp. 1107–1112: "The study of lead poisoning in an enameling plant," by W. S. Leathers, M. D., and Hugh J. Morgan, M. D.

A point of interest brought out by the examination and one showing the great need for physical examinations generally in industry was the fact that not one of the 39 men could be given a "clean bill of health." A total of 60 defects, many of them serious, were found, although, with the exception of those suffering from lead poisoning, the men generally considered themselves in good health.

The paint used in spraying the stoves was a mixture of ground glass and lead with some cadmium applied under a pressure of 80 pounds. It was so heavy that the exhaust equipment provided for the booths was entirely inadequate to remove it. In addition to the poor ventilaing and exhaust systems there was general disregard of the most elementary sanitary precautions. The men smoked while at work and ate their lunches in the workroom, and the washing and locker facilities were insufficient. As a result of the findings of the investigators the various unhygienic conditions of the plant were corrected—a new exhaust system was installed with its efficiency increased from 2,200 cubic feet of air removed per minute to about 7,300 cubic feet; the workers were instructed in personal hygiene; and adequate medical supervision was instituted.

This report is of interest not only because of the shocking conditions described in this one plant but because the situation might be duplicated in almost any industrial center. Dr. A. J. Lanza, in his discussion of the paper which was read before the section on preventive and industrial medicine and public health of the 1927 session of the American Medical Association, said that although statistics indicate that deaths from lead poisoning have decreased about one-half in the last 10 years there has not been a corresponding drop in the incidence of lead poisoning. These cases do not develop so much in places where lead is manufactured, such as lead or paint works where the lead hazard is recognized and guarded against, but in plants where lead is used incidentally in only one process in a general manufacturing plant.

Doctor Lanza says:

> A great many employers take on a lead process in their plant without any realization at all of its dangers. In other plants, the risk of lead poisoning is not sufficiently brought to the attention of the industrial workers who are continually exposed without being aware of the fact. It is not unusual to see lead handled as if it were a perfectly innocuous substance. I had occasion recently to visit an establishment in which there was a very pronounced lead hazard. Two hundred men were engaged in lead soldering in one room. The fumes from the solder came through the room and leaded the other workers who were near them. The amount of sickness from gastro-intestinal diseases in this group was four times that of respiratory disease, whereas in the ordinary population that ratio is transposed. Workers frequently consulted their own physicians in this small town; yet there has not been a single case of lead poisoning certified to the State authorities or diagnosed on an insurance disability certificate. Nevertheless, lead poisoning had been occurring there for a number of years to my certain knowledge. This indicates a failure to appreciate how widespread lead poisoning is in many an industrial community. Physicians who treat industrial workers complaining of gastro-intestinal symptoms, combined with anemia, without apparently any definite surgical condition, should keep the possibiilty of lead poisoning in mind and make blood smears to determine the presence of stippled cells.

Chronic Benzol Poisoning Among Women [1]

ACUTE and chronic poisoning resulting from exposure to the fumes of benzol was the subject of an exhaustive study and report [2] by a special committee appointed in 1922 by the National Safety Council. In view of the seriousness of the hazard as revealed by this report, and because more information as to the early effect of benzol upon women was needed, a study was made during the summer and fall of 1926 by the New York Bureau of Women in Industry to secure data relative to the prevalence of unrecognized chronic benzol poisoning among woman workers and to the earliest symptoms of such poisoning.

The production figures for benzol published by the United States Tariff Commission show the extent to which the use of benzol for industrial purposes has increased in recent years. In 1922 the output was 13,071,288 gallons and in 1925 it had increased to 22,811,576 gallons. In the chemical industries, including the manufacture of dyes and paints, and in the blending of motor fuels benzol is handled in closed systems so that there is comparatively little danger of the development of chronic poisoning through the inhalation of fumes, but in processes in which it is used as a solvent there is constant risk of poisoning. Benzol has a direct destructive action on the blood and on the blood-forming centers. It attacks and destroys the white blood cells causing the condition known as leukopenia and secondarily destroys the red blood cells, resulting in a corresponding decrease in hemoglobin. The anemia resulting from the action of the benzol is called "aplastic anemia" as there is little effort on the part of the blood-forming organs to produce new cells. It also destroys the parent cells of the blood platelets, causing a tendency to hemorrhage because of the interference with the normal clotting mechanism. This is the most serious symptom in the advanced cases.

The effects upon the blood do not give rise to symptoms usually until considerable damage has been done, and the condition may remain practically stationary in a mild chronic form for some time. The development of serious symptoms comes suddenly and the disease then tends to progress even with withdrawal from exposure to the poison. It appears that susceptibility varies in individuals, as the length of exposure before symptoms developed in various recorded cases ranges from less than a week to several years.

The characteristic sign of benzol poisoning, if there is a history of exposure to benzol fumes, is the presence of leukopenia, and it is necessary, therefore, in all suspected cases to examine the blood.

In early cases it is often enough to remove the patient from exposure to the fumes, but if there is anemia, rest, fresh air, sunlight, a nourishing diet, and proper medical care are required, though even with proper care recovery is usually slow. If serious symptoms such as purpuric spots and bleeding from the mucous membranes have occurred, hospital care is necessary and blood transfusions offer the best hope of recovery.

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[1] New York. Department of Labor. Bureau of Women in Industry. Special bulletin No. 150: Chronic benzol poisoning among women industrial workers. Albany, 1927.

[2] See Labor Review, issue of September, 1926, for digest of the final report of this committee issued in May, 1926 (pp. 39–44).

The study was carried out in six factories in New York State located in large industrial centers. The industries investigated included three factories in which sanitary tin cans were manufactured and one each manufacturing tires and rubber goods, cameras, and shoes. Seventy-nine women who in the course of their work were exposed to the fumes of benzol from the cements or lacquers used were given physical examinations. Forty-four were exposed directly to the fumes, through actual use or handling objects to which the substance had been applied and 35 were indirectly exposed through working in the same room where it was used. Of the first group 17, or 38.6 per cent, and of the second, 8, or 22.8 per cent, showed evidence of poisoning. In addition there were five suspected cases.

The shortest length of exposure among the women showing positive or suspicious signs of poisoning was 2 months, while one woman who was one of the suspected cases had been exposed for 11 years. Practically all of the women exposed had a look of fatigue and in the majority there was a striking degree of pallor. There were no cases with purpuric spots or bleeding from the mucous membranes, but less serious symptoms, such as headache, nausea, excessive fatigue, etc., were present in practically all of the women even when there was no positive sign of poisoning. The blood changes in the 30 cases showed unmistakably that the blood was seriously affected and the hemoglobin was moderately reduced in all but four cases. The severe anemia seems to develop only in the later stages after bleeding has commenced.

The conclusions reached as a result of the study were as follows: Benzol as used in the industries investigated results in chronic poisoning of practically one out of every three women; exposure to the fumes in the workroom even for those not working directly with the benzol is accompanied by risk; more than one-third of those who did not show definite signs of poisoning had symptoms which were probably caused by exposure to benzol; there did not seem to be any difference in the susceptibility to benzol poisoning between young and older workers; the most frequent symptoms accompanying blood changes which show early chronic poisoning are headache, excessive fatigue, dizziness, nausea, loss of appetite, nervousness, and disturbances of sensation such as numbness and tingling in the extremities; and the blood changes in addition to the leukopenia, the most characteristic sign of chronic benzol poisoning, include various other changes in different blood cells.

As a result of the study it is recommended that there should be a franker attitude on the part of employers toward the risk involved in its use and that workers should be warned of the possible danger to their health; that benzol should be used only in connection with efficient systems of local exhaust ventilation; that whenever possible substitutes for benzol, such as xylol, toluol, and Hiflash naphtha should be used; and that exposed workers should be under thorough and persistent medical supervision.

In connection with this report an account of a fatal case of benzol poisoning reported in the Boston Medical and Surgical Journal, September 29, 1927 (pp. 521–524), is of interest. The patient, who was treated in the Massachusetts General Hospital, was a Canadian girl 20 years old, who had been employed for eight months cementing

rubber heels in a rubber-shoe factory. For four months before admission to the hospital she had felt very exhausted. She had also had dizziness and had felt nauseated by the smell of the cement. For two months before admission there had been bleeding from mucous membranes. The immediate cause of admission to the hospital was profuse hemorrhage from the nose. Hemorrhages from various membranes, for which she was given eight blood transfusions, occurred at intervals during the 20 days which elapsed before her death. She had other symptoms of benzol poisoning, such as purpuric spots, and the blood tests showed changes in the various cells characteristic of this form of poisoning. The case was diagnosed by the different physicians concerned in the treatment as benzol poisoning. It was learned that the cement used by this patient in her work contained 80 per cent of benzol and also that there had been seven almost exactly similar cases reported from this factory.

Plan for a Department of Industrial Medicine in Stanford University

A STUDY of the present facilities and methods of training physicians for industrial medical service[1] has been made by Dr. R. W. Wilcox, of Long Beach, Calif., for the purpose of formulating a plan for a department of preventive medicine and surgery as applied to industry in the Stanford University Medical School.

In the foreword to the plan Doctor Wilcox says:

> The rapid progress in American industry during the last decade has of necessity resulted in an excessive waste and loss of effort which has greatly reduced production. The whole economic structure of industry has not been grounded upon a sufficiently old experience to obtain maximum production from minimum effort; however, as industrial competition has become stronger and mass production more extensive, there has been unified endeavor to eliminate every possible factor of waste. One of the most important factors, the conservation of man power, has received the least attention. The yearly preventable loss of life and disability resulting from either sickness or accident among the 42,000,000 gainfully employed in the United States, if estimated in dollars and cents, would amount to an astounding figure.
>
> It is estimated that there are yearly 2,500,000 industrial accidents in America resulting in temporary and permanent disability, representing the staggering loss of 227,000,000 days of labor. At an average wage of $4 per day this represents a financial loss of $908,000,000 per year. Besides this loss there is the added expense of medical care and attention with hospitalization, and the payment of workmen's compensation, which would increase the total to nearly one and one-half billion dollars. This calculation does not account for the loss to industry due to decreased production which takes place in the slowing up of work when an accident occurs and the lessening of efficiency brought about by replacement and retraining the new man. Lost time by an employee from any cause is estimated to be a financial loss to the employer approximately equal to the employee's wage per day. Accordingly the total yearly economic loss is doubled.
>
> Experience indicates and authorities agree that at least 50 per cent of these losses can be avoided by proper application of safety methods and safety education.
>
> Available statistics show that the approximate ratio of lost time from illness as compared to accident is 8 to 1; for example, an employee on an average loses eight days per year on account of sickness as compared to one day per

[1] Wilcox, R. W. Intermediate report to Stanford University regarding a department of preventive medicine and surgery as applied to industry. 1927. 25 pp., chart. Mimeographed.

year on account of accident. This again shows a tremendous financial loss to industry and to the workingman, to say nothing of the physical suffering and distress to both the worker and his family. Many industrial organizations with adequate medical facilities have reduced this average loss of time from sickness by 50 per cent, through the application of preventive measures and the early diagnosis and treatment of disease. A possible reduction from eight to four days' lost time per employee, thereby saving four days at the average wage of $4 per day would represent for the 42,000,000 workers an increased earning of $672,000,000 per year. Likewise, a similar amount would be gained by industry in increased production.

These figures although not absolutely accurate show that annually in the United States there is a tremendous waste in industry due to sickness and accident, 50 per cent of which is preventable. With the advent of compensation laws in nearly all of the States of the Union, disability from accidents and occupational diseases has rightly become a definite charge against industry and added to production costs. Accordingly industry was quick to recognize the fact that 50 per cent of this charge could be eliminated and this resulted in the organization of the National Safety Council. Probably the most farsighted and far-reaching effort of this organization is the extension of the safety-first idea and accident prevention movement into the curriculum of the public schools.

On the other hand, industrial disability from sickness, representing a far greater economic waste and likewise preventable to the same extent, has not received from industry the same organized endeavor of prevention, due probably to the fact that no laws, State or National, have been developed to force such disability as an added obligation upon production costs. However, many employers have recognized that reduction of sickness among employees is good business in lessening labor turnover, reducing absenteeism, and increasing labor efficiency.

The burden of responsibility for eliminating this economic waste caused by sickness and accident falls primarily upon the medical profession, the medical departments of industry, and the industrial physician. The scope of the field is very large and the essential factor behind the entire endeavor is the prevention of health and accident hazards. A properly trained medical profession, adequately financed by industry, can accomplish the desired result. This has been proven by larger concerns employing 500 or over who have been able to afford the maintenance of their own medical departments. However, employments of 500 or more represent probably less than 10 per cent of the total wage earners. The medical care of the remaining 90 per cent falls upon physicians engaged in general practice who can not be fully qualified for such service unless they have received definite and specific training in preventive medicine and surgery as applied to industry. In order to bring about the elimination of waste by the conservation of man power, industry is demanding better trained physicians who view disability from an economic standpoint.

The writer believes that the work of the industrial medical departments of those colleges giving such training has lacked proper industrial contact, and that the courses given do not create the proper incentive for the medical student to become interested in this type of work. In order to arrange the work of the new department to cover the field as comprehensively as possible the various agencies concerned in such work were visited or consulted. These included the universities where courses are given in the medical school which have any bearing on the subject; medical directors of a number of large industrial establishments maintaining full-time medical departments; various individuals, both lay and professional, who are interested in the subject; and governmental and other organizations concerned in the care and prevention of industrial accidents and diseases.

The plan as decided upon covers courses in industrial hygiene and medicine and traumatic surgery, which would be linked up with the special divisions in the medical school, and also training in service administration. The entire course is planned to work in as close cooperation as possible with the industries of the State, part of the

plan being to furnish the services of the university to industrial organizations for special research or investigation, and to supply for small industries unable to provide medical care for their employees the medical service so urgently needed.

As a result of the study the writer reached the following conclusions:

1. The idea must be fundamentally sound because without exception it met with apparently unqualified approval.
2. The idea is not new, however; it has not been successfully put into practical application by any university.
3. The medical schools have segregated courses which have not attracted the medical students because their curricula have not been correlated with and designed to meet the requirements of industry. Many of these courses are post-graduate with insufficient preliminary training to stimulate interest, resulting in the enrollment of few post-graduate students.
4. Medical schools have not adequately established industrial contact so that the teaching of medical and surgical care of industrial workers comes up to the standard required by industry, whose aim is the conservation of man power by the prevention of sickness and accident.
5. Physicians in charge of industrial medical departments, in the majority of cases, are doing good and constructive work; however, their knowledge and training has been acquired, not from their medical school but from actual practice. These physicians are doing a great deal of scientific work that is not published and therefore is not avilable as a source of general information, the result being that there has been a failure to properly standardize practices and procedures.
6. Physicians, as a whole, who are not associated directly with industry, are uninterested in industrial medical problems because the field has been greatly commercialized by insurance companies, and by physicians inadequately trained in general medicine and surgery. This has resulted in a lower standard of industrial practice.
7. Industry is eager to aid and assist in the better training of physicians both from the economic and humanitarian standpoint. If an established medical department of a large industry could be transferred to the medical school, and the curriculum correlated with established departments, a very effective and interesting training could be given the medical student.

Therefore, in order to obtain the desired objective for the proper training of medical students the following recommendations are made:

1. That Stanford University establish in the medical school a department of preventive medicine and surgery as applied to industry;
2. That established medical school departments and courses, also allied departments and courses in the university proper having a bearing on public health, hygiene, engineering, psychology, economics, business administration, etc., be so correlated with the proposed department that industry may receive the medical service it demands and at the same time provide the medical student with the training he should have; and
3. That the medical school be developed into a center for the formulation and dissemination of minimum standards of practices and procedures.

Chile Defines Occupational Diseases [1]

THE workmen's compensation law of Chile (No. 4055) which was passed on September 8, 1924,[2] included provisions concerning compensation for occupational diseases, subject to the publication of special regulations. On April 22, 1927, these regulations were published in the Diario Oficial, "occupational diseases" being defined as follows:

(1) Poisoning due to lead, mercury, arsenic, toxic gases, copper, zinc, antimony, chromium, barium, manganese, bronze, gold, silver, tin, carbon disulphide and hydrocarbons.

[1] Chile, Diario Oficial, Santiago, Apr. 22, 1927; and International Labor Office, Industrial and Labor Information, Geneva, Sept. 19, 1927, p. 366.
[2] For a résumé of this law see the January, 1926, issue of the Labor Review, pp. 206-209.

(2) Diseases caused by infectious bodies (ulcers, anthrax, actinomicosis, glanders, ankylostomiasis), inhalation of dust, gases and fumes (pneumonoconiosis), irritating gases and fumes and compressed air.

(3) Poisoning caused by gases, fumes from essences and resins, and toxic fumes from tar and its derivatives; inflammation of the subcutaneous cellular tissues of the hand or knee; acute synovitis of the elbow; inflammation of the synovia and tendons of the wrist; glassworkers' cataract; telegraphers' cramp; miners' nystagmus; occupational diseases of the bones, muscles and tendons; occupational neurosis; occupational skin diseases; alcohol and nicotine poisoning of workers in the alcohol and tobacco industries.

Industrial Poisoning and Diseases in British Factories, 1926

THE report of the chief inspector of factories and workshops in Great Britain for the year 1926 contains the report of Dr. John C. Bridge, senior medical inspector of factories, showing the causes and extent of industrial diseases and poisoning among British factory workers.

Table 1 shows the number of cases of diseases resulting from the use of some of the more important industrial poisons from 1906 to 1926:

TABLE 1.—NUMBER OF CASES OF POISONING AND OTHER INDUSTRIAL DISEASES AMONG FACTORY WORKERS IN GREAT BRITAIN, 1906 TO 1926

Disease	Average						1924	1925	1926
	1906 to 1908	1909 to 1911	1912 to 1914	1915 to 1917	1918 to 1920	1921 to 1923			
Lead poisoning:									
Cases	619	576	522	349	198	271	486	326	242
Deaths	30	35	33	21	20	26	32	13	28
Phosphorus poisoning: Cases	1	1	------	3	1	------	------	------	------
Arsenic poisoning:									
Cases	12	7	4	11	3	------	6	6	5
Deaths	1	------	------	2	------	------	1	------	3
Mercury poisoning:									
Cases	7	10	14	14	7	3	5	5	4
Deaths	------	------	------	------	------	------	------	------	1
Carbon bisulphide poisoning: Cases	------	------	------	------	------	------	------	3	1
Anilin poisoning:									
Cases	------	------	------	------	------	------	------	31	33
Deaths	------	------	------	------	------	------	------	1	1
Chronic benzene poisoning: Cases	------	------	------	------	------	------	------	------	1
Toxic jaundice:									
Cases	------	------	------	132	14	4	3	2	2
Deaths	------	------	------	34	5	1	------	1	------
Epitheliomatous ulceration:									
Cases	------	------	------	------	45	41	123	160	187
Deaths	------	------	------	------	1	3	24	55	49
Chrome ulceration: Cases	------	------	------	------	126	43	45	54	55
Anthrax:									
Cases	57	57	57	83	59	39	43	45	38
Deaths	13	11	7	12	9	5	4	9	3

Several special inquiries were made by the medical inspectors during the year. These included a preliminary survey of the stone-working industries for the purpose of outlining a scheme for a medical inquiry into the incidence of silicosis. The survey, which was limited to stone-working industries in which the stone contained a considerable proportion of silica, included visits to 82 quarries and 33 factories. It was found that mechanical methods tend more and more

to replace manual work on stone and that at some of the crushing plants very large amounts of dust were produced; also that in the use of pneumatic tools in the process of dry drilling the worker is exposed to a considerable amount of harmful dust. Other studies included one on conditions of employment as they affect women and young persons, and one on industrial dermatitis both generally and with special reference to certain trades. Included in the latter study was a brief inquiry into the possibility of the spread of infection by the use of the common towel and a special inquiry into the occurrence of skin lesions in the manufacture of bread, cakes, candies, and in the engineering trades.

Lead poisoning.—The number of cases of lead poisoning had decreased considerably in 1926 over the number reported in 1925, although there were more than twice as many deaths as in the preceding year. The decline in the total number of cases was considered to be due in part to the adverse conditions of trade, but in electric storage battery works, which had furnished the largest number of cases of any single industry in the past two years, the improvement seemed to be the result of better regulation of working conditions in the industry. Overtime is believed to be partly responsible for the number of cases. It is pointed out in the report that overtime in work exposing the worker to lead or any other toxic substance should be discouraged as it means an increase in the inevitable daily dose of lead dust or other harmful material. Constant supervision of the exhaust plant for the removal of dust and fumes both in plants using lead and in other factories is essential if the system is to be effective. A case is cited of a plant manufacturing lithotransfers, which had a good exhaust system installed several years ago. Three cases of lead poisoning occurred in rapid succession in 1926, however, and it was found that the exhaust plant and the inclosed machines had become ineffective and allowed the escape of the lead dust, generated in fine powder during the process, into the air of the workroom. One case of lead poisoning was reported from a shipbuilding yard as a result of applying paint containing a high proportion of lead by the spray method. Owing to the difficulty of providing exhaust apparatus when painting large articles by this process it is recommended that until a more satisfactory method is devised a breathing apparatus supplying the worker with fresh air should be provided.

Ninety cases of lead poisoning with 18 deaths among house painters came to the knowledge of the department. Notification of cases of poisoning among painters and plumbers has not been compulsory, but under the lead-paints act which became effective January 1, 1927, poisoning affecting any person engaged in the painting of buildings becomes notifiable to the chief inspector of factories, and it is hoped in the future to secure a more complete record of cases affecting house painters.

Arsenic.—Five cases of poisoning with three deaths were reported among men employed in the manufacture of arsenical sheep dip. There was definite cancer of the skin, with secondary growths in two cases, and there were two slight cases of arsenical dermatitis.

Mercury.—There were four cases of mercurial poisoning with one fatality. Two of these cases occurred in the repair of electric meters.

The fatal case was of a somewhat unusual character, as the worker died after an acute illness lasting eight days, although there was a previous history of ill health for about two months. Chemical examination of some of the organs of the body showed that the amount of mercury present in them was about 0.38 grain of mercury per pound.

Anilin.—Anilin poisoning was not among the notifiable diseases until 1925. During the two years, 1925 and 1926, there was a total of 64 cases and 2 deaths. Tumors of the bladder were the cause of notification in 4 cases, including the 2 fatalities, while the remaining 60 were cases showing the typical symptoms of anilism. The effect of hot weather on the incidence of poisoning was shown by the fact that half of these cases occurred in the four summer months, May to August.

Anthrax.—There were three deaths from anthrax during the year and 35 nonfatal cases. Fifteen cases, two of which were fatal, were caused by wool; 8, one of which was fatal, was due to horsehair; 12 to hides and skins; and 3 occurred in other industries. In connection with these cases 176 samples of wool and hair were examined, from 20 of which anthrax was cultivated. It is extremely difficult to disinfect horsehair effectively, and during the past five years examination of several lots of Russian and Siberian and Chinese horsehair which had been responsible for 23 cases of anthrax showed that the disinfection had not been successful in several cases, although the disinfection in all but two cases was carried out according to the regulations.

Chrome and epitheliomatous ulceration.—The cases of chrome ulceration occurred, principally in dyeing and finishing, in the manufacture of bichromate and chrome dyes, and in chrome tanning. The report points out the importance of slight injuries in the development of chrome ulceration and cites the case of a young man who burned his finger slightly while lighting a cigarette and who developed an ulceration on the site of the burn which rapidly became gangrenous, necessitating the removal of part of the finger.

Of the 187 cases of epitheliomatous ulceration, 78 (with 14 deaths) were due to pitch, tar, and paraffin, and 109 (with 35 deaths) were caused by oil. Although there were 49 deaths, not all occurred among persons who contracted the disease during 1926, as the disease is slow in developing, and it may be several years from the time it begins before death occurs. The fact that the disease progresses slowly is an argument for the periodic medical examination in industries using these substances, as the cancerous condition can be successfully treated if discovered early enough. During 1926 there were 88 cases of epithelioma reported among mule spinners.

Poisoning from gases and fumes.—The number of cases of poisoning from carbon monoxide was 101 with 6 deaths, a decrease of 17 cases from those reported the preceding year. The closing down of a great number of blast furnaces is responsible for this reduction, as the number of cases of poisoning from blast furnace gas fell from 25 with 6 deaths in 1925 to 9 cases with no fatalities in 1926. There were 32 cases with 2 deaths from producer gas, 26 cases of poisoning from coal gas with 1 death, and 34 cases with 3 deaths were due to various causes, such as fumes from coke stoves or fires, exhaust gas from motor cars, fumes from smoldering coke, coal, or ashes, and to fumes or

back draught from choked flues. Of the remaining fatalities 1 was caused by inhalation of fumes from strong nitric acid used in cleaning a lavatory floor, 1 by inhaling ammonia in refilling a tank, and 1 by the escape of fumes in a benzol still house.

Table 2 shows the number of cases of poisoning from gases and fumes for the years 1917 to 1926, by years:

TABLE 2.—NUMBER OF CASES OF INDUSTRIAL POISONING FROM GASES AND FUMES, 1917 TO 1926, BY YEARS

Gas or fume	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Carbon monoxide:										
Cases	99	54	85	56	77	111	134	107	118	101
Deaths	18	13	12	9	14	14	7	10	10	6
Carbon dioxide:										
Cases	1	5	3	------	5	1	10	5	10	4
Deaths	------	5	1	------	4	------	2	2	2	------
Sulphuretted hydrogen:										
Cases	11	7	3	13	3	12	8	11	4	3
Deaths	4	1	------	4	------	3	------	4	------	------
Sulphur dioxide:										
Cases	2	1	7	2	5	7	10	10	3	2
Deaths	------	------	------	------	------	------	------	------	1	------
Chlorine: Cases	3	4	9	8	3	11	16	20	12	13
Nitrous fumes:										
Cases	62	27	5	9	------	8	7	10	10	5
Deaths	5	7	2	3	------	------	------	1	2	1
Ammonia:										
Cases	4	6	8	------	9	8	5	1	5	5
Deaths	1	1	------	------	1	1	1	------	------	1
Benzol naphtha:										
Cases	4	7	9	12	10	25	55	26	3	4
Deaths	2	4	3	1	------	1	3	------	1	1
Arseniureted hydrogen: [1]										
Cases	12	2	3	5	1	1	4	3	2	1
Deaths	3	------	------	3	1	------	2	------	1	------
Miscellaneous: [2]										
Cases	4	1	3	9	3	10	35	28	35	17
Deaths	------	------	------	------	------	1	2	4	8	1

[1] Included also under "Toxic jaundice" in Table 1.
[2] Includes ether, acetone, nickel carbonyl, etc.

Prohibition of the Use of White Lead in Poland [1]

A LEGISLATIVE decree dated January 30, 1927, promulgated by the president of the Polish Republic, provides for the regulation of the production, importation, and use of white lead and other lead products. By the terms of the decree no new white lead factories may be set up, nor may white lead, lead sulphate, and other lead products be imported without special governmental authorization. The use of white lead, lead sulphate, and other products containing these pigments is forbidden in painting the interior of buildings with the exception of railway stations and industrial establishments where the factory inspector has specially authorized their use. Pigments which contain not more than 2 per cent of metallic lead may be used, and the use of white lead is permitted in artistic and decorative painting. White lead, and other lead products may not be used in painting except in the form of prepared paste or paint. Spraying may be carried on only in establishments having special equipment, and dry rubbing down of surfaces painted with lead products is prohibited. The employment of minors and of women in work involving the use of lead products is also prohibited. Penalties are provided for infringement of the decree.

[1] International Labor Office. Industrial and Labor Information. Geneva, Sept. 19, 1927, p. 365.

HOUSING

Average Construction Cost of Dwellings in Various Cities

THE Bureau of Labor Statistics annually collects data concerning building permits in cities having a population from 25,000 to 100,000 and semiannually in cities of over 100,000. Articles based on such data are published in the Labor Review and a bulletin containing the full-year figures is published annually.

An interesting feature of these figures is the building cost of new houses or apartments reduced to a per family basis. The cost stated in building permits applies to the building only, the cost of the land not being included. Further, the cost figures are those stated by the builder in his application for a permit to build. There may be a profit or loss between the cost to a builder and the cost to a later home purchaser. Also, as between different cities there may be a varying degree of deviation between the cost stated in the permit and the actual final cost of the structure.

Unfortunately, data are not available from which to determine the cost per room or per square foot. It would be of service to know such figures, especially for multi-family dwellings.

Table 1 shows the average cost each year, 1921 to 1926, of dwelling accommodations per family in each of the different kinds of dwellings for which permits were issued in 257 cities from which reports were obtained every year. The table also shows index numbers of the cost of accommodations per family in each of the different kinds of dwellings, index numbers of union wage rates in the building trades, and index numbers of wholesale prices of building materials. The building trades are so largely organized that the union wage rate is generally the prevailing rate.

TABLE 1.—AVERAGE COST OF DWELLING ACCOMMODATIONS PER FAMILY IN THE DIFFERENT KINDS OF DWELLINGS IN 257 IDENTICAL CITIES, 1921 TO 1926

Year	Average cost of dwellings [1] per family in—				Index numbers of—					
					Cost of dwellings per family in—				Union wage rates per hour in building trades	Wholesale prices of building material
	One-family dwellings	Two-family dwellings [2]	Multi-family dwellings [3]	All classes of dwellings	One-family dwellings	Two-family dwellings [2]	Multi-family dwellings [3]	All classes of dwellings		
1921	$3,972	$3,762	$4,019	$3,947	100.0	100.0	100.0	100.0	100.0	100.0
1922	4,134	3,801	3,880	4,005	104.1	101.0	96.5	101.5	93.4	102.2
1923	4,203	4,159	4,001	4,127	105.8	110.6	99.6	104.6	103.6	114.5
1924	4,317	4,336	4,418	4,352	108.7	115.3	109.9	110.3	112.2	106.1
1925	4,618	4,421	4,289	4,464	116.3	117.5	106.7	113.1	116.3	106.7
1926	4,725	4,480	4,095	4,422	119.0	119.1	101.9	112.0	124.0	105.0

[1] Buildings only. See text above.
[2] Includes one and two family dwellings with stores.
[3] Includes multi-family dwellings with stores.

In 1921 the average expenditure for the erection of a one-family dwelling was $3,972. Since 1921 there has been an increase each year in the cost of one-family dwellings until in 1926 this cost was $4,725, or 19 per cent higher than in 1921. There has been a steady increase also in the average cost of two-family dwellings. In 1921 the average expenditure per family for this class of dwelling was $3,762. By 1926 this had risen to $4,480, an increase of 19.1 per cent.

In contrast, the average cost per family unit in multi-family dwellings during the period has been irregular. In 1921 the cost per family for dwelling accommodations in this class of structure was $4,019; in 1922 it decreased to $3,880, or 96.5 per cent of the 1921 cost; in 1924 a peak of $4,418 was reached. This was 9.9 per cent above the 1921 cost. By 1926 the average cost had receded to $4,095, which was only 1.9 per cent above the 1921 cost.

In the period from 1921 to 1926 wage rates in the building trades advanced 24 per cent. During the same period wholesale prices of building material advanced 5 per cent.

Table 2 shows the number of families provided for and the average cost of dwelling accommodations per family in the different kinds of dwellings, in each of the 14 cities of the United States having a population of 500,000 or over, in the first half of 1927.

TABLE 2.—AVERAGE COST OF DWELLING ACCOMMODATIONS PER FAMILY IN THE DIFFERENT KINDS OF DWELLINGS IN CITIES HAVING A POPULATION OF 500,000 OR OVER IN THE FIRST SIX MONTHS OF 1927

City	Number of families provided for	Average cost per family
One-family dwellings		
St. Louis	838	$3,540
Los Angeles	4,224	3,895
Baltimore	2,115	3,942
Buffalo	666	3,986
San Francisco	1,586	4,497
Borough of Richmond [1]	731	4,649
Philadelphia	4,771	4,758
Detroit	3,087	5,277
Cleveland	859	5,400
Milwaukee	765	5,571
Borough of Queens [1]	6,197	6,013
Boston	265	6,177
New York (all boroughs)	10,135	6,184
Pittsburgh	1,030	6,189
Washington	1,069	6,337
Chicago	3,325	6,440
Borough of Brooklyn [1]	2,529	6,652
Borough of the Bronx [1]	676	7,567
Borough of Manhattan [1]	2	37,750
Total (14 cities)	34,735	5,306
Multi-family dwellings [2]		
Los Angeles	5,443	$2,143
St. Louis	1,451	2,541
San Francisco	3,264	2,708
Milwaukee	766	3,208
Borough of Richmond [1]	9	3,333
Borough of Queens [1]	8,205	3,382
Detroit	3,737	3,434
Cleveland	474	3,634
Boston	1,450	3,730
Philadelphia	2,129	3,849
Washington	1,498	3,981
Borough of Brooklyn [1]	11,728	4,000
Buffalo	564	4,116
Borough of the Bronx [1]	16,205	4,143
New York (all boroughs)	40,453	4,300
Pittsburgh	302	4,825
Baltimore	103	5,049
Chicago	17,690	5,253
Borough of Manhattan [1]	4,306	7,464
Total (14 cities)	79,324	4,185
Two-family dwellings [2]		
Buffalo	607	$3,078
St. Louis	420	3,465
Detroit	2,412	3,644
San Francisco	327	3,772
Los Angeles	970	3,839
Philadelphia	177	4,057
Borough of Richmond [1]	159	4,331
Baltimore	6	4,333
Borough of Queens [1]	3,164	4,339
Boston	810	4,593
Milwaukee	622	4,691
Pittsburgh	93	4,780
Cleveland	627	4,893
New York (all boroughs)	8,615	4,989
Washington	16	5,050
Borough of the Bronx [1]	1,534	5,284
Borough of Brooklyn [1]	3,754	5,443
Chicago	2,714	6,351
Borough of Manhattan [1]	4	7,125
Total (14 cities)	18,416	4,793
All classes of dwellings		
St. Louis	2,709	$2,991
Los Angeles	10,637	2,993
San Francisco	5,177	3,323
Buffalo	1,837	3,726
Baltimore	2,224	3,995
Detroit	9,236	4,105
Boston	2,525	4,264
Borough of the Bronx [1]	18,415	4,364
Philadelphia	7,077	4,467
Milwaukee	2,153	4,476
Borough of Queens [1]	17,566	4,483
Borough of Richmond [1]	899	4,579
Borough of Brooklyn [1]	18,011	4,673
New York (all boroughs)	59,203	4,723
Cleveland	1,960	4,811
Washington	2,583	4,962
Chicago	23,729	5,545
Pittsburgh	1,425	5,808
Borough of Manhattan [1]	4,312	7,478
Total (14 cities)	132,475	4,563

[1] Borough of "Greater New York."
[2] Includes one-family and two-family dwellings with stores.
[3] Includes multi-family dwellings with stores.

It must be remembered that the costs shown in Table 2 are compiled from estimated costs given by the prospective builder when filing his application for a permit to build. These costs may be overestimated or underestimated—probably more often the latter. They may be underestimated more in one city than in another city as some cities check up more closely than other cities on the costs as stated by the builder. It is not thought, however, that the deviation in underestimation between cities is enough to affect materially the comparative value of the figures presented.

Also, it must be borne in mind that the size and quality of the dwellings are not necessarily the same in the several cities. The cities with the lower average costs may be building smaller or lower quality dwellings than the cities with the higher costs.

There is a great difference in the average costs in the different cities. The lowest average cost for one-family dwellings was shown in St. Louis, where the cost per family for all new one-family dwellings built during the first half of 1927 was only $3,540. This contrasts with $6,440 in Chicago. While Chicago showed the highest expenditure per dwelling for one-family dwellings of any city taken as a whole, it was surpassed by three boroughs of New York City. The average cost of one-family dwellings in New York (all boroughs) was $6,184.

Washington and Baltimore are but 40 miles apart, yet the average cost of the one-family dwellings built in Baltimore in the first half of 1927 was only $3,942, while the average cost of those built in Washington during the same period was $6,337.

The average cost of the 34,735 one-family dwellings for which permits were issued in these 14 cities was $5,306.

The cost per family of two-family dwellings ranged from $3,078 in Buffalo to $7,125 in the Borough of Manhattan. There were 18,416 families accommodated in two-family dwellings for which permits were issued in these 14 cities, and the average cost per family of these dwellings was $4,793.

The cost per family for dwelling accommodations in apartment houses reached the high level of $7,464 in the Borough of Manhattan. The next most expensive unit cost in this class of structure was in Chicago, where 17,690 families were accommodated at a cost of $5,253 per family. The lowest per family cost for multi-family dwellings was in Los Angeles, where only $2,143 was spent per family provided for.

In the 14 cities having a population of 500,000 or over 79,324 families were provided for in apartment houses. The average cost of these multi-family dwellings per family accommodated was $4,185.

In these cities all classes of dwellings provided for 132,475 families during this six-month period, and the amount expended per family was $4,563. There were 4,312 families housed during this period on Manhattan Island, and it cost $7,478 per family to house them. The next most expensive housing was provided in Pittsburgh, where 1,425 families were provided with dwelling places at a cost of $5,808 per family. It cost only $2,991 per family to house the 2,709 families provided for in St. Louis, but it cost $4,962 each to house the 2,583 families accommodated in Washington. In New York (all boroughs) 59,203 families were provided with residences in new buildings at a cost of $4,723 per family.

Modern Houses for Workers in Cali, Colombia

A SOCIETY composed of prominent business men of Cali, Colombia, has undertaken, with the aid of an American company which has a contract with that city, to erect modern sanitary homes for the exclusive use of the poorer working classes, according to a report from Vice Consul R. Hudson Fetner, at Buenaventura, Colombia, dated August 15, 1927.

Cali has a population of 80,000, and in addition to being the leading commercial city, it is also the railroad center of the Cauca Valley. Twelve city blocks have been selected as the site for the new buildings. Each house is to have three bedrooms, a living room, dining room, and kitchen, and will be equipped with sanitary toilets, baths, and running water. Between each two houses there will be sufficient space for a garden or a children's playground.

By the middle of October seven of these houses will be ready for occupancy. The rents are to be low, and are to count as part payments toward final ownership of the houses if the tenants reside therein for 20 years and pay their rent promptly.

LABOR LAWS AND COURT DECISIONS

Decisions of Courts and Opinions Affecting Labor, 1926

A BULLETIN (No. 444) entitled "Decisions of courts and opinions affecting labor, 1926," has just been issued by the Bureau of Labor Statistics. This bulletin is in continuation of the bureau's policy of preparing annual compilations of the principal legal decisions regarding labor. The subject matter of the present bulletin as of the previous ones, is such decisions by the State and Federal courts as are adjudged to be of definite interest to students of the relations of employer and employee and the conditions of industry, including opinions of the Attorney General of the United States construing and applying the Federal labor laws. It would be neither practicable nor desirable, from any standpoint, to reproduce all the decisions, or to present those selected in all their details. Abridged statements of the facts, attempting particularly to bring out such items as are of special interest from the standpoints indicated, are followed by the conclusions reached by the courts, expressed either in the language of the courts or in that of the editors.

For the most part decisions appearing in the sources used—i. e., the National Reporter System and the Washington Law Reporter—for the calendar year 1926 are reproduced, though in a few cases later decisions have been noted on account of their application to points involved in cases presented, or for other reasons.

Workmen's compensation continues to afford the most fruitful source of material, the courts being still called upon in numerous instances to give construction to this recently adopted form of legislation. That employers' liability is not entirely superseded thereby is evident from the considerable number of cases that still arise under this system, though many of them relate to railroad employments to which the compensation laws do not, in the main, apply. An outstanding decision in admiralty completely reverses the previously accepted position as to the status of longshoremen under the seamen's acts; however, the effect of this decision is greatly minified, if not destroyed entirely, by reason of the enactment of the longshoremen's compensation act of March 4, 1927. The development of a harmonious and intelligible body of laws with regard to labor organizations continues, even though the line can not be regarded as a straight one nor the progress steady. Nevertheless, it is only from a study of such decisions as are presented in this bulletin and in preceding bulletins that the student of the legal aspects of the labor problem (in so far as judicial activities are concerned) can discover the trends of growth and the tendencies toward a recognition of legal personality that seems to be manifested.

Text of the English Trade Disputes and Trade-Unions Act

THE Labor Review for October (p. 18) contained a summary of the provisions of the English trade disputes and trade-unions bill which became law in July, 1927. The text of the act has since been received, and is as follows:

1. (1) It is hereby declared—

(*a*) That any strike is illegal if it (*1*) has any object other than or in addition to the furtherance of a trade dispute within the trade or industry in which the strikers are engaged; and (*2*) is a strike designed or calculated to coerce the Government either directly or by inflicting hardship upon the community; and

(*b*) That any lockout is illegal if it (*1*) has any object other than or in addition to the furtherance of a trade dispute within the trade or industry in which the employers locking-out are engaged; and (*2*) is a lockout designed or calculated to coerce the Government either directly or by inflicting hardship upon the community:

And it is further declared that it is illegal to commence, or continue, or to apply any sums in furtherance or support of, any such illegal strike or lockout.

For the purposes of the foregoing provisions—

(*a*) A trade dispute shall not be deemed to be within a trade or industry unless it is a dispute between employers and workmen, or between workmen and workmen, in that trade or industry, which is connected with the employment or non-employment or the terms of the employment, or with the conditions of labor, of persons in that trade or industry; and

(*b*) Without prejudice to the generality of the expression "trade or industry" workmen shall be deemed to be within the same trade or industry if their wages or conditions of employment are determined in accordance with the conclusions of the same joint industrial council, conciliation board or other similar body, or in accordance with agreements made with the same employer or group of employers.

(2) If any person declares, instigates, incites others to take part in or otherwise acts in furtherance of a strike or lockout, declared by this act to be illegal, he shall be liable on summary conviction to a fine not exceeding 10 pounds or to imprisonment for a term not exceeding three months, or on conviction on indictment to imprisonment for a term not exceeding two years: *Provided*, That no person shall be deemed to have committed an offense under this section or at common law by reason only of his having ceased work or refused to continue to work or to accept employment.

(3) Where any person is charged before any court with an offense under this section, no further proceedings in respect thereof shall be taken against him without the consent of the Attorney General except such as the court may think necessary by remand (whether in custody or on bail) or otherwise to secure the safe custody of the person charged, but this subsection shall not apply to Scotland or to any prosecution instituted by or on behalf of the director of public prosecutions.

(4) The provisions of the trade disputes act, 1906, shall not, nor shall the second proviso to subsection (1) of section 2 of the emergency powers act, 1920, apply to any act done in contemplation or furtherance of a strike or lockout which is by this act declared to be illegal, and any such act shall not be deemed for the purposes of any enactment to be done in contemplation or furtherance of a trade dispute: *Provided*, That no person shall be deemed to have committed an offense under any regulations made under the emergency powers act, 1920, by reason only of his having ceased work or having refused to continue to work or to accept employment.

2. (1) No person refusing to take part or to continue to take part in any strike or lockout which is by this act declared to be illegal, shall be, by reason of such refusal or by reason of any action taken by him under this section, subject to expulsion from any trade-union or society, or to any fine or penalty, or to deprivation of any right or benefit to which he or his legal personal representatives would otherwise be entitled, or liable to be placed in any respect either directly or indirectly under any disability or at any disadvantage as compared with other members of the union or society, anything to the contrary in the rules of a trade-union or society notwithstanding.

(2) No provisions of the trade-union acts, 1871 to 1917, limiting the proceedings which may be entertained by any court, and nothing in the rules of a trade-

union or society requiring the settlement of disputes in any manner shall apply to any proceeding for enforcing any right or exemption secured by this section, and in any such proceeding the court may, in lieu of ordering a person who has been expelled from membership of a trade-union or society to be restored to membership, order that he be paid out of the funds of the trade-union or society such sum by way of compensation or damages as the court thinks just.

(3) As respects any strike or lockout before the passing of this act but since the first day of May, 1926, which, according to the law as declared by this act, was illegal, this section shall have effect as if it had been in operation when the strike or lockout took place.

3. (1) It is hereby declared that it is unlawful for one or more persons (whether acting on their own behalf or on behalf of a trade-union or of an individual employer or firm, and notwithstanding that they may be acting in contemplation or furtherance of a trade dispute) to attend at or near a house or place where a person resides or works or carries on business or happens to be, for the purpose of obtaining or communicating information or of persuading or inducing any person to work or to abstain from working, if they so attend in such numbers or otherwise in such manner as to be calculated to intimidate any person in that house or place, or to obstruct the approach thereto or egress therefrom, or to lead to a breach of the peace; and attending at or near any house or place in such numbers or in such manner as is by this subsection declared to be unlawful shall be deemed to be a watching or besetting of that house or place within the meaning of section 7 of the conspiracy, and protection of property act, 1875.

(2) In this section the expression "to intimidate" means to cause in the mind of a person a reasonable apprehension of injury to him or to any member of his family or to any of his dependents or of violence or damage to any person or property, and the expression "injury" includes injury to a person in respect of his business, occupation, employment or other source of income, and includes any actionable wrong.

(3) In section 7 of the conspiracy, and protection of property act, 1875, the expression "intimidate" shall be construed as having the same meaning as in this section.

(4) Notwithstanding anything in any act, it shall not be lawful for one or more persons, for the purpose of inducing any person to work or to abstain from working, to watch or beset a house or place where a person resides or the approach to such a house or place, and any person who acts in contravention of this subsection shall be liable on summary conviction to a fine not exceeding 20 pounds or to imprisonment for a term not exceeding three months.

4. (1) It shall not be lawful to require any member of a trade-union to make any contribution to the political fund of a trade-union unless he has at some time after the commencement of this act and before he is first after the 31st day of December, 1927, required to make such a contribution delivered at the head office or some branch office of the trade-union, notice in writing in the form set out in the first schedule to this act of his willingness to contribute to that fund and has not withdrawn the notice in manner hereinafter provided; and every member of a trade-union who has not delivered such a notice as aforesaid, or who, having delivered such a notice, has withdrawn it in manner hereinafter provided, shall be deemed for the purposes of the trade-union act, 1913, to be a member who is exempt from the obligation to contribute to the political fund of the union, and references in that act to a member who is so exempt shall be construed accordingly: *Provided*, That, if at any time a member of a trade-union who has delivered such a notice as aforesaid gives notice of withdrawal thereof, delivered at the head office or at any branch office of the trade-union, he shall be deemed for the purposes of this subsection to have withdrawn the notice as from the first day of January next after the delivery of the notice of withdrawal.

For the purposes of this subsection, a notice may be delivered personally or by any authorized agent and any notice shall be deemed to have been delivered at the head or a branch office of a trade-union if it has been sent by post properly addressed to that office.

(2) All contributions to the political fund of a trade-union from members of the trade-union who are liable to contribute to that fund shall be levied and made separately from any contributions to the other funds of the trade-union and no assets of the trade-union, other than the amount raised by such a separate levy as aforesaid, shall be carried to that fund, and no assets of a trade-union other than those forming part of the political fund shall be directly or indirectly applied or charged in furtherance of any political object to which section 3 of

the trade-union act, 1913, applies; and any charge in contravention of this subsection shall be void.

(3) All rules of a trade-union made and approved in accordance with the requirements of section 3 of the trade-union act, 1913, shall be amended so as to conform to the requirements of this act, and as so amended shall be approved by the Registrar of Friendly Societies (in this act referred to as "the Registrar") within six months after the commencement of this act or within such further time as the Registrar may in special circumstances allow, and if the rules of any trade-union are not so amended and approved as aforesaid they shall be deemed not to comply with the requirements of the said section.

(4) Notwithstanding anything in this act, until the 31st day of December, 1927, it shall be lawful to require any member of a trade-union to contribute to the political fund of the trade-union as if this act had not been passed.

(5) If the Registrar is satisfied, and certifies, that rules for the purpose of complying with the provisions of this section, or for the purposes of the trade-union act, 1913, as amended by this act, which require approval by the Registrar have been approved by a majority of the members of a trade-union voting for the purpose, by the executive or other governing body of such a trade-union, or by a majority of delegates of such a trade-union voting at a meeting called for the purpose, the Registrar may approve those rules and those rules shall thereupon have effect as rules of the union notwithstanding that the provisions of the rules of the union as to the alteration of rules or the making of new rules have not been complied with.

(6) Section 16 of the trade-union act, 1871 (which provides for the transmission to the Registrar of annual returns by registered trade-unions), shall apply to every unregistered trade-union so far as respects the receipts, funds, effects, expenditure, assets, and liabilities of the political fund thereof.

5. (1) Amongst the regulations as to the conditions of service in His Majesty's civil establishments there shall be included regulations prohibiting established civil servants from being members, delegates, or representatives of any organization of which the primary object is to influence or affect the remuneration and conditions of employment of its members, unless the organization is an organization of which the membership is confined to persons employed by or under the Crown and is an organization which complies with such provisions as may be contained in the regulations for securing that it is in all respects independent of, and not affiliated to, any such organization as aforesaid the membership of which is not confined to persons employed by or under the Crown or any federation comprising such organizations, that its objects do not include political objects, and that it is not associated directly or indirectly with any political party or organization: *Provided*, That the regulations made in compliance with the provisions of this section shall not prevent—

(*a*) Any person who is at the commencement of this act an established civil servant from remaining a member of any trade-union or organization not composed wholly or mainly of persons employed by or under the Crown of which he had, at the commencement of this act, been a member for more than six months, if under the rules thereof there had on the 4th day of April, 1927, accrued or begun to accrue to him a right to any future payment during incapacity, or by way of superannuation, or on the death of himself or his wife, or as provision for his children; or

(*b*) Any person employed at the commencement of this act by or under the Crown who thereafter becomes an established civil servant from remaining, so long as he is not appointed to a position of supervision or management, a member of any trade-union or organization, not composed wholly or mainly of persons employed by or under the Crown, of which he is a member at the date when he so becomes an established civil servant, if under the rules thereof there has at that date accrued, or begun to accrue, to him a right to any future payment during incapacity, or by way of superannuation, or on the death of himself or his wife, or as provision for his children; or

(*c*) A person who in addition to being an established civil servant is, apart from his service as such, also engaged in some other employment or occupation from being a member, delegate, or representative of any trade-union or organization, of which the primary object is to influence or affect the remuneration or conditions of employment of persons engaged in that employment or occupation.

(2) Subject as hereinafter provided, any established civil servant who contravenes the regulations made under this section shall be disqualified for being a member of the civil service: *Provided*, That, in the case of a first offense, a civil servant shall forthwith be warned by the head of his department, and the

said disqualification shall not take effect if within one month after such warning the civil servant ceases to contravene the said regulations.

(3) In this section—

(*a*) The expression "established civil servant" means a person serving in an established capacity in the permanent service of the Crown, and includes any person who, having been granted a certificate by the civil service commissioners, is serving a probationary period preliminary to establishment; and

(*b*) The expression "conditions of employment" means in relation to persons other than persons employed by or under the Crown the conditions of employment of persons employed under a contract of service.

6. (1) It shall not be lawful for any local or other public authority to make it a condition of the employment or continuance in employment of any person that he shall or shall not be a member of a trade-union, or to impose any condition upon persons employed by the authority whereby employees who are or who are not members of a trade-union are liable to be placed in any respect either directly or indirectly under any disability or disadvantage as compared with other employees.

(2) It shall not be lawful for any local or other public authority to make it a condition of any contract made or proposed to be made with the authority, or of the consideration or acceptance of any tender in connection with such a contract, that any person to be employed by any party to the contract shall or shall not be a member of a trade-union.

(3) Any condition imposed in contravention of this section shall be void.

(4) There shall be added to section 5 of the conspiracy, and protection of property act, 1875, the following provision, that is to say:

"If any person employed by a local or other public authority willfully breaks a contract of service with that authority, knowing or having reasonable cause to believe that the probable consequence of his so doing, either alone or in combination with others, will be to cause injury or danger or grave inconvenience to the community, he shall be liable, on summary conviction, to a fine not exceeding 10 pounds or to imprisonment for a term not exceeding three months."

7. Without prejudice to the right of any person having a sufficient interest in the relief sought to sue or apply for an injunction to restrain any application of the funds of a trade-union in contravention of the provisions of this act, an injunction restraining any application of the funds of a trade-union in contravention of the provisions of section 1 of this act may be granted at the suit or upon the application of the Attorney General.

In the application of this section to Scotland, there shall be substituted therein for references to an injunction references to an interdict, and for the reference to the Attorney General a reference to the Lord Advocate.

8. (1) This act may be cited as the trade disputes and trade-unions act, 1927, and shall be construed as one with the trade-union acts, 1871 to 1917, and this act and the trade-union acts, 1871 to 1917, may be cited together as the trade-union acts, 1871 to 1927.

(2) For the purposes of this act—

(*a*) The expression "strike" means the cessation of work by a body of persons employed in any trade or industry acting in combination, or a concerted refusal, or a refusal under a common understanding of any number of persons who are, or have been so employed, to continue to work or to accept employment;

(*b*) The expression "lockout" means the closing of a place of employment or the suspension of work, or the refusal by an employer to continue to employ any number of persons employed by him in consequence of a dispute, done with a view to compelling those persons, or to aid another employer in compelling persons employed by him, to accept terms or conditions of or affecting employment; and

(*c*) A strike or lockout shall not be deemed to be calculated to coerce the Government unless such coercion ought reasonably to be expected as a consequence thereof.

(3) This act shall not extend to Northern Ireland, except that the provisions of this act relating to civil servants shall apply to civil servants employed in Northern Ireland in the administration of services with respect to which the Parliament of Northern Ireland has not power to make laws.

(4) The enactments mentioned in the second schedule to this act are hereby repealed to the extent specified in the third column of that schedule.

FIRST SCHEDULE

FORM OF POLITICAL FUND CONTRIBUTION NOTICE

Name of trade-union ———
Name of member's branch (if any) ———

Political fund (contribution notice)

I hereby give notice that I am willing, and agree, to contribute to the political fund of the —— union and I understand that I shall, in consequence, be liable to contribute to that fund and shall continue to be so liable unless I deliver at the head office, or some branch office, of the union, a written notice of withdrawal: I also understand that after delivering such a notice of withdrawal I shall still continue to be liable to contribute to the political fund until the next following first day of January.

A ——— B ———

Address ———

Membership number (if any) ———

——— day of ———, 19—

SECOND SCHEDULE

ENACTMENTS REPEALED

Session and chapter	Short title	Extent of repeal
2 & 3 Geo. 5. c. 30.	Trade-union act, 1913	In subsection (1) of section three the words from "and for the exemption" to "objects to contribute;" subsection (2) of section four; section five; section six; the schedule.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Meeting of the International Association of Industrial Accident Boards and Commissions in 1927

THE fourteenth annual convention of the International Association of Industrial Accident Boards and Commissions convened in Atlanta, Ga., September 27, 1927. Persons attended from 23 States, the District of Columbia, and two Canadian Provinces.

After addresses of welcome by Gov. L. G. Hardman and Mayor I. N. Ragsdale, there was a brief address by the president of the association, Mr. H. M. Stanley, of Georgia. Mr. L. W. Hatch, of New York, reporting for the committee on statistics and compensation insurance cost, gave the progress to date of the work of gathering records of experience from which to compile an American remarriage table, and the revision of the standardization of methods of recording and compiling accident statistics under the auspices of the American Engineering Standards Committee.

The Boston plan of legal aid in compensation cases was described by Mr. Samuel B. Horovitz, attorney for the Boston Legal Aid Society, and cases cited in which the society had been of legal assistance to workmen in obtaining the payment of their compensation.

A paper on "Problems arising through accidents to employees outside the State in which the employer is located," by Judge Arthur G. Powell, of Atlanta, led to a resolution that a committee be appointed to draft uniform provisions to eliminate jurisdictional conflict in such cases.

Under the subject, "Tendencies in workmen's compensation laws," Mr. Hatch brought out some of the most significant developments in workmen's compensation legislation, such as extension in employments and injuries covered, and of medical benefits, increases in compensation benefits, and reduction of waiting period, and came to the conclusion, "All of this simply means that in examining our compensation system to-day we have been studying an organism that is alive and growing, still in its youth, and, who can doubt, with much more of growth still ahead."

Mr. Charles H. Verrill, member of the United States Employees' Compensation Commission, read a paper on the recently enacted Federal longshoremen's and harbor workers' compensation act, which it was estimated covers upward of 300,000 employees.

Arguments on the right of the injured workman to select his own physician were advanced by Mr. O. F. McShane, of Utah, with the mention of five essential factors supplementary to the exercise of such right in procuring the best possible medical care.

As usual, the sessions dealing with medical problems confronting the administrators of workmen's compensation laws evoked much

interest. Dr. Lawson Thornton, of Atlanta, presented a paper on injuries to bone and joint tissues and gave suggestions for minimizing the industrial handicap. Dr. Charles E. Dowman, of Atlanta, dealt with brain, spinal cord, and nerve injuries, with special reference to their industrial aspects. An attempt to clarify the question of disability resulting from functional neuroses was made by Dr. Lewis M. Gaines, of Atlanta, in a paper on "The psychic factor in industrial practice." Dr. H. H. Dorr, of Ohio, summed up the answer to his paper on "What compensation commissions want of the physicians" in the two words, "honest cooperation." Dr. G. H. Gehrmann, medical director of E. I. du Pont de Nemours & Co., discussed the problems of the physician for the self-insurer, and stated that the problems confronting any industrial physician are founded on three principles—prevention, cure, and rehabilitation. Dr. T. F. Abercrombie, State Commissioner of Health of Georgia, stressed the importance of physical examinations and the saving effected by industrial health work. The outstanding medical paper was presented by Dr. C. W. Roberts, medical director of the Georgia Industrial Commission, and chairman of the medical committee of the association, who, under the subject, "Factors influencing the disability period following industrial injuries," elaborated upon the following conclusions:

1. Preexisting abnormal states influence the type and period of disability in more than one out of three workmen.
2. The practice of considering disease activated by injury as a part of the results from injury appears to me to be sound, provided each case is settled upon its own merits.
3. Workmen should be employed without prejudice, and their handicaps, precipitated by industrial accidents, passed on to society as a part of the production costs.
4. Disability periods may be shortened by employment of physicians and adjusters who are skilled in the handling of industrial problems and whose vision is broad enough to recognize the preferred attention required by the group of injured workmen falling in the unusual class.
5. The unnecessary idle period should be eliminated by early return to selected work after injury.

Mr. Bolling H. Handy, of Virginia, outlined the method of his commission in treating the problem of compensation for extra-hazardous industries which insurance carriers refuse to cover, and Mr. L. B. Kyle told how the difficulty is handled in Oklahoma. Mr. Henry J. Halford stated that such a problem could not arise under a State fund system such as that of Ontario.

The subject of court system of administration of workmen's compensation was opened by a paper by Mr. Harry J. Nelson, of Tennessee, in which, referring to agreements in settlement of compensation cases in his State, he said, "After over four years of checking these settlements, including those approved by the courts and those not approved, I do not hesitate to state that, in my humble opinion, court administration in Tennessee is a failure; that the courts will approve in most cases any kind of settlement whatever presented to them by the interested parties regardless of whether said settlement is in line with the law." Speaking of the court system of administration of workmen's compensation, Mr. F. W. Wood, commissioner of labor of Louisiana, stated, "I have been at the head of the Department of Labor of Louisiana for practically

11 years, and from observation after assuming charge of the department it did not take me long to come to realize that court administration of this particular law was a joke." He cited specific cases to substantiate this conclusion. As reflecting the stand of the large self-insurer on this point, a statement written by Mr. O. T. Fell, solicitor for the Republic Iron & Steel Co., and expressing his personal views upon the court system of administration, was read, to which Mr. Abel Klaw, attorney for E. I. du Pont de Nemours & Co., replied.

The following officers were elected for the ensuing year:

President.—Dr. Andrew F. McBride, commissioner Department of Labor of New Jersey.

Vice President.—James A. Hamilton, industrial commissioner Department of Labor of New York.

Secretary-treasurer.—Ethelbert Stewart, United States Commissioner of Labor Statistics.

Executive committee.—H. M. Stanley, chairman Industrial Commission of Georgia; G. N. Livdahl, Workmen's Compensation Bureau of North Dakota; W. H. Horner, Department of Labor and Industry of Pennsylvania; William W. Kennard, chairman Department of Industrial Accidents of Massachusetts; George A. Kingston, commissioner Workmen's Compensation Board of Ontario; and William M. Scanlan, chairman Industrial Commission of Illinois.

The location and the date of the next annual meeting will be decided by the executive committee.

The proceedings of the convention will be published as a bulletin of the United States Bureau of Labor Statistics.

Unemployment Insurance in the Chicago Clothing Industry [1]

A DISCUSSION by Bryce M. Stewart of the administration of the unemployment insurance plan inaugurated in 1923 by the men's clothing industry of Chicago is published in the Bulletin of the Taylor Society, August, 1927 (pp. 471–477).

Prior to the inauguration of this plan unemployment insurance funds had been established in a few cases by individual employers, unemployment benefits had been paid by a small number of trade-unions, and the Cleveland cloak and suit industry had put into effect a plan guaranteeing employment, or pay therefor, for a period of 40 weeks each year. The Chicago plan was much more comprehensive than any of these plans, however, as it covered about 350 establishments, employing approximately 25,000 workers.

Contributions to the fund, which is supported by a payment of 3 per cent of the actual weekly pay roll divided equally between employers and employees, amounted to $3,250,000 for the period from May 1, 1923, to October 31, 1926, and the benefits paid during this period totaled $2,650,000.

The plan provides for the payment of benefits amounting to 30 per cent of full-time wages, with a maximum of $15 per week, and for a waiting period for workers on short time of 44 hours before the payment of benefits. A waiting period of the same length, after registering at the employment exchange, is required for workers on lay offs, the time on lay off in excess of the waiting period being counted as

[1] For other articles relating to this plan see Labor Review, July, 1923 (pp. 129, 130), November, 1923 (pp. 125–130), and July, 1924 (pp. 23–25).

unemployment. Every hour of overtime work, however, offsets one of unemployment. Benefits may be paid for not more than two and one-half weeks in either of the two seasons, May to October and November to April, and a worker on short time may not be credited in any week with wages and benefit in excess of $50. In order to be eligible for benefits a worker must have been a member of the union in good standing for one year. Applicants for benefits must be registered at the employment exchange if wholly unemployed and must not have refused to accept suitable employment. A special fund is maintained for temporary cutters, who receive 25 instead of 30 per cent of their weekly wages as benefit and who may receive benefits for six weeks in the year.

The size of the employment fund is limited to an amount equal to the total maximum benefits payable during a period of two years. When it reaches that amount contributions cease on both sides until the fund is reduced to an amount less than the total maximum benefits payable during a period of one year.

The plan is administered by five boards of trustees presided over by an impartial chairman. These boards include one each from the three largest manufacturers, one for the remaining large concerns, and one for the contractors. On each of these boards there is equal representation of employers and employees.

In planning the administration of the scheme it was decided, after much discussion, to locate the administration of all the funds in a central office. The management of the plan is rendered much more complex, for example, than the British scheme of unemployment insurance (in which there is a flat rate for both contributions and benefits) by the fact that contributions and benefits are based on the earnings of each worker. This necessitates keeping a record for each employee covering his weekly hours of employment, earnings, and insurance contributions. Account has to be taken in the record, also, of the overtime worked as it has to be deducted in calculating short time and lay off. Instead of requiring the larger firms to send in a weekly report which would entail transcribing most of the information on the pay roll they are allowed to loan their pay rolls to the unemployment insurance office one day each week. The smaller firms find it more convenient to make their own reports.

There are three divisions in the unemployment insurance office—records, benefits, and accounts. The records division collects the pay rolls and pay-roll reports, copies the data, and returns the pay rolls to the firms. The accounts division takes care of the accounts of each firm, banks the money daily, and cooperates with treasurers of the different boards in investing surplus funds in United States securities.

A central benefit account is maintained by the trustees, from which all benefits are paid except those to temporary cutters who have a separate fund. When cash is needed for the payment of benefits the treasurer notifies the trustee board concerned and they liquidate securities and deposit the proceeds to the benefit accounts. The benefits division passes upon each worker's eligibility for benefit and issues the benefit checks. The benefits are paid on April 30 and November 30 at the close of the half-yearly benefit periods. This method of paying has been found to be preferable to the former

plan of paying each month, as the checks are larger and therefore more appreciated and it is also less expensive.

A report is sent once a month by the accounts division to each firm, showing the total contributions received, the balance due on contributions, if any, and the amount of cash available for benefits remaining in the funds of the firm.

The cost of administering the plan, not including the cost of equipment, from May, 1923, to January, 1927, amounted to 6.2 per cent of the contributions received.

Widows', Orphans', and Old-Age Contributory Pensions in England

THE Review for September, 1927 (p. 87), contains an account of the working of the contributory pension act in Scotland. The eighth annual report of the English Ministry of Health, which has recently appeared, gives data concerning the operation of the same act in England up to March 31, 1927. It is to be noted that the sections relating to pensions for widows and orphans became effective January 4, 1926, those relating to unrestricted old-age pensions for persons aged 70 or over went into operation July 2, 1926, and those dealing with contributory pensions for persons between 65 and 70 will not become effective till January 2, 1928.

Widows' and Orphans' Pensions

CLAIMS under this section fall into two groups, those in which the applicant's husband or parents died before January 4, 1926, and those in which the death has occurred since that date, the great majority of claimants being, of course, in the first class. By March 31, 1927, pensions were being paid covering 135,271 widows, 195,369 children of widows, and 11,453 orphans. The total amount which had been paid in pensions to these claimants was approximately £6,614,000,[1] and for the week ending March 26th the pension roll amounted to £113,060. Claimants receiving pensions in respect of husbands or parents who had died before January 4, 1926, formed 75 per cent of this group, and had received 84 per cent of the total amount paid out.

Claims to the number of 47,206 had been disallowed or withdrawn, the chief causes of rejection being either that the claimant had no child or stepchild under 14 on January 4, 1926, or that the deceased husband had not been insured under the health insurance plan during the last two years of his life, or was not in an occupation which would have qualified his dependents for a pension had the act been in force during his life.

Methods of Pension Payments

WHEN an application for a widow's or an orphan's pension is allowed, the claimant is given a book containing a number

[1] Pound at par=$4.8665; exchange rate about par.

of orders covering a limited period, 50 weeks being the absolute maximum, during which there is no ascertainable prospect of any change in circumstances necessitating a revision of the award. These orders are payable weekly at post offices. A short time before the orders have been used up, the pensioner must present a certificate from which it can be seen whether the conditions for receipt of the pension still hold good. If they do, the order book is renewed after the last order has been cashed, without any interruption in the receipt of the pension.

Noncontributory Old-Age Pensions

THE act of 1925 provided for the extension or grant of pensions as provided under the preceding acts, without the application of the tests as to means, residence, and nationality, to insured men and insured women who reach 70 on or after July 2, 1926, who can not qualify for pensions under the contributory scheme because they will be over 70 when such pensions begin on January 2, 1928. Under these provisions a total of 169,753 claims have been received, of which 18,097 have been rejected. Most of these were disallowed either because the applicant had not the necessary insurance qualification or because he was unable to prove that he had reached 70. Considerable difficulty has been encountered "in establishing the claimant's correct age where no birth certificate is available," and unless it is established, the claim necessarily fails.

CHILD LABOR

Statement of the National Association of Manufacturers on Child Labor

THE National Association of Manufacturers has recently put forth a statement of principles concerning the protection of young workers, which was formulated by its committee on junior education and employment and approved by its board of directors. The statement issued by the association is as follows:

Program of the National Association of Manufacturers for the further protection of employed children 14 and 15 years of age:

(*a*) An employment certificate issued under State authority for each job applied for under a different employer.

(*b*) A physical examination by physicians designated by the State, and a certificate that the individual is physically fit to enter the employment applied for.

(*c*) The completion of the sixth grade, after allowing two years for adjustment after the passage of the statute in States not already having an educational qualification, with proper provision for vacation permits.

(*d*) The requirement of a minimum of four hours a week of continued education, either in continuation schools or under shop plans approved by properly constituted State authority which should have the power to release individuals incapable of further education or to excuse any child until proper continuation schools have been established.

(*e*) The limiting of the hours of labor of all children under 16 years employed in manufacturing, mining, transportation or commercial occupations, of not to exceed 48 hours per week, with a prohibition of night work before 7 a. m. or after 9 p. m.

(*f*) The strengthening of laws forbidding the employment of children in hazardous occupations by more carefully defining the specific hazards.

In discussing these principles, the association's statement gives emphasis to the importance of providing State supervision over certification and physical examination. When the matter of certification is left to local authorities, it is pointed out, the system must inevitably be administered either by the police department, which is out of touch with the educational problems involved, or by the school authorities. "In the latter case local certification almost inevitably leads to a method under which the school relieves itself of its incompetents and failures."

The State supervision of certification can perform a very valuable service for the schools by establishing higher standards of accomplishment and by measuring the schools in relation to these standards. Such certification is not only of assistance to the child but to the school and the employer.

State supervision over physical examinations is desirable "in order that there may be uniform physical standards for entering the employment applied for."

CHILD ENDOWMENT

Child Endowment in New Zealand

THE New Zealand child endowment act, which became effective on April 1, 1926,[1] provides for the granting of allowances toward the maintenance of children whose parents have very limited incomes. R. M. Campbell, of Victoria University College, Wellington, New Zealand, discusses the new legislation in the Economical Journal (London) of September, 1927. Excerpts from this article are given below.

Summary of the act

1. On application to the commissioner of pensions by the father of three or more children, an allowance shall be payable at the rate of 2 shillings a week for every child in excess of two, but so that the average weekly income from all sources shall not exceed £4 together with 2 shillings for each child in excess of two.

(N. B.—"Child" means a child under the age of 15 years, being a son, daughter, stepson or stepdaughter of the applicant, and includes a child legally adopted, but does not include an illegitimate child, or any child not maintained as a member of the applicant's family, or any child receiving a pension out of public moneys.)

2. In computing the average weekly income, account shall be taken of all money or money's worth received within the year immediately preceding the date of the application, and interest at 5 per cent (or such higher rate as may actually be received) on the value of the beneficial interest of any member of the family in any property (other than furniture and personal effects). The commissioner may, however, take into consideration any increase of income which any member of the family may be entitled to receive in the ensuing year, or any decrease of income to be suffered by any member of the family in that year.

3. Where, by reason of physical or mental defect, a child is totally incapacitated from earning a living, the allowance may be continued beyond the age of 15 years.

4. The minister may authorize the payment of an allowance in respect of an illegitimate child.

5. Generally, allowances shall be paid to the wife of the applicant. If, however, the wife is not living with the applicant, or if for any other reason the commissioner is of opinion that payment should be made to the applicant personally, the allowance may be paid to the applicant. Similarly the commissioner may in special cases pay the allowance to any reputable person.

6. No allowance shall be payable unless the applicant has been permanently resident in New Zealand for not less than one year, and the children in respect of whom the allowance is payable have been resident in New Zealand for not less than one year, or have been born in New Zealand.

7. Save with the direction of the minister, an allowance shall not be payable in respect of the children of any person who is an alien or an Asiatic even if he (the Asiatic) is a British subject.

8. The commissioner may refuse to grant an allowance if the applicant or his wife is of notoriously bad character, or has been guilty of any offense or misconduct "dishonoring him or her in the public estimation," or if either has foregone any property in order to obtain an allowance or to avoid its reduction.

The writer declares that the outstanding features of this legislative innovation are that the whole expense of it is borne by the general taxpayer and that the measure provides for all families (with

[1] See Labor Review, issue of May, 1927, pp. 120, 121.

two or more children) that have less than a stipulated income, regardless of the parents' employment.

Mr. Campbell confines his discussion mainly to two questions:

1. Whether it is a sound principle deliberately to base income to some extent on number of children.

2. If such principle is admitted as sound, is a State-financed and State-conducted scheme preferable to private or semiprivate systems on occupational or regional lines?

The strongest argument for this remedial legislation was "the present plight of an immense number of children." The quinquennial census was taken a short time before the Government's family allowances bill was introduced, and it was found that 50,000 children, or not less than 12½ per cent of the total child population of New Zealand, were dangerously near destitution.

The minister in charge of the bill quoted figures showing that 32,762 breadwinners, with 80,265 dependent children, had incomes below £4 [2] a week and that 50,989 of these children belonged to families which had three or more children.

The writer calls attention to the war-time disclosures regarding the physical deficiencies of recruits and to school medical officers' reports, the latter showing that some 10 per cent of children are victims of "subnormal nutrition." While he admits that a considerable amount of this child starvation is undoubtedly the result of the ignorance of parents, he thinks that it is not easy to escape the conclusion that in this prosperous young country an astoundingly high percentage of the rising generation "lack the bare physical minimum of a decent existence."

With reference to the contention that family allowances would encourage the poor to have larger families, Mr. Campbell points out that "it is a statistical commonplace that a high birth rate, only partially offset by a high death rate, prevails under poor social and economic conditions." Substantial evidence was found by the Cost of Living Commission of New Zealand (Parliamentary paper, 1912: H. 18, p. xlvii) that the improvement in material conditions over a 30-year period was attended by a higher marriage rate, less births per marriage, a decrease in the size of the average family, and a decline in the bankruptcy rate. Income, however, Mr. Campbell declares, "affects birth rate only indirectly and through the standard of life, and allowances would require to be very substantial to influence that standard." He also thinks "it is reasonable to hope" that family allowances may reduce infant mortality in very poor families. In brief, if child endowment is to be justified, "it must be simply as a measure of child welfare and not as an expedient designed to tinker with the birth rate."

Effect on Industry

CITING the objection to family allowances on the basis that "only increased wealth production and no system of mere redistribution can rescue the mass of the people from poverty," Mr. Campbell acknowledges the plausibility of this contention and states that "it is desirable that society should remunerate its members according to their efficiency in production, not in reproduction."

[2] Pound at par = $4.8665; exchange rate about par.

In his judgment, "it is vitally necessary to maintain a clear connection between wealth production and reward." At the same time he realizes the force of Tawney's statement that "the assumption that the stimulus of imminent personal want is either the only spur or a sufficient spur to productive effort is a relic of a crude psychology which has little warrant either in past history or in present experience." [3]

Mr. Campbell also calls attention to an interesting incongruity in the New Zealand child endowment act which he illustrates by the hypothetical case given below:

> The parent of eight children, six of whom are beneficiaries under the scheme, has nothing to gain by any weekly wage increase between £4 and £4 12s., nor will he suffer any net reduction in income by a fall in his wage from the larger to the smaller sum. With the allowance at its present low rate this is not serious, but future increases in the rate will expand the "doldrums" in which the individual is liable to find himself. This should be remedied by the adoption of some such formula as the following (accepting present rates for illustration): The "basic income" shall be £4 weekly plus 2s. per child in excess of two, and the family allowance shall be at the weekly rate of 2s. per child, the total allowance being diminished by one-half of any excess of actual earnings and allowance combined over the "basic income."

Some advocates of child endowment argue that the greater sense of security given under such a system to the fathers of families should make for improved efficiency and consequently higher production. Mr. Campbell thinks that the weight of this factor is likely to be underrated in considering the wide adoption of family allowances.

Influence on General Wage Levels

ACCORDING to Mr. Campbell, organized labor under family-allowance systems should be vigilant in maintaining at least established wage standards. This is especially true in times when instability in prices and perplexing money values "expose those standards to insidious influences not readily apprehended." The writer thinks this danger is a very grave one in New Zealand. Wages there are arbitrarily fixed from time to time by court decrees, "and it is not inconceivable that the provision of children's allowances from a source other than wages may be taken to justify a smaller wage."

It may also be argued, however, that these allowances as granted in New Zealand will increase labor's bargaining power by taking away some of "the sting in the whip of starvation which now gives employers such an advantage in a strike or lockout."

The fact that the New Zealand child endowment act was backed by an "antisocialist government" is responsible, Mr. Campbell maintains, for the measure's having escaped being scored as "socialistic."

In connection with the practice of labeling family allowances "doles" he says:

> To the father of three children who happens to be in the highest income-group the State makes a tax reduction of £33 15s., or 13s. weekly. The man receiving less than £4 weekly and having three dependent children is allowed 2s. weekly, and this can not unreasonably be regarded as a refund of a part of his indirect taxation. Of these two forms of State aid to the family man, why should the 2s. weekly and not the 13s. weekly be stigmatized as a "dole"?

[3] Tawney, Richard Henry: The Sickness of an Acquisitive Society. London, 1920, p. 78.

Advantages of a National System

THE author is apparently strongly in favor of "one comprehensive national, State-financed system which he thinks has distinct advantages because (1) it makes possible a completeness and regularity which could not otherwise be secured; (2) it results in economy of administration and facilitates the imposing of social welfare provisions—for example, those in clauses 5 and 8 of the above summary of the act—which might be vigorously objected to if imposed by private employers; (3) child welfare, the essential objective of child endowment is of "paramount national concern" and therefore justifies direct State action.

Mr. Campbell regards it as a "most glaring" anomaly to exclude from the benefits of the act families, no matter how poverty stricken, which have only one or two children. "It may be," he says, "that the basic income of £4 weekly covers the requirements of a 4-member family, but this is not a strong reason for withholding even a pittance from children whose parents are not in receipt of that basic wage." It is suggested that the first amendment to the act should be in direction of the relief of children in these smaller families.

The author is aware of the dangers besetting the principle of family allowances but he insists that against these dangers actual present evils must be weighed.

> As a comprehensive measure of child welfare, however, they [these allowances] are to be approved, and their direct provision by means of taxation provides an eminently satisfactory form of State activity, promising, without diminishing production, to improve the distribution of wealth by the transfer of purchasing power to a most deserving quarter.

Family Endowment Act of New South Wales

THE Review for June, 1927 (pp. 127, 128), gave some account of the legislative fight in New South Wales over the effort to secure a family endowment scheme coupled with a basic wage. A bill was finally passed providing that the endowment scheme should not come into effect until the industrial commission had declared a wage based on the needs of a man and wife without children, but that such a declaration must be made before July 1, 1927. On June 27 the commission issued its findings, setting the basic wage at £4 5s.[1] a week for men and £2 6s. for women. This was an increase for men of 1s. and for women of 3s. 6d. per week over the wage prevailing up to that time. Thereupon the premier immediately issued an announcement that the family endowment act should come into effect on June 30, 1927.

The text of the family endowment act is not yet at hand, but the Industrial Bulletin of New Zealand, the organ of the Employers' Federation, contains a summary of its terms in the issue for August 10, 1927. The main purpose of the act is to insure allowances to families for the benefit of children. Under the terms of the act the allowance is made only for children under 14, and only to families in which the income falls below a certain sum. The basic wage of

[1] At par pound=$4.8665, shilling=24.3 cents, penny=2.03 cents; exchange rate about par.

£4 5s. is supposed to provide for the needs of a man and his wife, and for each child under 14 an additional income of 5s. a week is to be made sure. If the family income is over the basic wage, the allowance is paid only to such an extent as may be necessary to bring the amount up to the basic wage plus 5s. for each child under 14. Thus if a man with three children under 14 earns precisely the basic wage, £4 5s. a week, the allowance will be paid for all three of the children, bringing the income up to £5 a week; if he earns £4 10s., the allowance will be paid for two children; if he earns £4 15s., the allowance will be paid for only one child, and if he earns £5, no allowance is made. The allowance is in all cases to be paid to the mother, or the person representing her, or the person who has legal custody and is responsible for the maintenance of the child or children.

The allowance is based on annual, not on weekly income.

It is specifically provided that no certificate of endowment shall be issued in any case where the family income in the 12 months immediately preceding the date of claim exceeds the amount of the living wage, plus £13 for each child in the family. This means that although the family's weekly earnings may exceed the weekly basic wage, if through intermittent employment or other cause the annual income does not exceed, or is less than the basic wage, the family is entitled to claim for the full amount of endowment.

The act is to be administered by a commissioner, who is appointed by the governor for seven years, a registrar of family endowment, and other officers. Anyone wishing to claim the benefit of the act must make out an application setting forth his qualifications, and after the registrar has investigated the truth of the statements, the claim is referred to a magistrate, who is empowered to recommend it for payment, to postpone it or to recommend it for rejection. The certificate of endowment, issued if the claim is approved, may not be for more than one year, and application for continuance of the allowance must be made in the same manner as the original claim. The payment of endowments is to be made in fortnightly instalments, which must be claimed within 21 days after becoming due or be forfeited.

A fund for the payment of allowances is established by the act, the principal source of income being an assessment of 3 per cent upon the total amount of wages paid by private employers and statutory authorities within the State. If employees are working under a Federal award, the amount of this levy is reduced. Employers whose total pay roll for the year does not exceed £150 are exempt from the levy.

LABOR ORGANIZATIONS AND CONGRESSES

Report of Executive Council of American Federation of Labor, 1927

THE Forty-Seventh Annual Convention of the American Federation of Labor opened in Los Angeles, Calif., October 3, 1927. The report of the executive council of the organization to this meeting outlines in brief the record of the Federation's work of the past year and defines the policy of the council regarding the present outstanding problems facing organized labor. Excerpts from this document are given below:

Membership and Finance

THE federation includes 49 State federations and has 4 departments, 106 national and international unions, 742 local department councils, 794 city central bodies, 365 local trade and federal labor unions, and 29,394 local unions. The total average paid-up membership reported for 1927 is 2,812,407,[1] an advance of 8,441 over 1926.

The Federation has 1,795 general and district organizers and also 19 paid organizers and the officers of nearly 800 city central bodies who are always ready to meet calls for assistance from members of directly affiliated unions in the event of strikes or lockouts.

There was a balance on hand August 31, 1926, of $212,391.96 and the receipts for the following 12 months amounted to $524,284.74, making a total of $736,676.70. The total expenditures for the fiscal year aggregated $485,033.96, leaving a balance of $251,642.74, of which $217,839.56 was in the defense fund for local trade and Federal labor unions.

Benefit payments by 24 national and international organizations and 14 directly affiliated unions were reported as follows:

Death benefits	[2] $1, 861, 148. 35
Death benefits to members' wives	92, 002. 00
Sick benefits	[3] 1, 930, 660. 74
Tool insurance	2, 051. 00
Unemployment benefits	75, 405. 05
Traveling benefits	165, 108. 61

These sums are constituted largely of the disbursements of internationals. The totals include but a small proportion of the aggregate amounts paid out in trade-union benefits, as many of the local unions provide out-of-work, sick, and death benefits.

[1] It is estimated that there were at least 500,000 members for whom the per capita tax was not paid because of strikes, lockouts, or unemployment.

[2] Includes some disability benefits.

[3] Includes some disability benefits for boot and shoe workers, maintenance of Union Printers' Home, old-age pensions, operation of trade school for apprentices by printing pressmen's union, and operating tuberculous sanitarium, home for aged, and trade schools for members of typographical union.

Achievements

PROGRESS toward mutual understanding.—Numerous employers and a large proportion of the general public are beginning to realize "that in addition to its militant functions the union is the agency through which the workers can make their fullest contribution to industry and society." This changed attitude is due in a considerable degree "to the new emphasis labor has put upon its constructive work. By shifting attention from problems of defense or aggression to those of constructive building, the relative importance of the sustained work of the union becomes more obvious."

Five-day week.—In 1926 labor set for itself a new objective—the 5-day week. Some unions may make this a direct purpose, while others still have an "intermediate goal" to attain. A large proportion of the unorganized still have a long working-day.

Constructive work of trade-unions.—Practically every union has some distinctive, constructive activity through which it is making the union more valuable to its members and the industry. Practically all establishments in which there are collective agreements have developed some kind of continuous cooperation with their employees. Among these schemes are:

An agency for the interpretation of the agreement and for the adjustment of difficulties and new problems arising out of the contract. An agency of this type becomes a controlling factor in the work experience of the industry and enables the workers to participate in decisions of vital importance to them.

Arbitration based upon research.

Joint determination of production standards.

Union control over work opportunities and supply of workers has changed intermittent work to stable employment under good conditions.

Joint undertakings for the education of apprentices to assure standards of craftsmanship.

Provisions to reward craftsmanship.

A union technical school which trains apprentices and furnishes technical aid to union workers in industry so that craftsmen may get the best possible results from their labor.

Care for the health of workers—various general undertakings, as well as sick benefits, insurance, and such elaborate services as the union health bureau.

Regular presentation of unsatisfactory work conditions and method which unremedied would result in waste and losses.

Joint committees of management and unions to consider and recommend economical and improved work methods in railway shops.

Joint committees of union and management to improve street railway service.

Joint committees in the paper industry to adjust.

Maintenance of union wage standards.—In the past year the unions of the Federation have generally succeeded in preventing the reduction of wages and a considerable number of organizations have negotiated wage increases.

The establishment of union rates has tended to raise wages even among the unorganized. The council emphasizes, however, that "there are still thousands of unorganized workers working for wages that are far below wages necessary to maintain American standards of living. We regret the impression carried abroad by some reporters and commissions that high wages generally prevail." The council invites unskilled unorganized workers whose wages are below the decent living line to join the ranks of the Federation.

We have been publishing in the American Federationist a series of studies on wages, discussing the relations of wages to prices and productivity. These studies

indicate that wages have generally increased in amount and with reference to prices. With reference to productivity wage movements are not so regular and it is evident that there is need of data to show the way to wages that will provide a purchasing demand proportionate to increases in production. Our present plan is to utilize statistics of the manufacturers census and to make the results available by industries. The studies will be published in the American Federationist. This undertaking we feel is a distinct step forward. For the first time labor is exploring the field of government statistics to ascertain whether its share in national income is equitable and whether wages paid to wage earners will enable them to share in advances in material civilization.

That the idea of higher wages has gained in popular acceptance and that the Federation has begun studies of wages, mark a definite stage in progress toward clearer understanding and discussion of wages.

(For details of policy see Labor Review for October, 1927, page 129.)

Progress in education.—Trade-unions are counseled to recognize more and more fully that they must have recourse to educational methods. Various kinds of educational work are already being carried on by the union, special reference being made to the educational activities of the national and international unions through their official organs and trade training and to the discussion groups and study classes of many labor organizations. The stimulating leadership of the workers' education bureau receives cordial comment from the council, the active affiliations of that bureau being reported as including 52 national and international unions, 23 State federations of labor, 68 central labor unions, and 360 local unions.

Among the educational conferences and institutes of the last 12 months under trade-union auspices, the council regards as particularly important the conference on the elimination of waste, in Philadelphia,[4] which resulted in another constructive meeting on the stabilization of employment.[5]

Pan American congress.—The Pan American Federation of Labor at its recent congress[6] "gave evidence that it had a definite rôle in promoting peace and good will between the peoples of Pan America." The organization "will be a power against imperialism and exploitation."

No compromise with communists.—The council reports success in the past year in defeating communistic schemes to secure control of trade-unions and states its belief that "there can be no compromise with communists because their purpose is the destruction of trade-unions and the inculcation of class war."

Subjects Upon Which Union Policies Should be Formulated

PROVISION for old age.—The old-age-pension policies of certain unions affiliated with the Federation are heartily commended, and the hope is expressed that other unions may adopt like policies. Furthermore, a comprehensive study of all old-age-pension plans, including the insurance system, is recommended in order that advice and suggestions may be made available for the officers and members of the Federation's affiliated organizations.

Investment of union funds.—Trade-union assests are quite substantial. A very incomplete summary in 1926 which included reports of national and international organizations, but not of the funds of numerous local unions, showed assets totaling $35,897,727.36.

[4] A report on this congress is given in the Labor Review for July, 1927, pp. 41–43.
[5] See pp. 122 of this issue of the Review.
[6] For a résumé of this congress, see Labor Review for September, 1927, pp. 90–95.

The investment of union funds is stated to be "a serious problem for the labor movement." The report states that repeated notes of caution have been sounded by the Federation regarding experiments in labor banking. Experience along this line is now sufficient "to make a solemn note of warning imperative." In the council's judgment, "the time has come to stop expansion in the field of labor banking until experience with those labor banks already organized shall have been critically studied and evaluated."

Important Problems

Among the problems now facing the labor movement the following four are listed as "outstanding:"

1. *Legal status.*—The interpretation of law and procedure in equity courts are seriously hampering trade-union work, according to the report of the council, which submits a list of cases to illustrate the gravity of the situation.

In order to give the trade-unions not only legal existence but the right to exercise their normal functions, two legislative remedies must be enacted: Amendment of antitrust and anticombination legislation to prevent restriction of normal union activity, as is possible under present law, and definition of the jurisdiction of equity courts.

We believe there should be freedom of association for economic agencies because associated effort is essential for those experiences and economies necessary to most efficient production results, and, on the other hand, associated effort is necessary for most constructive functioning of all groups connected with production.

We hold the right of labor to organize into trade-unions and the exercise of their normal functions should not be questioned. We concede the necessity for safeguards to prevent monopolistic evils on the part of all other forms of associations.

We shall submit to Congress legislative drafts and shall give these measures priority in our legislative efforts. We shall seek the cooperation of other interested groups.

Use of "yellow dog contracts" has not decreased. Employers in many States have been compelling their employees to sign contracts not to belong to unions as a condition of employment. In other instances we find employers requiring their workers to belong to "company unions." We note the efforts in some States to secure legislation declaring yellow dog contracts contrary to public policy and we hope these efforts will be helpful in reducing this evil.

2. *Unionization of highly machinized industries.*—Mass production has brought about another industrial revolution with changes comparable to those effected by the inauguration of the factory system. In mass production individuals are assigned highly repetitive jobs, the former task of the craftsman being subdivided into repetitive operations carried on by a number of workers. "For example, in the automobile industry there are 34 job designations given work previously called the work of one craft. This production technique in quantity and mass production requires new kinds of skill and new group bases for organization of the workers into unions. In practically none of these industries are the workers organized."

The problem of organizing them presents two aspects: What shall be the basis of union organization and what agency shall be responsible for organizing them?

The work organization in mass production industries is such that there must be a new basis of appeal. The industry or the plant must be studied in order to find a basis which would introduce elements of unity and joint interests. The responsibility must lie with a federated body—locally the central labor union and nationally, the Federation. All unions would gain from such planning and foresight.

There is need for study of the mass production industries in order that we may know the probability of industrial development in this direction.

3. *How to sustain members' interest in union activities.*—First, among union administrative problems is the maintenance of a permanent, active, and efficient membership. Members must be made to realize that the union is "permanently necessary to them as a business agency and as a medium to express their needs and wishes as workers." To bring about such a realization effective publicity is required for the various trade organizations and the federated labor movement.

Moreover, it is highly desirable that unions maintain activities which will give every member an opportunity for personal service. When a few do all the work, the inactive majority soon lose interest.

The importance of the unions' providing means for educational development and social features is also stressed.

As a further stimulus to loyalty and support unions should consider providing additional benefits and services such as investment advice and opportunities, insurance, employment service, unemployment aids, and old-age pensions.

4. *Company unions.*—The isolation of the company union makes it incapable of setting standards for labor. Such an agency is for the administration of a company's affairs and "is not an economic and social force."

Company unions do not sponsor great moral or social issues; they do not participate in community or national affairs; they do not participate in fundamental decisions in their own industry affecting workers directly; they do not even participate on an equal footing in the decisions concerning them within their own company; they do not venture to give their management the benefit of their own work experiences which are invaluable in evaluating technical procedure and in knowing when and how changes are necessary.

Some corporations which have organized company unions are spending considerable sums of money on employee representation and welfare work. In addition to these inducements they add group insurance, old age pension and employee stock ownership plans. Obviously, the purpose of these corporations is to control and influence the worker so that he will be bound to his position. In binding him in this way he is compelled to forego the exercise of fundamental rights. This is the price the workers must pay for the paternal care which corporations exercise over them. Through such a process they are called upon to surrender certain fundamental rights such as freedom of decision and action. Such a policy is contrary to the public welfare and to the advancement of individual interest.

The council advocates union-management cooperation—the joint activity of two equal groups, which "is much more fundamental and effective than employee representation plans for cooperating with management."

The question at issue here is not one that should be decided by conflict—unless employers force that course. It is a serious problem that must be met by individual unions as well as the labor movement as a whole.

Philosophy of the Carpenters' Union

THE philosophy of the United Brotherhood of Carpenters and Joiners is discussed in an article in the Political Science Quarterly for September, 1927 (pp. 397–418). As the attitude of this union reflects that of the American Federation of Labor and as it is the largest and strongest craft union affiliated with that body, its official attitude is of importance.

Attitude toward Legislation

THE attitude of the brotherhood toward legislative action as a means of gaining labor's ends has varied with circumstances, though in the main "legislation has been looked upon as a helpful and necessary complement to trade-unionism in the fight for better conditions among the workers."

Although little is known of the attitude of the early local carpenters' unions toward legislation, it is probable that many of them supported the various legislative movements prior to the Civil War. When the Knights of Labor was organized a large number of carpenters' locals joined that organization.

In the early years after the formation of the brotherhood, that body looked to legislation to secure not only measures which could not be obtained by collective bargaining but also those which could. The eight-hour day through legislation was advocated, although at the same time the carpenters were also carrying on strikes to obtain the same end. Other legislation favored included mechanics' lien laws (the carpenters' support being largely responsible for the passage of such a law in Pennsylvania), stringent immigration laws, the bimetallic money standard, etc.

The faith in the possibilities of legislation has faded and the union now depends largely upon collective bargaining "for the attainment of all that pertains to the standardization policy." The brotherhood has never depended upon law for improving the wages of its own members, but it does take an official stand as to wages of certain groups handicapped in bargaining for themselves—as women, children and public employees. In this way it has stood for the weekly payment of wages, for equal pay for equal work in public employments, and for the abolition of payment in scrip and in kind.

As regards hours of work, the brotherhood now relies solely upon collective bargaining, backed up by strikes when necessary, but still favors legislation for those who can not bargain effectively, and supports laws providing for the eight-hour day on public works and in public employment, and reducing the hours of employment of women and children.

It opposes compulsory arbitration of labor disputes, and the intervention of the Government to that end. "The brotherhood itself has never been confronted with this possibility, but it has scented danger in the introduction of compulsory arbitration into other industries." It holds that compulsory arbitration strikes at the very heart of unionism, for if the right to strike is taken away the union ceases to be an important factor in improving the condition of the wage earners. It also opposes convict labor as being in competition with free labor, and so in cutting down wages; opposes the sweating system and child labor; and favors State laws providing for factory and mine inspection.

In general the brotherhood has merely expressed approval of proposed labor laws rather than actively to work for such measures. The reason for this policy is that most of these measures have not affected the brotherhood directly. In those in which this union has had a direct concern—measures affecting the general status of trade-unions, of strikes, and of the boycott—it has been vigorous in its action and has given generously both of time and money.

Relations with the Courts

THE brotherhood's disillusionment as to the effectiveness of legislation is largely the result of its loss of faith in the administration of the law. "It has learned by experience that even if after a long and bitter fight a favorable piece of legislation is finally enacted," a court interpretation may render it useless as far as labor is concerned. Gains made by collective bargaining, however, can not usually be taken away by the court.

The carpenters have especially denounced the use of the injunction in labor disputes, having been "often and seriously embarrassed by that instrument."

Attitude Toward Political Action

THE brotherhood has from the beginning maintained an official policy of nonpartisan political activity. No union has been more wholeheartedly in support of the American Federation of Labor's official attitude of "supporting its friends and punishing its enemies" than that of the carpenters. Though the union has contained a minority favoring separate political action, the majority has always been opposed to it, even during the campaign of 1924, when the American Federation of Labor seemed to have departed from its policy of neutrality.

Social Philosophy

ALTHOUGH the inside men in the union, the furniture workers, have always been more or less socialistically inclined, this has not been true of the outside workers to any extent. At the present time the constitution of the brotherhood contains a clause favoring Government ownership of public utilities and transportation facilities, but this clause is not being actively supported and it is stated that the members generally appear to be unaware even that the organization has taken this stand.

The article concludes as follows:

> The brotherhood represents perhaps as well as any other union the opportunist philosophy of the Federation and is one of its staunchest defenders. There seems to be no immediate prospect of any real change in the brotherhood's philosophy. The organization has unquestionably been successful, and by its national officers as well as by those members who analyze the situation much of that success is attributed to the opportunistic philosophy of the union. As long as the brotherhood continues to succeed, it will be loath to give that policy up, whether or not it has been as large a factor in the union's success as the carpenters themselves believe.

Labor's Unemployment Conference [1]

AS NOTED in the July, 1927, issue of the Labor Review (pp. 41–43) a conference on the elimination of waste was held early in April, under the auspices of the trade-union movement of Philadelphia. That conference developed the fact that the main source of industrial waste is unemployment. It was, therefore, decided to hold a second conference devoted to the subject of unemployment.

[1] American Federationist. Washington, September, 1927, pp. 1050–1094.

The conference on unemployment took place July 30 and 31 at Bryn Mawr College and like the previous conference was attended not only by trade-unionists but also by economists, statisticians, and others. It is stated that "the conference did not attempt to solve the problem, but it at least made two things clear—first, that the problem of unemployment is not insoluble, and second, that any far-reaching solution involves not only advance planning but also the cooperation of labor and management and the consumer in a common task."

Israel Mufson, secretary of the Philadelphia Labor College, under whose auspices (jointly with the Central Labor Union of that city) the conference was held, pointed out that all trade-unionists are aware of the evils brought by unemployment, but labor does not look upon unemployment as an irremediable condition. He emphasized, however, that the elimination of unemployment will be a long task, needing for its accomplishment those who do not insist upon immediate results but who have the vision and faith to keep on working for an end whose attainment they themselves may never see.

Labor's Attempts Toward the Solution of Unemployment

THE point of view of organized labor toward the problem was presented by speakers representing, respectively, the glass bottle blowers, the photo-engravers, and the ladies' garment workers.

Harry Jenkins, secretary of the Glass Bottle Blowers' Association, reviewed the employment conditions brought about in the glass industry by the introduction of machinery. Until 1898 practically all the work was done by hand. From that time onward, one machine after another was introduced, throwing the skilled hand workers out of employment. The union met the situation constructively, however, not opposing the machines but training the men to operate them, suggesting the introduction of continuous operation in three 8-hour shifts, etc. The union has, at the same time, endeavored to reduce the cost of operation to the hand manufacturers, so as to enable them to remain in business and compete with the machine plants.

Elias Reisberg, vice president of the International Ladies' Garment Workers' Union, pointed out the special burden of unemployment in the women's wear industry, due to the enforced lay-offs summer and winter resulting from the seasonal demand for the products of the industry. Workers in the industry have employment only about 31 of the 52 weeks in each year.

As the union could not attempt the payment of unemployment benefits such as are paid by unions in other industries, because of the greatness of the problem, it looked about for other ways of meeting the situation. Those adopted were: The securing of wages during the period of employment high enough to tide the worker over the slack season; reduction of the hours of work so as to provide jobs for a greater number of workers; penalizing overtime by requiring payment at the rate of time and a half or double time and prohibiting it entirely during the slack season, also with the idea of spreading the jobs among a greater number of workers; insisting on the practice of equal division of work among the force; and prohibiting home work.

Notwithstanding all this, the union has not succeeded in doing away with unemployment or even in diminishing it, because of certain other factors with which the union can not cope—style changes, shift of demand to fur instead of cloth coats, simplification of garments requiring less work, the practice of "hand-to-mouth" buying which always means rush orders and results in still further shortening the season. The union has attempted to combat this by the introduction of an unemployment fund, supported by union and employers jointly. This has worked well in Cleveland, but due to internal difficulties in the union organization in New York City the fund which had been established there has been suspended until July, 1928. The unemployment fund does not diminish unemployment but does alleviate the hardships of being out of work.

Warner D. Curry, business representative of the International Photo-Engravers' Union, emphasized the fact that labor must take an active interest in finding the solution of the unemployment problem. The time has passed when trade-unions could confine their efforts to strictly organization matters, and every union should now have its affairs so arranged that its officers will have time to devote to the big economic and industrial issues, such as unemployment.

Suggested Remedial Measures

H. E. BARTOW, secretary of the Peirce School of Business Administration, pointed out that unemployment in and around Philadelphia seems to be on the increase and that while in former years only the less desirable workers were affected, now some of the best workers find themselves out of work. He urged that labor unions should gather and publish statistics of employment, that they assist workers to get jobs, and that there be closer cooperation between employers and employees.

Edward Eyre Hunt, secretary of the President's Conference on Unemployment, 1921, emphasized the need of sound statistics as a basis for national planning to avoid unemployment, and noted that since the holding of the President's conference on unemployment much has been learned about controlling the extremes of the business cycle, and the Government is committed to the policy of using public works to supply employment in slack times, but there is still a long distance to go toward stabilizing employment in seasonal industries.

Charles H. Chase, of the Institute of Economics, was of the opinion that too much emphasis has been placed on statistics of past unemployment, and that the budget method be used in planning for future work. "To the student of the budget method the statistics that are of most interest are not statistics of past decades, but statistics of prospective economic requirements—statistics of available resources, statistics of current industrial, commercial, and financial projects, and statistics of actual and contemplated agreements and arrangements for the carrying on of various types of economic activity, the employment of labor, the distribution of to-morrow's income, and the purchase of the product of industry as it prospectively will be coming to the markets. Budgeting means comprehensive balancing of prospective wants and forward projects."

Not only is such budgeting possible but it is actually being evolved in American industry. No concentration of administrative power is

necessary for such a system on a national scale but only that "all major contemplated and contracted activities" be reported. This is now being done in agriculture, road construction, on the railroads, etc.

The relation between security of employment and the whole machinery of finance and credit should be steadily kept in mind, in the opinion of Miss Mary Van Kleeck, director of the department of industrial studies of the Russell Sage Foundation. Fluctuations in buying power are intimately related to security of employment. She urged, also, greater cooperation of unions with their State bureaus of labor statistics in gathering employment data.

Meeting of Canadian Trades and Labor Congress, 1927 [1]

THE Trades and Labor Congress of Canada held its forty-third annual convention at Edmonton, Alberta, August 22–26, 1927.

For the first time in several years an increase in paid-up membership was reported, such increase being 11,325 or approximately 11 per cent.

The attitude of the congress on various matters is disclosed by the following résumé of adopted resolutions:

In favor of abolishing all private employment bureaus and extending free government agencies.

In favor of the enactment of legislation compelling employers to make known, in advertising for workers, whenever a trade dispute exists.

Instructing the executive council to seek an amendment to the immigration act, which would prohibit the importation of industrial workers unless it was previously certified "as being required by the Government Employment Service."

In favor of having "the administration of the alien labor act placed under a responsible minister of the Crown."

For amendments to the immigration act, which would make those who sought to bring immigrants to the Dominion financially responsible for such immigrants for not less than 12 months.

Urging the extension of free education and free school books.

Pressing for the raising of the standards of teachers and for a minimum wage for school teachers in certain Provinces.

Seeking amendments to Dominion and Provincial fair wage regulations.

Recommending that the convention go on record as indorsing the principle of the 5-day, 40-hour, week and urging all affiliated bodies to do their utmost to put it into effect.

Approving of legislation in the Province of Quebec allowing a rest of 24 consecutive hours a week to employees in the mechanical department of the theatrical industry.

Requesting that Federal office cleaners be compensated on an annual salary basis with sick leave, holidays with pay, and old-age pensions.

Favoring the reclassification of the letter-carrier service with a view to more adequate salaries in such service.

[1] Labor Gazette, Ottawa, September, 1927, pp. 967–982, and Canadian Congress Journal, Ottawa, September, 1927, pp. 9–16.

For the taking away of the power of the civil service commission to establish salary schedules.

Indorsing a request for an amendment to the bankruptcy and winding-up act so that claimants for wages and salaries be given priority over other creditors.

Requesting legislation to compel power companies to provide safety for their employees and the public.

Approving various other proposals in the interest of health and safety, including the proper protection of operators on spraying machines, the wrapping of bread in wax paper, and the discontinuance of the making or manufacturing of clothing for commercial purposes in wage-earners' homes.

In favor of the extension of minimum wage legislation.

For the extension of old-age-pension legislation to all Provinces.

In favor of securing amendments to the criminal code in order to allow peaceful picketing.

Urging the organization of women and young workers.

Opposing "the interference of all foreigners into the political, economic, and industrial life of China."

The congress refused to approve a resolution requesting "that the convention protest against the breaking off of trade relations between Canada and the Union of Soviet Republics."

A special committee appointed by the convention reported on workmen's compensation, making a number of recommendations with a view to bringing about more equitable compensation for industrial accidents and greater uniformity in Canadian compensation legislation.

Tom Moore, the president of the congress, and P. M. Draper, its secretary-treasurer, were reelected by acclamation. The 1928 convention will meet in Toronto.

Confederation of Labor of Ecuador to Hold Labor Congress

THE national directorate of the Ecuadorian Confederation of Labor has issued a call for a labor congress to be held at Quito beginning October 9, 1927, according to a report from Consul Harold D. Clum, at Guayaquil, dated August 13, 1927.

The purpose of this congress is to study and make recommendations regarding laws which have been adopted and those which are under consideration by the Government relating to the working classes. The congress is to be composed of two delegates from each provincial branch of the confederation.

Meeting of the English Trades-Union Congress, 1927

THE fifty-ninth annual meeting of the trades-union congress was held in Edinburgh from September 5 to 10, inclusive. A summary of its proceedings is given in the Ministry of Labor Gazette (London) for September, 1927. There were 646 delegates in attendance, or, present, representing 170 organizations with a membership of 4,163,994. This was a decrease of 201,625 from the member-

ship represented at the last annual meeting. The most serious decreases were found in the trades dealing with metals, machines, and conveyances, which had lost 78,335; in the paper and printing trades, which showed a loss of 75,003; and in the railway service with a decline of 20,983. The textile trades, building and public works contracting, and the organizations of Government workers showed increases in membership.

Important matters handled during the meeting were the attitude of the congress toward the trade disputes and trade-unions act, which had become law a few weeks earlier; the question of organization by industry rather than by craft; the matter of unemployment; the relation between the British trade-union movement and the Russian movement; and a number of miscellaneous resolutions dealing with various questions of fair wages, hours, the attitude of the Government, and the like.

On the question of the trades dispute act, the congress expressed itself in no uncertain tones. A resolution was passed unaminously, of which the first and the last two paragraphs are as follows:

> This congress emphatically protests against the action of the Government in its attack upon the labor movement by forcing the trades disputes and trade-unions bill through the House of Commons without any attempt at impartial preliminary inquiry or mandate from the people.
>
> This congress hereby affirms its determination to maintain in their entirety the rights and liberties which the past efforts of the organized workers have secured, including the full right of combination by all workers and the application of the strike, to be used as and when and in what manner may be found necessary, either to secure improvements in their working conditions, to establish a rightful status of labor in the economic life of the country, or to resist any attempts to depress the workers' economic conditions.
>
> This congress pledges itself to work steadfastly for the repeal of this iniquitous measure, and calls upon the working class of Great Britain to exercise its fullest political power to remove from office the present Government, which, dominated by organized capital and hereditary class privilege and prejudice, has so unscrupulously used its position to injure the industrial and political organization of the workers.

Indicative of the same kind of feeling was the official answer which the congress made to the Prime Minister's appeal for fuller cooperation between employers and workers. No other group could be more desirous of industrial peace, it stated, than the congress, representing the views of the workers.

> It is compelled, however, to inform Mr. Baldwin that the greatest hindrance to a response to these appeals is the legislative and industrial policy pursued by him and his Government, and especially their attacks on the wage standards and liberties of the workers, their action in lengthening the miners' hours, and the deliberate class bias displayed in the trade disputes and trade-unions act.
>
> The immediate repeal of such repressive legislation would be the best evidence of the sincerity and honesty of Mr. Baldwin and his Government. Failing this, the congress declares that the country should be given an immediate opportunity of pronouncing a verdict upon the present Government's policy.

The question of organization by industry was decided adversely, one of the main objections being the impossibility of fixing any precise boundaries of an industry. A resolution on unemployment was carried, deploring the inaction of the present Government, declaring that the problem can be satisfactorily dealt with only on the lines laid down by the labor movement, and demanding a full recognition of the principle of work or maintenance.

Relations with Russia were discussed at length. The Russian labor representatives were criticized for their apparent inability to understand the democratic basis of English trade-unionism, and for their tendency to indulge in abuse when the British representatives differed from them. Under the circumstances it was decided "that no useful purpose will be served by continuing negotiations with the All Russian Council of Trade-Unions so long as their attitude and policy are maintained." At the same time a resolution was passed unanimously deploring the termination of the trade agreement with Russia and the breaking off of diplomatic relations.

The action of the labor representatives on the Blanesburgh committee in signing the Blanesburgh report on unemployment insurance (see Labor Review, issue of April, 1927, p. 47) was censured in a resolution passed by a vote of 1,836,000 to 1,419,000. The failure of the Government to ratify the Washington hours convention was condemned, and the general council was called upon to do its best to secure, in the proposed new factories bill, a maximum working week of 48 hours.

Other resolutions dealt with the observance of the fair wage clause in contracts for public bodies; the establishment of municipal banks; the proposed abolition of the Ministry of Transport; the undermanning of trailers attached to mechanically propelled vehicles; the admission of trades councils to congress; employment of blind persons; proposed deputation to India to report on labor conditions; codification of factory legislation; extension of workmen's compensation act; health research; repeal of coal mines act, 1926; improvement of young workers' conditions; shop hours; abolition of night baking; continuance of the rent act; encouragement of building of houses to let; and the amendment of the theatrical employers' registration act.

Bombay Textile Labor Union

THE Bombay textile labor union, formed in 1926, has recently issued its first report, giving an account of its organization and its work. This, which is the second largest textile union in India, came into existence as a direct result of the Bombay cotton strike of 1925. (See Labor Review for February, 1926, pp. 226–228.) Previous to this there had been a few small unions in the Bombay mills, but they had been scattered and ineffective. During the strike period, however, the employees in general came to realize the desirability of having one strong union catering to the needs of all the textile unions. Also, the help which came to the strikers from the English trade-unions and from the international movement gave them a new idea of what strong and well-organized unions could accomplish, and the success of the strike roused great enthusiasm and fired the workers with the idea of a new organization on a sound basis through which they could make further progress.

The new body was formed on January 1, 1926, by the amalgamation of nine unions already existing and in its first month enrolled 5,000 members. Since then the membership has fluctuated, reaching a little over 9,000 at its highest point. The average membership for the year, counting only those who paid dues, was nearly 6,000, of whom the majority came from 15 of the 60 mills represented.

Like many of the other Indian trade associations, this is an industrial rather than a craft union. The mills are grouped into centers,

each mill being attached to the center nearest it, having its own mill committee and electing representatives to the center committee.

The functions of the mill and center committees are purely advisory; they consider questions affecting the centers and mills concerned, their growth and development and the arrangement for collections, the complaints and the like. But their main object is to create interest in the minds of the workers themselves in the work of the union and sustain it as far as possible.

The affairs of the union as a whole are conducted by a managing committee, which consists of representatives of the workers elected in the ratio of one representative for each 200 members in a mill, together with the officers of the central body. The managing committee has at present a membership of 50, of which only 8, the officials, are nonworkers.

During the first year the union directed its attention mainly to secure redress of its members' grievances. From 54 out of about 80 mills in Bombay the union received 260 complaints. The largest group of complaints, numbering 66, dealt with dismissals which the workers affected considered unjustified, the second largest, 63, with the holding back of wages, and the third, 37, with fines. As to the disposition of the complaints, the union prosecuted 89 successfully, compromised 22, and had 22 pending when the report was issued. It had been unsuccessful with 50, and 77 had been dropped or canceled. It had been most successful in regard to claims for wages withheld, having succeeded in collecting the full amount claimed in 33 cases, while 16 cases were pending at the close of the year, and only 3 had been lost.

The union has also taken an active part in presenting the workers' views on two questions which the Government has under consideration—the prompt payment of wages, and the deductions from wages and payments under the name of fines.

Financially, the year's record is striking, as it shows that less than half of the total receipts have been devoted to meeting current expenses, the remainder, 9,222 rupees,[1] having been put aside as the nucleus of a fund from which it is hoped in the future to pay benefits.

[1] Average exchange rate of rupee in 1926=36.3 cents.

LABOR TURNOVER

Labor Turnover in American Factories in First Nine Months of 1927

THE accompanying table shows the recent figures of labor turnover experience among American manufacturers reporting to the Metropolitan Life Insurance Co. About 300 manufacturers, employing about 550,000 wage earners, are now covered in this monthly survey.

Associated with the Metropolitan are several agencies which now carry on periodic local investigations along the general lines established by the company. These local organizations include the University of Michigan Bureau of Business Research, Ohio State University Bureau of Business Research, Brown University Bureau of Business Research, University of Denver, University of Pennsylvania, Associated Industries of Massachusetts, and Manufacturers' Association of Bridgeport, Conn. Similar local surveys are contemplated in Connecticut by the Connecticut Industrial Council of the Manufacturers' Association of Connecticut and in Illinois by the State Bureau of Labor Statistics.

AVERAGE TURNOVER RATES PER 100 EMPLOYEES ON PAY ROLL, IN MONTHS SPECIFIED, IN SELECTED AMERICAN FACTORIES

[Monthly rate stated on equivalent annual basis]

Month	Accession rate	Total separation rate [1]	Voluntary quit rate	Lay-off rate	Discharge rate
1927					
January	36.3	40.8	23.1	12.3	5.4
February	41.7	36.9	21.8	9.6	5.5
March	43.2	42.5	29.8	6.4	6.3
April	47.5	48.3	32.4	9.7	6.2
May	48.0	44.7	31.9	7.6	5.2
June	45.0	43.9	29.1	8.0	6.8
July	37.8	35.7	24.4	6.0	5.3
August	39.6	36.4	23.0	8.5	4.9
September [2]	52.6	51.3	38.0	6.0	7.3

[1] Arithmetical sum of last 3 columns. [2] Preliminary.

This table indicates that the 300 manufacturing establishments covered by the returns took on more new employees during the month of September than in any former month during the year, the September rate, computed on an annual basis, being 52.6 per cent. On the other hand, the total separations were greater than for any other month during the year, these separations being at the rate of 51.3 per cent per year. The voluntary quit rate, which is probably pure turnover, was the highest of any month of the year. The lay-off rate, which is due to reduction of force, was low. The discharge rate, which may be due to reduction of force or to turnover, was high. These two combined—that is lay-off and discharge—were higher than for the month of July or August, but lower than for several other months.

The Problem of Labor Turnover in Hospitals [1]

THE high rate of labor turnover in industry is equaled, if not exceeded, by the labor turnover in hospitals, according to an article in the September issue of the Modern Hospital in which data collected from a study of 54 hospitals in Greater New York are presented.

The 54 institutions studied had a total bed capacity of 34,810, or an average of 645 beds each, and the number of unskilled workers included in the study was 6,411, or an average of 120 in each hospital. The distribution of these workers according to occupation was as follows: Orderlies, 1,520; porters, 1,076; pantrymen, 398; kitchenmen, 643; waiters, 494; maids, 1,388; and laborers, 892.

Great variation was found between the different hospitals in the wages paid for similar positions. The range for orderlies, who had the highest rate of turnover, was from $35 to $55 per month with full maintenance, with an average of $47 per month when living in the hospital, while the rates for those living out of the institution ranged from $60 to $75 per month. The rate of turnover among the first group was 37 per cent per month and among the second only 12 per cent. The lower turnover rate among those who were furnished no maintenance other than the noon meal is considered to account for the growing tendency to employ these workers on this basis.

The second highest turnover rate, 34 per cent per month, was found among waiters. Their average wage was $42 per month, with maintenance, while porters received an average wage of $47 per month and maintenance. The rate of turnover among the latter group was 28 per cent. In institutions employing waitresses the turnover rate was lower for this class of labor than in those employing waiters and the rate among ward maids whose wages averaged $45 per month was only 17 per cent.

The following figures show the annual rate of turnover in three groups of hospitals of varying bed capacities:

ANNUAL RATE OF TURNOVER AMONG UNSKILLED LABOR IN HOSPITALS [a]

Occupation	Per cent of turnover for year in hospitals of—		
	150 beds and less	300 to 400 beds	1,000 beds or over
Orderlies	120	228	624
Porters	192	264	420
Pantrymen	144	288	516
Kitchenmen	240	204	624
Waiters	228	156	660
Maids	96	156	264
Average, all occupations	168	216	516

[a] The turnover rates which are given on a monthly basis in the report have been recomputed on an annual basis by multiplying the monthly rate by 12.

The fact that there is more opportunity for personal supervision by the executives in the smaller institutions and for a more personal interest in the employees makes for a lower rate of turnover in these establishments, it is said, than in the large hospitals.

[1] Modern Hospital, Chicago, September, 1927, pp. 57–60: How can the labor flux be brought to an irreducible minimum?, by Jacob Goodfriend, assistant general superintendent, Montefiore Hospital, New York.

The principal causes of the large number of changes in hospital personnel were found to be the wages, unsuitable living conditions, length of the working-day, holidays and vacations, location of the hospital, and unsatisfactory working conditions and food. In addition to these definite causes for dissatisfaction many of these employees come within the class of "drifters" and others leave out of sympathy for friends who have left either on account of discharge or for other reasons.

Wages appear to be on a generally unsatisfactory basis as there does not seem to be enough opportunity for advancement for these workers, and the writer states that every effort should be made to work out definite lines of promotion so that employees will realize they have an opportunity to increase their income and advance in position.

In dealing with the question of turnover in hospitals it is not enough to remedy conditions which make for dissatisfaction but it is also necessary to keep out undesirable employees. Theft, either of hospital property or the property of patients or employees, is usually accepted as one of the necessary hospital evils and is often traceable to the class of employees who drift from place to place. One of the essentials in reducing turnover, therefore, is keeping out these undesirables and a careful interview before employment, requiring references from former employers, and careful record keeping help to attain this object. Of a total of 190 employees leaving a large hospital in the Middle West in 1923 who were questioned as to the cause for giving up their employment, 39.5 per cent gave no reason for leaving; 14.5 per cent left for higher wages; 14.5 per cent left because the work was too hard; 14 per cent were shifters; 10.5 per cent were dissatisfied with working conditions; and 6.5 per cent left on account of marriage, sickness, or death. Of the 39.5 per cent who gave no reason for leaving it is considered probable that a large proportion were shifters.

Steps to remedy the situation were taken at a recent meeting of hospital executives, representing 45 of the leading institutions in New York City, which was held for the special purpose of devising ways and means of reducing the labor turnover. At this meeting a committee was appointed to create a reference bureau or clearing house of the hospital help in the city. Under this plan employees will be hired directly by the individual institutions but will be registered at a central office, so that records of the services of the employees in all the hospitals will be available. It was also proposed, at a subsequent meeting, to establish in addition to the reference bureau an employment agency under the direction of some recognized communal organization such as the United Hospital Fund of New York.

Further evidence of the unsatisfactory conditions prevailing among hospital workers is contained in a recent statement[2] by Bird S. Coler, commisssioner of the Department of Public Welfare of New York City, in which the high labor turnover in the institutions in his department is ascribed to the low wages paid in the city hospitals. He states that of the 5,200 employees in his department 2,012 are getting $40 a month and less and that the changes in personnel are almost entirely among these low-paid workers. As a result, the work of the department is said to be seriously handicapped.

[2] American Federation of Labor. Weekly News Service. Washington, Sept. 17. 1927.

NEGRO IN INDUSTRY

Work of the Negro Industrial Commission of Missouri

THE fourth biennial report of the Negro Industrial Commission of Missouri, covering the period 1925–26, which has recently appeared, in outlining the work which is being attempted, emphasizes especially the effort to open new avenues of employment for the negro worker, to encourage sanitation and better living conditions, especially in industrial areas, and to foster interracial cooperation whenever and wherever practicable and helpful to all concerned.

The negro in Missouri is still employed largely in agricultural labor, and since the migration from the more southerly States he has played an important part in developing the cultivation of cotton to an extent unknown before. The need for his work in this direction is strongly felt. A single county in the southeast of the State "recently sent out a call for 5,000 negroes to save the cotton crop." A few have achieved farm ownership and become employers of labor, but for the most part they are tenants or field hands. While their labor is valued, their coming is not regarded as an unmixed benefit.

The migration into Missouri has provided a badly needed addition to the farm labor supply, especially in the southern section of the State. It has also introduced an acute racial problem; the petty jealousies between the white and colored tenants and laborers have been the occasion of racial disturbances in several sections. In this section of the State there is no guaranty of permanency—cotton may prove to be too costly a crop, one or two bad seasons, a slump in prices, and there will be a greater return to diversified farming, and the need for the negro farmer will be lessened.

Answers to a questionnaire sent out to employers of colored labor indicated that the negro compares favorably in efficiency, regularity, and loyalty with other workers. The turnover is somewhat larger than among white employees, a fact which is tentatively ascribed to poor health and poor housing conditions. In regard to wages, there seems to be little discrimination in the larger industrial plants. "Often the negro is new on the job, and he is given a starting wage and is kept at that rate until increase is justified by length of service, more skill, and experience."

The report contains rather full accounts of the conferences of the State Committee on Interracial Relations, and a study, made by the students of the Lincoln High School, of the opportunities for commercialized and noncommercialized recreation open to the negroes of Kansas City, Mo.

Several recommendations are made for needed legislation, especially in regard to school facilities. At present no school for negro children may be provided in a district unless there are at least 15 to benefit by it, an arrangement which leads to neglect of children in the less settled regions.

The statutes make no such provision for the establishing of schools for white children. This law should either be amended so as to provide a school for a smaller number of colored children, or should be repealed and require schools to be established for colored children exactly in the same manner in which schools

for white children are established. There is a provision in the school law requiring 25 children to reside in a district before a school district may be organized, but this includes both white and negro children. Suppose we may have 14 colored children and 11 white children in a district; the district may be organized and the 11 white children will be furnished a school and the 14 colored children will be denied a school because there are not 15 colored children, the number required by statute, yet the colored children were counted in the organization of the district.

The committee on education suggests, in discussing this question, that something might be done in the way of providing itinerant teachers to take care of the colored children where the families are few and widely scattered.

Another recommendation is for legislation providing a sanitarium for tuberculous negroes, for whom at present there is no refuge. This is particularly important, as tuberculosis is prevalent among the colored.

In Missouri the death rate from tuberculosis among negroes is approximately 3.9 times as high as among white people; of the total population of Missouri, negroes constitute approximately one-nineteenth, or 5¼ per cent; of all years lost by Missourians in life expectation on account of early preventable death, negroes, because of earlier death from tuberculosis, are responsible for approximately 40 per cent of such year loss.

Other recommendations are for the establishment of colonies for the care of feeble-minded negroes, for whom there is as yet no provision, though the State laws definitely authorize the maintenance of cottages for them, and larger appropriations for the support of the negro industrial commission, whose work is hampered by its inadequate allowance.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in September, 1927

THE figures for industrial disputes contained in this issue of the Labor Review form the second monthly report to be given in more detail than was feasible in the past. These reports are made possible through the cooperation of the Conciliation Service of the Department of Labor and other agencies.

Under the present method of presentation data are given not only regarding the number of disputes beginning each month, but also regarding the number in effect at the end of the month and the number of workdays lost by reason of disputes during each month. The number of workdays lost is computed by multiplying the number of workers affected in each dispute by the length of the dispute measured in working-days as normally worked by the industry or trade in question.

Disputes involving fewer than six workers and those lasting less than one day have been omitted. Data for August and September are subject to revision because of the fact that reports for these months are more or less incomplete.

The bureau is largely dependent upon newspapers and trade journals for its initial information regarding disputes. These are followed by questionnaires addressed to such sources as may further supplement the bureau's reports with reliable information. The bureau wishes to assure all those cooperating in this work of its appreciation as well as to solicit future assistance from others concerned.

Industrial Disputes Beginning in and in Effect at End of June, July, August, and September, 1927

TABLE 1 is a summary table showing for each of the months, June, July, August, and September, the number of disputes which began in these months, the number in effect at the end of each month and the number of workers involved. It also shows, in the last column, the economic loss (in man-days) involved. It is to be noted that the figures given include only those disputes which have been verified by the bureau.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF JUNE, JULY, AUGUST, AND SEPTEMBER, 1927

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost during month
	Beginning in month	In effect at end of month	Beginning in month	In effect at end of month	
June, 1927	75	82	18,585	196,047	4,859,468
July, 1927	62	62	33,763	199,087	5,307,089
August, 1927 (preliminary figures)	49	49	7,774	198,582	4,997,507
September, 1927 (preliminary figures)	39	44	12,514	197,101	4,959,509

Industrial Disputes Beginning in and in Effect at End of July, August, and September, 1927, by Industries

TABLE 2 gives by industry the same information as that shown in Table 1, thus offering the opportunity for more detailed comparison.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF JULY, AUGUST, AND SEPTEMBER, 1927, BY INDUSTRIES

Industry and month	Number of disputes [1]		Number of workers involved in disputes		Number of man-days lost during month
	Beginning in month	In effect at end of month	Beginning in month	In effect at end of month	
Automobiles:					
July	1	1	100	100	900
August					600
September	1	1	12	12	300
Bakery trade:					
July		1		16	3,664
August		1		16	400
September					16
Barbers:					
July					28,600
August	1		104		312
September	1		30		90
Building trades:					
July	13	14	7,669	5,463	378,547
August	9	11	966	3,764	124,960
September	6	5	598	2,270	67,370
Chauffeurs and teamsters:					
July	1	1	200	200	400
August	1		22		3,457
September	3		8,037		20,481
Clerks:					
July		1		23	575
August		1		23	575
September		1		23	575
Clothing:					
July	19	12	2,395	702	45,086
August	11	8	2,569	806	27,497
September	6	6	532	872	23,623
Coopers:					
August	1	1	20	20	340
September		1		20	500
Farm labor:					
August	1		50		150
Furniture:					
July	1		270		6,940
August	3	3	169	169	1,490
September	3	3	328	399	11,181
Glass:					
July	3	3	167	167	2,671
August	1	4	30	197	4,925
September		4		197	4,925
Hotels and restaurants:					
July		1		18	450
August		1		18	450
September		1		18	450
Iron and steel workers:					
July	1		250		3,000
Laundries:					
July					1,764
Leather workers:					
September	3	1	745	33	4,293
Metal trades:					
July	1	2	16	39	967
August	1	1	25	25	1,268
September		1		25	625
Mining, coal:					
July	7	4	18,477	190,500	4,780,650
August	4	5	1,015	190,850	4,763,940
September	1	4	1,100	191,200	4,776,300
Miscellaneous:					
July	5		3,876		5,426
August	1		50		200
September	1		60		960

[1] Figures for August and September are preliminary.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF JULY, AUGUST, AND SEPTEMBER, 1927, BY INDUSTRIES—Continued

Industry and month	Number of disputes		Number of workers involved in disputes		Number of man-days lost during month
	Beginning in month	In effect at end of month	Beginning in month	In effect at end of month	
Motion picture and theatrical workers:					
July	3	3	109	121	1,794
August	2	1	608	600	3,923
September	9	5	747	654	9,884
Municipal employees:					
July	1	1	30	350	8,930
August		1		350	8,750
September		1		350	8,750
Oil and chemicals:					
August	1		7		84
September	1		48		576
Pottery:					
August	1		80		640
Printing and publishing:					
July	3	9	52	799	19,495
August		5		740	19,127
September		5		740	18,500
Rubber:					
July					256
September	1	1	140	140	1,540
Slaughtering and meat packing:					
July		1		6	150
August	1	1	30	6	270
September		1		6	150
Stone:					
July	1	1	42	75	2,589
August					1,125
September	1	1	60	60	1,200
Telephone and telegraph:					
July		1		23	575
August					529
Textile:					
July	2	6	110	485	13,660
August	9	5	2,029	998	32,495
September	2	2	77	82	7,590

Industrial Disputes Beginning in September, 1927, by Classified Number of Workers and by Industries

TABLE 3 gives the number of industrial disputes beginning in September, classified by number of workers and by industries:

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN SEPTEMBER, 1927, BY CLASSIFIED NUMBER OF WORKERS AND BY INDUSTRIES

Industry	Number of disputes beginning in September, 1927, involving—					
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 and under 5,000 workers	5,000 workers and over
Automobile, carriage, and wagon workers	1					
Barbers		1				
Building trades	1	3	2			
Chauffeurs and teamsters		1			1	1
Clothing	1	2	3			
Furniture		2	1			
Leather workers	1	1		1		
Mining, coal					1	
Motion-picture and theatrical workers	4	3	2			
Oil and chemical workers		1				
Rubber			1			
Stone		1				
Textile	1	1				
Miscellaneous		1				
Total	9	17	9	1	2	1

Industrial Disputes Ending in September, 1927, by Industries and Classified Duration

IN Table 4 are shown the number of industrial disputes ending in September, by industries and classified duration:

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN SEPTEMBER, 1927, BY INDUSTRIES AND CLASSIFIED DURATION

Industry	Classified duration of strikes ending in September, 1927					
	One-half month or less	Over one-half and less than 1 month	1 month and less than 2 months	2 months and less than 3 months	3 months and less than 4 months	4 months and less than 6 months
Barbers	1			1		
Building trades	4	2	2		1	3
Chauffeurs and teamsters	3					
Clothing	5		2	1		
Furniture	1		2			
Leather workers	2					
Mining, coal	2					
Motion-picture and theatrical workers	5					
Oil and chemical workers	1					
Textile	2		2			1
Miscellaneous	1					
Total	27	2	8	2	1	4

Principal Strikes and Lockouts Beginning in September, 1927

TEAMSTERS and truckmen, New York.—Approximately 6,000 teamsters and truckmen in New York City went out on strike September 7 to enforce their demands for a wage of $45 per week instead of $40, $1.20 per hour for overtime instead of $1, and a working-day of 8 hours instead of 9. The strike was called by Locals Nos. 282 and 807 of the International Brotherhood of Teamsters, Chauffeurs, Stablemen, and Helpers of America. This strike affected general trucking of merchandise throughout the city and partially tied up shipping, warehouses, etc.

The Merchant Truckmen's Bureau of New York, with some 600 members, was the principal employing organization involved. The old agreement expired September 1 and the strike followed several weeks of unsuccessful negotiation.

Freight congestion was not admitted to be serious by the railroads, except in the case of the Long Island Railroad, which declared an embargo on freight delivered at Pier 22, East River, and shipments ordinarily made via that pier were rerouted by way of the Flatbush Avenue station in Brooklyn. Other terminals of this railroad, it is understood, were not seriously affected.

The return of the truckmen employed by the United States Trucking Corporation, one of the largest employing companies, was announced on September 10, the company having reached an agreement with its men on the night preceding, whereby it conceded a wage increase of $5 per week, with the propositions regarding the increase in overtime pay and a reduction of the regular working hours held in abeyance for further consideration. This announcement of a settlement with the United States Trucking Corporation was soon followed by another to the effect that all the trucking companies had come to a verbal agreement with the strikers, subject to ratification. Under

the terms of the settlement the men are to receive a wage increase of $5 per week, but agree to the retention of the 9-hour day, with no increase in overtime pay. The strike was officially settled by signed agreement on the afternoon of September 15, and is retroactive, it is understood, to September 1. Some of the men returned to work on September 10 and some on September 12, by which date most of them had resumed work and the strike was practically over.

Teamsters and chauffeurs, New York.—A strike of about 2,000 drivers, loaders, helpers, and assorters engaged in hauling and handling fruit and vegetables in New York City began at 4 o'clock in the afternoon of September 15, after conferences had failed to establish a peaceful settlement of differences with employers. It was called by Local No. 202 of the International Brotherhood of Teamsters, Chauffeurs, Stablemen, and Helpers of America. The drivers were employed by the Market Truckmen's Association, representing the boss truckmen. Other interested groups were the Fruit and Produce Trade Association, United Fruit Buyers' Association, and the Fresh Fruit and Vegetable Trade Association. The drivers or truckmen, numbering about 1,000, demanded a wage increase of $7 per week. No demands were submitted by the other workers, who expected to get a pro rata increase in case the drivers were successful. A settlement was reached in the afternoon of September 16, about 26 hours after the strike began, allowing the drivers an increase of $5 per week from $40 per week, as in the case of the strike of 6,000 teamsters and chauffeurs which began on September 7. The other workers, it is understood, received wage increases, but the amount is not reported. Earlier in the day the Market Truckmen's Association had agreed to pay the increase, but there was a hitch in the settlement when the boss truckmen demanded that the produce dealers agree to any rate adjustment necessitated by this increase.

Principal Strikes and Lockouts Continuing into September, 1927

BITUMINOUS coal strike.—The major suspension of April 1 continues only in part. In addition to the settlements in Illinois and Iowa, heretofore reported, settlements have been made in Indiana and in the southwestern district, embracing Kansas, Missouri, Oklahoma, and Arkansas.

The agreement in Indiana was reached on the night of October 7, and is similar to the Illinois arrangement.

The agreement for the southwestern district was reached on October 6, and virtually continues to March 31, 1928, according to reports, the same wage scale that was in effect before the suspension of April 1 began. It was stated, however, that the operators in Arkansas and Oklahoma had withdrawn from the Southwestern Interstate Operators' Association, and to what extent they will be governed by the agreement is unknown.

These settlements leave only the miners of Ohio and Western Pennsylvania still on strike as a part of the major suspension of April 1, 1927. The big bituminous coal strike is therefore more than 50 per cent settled.

The text of the agreement, as reported in the United Mine Workers' Journal, between the Coal Operators' Association of Illinois and the United Mine Workers of America, district 12, continuing temporarily

the Jacksonville scale pending an investigation of wages and working conditions in the coal-mining industry by a commission of operators and miners, follows:

This agreement, made this first day of October, 1926, between District No. 12, United Mine Workers of America, parties of the first part, and the Coal Operators' Association of Illinois, parties of the second part, covering wages and working conditions of employment at the coal mines of Illinois, witnesseth:

1. The question of making a wage contract effective April 1, 1928, and all matters relating thereto, is referred to a joint wage commission composed of the president and vice president of the Coal Operators' Association of Illinois, and the president and vice president of district 12, United Mine Workers of America.

2. Said joint wage commission shall with all diligence apply itself to such task and examine into, consider and report on the demands, claims and contentions of the operators and mine workers without prejudice or restriction. The commission shall report in writing its findings and recommendations to a joint scale meeting of the parties hereto, to be held in Chicago, February 7, 1928, and its report shall become the basis for the ensuing wage agreement.

3. The commission will formulate its own rules and methods of procedure and will organize its work promptly and hold frequent meetings. To facilitate agreements on disputed points the commission may enlarge its number to five, in which case a majority vote shall be binding.

4. Work shall be resumed at once, the wages, conditions and rules of employment existing March 31, 1927, being extended to April 1, 1928.

5. It is desirable to have an early arrangement covering the operation of machinery and devices for loading coal. The commission is requested to give this matter its prompt attention and is authorized to formulate a temporary basis for the operation of such machines to be in effect from November 1, 1927, to March 31, 1928.

The investigating commission will be Rice Miller and Herman C. Perry, both of Hillsboro, Ill., president and vice president, respectively, of the Coal Operators' Association of Illinois, and Harry Fishwick and State Senator William Sneed, president and vice president, respectively, of district 12, United Mine Workers of America.

Conciliation Work of the Department of Labor in September, 1927

By Hugh L. Kerwin, Director of Conciliation

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 27 labor disputes during September, 1927. These disputes affected a known total of 9,774 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

On October 1, 1927, there were 41 strikes before the department for settlement, and, in addition, 6 controversies which had not reached the strike stage. The total number of cases pending was 47.

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
					1927	1927		
Building wreckers, Boston, Mass.	Strike	Wreckers	Asked $1 per hour—25 cents increase.	Pending	Sept. 9		175	
Chrisedge Theater Co., Elizabeth, N. J.	do	Theater workers	(1)	do	(1)		(1)	
Fruit Market Truckmen's Association, New York City.	Controversy	Truck owners	Charge 4 cents per package increase to shippers.	Unable to adjust. Conferences refused by truck owners.	Sept. 3	Sept. 12	(1)	
Potruch Construction Co., Allentown, Pa.	Strike	Building crafts	Nonunion iron workers	Adjusted. Agreed to replace nonunion with union iron workers.	Aug. 30	Sept. 9	53	7
Stern & Mayer, New York City	do	Neckwear workers	Nonunion labor	Pending	Sept. 3		100	
Whidden-Beckman Co., Boston, Mass.	do	Building crafts	Nonunion truckmen	Adjusted. Agreed to finish job without change.	Aug. 26	Sept. 6	85	6
Truck drivers, New York City	do	Drivers	Asked 8-hour day; $40 to $45 per week; overtime.	Adjusted. Allowed $5 per week increase. No change in hours.	Sept. 7	Sept. 10	6,000	
Bag and suitcase makers, Philadelphia, Pa.	do	Leather workers	Asked 44-hour week; 20 per cent increase.	Pending. Court proceedings now pending.	Sept. 22		300	300
Lyric Theater, Oil City, Pa.	do	Musicians	Wages and number of men in orchestra.	Adjusted. Agreed on 5 men minimum orchestra; $2.50 increase for players; $5 increase for leader.	Sept. 10	Oct. 10	8	5
Venango Theater, Oil City, Pa.	do	do	do	do	do	do	6	3
Franc-Srohmenger & Cowan (Inc.), New York City.	do	Neckwear workers	Working conditions	Pending	Aug. 24		300	
Motion picture and vaudeville theaters, Decatur, Ill.	do	Theater workers	Signing of contract	Adjusted. Temporary settlement effected.	Sept. 1	Sept. 8	5	5
Berkman & Adler, New York City and New Haven, Conn.	do	Neckwear workers	Nonunion labor	Unable to adjust. Factory moved to New Haven, Conn.	do	Sept. 12	25	
Boldt Construction Co., New Castle, Pa.	do	Hoisting engineers	Workers asked railroad fare to and from work.	Adjusted. Returned; railroad fare not allowed.	Sept. 8	Sept. 14	15	5
Smith & Brennen, contractors, New Castle, Pa.	Controversy	Carpenters and sheet-metal workers.	Jurisdiction of metal work	Adjusted. Metal workers to do cornice work; remainder equally divided between metal workers and carpenters.	Sept. 12	do	30	25
New Castle Lumber & Construction Co., New Castle, Pa.	do	Building crafts	do	Adjusted Front of building and windows finished by metal workers.	(1)	Sept. 16	30	15
Barnard Mills, Fall River, Mass.	do	Weavers	Wage increase asked	Adjusted. Returned for trial of 2-loom system.	Sept. 8	Sept. 22	44	716

[1] Not reported.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, SEPTEMBER, 1927—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
					1927	1927		
Union Paving Co., Philadelphia, Pa.	Strike	Paving-stone cutters	Wage scale	Pending	Sept. 15		100	
Rubel Coal & Ice Co. and Commonwealth Fuel Co. (Inc.), Jamaica, N. Y.	do	Truck drivers and handlers.	Wages	do	Sept. 16		37	
Heck Co., Columbus, O	Lockout	Building crafts	Wages cut from $1.25 per hour to $1.	do	(1)		(1)	
McGrath Co., Columbus, O	do	do	do	do	(1)		(1)	
Victor Smith, contractor, on County Children's Home, Dayton, O.	Strike	do	Nonunion engineers and cement finishers.	Adjusted. Agreed to use all union workers on this job.	Sept. 3	Sept. 20	250	
Motion picture operators, St. Paul and Minneapolis, Minn.	do	Operators	Sympathy with stage hands	Pending	Sept. 21		450	
Stage hands, picture theaters, St. Paul and Minneapolis, Minn.	do	Stage hands	Asked 30 weeks' work in year and 1 day off in 7.	do	Sept. 17		150	
Phillips-Baker Rubber Co., Providence, R. I.	do	Rubber-shoe makers	Asked 5 to 15 per cent wage increase.	Adjusted. Returned without increase; conditions improved.	Sept. 19	Sept. 30	200	75
Keith and Leow theaters, Columbus, O.	do	Musicians	Wages and number of players employed.	Pending. Conferences adjourned without settlement.	Sept. 29		125	110
Stage hands, Oil City, Pa	Threatened strike.	Stage hands and operators.	Sympathy with musicians	Adjusted. Settled when musicians strike was adjusted.	Sept. 28	Oct. 10	8	6
Total							8,496	1,278

[1] Not reported.

Strikes and Lockouts in Denmark, 1920 to 1926

THE following figures on strikes and lockouts in Denmark from 1920 to 1926, inclusive, are taken from the Statistical Annual of that country, published in 1927:

STRIKES AND LOCKOUTS IN DENMARK, 1920 TO 1926

Year	Number of strikes and lockouts	Number of workers involved in—		Number of days lost (000 omitted)	Cases where State conciliator acted as mediator
		Strikes	Lockouts		
1920 [1]	243	19,129	2,836	690	24
1921	110	13,356	34,791	1,321	20
1922	31	640	48,219	2,272	6
1923	58	1,941	----------	20	5
1924	71	8,993	765	175	13
1925	48	35,477	66,854	4,138	18
1926	32	975	75	23	3

[1] The figures presented for this year do not include the general strike of April, 1920.

English Conciliation Machinery for Railway Shopmen

ON AUGUST 15, 1927, an agreement was signed between the railway companies of England and the trade-unions which include in their membership employees in the railway shops, establishing machinery for dealing with questions of wages, hours, and working conditions of male workers in the shops. A summary of the terms agreed upon is given in the Ministry of Labor Gazette (London) for September, 1927.

The agreement provides that in any shop where not fewer than 75 workers are employed a shop committee may be set up, consisting of representatives of the workers and the employers in equal numbers. Shops employing fewer than 75 workers may be grouped for this purpose. At any place where, in the same department, there is more than one shop committee, a works committee is to be established. A third type of body, a line committee, is also to be established for each department, "for the purpose of dealing with matters affecting detached bodies of workers in the same department at centers where the number of employees is not large enough to enable a shop committee to be formed." The plan of procedure after the establishment of these bodies is thus described:

> Any employee or group of employees desiring to raise a question within the scope of the scheme may make representations in the first place to the foreman of the shop. If the answer is not satisfactory reference is to be made to the shop committee, or if there is no such committee, the question may be discussed with the local management. Matters not settled by a shop committee may be referred to the works committee, or discussed between the district staff officer of the trade-union and the local management, or referred by the shop committee to the head of the department. At places where there is no shop committee the question may be referred to the line committee. If the employees in two or more shops desire to raise a general question the matter is referred to the local management, and failing satisfaction, to the works committee. Employees at different centers where there are no shop or works committees wishing to raise a question collectively are to refer in the first place to the head of the department, and failing satisfaction, to the line committee. Matters which are not settled by the works or line committees may be discussed between the district staff officer of the union

and the local management, or between headquarters officials and the general manager of the company. If the trade-unions wish to raise a question of a national character they are to take up the matter with the general managers, and a national railway shopmen's council is to be established to deal with such matters. Any questions which the company or companies may wish to raise are to be referred to the employees' secretary of the appropriate committee or of the national council. Provision is made for the expediting of cases referred to the new bodies, and also that, where the parties concerned desire to submit a question to arbitration, the reference is to be to the industrial court. No withdrawal of labor or unauthorized action is to be taken pending negotiations on the lines set out in the agreement.

Labor Agreement Averts Shutdown in Mexico [1]

ON JULY 21, 1927, 1,500 workers entered into an agreement with the Mazapil Copper Co., a British corporation operating in Mexico, by which they consented to wage cuts averaging about 12½ per cent in order to avert a shutdown which was to have taken place on September 1, 1927, because of the losses sustained by the company as a result of high wages and taxes.

Among the outstanding provisions of the agreement are the following: Only wages of more than 1 peso [2] per day will be affected; cuts will be in proportion to the wages earned, higher wages being reduced by a greater percentage; the agreement will be binding until the price of copper reaches 14 cents (United States currency) a pound and that of lead 25 pounds sterling per English ton, at which time the company is obligated to resume its present wage scale; wage cuts are to become effective August 1, 1927, but no workers are to be dismissed.

The agreement provides also for the creation of a committee on subsistence, to be composed of representatives of the workers, the merchants, and the State and municipal governments, whose duty it shall be to reduce the cost of living in the mining region for the period during which wages are reduced.

[1] Report from the American consul, Thomas S. Horn, at Saltillo, Coahuila, Mexico, dated Aug. 2, 1927.
[2] Average exchange rate of peso for year 1926=48.31 cents.

WAGES AND HOURS OF LABOR

Hourly Earnings of Employees in Railroad Freight Service, from 1924 to 1927

IN ITS publication "Wage Statistics" for June 1927, the Interstate Commerce Commission gives the following data regarding the straight-time hourly earnings of train and engine employees in the freight service of Class I railroads for the month of June, in each of the years 1924, 1925, 1926, and 1927.

AVERAGE STRAIGHT-TIME HOURLY EARNINGS OF EMPLOYEES IN THROUGH AND LOCAL FREIGHT SERVICE OF CLASS I RAILWAYS IN JUNE, 1924, 1925, 1926, AND 1927

Month of June—	Freight conductors		Freight brakemen and flagmen		Freight engineers		Freight firemen and helpers	
	Through	Local and way	Through	Local and way	Through	Local and way	Through	Local and way
	United States							
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
1924	77.9	83.6	61.5	65.9	93.1	95.4	69.8	71.0
1925	78.4	84.2	61.9	66.6	95.5	97.9	72.2	73.5
1926	78.1	84.0	61.8	66.6	95.6	98.4	72.2	74.2
1927	81.2	87.3	64.2	69.4	95.7	98.3	75.0	76.1
	Eastern district							
1924	77.5	83.5	61.1	65.2	94.2	98.1	71.2	73.7
1925	78.1	83.6	61.0	65.7	95.1	98.9	71.9	74.5
1926	77.9	83.4	61.1	65.7	95.4	99.4	72.2	75.0
1927	83.2	88.8	65.2	70.3	95.6	99.1	77.2	79.3
	Southern district							
1924	77.9	83.0	61.2	64.8	96.1	95.4	71.7	70.8
1925	77.8	83.6	61.4	65.4	97.2	96.8	73.0	72.2
1926	77.6	83.5	61.2	65.5	96.8	98.7	72.5	74.5
1927	82.2	88.9	64.7	69.7	96.6	97.3	74 8	75.0
	Western district							
1924	78.3	84.1	62.2	67.4	90.2	92.2	67.1	68.1
1925	79.2	85.1	63.2	68.3	95.1	97.2	72.0	72.9
1926	78.6	84.9	62.8	68.2	95.3	97.0	72.0	73.3
1927	78.4	85.0	62.9	68.3	95.4	97.7	72.1	73.2

Hourly Earnings in Connecticut, 1926

ACTUAL hourly earnings in certain occupations in Connecticut are published as follows in the biennial report of the department of labor and factory inspection of that State for the period ending June 30, 1926.

STARTING RATES AND ACTUAL HOURLY EARNINGS IN THE LEADING INDUSTRIAL PLANTS OF CONNECTICUT, NOVEMBER 1, 1926

Occupation	Starting rate	Actual hourly earnings
Males		
Assemblers, bench, first grade	$0.435	$0.57
Assemblers, bench, second grade	.40	.54
Assemblers, machine tool, first grade	.60	.71
Assemblers, machine tool, second grade	.55	.60
Automatic screw	.55	.65
Blacksmiths, first grade	.715	.75
Blacksmiths, second grade	.55	.60
Blacksmiths' helpers	.465	.50
Boring mill, "36" and under	.65	.70
Boring mill, "36" and over	.70	.85
Buffers, first grade work	.585	.69
Buffers, second grade work	.465	.50
Carpenters	.55	.70
Carpenters' helpers	.44	.50
Chippers	.45	.50
Core makers	.70	.73
Designers, tool and machine	.82	1.00
Die makers, first grade work	.755	.805
Die makers, second grade work	.68	.705
Die sinkers, hand	.65	1.05
Die sinkers, hand and machine	.72	.98
Die sinkers, first grade	.78	.905
Die sinkers, second grade	.705	.83
Drill press, multiple spindle, first grade	.46	.60
Drill press, ordinary work	.44	.525
Drop forgers, first grade	.72	.885
Drop forgers, second grade	.68	.86
Electricians	.50	.705
Electricians' helpers	.435	.535
Firemen	.46	.55
Foot press	.43	.475
Grinders, surface, first grade	.525	.60
Grinders, surface, second grade	.46	.58
Grinders, universal, first grade	.60	.70
Grinders, universal, second grade	.55	.65
Hand screw machine	.45	.60
Hardeners, first grade	.60	.70
Hardeners, second grade	.45	.65
Helpers, foundry	.45	.55
Inspecting, exacting work	.50	.65
Inspecting, ordinary work	.45	.55
Lathe hands, under "24," first grade	.56	.65
Lathe hands, under "24," second grade	.51	.60
Lathe hands, "24" to "36"	.65	.70
Machinists, first grade	.65	.70
Machinists, second grade	.55	.625
Milling, "hand"	.45	.555
Milling, universal, first grade	.55	.65
Milling, universal, second grade	.45	.55
Millwrights	$0.60	$0.70
Millwrights' helpers	.47	.525
Molders, bench	.40	.50
Molders, ex. bench, machine	.60	.85
Molders, first class, floor	.70	.95
Molders, floor, machine	.50	.80
Molders, iron, bench	.70	.90
Molders, iron, machine	.60	.65
Molders, iron, floor	.69	.875
Molders, squeezers	.63	.89
Pattern makers, metal	.75	.80
Pattern makers, wood	.75	.80
Planer hands, "36" under, first grade	.60	.70
Planer hands, "36" under, second grade	.55	.65
Planer hands, above "36," first grade	.70	.75
Planer hands, above "36," second grade	.65	.70
Polishers, first grade	.56	.715
Polishers, second grade	.40	.61
Power press, large	.45	.55
Power press, small	.405	.50
Scrapers, machine tool, first grade	.55	.66
Scrapers, machine tool, second grade	.41	.55
Shapers, first grade	.65	.75
Shapers, second grade	.60	.65
Sheet-metal workers	.56	.60
Sheet-metal helpers	.40	.48
Shop helpers	.415	.45
Snaggers	-------	.50
Tapping and counterboring, first grade	.40	.595
Tapping and counterboring, second grade	.385	.58
Tool makers, first grade work	.60	.85
Tool makers, second grade work	.55	.69
Tool setters, adjusters	.60	.65
Turret lathe, high grade work	.60	.65
Turret lathe, ordinary work	.545	.60
Watchmen	.38	.45
Females		
Bench work	.275	.38
Drill press	.33	.40
Foot press	.28	.41
Inspecting	.285	.355
Packing room	.275	.32
Power press	.27	.41

Wages in Tennessee, 1926

THE wage statistics here presented are taken from the fourth annual report of the Department of Labor of Tennessee for the year 1926:

AVERAGE WEEKLY WAGES OF MALE AND FEMALE EMPLOYEES IN TENNESSEE INDUSTRIES IN 1926

Industry	Number of establishments	Number of employees		Weekly wages	
		Male	Female	Male	Female
Manufactures:					
Bags, cloth and paper	6	435	587	$19.72	$10.38
Bakeries	36	906	513	24.46	10.36
Boilers and tanks	6	238	5	24.60	24.75
Boots and shoes	3	671	411	23.30	13.77
Bottlers	54	637	22	20.34	20.55
Boxes, paper and wood	19	1,315	303	19.20	12.88
Brick, lime, cement, and sewer pipe	25	1,679	43	18.24	12.14
Brooms, brushes, and mops	2	20	1	18.00	30.00
Candy	17	517	616	22.34	13.67
Chemical works and fertilizer	16	869	127	20.48	12.72
Chewing gum	1	10	10	10.80	14.30
Cigars, tobacco, and snuff	13	351	1,638	23.22	12.73
Clothing	63	1,840	4,662	15.46	12.71
Cotton goods and hosiery	64	5,438	9,125	19.68	14.44
Cottonseed oil and products	22	2,253	88	16.66	13.31
Cotton storage, gin, and compress	26	270	13	17.96	9.23
Electrical	3	43	2	37.25	25.00
Feed	21	378	31	21.28	17.98
Fire doors and shutters	1	8		11.75	
Food and food products	53	973	68	19.49	20.59
Foundries	24	2,896	27	22.63	25.05
Furnaces	4	799	4	19.03	26.25
Furniture	36	2,427	428	19.74	12.75
Gas, coal, and electrical products	9	429	30	27.26	14.84
Gas and electrical fixtures	3	120	14	19.02	28.33
Glass and bottles	4	185	21	22.39	11.84
Gloves	4	86	627	19.51	15.86
Hardware and stoves	12	1,759	61	24.13	24.75
Harness, saddlery, and leather goods	9	267	32	22.86	17.42
Ice	53	917	43	20.67	16.02
Ice cream	17	258	25	22.81	17.67
Lumber	90	2,703	70	19.81	20.71
Lumber products	147	8,903	737	18.77	13.40
Machinery	18	1,609	85	25.31	18.83
Metal and metal products	30	1,369	58	24.67	18.09
Mirrors	1	23	4	18.74	15.00
Oil (refineries)	2	203	29	19.29	18.07
Paint and varnishes	9	122	21	24.12	19.84
Paper, pulp, and fiber	4	334	10	20.12	20.44
Pharmaceuticals and drugs	21	274	550	24.12	14.86
Potteries	1	93	17	21.29	14.47
Printing, engraving, and lithographing	72	1,164	562	30.46	16.42
Quarries, stone and marble	13	366	11	30.70	18.90
Roofing	3	71	3	20.80	18.00
Silk and silk hosiery	6	2,221	2,027	16.43	13.74
Springs and mattresses	15	460	186	25.77	15.29
Structural steel and bridges	2	164	3	25.30	28.33
Tanneries and extracts	11	635	19	20.32	16.63
Telephone and telegraph	49	571	1,814	26.83	17.44
Trunks, valises, and bags	4	51	10	24.96	15.80
Wagons, vehicles, and auto parts	26	1,056	39	20.76	25.59
Water, light, and power	26	395	12	23.61	21.08
Woolen mills and woolen extracts	10	562	581	17.80	12.57
Miscellaneous	28	531	231	22.93	11.84
Retail establishments:					
Boots and shoes	2	13	7	30.38	15.57
Clothing	63	232	443	24.50	16.89
Department stores	39	1,430	3,107	26.86	15.61
Druggists	3	25	8	12.76	12.00
Five-and-ten-cent stores	28	128	703	16.63	9.59
Groceries and markets	4	43	10	22.14	17.10
Hardware	2	20	4	23.86	21.50
Jewelry stores	1	2	6	30.00	22.50
Lumber	1	5	1	18.60	13.00
Millinery	5	3	16	11.67	16.13
Stationery—Books and news	3	4	18	16.25	16.80
Unclassified	1	5	3	25.00	38.00

AVERAGE WEEKLY WAGES OF MALE AND FEMALE EMPLOYEES IN TENNESSEE INDUSTRIES IN 1926—Continued

Industry	Number of establishments	Number of employees		Weekly wages	
		Male	Female	Male	Female
Wholesale establishments:					
Druggists	1	17	6	$25.06	$18.33
Hardware	1	8	1	30.00	10.00
Lumber products	2	82	5	21.10	28.60
Produce	2	23	20	28.08	12.85
Shops:					
Cleaning and dyeing	44	333	255	23.62	14.86
Electrical repair	3	26	1	23.00	25.00
Machine	29	489	13	21.95	19.89
Plumbing	2	48	9	23.40	18.00
Stamping and enameling	1	178	26	21.36	18.46
Street railway car	4	406	15	27.65	22.87
Tailor	1	4	2	40.00	18.00
Unclassified	13	134	17	19.53	9.47
Not otherwise specified:					
Auto sales and garage	53	1,626	96	32.32	25.86
Builders' supplies	9	190	9	23.76	21.00
Contractors	3	316	1	18.43	25.00
Dairies (creameries)	20	167	28	22.50	11.39
Express, transfer, and storage	8	325	100	23.32	25.86
Hotels and restaurants	30	254	302	24.86	9.89
Laundries	70	926	2,339	21.67	9.77
Livery and taxi	1	40		17.40	
Newspapers and periodicals	7	341	28	40.61	20.50
Office buildings and banks	2	39	20	19.14	9.00
Packing houses, refineries, and cold storage	32	1,364	376	20.86	10.12
Picture shows and theaters	22	279	103	37.38	9.92
Unclassified	12	130	225	18.83	9.11

Wage Increases for Railway Employees in Bahia, Brazil

A COMMUNICATION from the American consul, Howard Donovan, at Bahia, Brazil, dated July 20, 1927, states that the employees of the Bahia State South Western Railway are to receive wage increases in accordance with the provisions of decree No. 5041 of July 11, 1927, published in the Diario Oficial of July 13, 1927.

The following statement taken from this report gives the average per cent of increase the 1927 wages are over those paid in 1923 and 1925 in the various departments:

Department	Per cent of increase since 1923	Per cent of increase since 1925
Administration	80	24
Office	32	25
Traffic	57	32
Locomotion	85	28
Maintenance of way	82	35
Total	72	31

Wages of English Coal Miners

THE agreements by which the coal-mining stoppage of 1926 was ended provided that for a transition period wages were to consist of a basis rate plus a specified percentage, and that thereafter the proceeds of the industry were to be determined periodically and divided in a fixed ratio between wages and profits. A definite minimum

percentage on basis rates was fixed below which wages must not fall, but if the payment of this minimum cut into the proportion allowed for profits, it became a charge upon future wages; should the industry later on become more prosperous, the deficit in profits would have to be made up before wages could rise above the minimum. The transition period, which was longest for Nottingham and Derbyshire, has now ended throughout the coal fields, and in every district wages have sunk to the minimum. In nearly all cases, moreover, this minimum is maintained only by cutting into profits, thus causing a deficiency which is recoverable by the owners before wages can rise above the present figures. The Economist (London), in its issue for September 10, 1927, gives the following table showing the percentages now ruling as compared with those of 1914:

Percentage addition to basis rates

District	July, 1914	September, 1927
Northumberland	50	80
Durham	57½	89
Yorkshire	10	36
Lancashire	10	32
Nottinghamshire	10	38
Derbyshire	10	38
South Wales	6⅔	28
Scotland	75	110

In considering these figures it must be borne in mind that the cost of living in England in August, 1927, was 64 per cent higher than in 1914. On the other hand, the Economist calls attention to the fact that in a few cases the basis rates have been raised, and that "the lower paid men in all cases are now in receipt of subsistence wages or allowances which are in excess of the amounts yielded by the addition of the current percentage to basis rates."

Wages of Mexican Railway Workers in 1925 and 1926[1]

IN THE Eighteenth Annual Report of the National Railways of Mexico (*Ferrocarriles Nacionales de México*) for the fiscal year ending June 30, 1926, data are published showing the average daily wages of their railway workers for the six months period from July 1 to December 31, 1925, and also for the period from January 1 to June 30, 1926. The following table is taken from this report:

[1] National Railways of Mexico. Eighteenth Annual Report for the fiscal year ended June 30, 1926. [Mexico City, 1927] pp. 37, 38.

AVERAGE DAILY WAGES OF WORKERS ON MEXICAN RAILWAYS IN 1925 AND 1926, BY OCCUPATION

[Average exchange rate of peso in 1926=48.31 cents.]

Occupation	Average daily wages July 1 to December 31, 1925	Average daily wages, January 1 to June 30, 1926	
		Amount	Equivalent in U. S. currency
	Pesos	*Pesos*	*Dollars*
Section foremen	1.99	1.92	0.93
Laborers	1.57	1.44	.70
Telegraph linemen	4.91	4.87	2.35
Civil engineers	6.96	6.99	3.38
Quarrymen and masons	2.78	2.71	1.31
Mechanics	6.21	6.20	3.00
Carpenters	5.11	5.07	2.45
Boiler makers	7.79	7.79	3.76
Foundry men	3.36	3.33	1.61
Tinsmiths and coppersmiths	4.88	4.83	2.33
Blacksmiths	3.83	3.87	1.87
Station agents	9.06	9.07	4.38
Loaders	4.08	4.01	1.94
Locomotive engineers	16.28	16.35	7.90
Conductors	15.33	15.41	7.44
Brakemen	8.61	8.60	4.15
Firemen	8.33	8.40	4.06
Coal passers	4.95	4.91	2.37
Yard workers	6.27	6.24	3.01
Dispatchers	15.95	15.65	7.56
Telegraph operators	8.27	8.27	4.00
Flagmen, watchman, and switchmen	2.25	2.18	1.05
Storehouse employees	4.48	4.70	2.27
Express agents	11.85	12.28	5.93
Traveling inspectors	14.43	14.91	7.20
Messengers	6.47	6.82	3.29
Day and night watchmen	2.51	2.79	1.35
Chauffeurs	5.83	6.17	2.98
Loaders, cleaners, and messenger boys	2.38	2.66	1.29

TREND OF EMPLOYMENT

Employment in Selected Manufacturing Industries in September, 1927

EMPLOYMENT in manufacturing industries increased seven-tenths of 1 per cent in September, 1927, as compared with August, but owing largely to Labor Day shutdowns there was a falling off in pay-roll totals of 1 per cent.

The level of employment in September, 1927, was 4.6 per cent below the level in September, 1926, and pay-roll totals were 5.3 per cent lower.

The Bureau of Labor Statistics' weighed index of employment for September, 1927, is 88, as compared with 87.4 for August, 1927, 87.3 for July, 1927, and 92.2 for September, 1926; the weighted index of pay-roll totals for September, 1927, is 90.1, as compared with 91 for August, 1927, 89.1 for July, 1927, and 95.1 for September, 1926.

The report for September, 1927, is based on returns to the Bureau of Labor Statistics from 10,781 establishments in 54 of the principal manufacturing industries of the United States. These establishments in September had 3,030,762 employees whose combined earnings in one week were $79,212,903.

Comparison of Employment and Pay-roll Totals in August and September, 1927

THIRTY-FIVE of the 54 separate industries had more employees in September than in August, and despite the effect of Labor Day 27 industries reported increased pay-roll totals. The outstanding increases were largely in industries having a decided seasonal tendency, such as confectionery, rubber boots and shoes, and fertilizers. The machine-tools industry showed a large increase in both items, but these increases almost entirely represent merely a recovery from vacations in August; cigars and cigarettes also showed very large gains both in employment and in pay-roll totals. The increases in the two items in these 5 industries ranged from 10.7 per cent to 32.7 per cent. Other industries showing pronounced improvement in operation were hosiery and knit goods, shirts and collars, women's clothing, millinery and lace goods, hardware, stoves, furniture, paper boxes, glass, and carriages and wagons. Cotton goods and woolen and worsted goods each gained from 1 per cent to 1.5 per cent in each item.

Noticeable seasonal decreases in September were in ice cream, cast-iron pipe, structural ironwork, millwork, brick, cement, and agricultural implements. Cane-sugar refining fell off 3.7 per cent in employment; petroleum refining decreased 2.6 per cent; automobiles decreased 2.9 per cent; and automobile tires decreased 3.4 per cent. Employment in shipbuilding also decreased 3.4 per cent, and for the

first month since April, 1926, the level of employment in this industry fell below the level of employment in the same month of the previous year.

Eight of the 12 groups of industries gained in employment and 6 gained in pay-roll totals in September, the greatest improvement having been in the tobacco, chemical, and food groups.

The textile group gained 1.9 per cent in employment and 2.4 per cent in pay-roll totals; the iron and steel group lost one-half of 1 per cent of its employees and decreased 2.8 per cent as to pay-roll totals; and the vehicle group decreased 1.6 per cent and 4.9 per cent in the two items.

The New England, Middle Atlantic, South Atlantic, and South Central geographic divisions gained both in employment and in pay-roll totals in September, the New England and South Atlantic divisions leading with increases of from 2.3 per cent to 2.6 per cent in each item. The West North Central division gained a few employees, but pay-roll totals were smaller, and the East North Central, Mountain, and Pacific divisions all had fewer employees and smaller pay-roll totals.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN AUGUST AND SEPTEMBER, 1927

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		August, 1927	September, 1927		August, 1927	September, 1927	
Food and kindred products	**1,656**	**223,457**	**230,666**	(1)	**$5,720,482**	**$5,848,362**	(1)
Slaughtering and meat packing	189	85,134	85,011	−0.1	2,196,358	2,199,936	+0.2
Confectionery	308	33,641	40,197	+19.5	621,450	734,631	+18.1
Ice cream	206	11,251	10,329	−8.2	371,095	346,204	−6.7
Flour	331	15,635	16,026	+2.5	411,609	420,608	+2.2
Baking	607	66,498	68,227	+2.6	1,786,235	1,830,440	+2.5
Sugar refining, cane	15	11,298	10,876	−3.7	333,735	317,143	−5.0
Textiles and their products	**1,885**	**602,623**	**611,235**	(1)	**12,092,692**	**12,267,698**	(1)
Cotton goods	464	235,905	238,196	+1.0	3,865,680	3,924,613	+1.5
Hosiery and knit goods	249	79,723	83,042	+4.2	1,508,920	1,560,283	+3.4
Silk goods	197	55,370	55,577	+0.4	1,176,625	1,174,205	−0.2
Woolen and worsted goods	189	61,905	62,615	+1.1	1,395,941	1,413,823	+1.3
Carpets and rugs	31	23,765	23,733	−0.1	647,382	630,305	−2.6
Dyeing and finishing textiles	98	30,836	31,420	+1.9	743,997	779,591	+4.8
Clothing, men's	279	64,657	63,953	−1.1	1,649,321	1,599,434	−3.0
Shirts and collars	92	18,570	19,192	+3.3	308,883	315,169	+2.0
Clothing, women's	206	20,646	21,721	+5.2	529,494	583,192	+10.1
Millinery and lace goods	80	11,246	11,786	+4.8	266,449	287,083	+7.7
Iron and steel and their products	**1,806**	**648,701**	**646,550**	(1)	**18,895,222**	**18,438,573**	(1)
Iron and steel	209	262,726	260,847	−0.7	7,741,484	7,543,486	−2.6
Cast-iron pipe	42	13,618	13,034	−4.3	333,453	316,861	−5.0
Structural ironwork	159	24,096	23,838	−1.1	732,146	682,246	−6.8
Foundry and machine-shop products	973	237,196	232,066	−2.2	6,942,161	6,639,555	−4.4
Hardware	71	30,974	32,388	+4.6	764,516	787,542	+3.0
Machine tools	153	25,602	28,541	+11.5	785,601	871,854	+11.0
Steam fittings and steam and hot-water heating apparatus	114	40,353	41,026	+1.7	1,198,230	1,186,928	−0.9
Stoves	85	14,136	14,810	+4.8	397,631	410,101	+3.1
Lumber and its products	**1,156**	**219,669**	**221,556**	(1)	**4,884,987**	**4,941,728**	(1)
Lumber, sawmills	475	125,214	125,776	+0.4	2,538,861	2,582,362	+1.7
Lumber, millwork	257	32,237	31,627	−1.9	813,681	776,490	−4.6
Furniture	424	62,218	64,153	+3.1	1,532,445	1,582,876	+3.3

[1] The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN AUGUST AND SEPTEMBER, 1927—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		August, 1927	September, 1927		August, 1927	September, 1927	
Leather and its products	**360**	**128,564**	**128,928**	(1)	**$3,146,794**	**$3,071,486**	(1)
Leather	126	27,118	27,302	+0.7	687,575	675,435	−1.8
Boots and shoes	234	101,446	101,626	+0.2	2,459,219	2,396,051	−2.6
Paper and printing	**910**	**172,365**	**173,757**	(1)	**5,556,981**	**5,610,004**	(1)
Paper and pulp	222	57,494	57,527	+0.1	1,505,666	1,484,084	−1.4
Paper boxes	180	19,415	20,067	+3.4	434,911	449,742	+3.4
Printing, book and job	302	47,912	48,372	+1.0	1,693,107	1,708,318	+0.9
Printing, newspapers	206	47,544	47,791	+0.5	1,923,297	1,967,860	+2.3
Chemicals and allied products	**362**	**88,679**	**90,919**	(1)	**2,610,862**	**2,618,441**	(1)
Chemicals	127	31,130	31,778	+2.1	851,962	855,725	+0.4
Fertilizers	174	8,699	11,540	+32.7	176,497	233,028	+32.0
Petroleum refining	61	48,850	47,601	−2.6	1,582,403	1,529,688	−3.3
Stone, clay, and glass products	**638**	**109,776**	**110,068**	(1)	**2,900,550**	**2,861,278**	(1)
Cement	96	26,453	26,252	−0.8	787,243	775,022	−1.6
Brick, tile, and terra cotta	371	34,005	32,964	−3.1	879,182	838,175	−4.7
Pottery	64	12,851	13,110	+2.0	330,755	334,829	+1.2
Glass	107	36,467	37,742	+3.5	903,370	913,252	+1.1
Metal products, other than iron and steel	**228**	**51,595**	**51,087**	(1)	**1,357,082**	**1,318,052**	(1)
Stamped and enameled ware	72	19,648	19,732	+0.4	498,365	477,720	−4.1
Brass, bronze, and copper products	156	31,947	31,355	−1.9	858,717	840,332	−2.1
Tobacco products	**173**	**39,670**	**44,035**	(1)	**705,797**	**792,717**	(1)
Chewing and smoking tobacco and snuff	28	7,614	7,632	+0.2	118,869	116,107	−2.3
Cigars and cigarettes	145	32,056	36,403	+13.6	586,928	676,610	+15.3
Vehicles for land transportation	**1,194**	**479,826**	**469,836**	(1)	**15,088,755**	**14,313,587**	(1)
Automobiles	197	313,037	304,108	−2.9	10,077,874	9,509,127	−5.6
Carriages and wagons	66	1,714	1,801	+5.1	38,474	39,617	+3.0
Car building and repairing, electric-railroad	372	26,694	26,701	+(2)	815,877	808,483	−0.9
Car building and repairing, steam-railroad	559	138,381	137,226	−0.8	4,156,530	3,956,360	−4.8
Miscellaneous industries	**413**	**251,850**	**252,125**	(1)	**7,338,526**	**7,130,977**	(1)
Agricultural implements	85	22,833	22,139	−3.0	656,449	601,003	−8.4
Electrical machinery, apparatus, and supplies	178	121,124	123,052	+1.6	3,547,831	3,427,160	−3.4
Pianos and organs	42	7,650	7,808	+2.1	224,195	241,421	+7.7
Rubber boots and shoes	10	16,412	18,166	+10.7	409,692	458,862	+12.0
Automobile tires	58	56,429	54,502	−3.4	1,728,949	1,663,766	−3.8
Shipbuilding, steel	40	27,402	26,458	−3.4	771,410	738,765	−4.2
All industries	**10,781**	**3,016,775**	**3,030,762**	(1)	**80,298,730**	**79,212,903**	(1)

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION							
New England	1,405	408,964	418,483	+2.3	$10,019,468	$10,281,234	+2.6
Middle Atlantic	2,552	836,499	845,481	+1.1	23,582,517	23,698,278	+0.5
East North Central	2,894	990,780	978,445	−1.2	29,450,494	27,972,757	−5.0
West North Central	1,008	161,098	161,120	+(2)	4,078,521	4,011,410	−1.6
South Atlantic	1,141	279,618	286,653	+2.5	5,166,846	5,291,404	+2.4
East South Central	470	103,664	103,884	+0.2	1,993,724	1,993,956	+(2)
West South Central	438	86,498	87,687	+1.4	1,837,963	1,860,616	+1.2
Mountain	185	27,647	27,346	−1.1	754,498	740,215	−1.9
Pacific	688	122,007	121,663	−0.3	3,414,699	3,363,033	−1.5
All divisions	**10,781**	**3,016,775**	**3,030,762**	(1)	**80,298,730**	**79,212,903**	(1)

[1] The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

[2] Less than one-tenth of 1 per cent.

TABLE 2.—PER CENTS OF CHANGE, AUGUST TO SEPTEMBER, 1927—12 GROUPS OF INDUSTRIES AND TOTAL OF ALL INDUSTRIES

[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group, by the number of employees, or wages paid, in the industries]

Group	Per cent of change, August, 1927, to September, 1927		Group	Per cent of change, August, 1927, to September, 1927	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products	+3.4	+2.3	Metal products, other than iron and steel	−1.2	−2.6
Textiles and their products	+1.9	+2.4	Tobacco products	+11.8	+13.1
Iron and steel and their products	−0.5	−2.8	Vehicles for land transportation	−1.6	−4.9
Lumber and its products	+0.7	+1.3	Miscellaneous industries	−1.3	−3.5
Leather and its products	+0.3	−2.5			
Paper and printing	+1.0	+1.0	**All industries**	**+0.7**	**−1.0**
Chemicals and allied products	+4.2	+2.2			
Stone, clay, and glass products	+0.2	−1.3			

Comparison of Employment and Pay-Roll Totals in September, 1927, and September, 1926

EMPLOYMENT in manufacturing industries in September, 1927, was 4.6 per cent lower than in September, 1926, and pay-roll totals were 5.3 per cent smaller.

Two of the 12 groups of industries—textiles and tobacco—are shown to have had more employees at the end of this 12-month period than at the beginning, the increases having been 3.2 per cent in each instance. In the textile group as a whole the increase in pay-roll totals reached 6.9 per cent.

Seven of the 10 separate industries of the textile group showed decided improvement, the cotton-goods industry leading with an increase of 8 per cent in employment and 12.8 per cent in pay-roll totals, followed next by women's clothing with increases of 4.9 per cent and 13.2 per cent in the two items, respectively.

The iron and steel *group* fell off 9.3 per cent in employment in this period, the vehicle group 10.5 per cent, the stone, clay, and glass group 8.3 per cent, the lumber group 7.3 per cent, and the chemical group 6.5 per cent. In these groups some of the notable decreases in employment over this 12-month interval were 9.7 per cent in the iron and steel *industry*, 16.4 per cent in cast-iron pipe, 10 per cent in machine tools, 10 per cent in millwork, 12.3 per cent in fertilizers, 11.3 per cent in petroleum refining, 11 per cent in pottery, 10.9 per cent in automobiles, 26.7 per cent in carriages and wagons, and 10.6 per cent in steam-car building and repairing.

The South Atlantic division alone of the nine geographic divisions had more employees in September, 1927, than in September, 1926, the increase having been 1.2 per cent. The greatest declines in employment were in the Middle Atlantic, East North Central, and both East and West South Central divisions—about 6 per cent in each case.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS, SEPTEMBER, 1927, WITH SEPTEMBER, 1926

[The per cents of change for each of the 12 groups of industries and for the total of all industries are weighted in the same manner as are the per cents of change in Table 2]

Industry	Per cent of change, September, 1927, compared with September, 1926	
	Number on pay roll	Amount of pay roll
Food and kindred products	**−0.3**	**−0.4**
Slaughtering and meat packing	−2.0	−2.8
Confectionery	−1.3	+0.6
Ice cream	−5.4	−6.2
Flour	−1.7	−3.2
Baking	+2.1	+2.8
Sugar refining, cane	+4.2	+5.5
Textiles and their products	**+3.2**	**+6.9**
Cotton goods	+8.0	+12.8
Hosiery and knit goods	+1.6	+4.4
Silk goods	+0.2	+1.6
Woolen and worsted goods	−1.3	+1.9
Carpets and rugs	+2.8	+1.9
Dyeing and finishing textiles	+2.4	+5.3
Clothing, men's	−0.6	+1.3
Shirts and collars	−1.6	+4.3
Clothing, women's	+4.9	+13.2
Millinery and lace goods	+2.5	+4.7
Iron and steel and their products	**−9.3**	**−11.8**
Iron and steel	−9.7	−13.5
Cast-iron pipe	−16.4	−15.1
Structural ironwork	−8.8	−7.3
Foundry and machine-shop products	−9.4	−11.1
Hardware	−7.1	−10.1
Machine tools	−10.0	−8.8
Steam fittings and steam and hot-water heating apparatus	−4.3	−5.9
Stoves	−8.7	−10.3
Lumber and its products	**−7.3**	**−6.5**
Lumber, sawmills	−8.0	−7.2
Lumber, millwork	−10.0	−9.8
Furniture	−3.5	−2.1
Leather and its products	**−2.8**	**−2.8**
Leather	−3.4	−5.5
Boots and shoes	−2.5	−1.6
Paper and printing	**−0.6**	**+0.8**
Paper and pulp	−2.7	−4.8
Paper boxes	−2.7	+1.5
Printing, book and job	−0.9	+1.1
Printing, newspapers	+2.2	+4.9
Chemicals and allied products	**−6.5**	**−3.9**
Chemicals	−0.6	+3.3
Fertilizers	−12.3	−5.4
Petroleum refining	−11.3	−11.3
Stone, clay, and glass products	**−8.3**	**−8.0**
Cement	−4.3	−5.3
Brick, tile, and terra cotta	−8.9	−9.3
Pottery	−11.0	−8.9
Glass	−8.0	−7.5
Metal products, other than iron and steel	**−7.1**	**−8.1**
Stamped and enameled ware	−9.1	−7.8
Brass, bronze, and copper products	−6.3	−8.2
Tobacco products	**+3.2**	**+2.6**
Chewing and smoking tobacco and snuff	−2.4	−6.1
Cigars and cigarettes	+4.0	+3.8
Vehicles for land transportation	**−10.5**	**−10.6**
Automobiles	−10.9	−13.5
Carriages and wagons	−26.7	−21.5
Car building and repairing, electric-railroad	+3.4	+3.6
Car building and repairing, steam-railroad	−10.6	−8.5
Miscellaneous industries	**−5.2**	**−6.1**
Agricultural implements	−9.9	−8.0
Electrical machinery, apparatus, and supplies	−5.5	−5.9
Pianos and organs	−9.4	−9.7
Rubber boots and shoes	+7.2	+16.8
Automobile tires	−7.1	−10.2
Shipbuilding, steel	−4.2	−5.6
All industries	**−4.6**	**−5.3**

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION		
New England	−3.6	−1.6
Middle Atlantic	−6.1	−7.1
East North Central	−6.3	−7.7
West North Central	−3.0	−4.4
South Atlantic	+1.2	+0.3
East South Central	−6.2	−5.4
West South Central	−5.9	−2.8
Mountain	−5.0	−3.0
Pacific	−1.1	−0.7
All divisions	**−4.6**	**−5.3**

Per Capita Earnings

PER CAPITA earnings for the 54 industries combined in September, 1927, were 1.6 per cent lower than in August, 1927, and seven-tenths of 1 per cent lower than in September, 1926.

Per capita earnings in September, 1927, showed a gain over August, 1927, in 14 industries, and a gain over September, 1926, in 31 industries.

In the comparison between September, 1927, and September, 1926, the most pronounced increases were in the women's clothing, rubber boot and shoe, paper box, fertilizer, shirt and collar, and carriage and wagon industries, while the notable decreases were in the iron and steel, automobile, and automobile-tire industries.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS, SEPTEMBER, 1927, WITH AUGUST 1927, AND SEPTEMBER, 1926

Industry	Per cent of change, September, 1927, compared with—		Industry	Per cent of change, September, 1927, compared with—	
	August, 1927	September, 1926		August, 1927	September, 1926
Pianos and organs	+5.5	−0.2	Confectionery	−1.1	+1.8
Clothing, women's	+4.7	+8.1	Shirts and collars	−1.3	+5.9
Dyeing and finishing textiles	+2.8	+2.5	Sugar refining, cane	−1.3	+1.6
Millinery and lace goods	+2.8	+2.0	Hardware	−1.5	−3.1
Printing, newspapers	+1.8	+2.6	Paper and pulp	−1.5	−2.2
Ice cream	+1.6	−0.9	Brick, tile, and terra cotta	−1.6	−0.2
Cigars and cigarettes	+1.5	−0.1	Chemicals	−1.6	+4.0
Lumber, sawmills	+1.2	+1.0	Stoves	−1.6	−1.8
Rubber boots and shoes	+1.2	+9.0	Iron and steel	−1.9	−4.3
Cotton goods	+0.5	+4.6	Carriages and wagons	−2.0	+6.9
Slaughtering and meat packing	+0.3	−0.9	Clothing, men's	−2.0	+2.0
Furniture	+0.2	−0.5	Foundry and machine-shop products	−2.3	−1.9
Woolen and worsted goods	+0.1	+3.4	Glass	−2.3	+0.2
Paper boxes	+(1)	+4.5	Leather	−2.4	−2.5
Baking	−0.1	+0.6	Carpets and rugs	−2.5	−0.7
Printing, book and job	−0.1	+2.2	Chewing and smoking tobacco and snuff	−2.6	−4.0
Brass, bronze, and copper products	−0.3	−2.4	Steam fitting and steam and hot-water heating apparatus	−2.6	−1.9
Flour	−0.3	−1.2	Boots and shoes	−2.7	+0.9
Automobile tires	−0.4	−3.3	Lumber, millwork	−2.7	+0.4
Fertilizers	−0.5	+7.8	Automobiles	−2.9	−3.2
Machine tools	−0.5	+1.3	Car building and repairing, steam-railroad	−4.0	+2.4
Silk goods	−0.6	+1.3	Stamped and enameled ware	−4.5	+1.3
Cast-iron pipe	−0.7	+1.5	Electrical machinery, apparatus, and supplies	−4.9	−0.5
Hosiery and knit goods	−0.7	+2.9	Agricultural implements	−5.6	+1.8
Cement	−0.8	−0.9	Structural ironwork	−5.8	+1.8
Petroleum refining	−0.8	−0.3			
Pottery	−0.8	+2.4			
Shipbuilding, steel	−0.8	−1.5			
Car building and repairing, electric-railroad	−0.9	+0.1			

[1] Less than one-tenth of 1 per cent.

Wage Changes

TWENTY-TWO establishments in 16 industries reported increases in wage rates during the month ended September 15, 1927. These increases averaged 5.5 per cent and affected 887 employees, or 16 per cent of the total employees in the establishments concerned.

Twenty-one establishments in 7 industries reported decreases in wage rates during the same period. The decreases averaged 8.4 per cent and affected 3,181 employees, or 59 per cent of all employees in the establishments concerned.

TABLE 5.—WAGE ADJUSTMENTS OCCURRING BETWEEN AUGUST 15 AND SEPTEMBER 15, 1927

Industry	Establishments		Per cent of increase or decrease in wage rates		Employees affected			
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees		
						In establishments reporting increase or decrease in wage rates	In all establishments reporting	
			Increases					
Confectionery	308	4	5.0–10.0	8.9	53	23	(1)	
Baking	607	1	10.0	10.0	33	50	(1)	
Silk goods	197	1	9.0	9.0	31	6	(1)	
Iron and steel	209	1	3.0	3.0	200	40	(1)	
Structural ironwork	159	1	10.0	10.0	6	10	(1)	
Foundry and machine-shop products	973	1	1.0	1.0	10	12	(1)	
Lumber, sawmills	475	1	6.0	6.0	90	100	(1)	
Furniture	424	2	7.0–20.0	9.5	16	5	(1)	
Paper boxes	180	1	5.0	5.0	7	11	(1)	
Printing, book and job	302	2	7.0– 7.5	7.3	30	8	(1)	
Printing, newspapers	206	1	3.0	3.0	130	43	(1)	
Chemicals	127	2	5.0–10.0	8.5	110	6	(1)	
Fertilizers	174	1	10.0	10.0	6	27	(1)	
Glass	107	1	10.0	10.0	43	13	(1)	
Agricultural implements	85	1	2.5	2.5	100	30	(1)	
Electrical machinery, apparatus, and supplies	178	1	5.0	5.0	22	6	(1)	
			Decreases					
Iron and steel	209	1	2.5	2.5	40	7	(1)	
Foundry and machine-shop products	973	1	10.0	10.0	250	38	(1)	
Lumber, sawmills	475	9	1.0–10.0	8.3	2,180	67		2
Lumber, millwork	257	3	10.0–15.0	10.3	89	64	(1)	
Brick, tile, and terra cotta	371	5	7.0–11.0	9.3	477	89		1
Cigars and cigarettes	145	1	1.0	1.0	95	52	(1)	
Automobile tires	58	1	10.0	10.0	50	100	(1)	

[1] Less than one-half of 1 per cent.

Indexes of Employment and Pay-Roll Totals in Manufacturing Industries

INDEX numbers for September, 1927, and for July and August, 1927, and September, 1926, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in Table 6.

The general index of employment for September, 1927, is 88.0, this number being 0.7 per cent higher than the index for August, 1927, 0.8 per cent higher than the index for July, 1927, and 4.6 per cent lower than the index for September, 1926. The general index of pay-roll totals for September, 1927, is 90.1, this number being 1 per cent lower than the index for August, 1927, 1.1 per cent higher than the index for July, 1927, and 5.3 per cent lower than the index for September, 1926.

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—SEPTEMBER, 1926, AND JULY, AUGUST, AND SEPTEMBER, 1927

[Monthly average, 1923=100]

Industry	Employment				Pay-roll totals			
	1926	1927			1926	1927		
	September	July	August	September	September	July	August	September
General index	**92.2**	**87.3**	**87.4**	**88.0**	**95.1**	**89.1**	**91.0**	**90.1**
Food and kindred products	**92.4**	**89.9**	**89.1**	**92.1**	**96.3**	**95.5**	**93.7**	**95.9**
Slaughtering and meat packing	81.7	83.6	80.2	80.1	86.2	88.2	83.7	83.8
Confectionery	94.3	73.1	77.9	93.1	100.5	80.7	85.6	101.1
Ice Cream	101.2	107.6	104.2	95.7	111.3	116.6	111.9	104.4
Flour	92.5	87.6	88.6	90.9	95.6	88.5	90.5	92.5
Baking	102.5	103.0	102.1	104.7	107.1	108.7	107.4	110.1
Sugar refining, cane	91.3	100.0	98.7	95.1	90.2	101.0	100.2	95.2
Textiles and their products	**84.2**	**84.2**	**85.3**	**86.9**	**82.9**	**83.5**	**86.5**	**88.6**
Cotton goods	81.0	87.2	86.6	87.5	78.1	86.1	86.8	88.1
Hosiery and knit goods	95.0	91.0	92.6	96.5	103.7	98.9	104.7	108.3
Silk goods	97.9	96.7	97.7	98.1	102.9	101.3	104.7	104.5
Woolen and worsted goods	79.9	74.7	78.1	78.9	77.1	73.4	77.6	78.6
Carpets and rugs	91.6	95.0	94.3	94.2	89.1	88.3	93.2	90.8
Dyeing and finishing textiles	96.0	95.3	96.5	98.3	98.1	95.0	98.6	103.3
Clothing, men's	84.4	82.7	84.8	83.9	77.6	79.3	81.0	78.6
Shirts and collars	80.3	76.7	76.5	79.0	77.1	79.3	78.9	80.4
Clothing, women's	77.0	75.2	76.8	80.8	77.1	75.2	79.3	87.3
Millinery and lace goods	68.3	62.4	66.8	70.0	71.8	62.0	69.8	75.2
Iron and steel and their products	**92.6**	**85.1**	**84.4**	**84.0**	**96.0**	**84.6**	**87.1**	**84.7**
Iron and steel	98.2	90.4	89.3	88.7	102.0	86.3	90.5	88.2
Cast-iron pipe	109.4	98.1	95.6	91.5	108.9	100.6	97.4	92.5
Structural ironwork	105.3	95.5	97.1	96.0	108.6	101.3	108.0	100.7
Foundry and machine-shop products	87.2	81.2	80.8	79.0	88.3	81.4	82.2	78.5
Hardware	86.4	79.4	76.8	80.3	95.1	83.1	83.1	85.5
Machine tools	102.3	92.3	82.6	92.1	111.1	98.5	91.2	101.3
Steam fittings and steam and hot-water heating apparatus	97.2	91.1	91.5	93.0	102.8	92.7	97.6	96.7
Stoves	88.3	67.3	76.9	80.6	90.2	64.8	78.5	80.9
Lumber and its products	**91.8**	**83.7**	**84.5**	**85.1**	**100.2**	**89.4**	**92.5**	**93.7**
Lumber, sawmills	88.3	80.4	80.9	81.2	97.3	86.7	88.7	90.3
Lumber, millwork	97.4	89.3	89.4	87.7	103.4	94.1	97.8	93.3
Furniture	100.6	91.6	94.1	97.1	108.0	95.7	102.3	105.7
Leather and its products	**93.9**	**88.2**	**91.0**	**91.3**	**93.6**	**86.7**	**93.3**	**91.0**
Leather	92.3	88.2	88.6	89.2	94.0	87.8	90.4	88.8
Boots and shoes	94.4	88.2	91.8	92.0	93.4	86.3	94.4	91.9
Paper and printing	**104.0**	**101.8**	**102.4**	**103.4**	**110.8**	**109.0**	**110.6**	**111.7**
Paper and pulp	95.9	92.2	93.2	93.3	101.6	95.3	98.0	96.7
Paper boxes	102.4	95.0	96.3	99.6	109.2	103.8	107.2	110.8
Printing, book and job	104.9	101.6	102.9	104.0	113.7	111.6	113.9	114.9
Printing, newspapers	111.5	114.4	113.5	114.0	117.2	121.0	120.2	122.9
Chemicals and allied products	**100.3**	**89.4**	**90.0**	**93.8**	**102.5**	**95.1**	**96.4**	**98.5**
Chemicals	95.9	92.9	93.3	95.3	101.3	102.6	104.2	104.6
Fertilizers	108.6	64.5	71.7	95.2	117.0	76.5	83.8	110.7
Petroleum refining	102.7	95.7	93.5	91.1	99.8	92.2	91.5	88.5
Stone, clay, and glass products	**103.6**	**94.4**	**94.8**	**95.0**	**108.1**	**96.9**	**100.7**	**99.4**
Cement	96.6	93.3	93.2	92.4	103.0	97.5	99.1	97.5
Brick, tile, and terra cotta	107.4	103.5	100.9	97.8	110.9	106.9	105.6	100.6
Pottery	108.6	81.6	94.8	96.7	114.6	81.3	103.2	104.4
Glass	100.5	90.3	89.4	92.5	105.2	93.0	96.2	97.3
Metal products, other than iron and steel	**95.7**	**89.5**	**90.0**	**88.9**	**93.6**	**86.9**	**88.3**	**86.0**
Stamped and enameled ware	91.2	82.8	82.5	82.9	85.5	78.4	82.1	78.8
Brass, bronze, and copper products	97.8	92.5	93.4	91.6	96.6	90.0	90.6	88.7
Tobacco products	**85.1**	**84.6**	**78.5**	**87.8**	**89.1**	**86.7**	**80.8**	**91.4**
Chewing and smoking tobacco and snuff	93.5	87.3	91.1	91.3	99.1	96.4	95.3	93.2
Cigars and cigarettes	84.0	84.3	76.9	87.4	87.9	85.6	79.1	91.1

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—SEPTEMBER, 1926, AND JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Industry	Employment				Pay-roll totals			
	1926	1927			1926	1927		
	September	July	August	September	September	July	August	September
Vehicles for land transportation	**91.3**	**82.3**	**83.0**	**81.7**	**91.3**	**81.4**	**85.8**	**81.6**
Automobiles	108.0	95.3	99.1	96.2	109.3	91.9	100.1	94.5
Carriages and wagons	103.9	67.6	72.5	76.2	103.4	73.6	78.8	81.2
Car building and repairing, electric-railroad	87.8	90.3	90.8	90.8	88.3	90.4	92.3	91.5
Car building and repairing, steam-railroad	80.5	74.0	72.6	72.0	79.6	74.3	76.5	72.8
Miscellaneous industries	**96.4**	**94.2**	**92.6**	**91.4**	**99.3**	**99.5**	**96.6**	**93.2**
Agricultural implements	93.2	85.3	86.6	84.0	98.6	93.1	99.0	90.7
Electrical machinery, apparatus, and supplies	99.4	92.0	92.4	93.9	100.2	93.6	97.7	94.3
Pianos and organs	94.4	79.2	83.8	85.5	106.3	79.0	89.2	96.0
Rubber boots and shoes	83.4	80.6	80.7	89.4	87.6	90.2	91.3	102.3
Automobile tires	114.9	111.4	110.4	106.7	122.2	114.2	114.0	109.7
Shipbuilding, steel	90.1	93.3	89.3	86.3	92.7	100.1	91.4	87.5

Table 7 shows the general index of employment in manufacturing industries and the general index of pay-roll totals from January, 1923, to September, 1927.

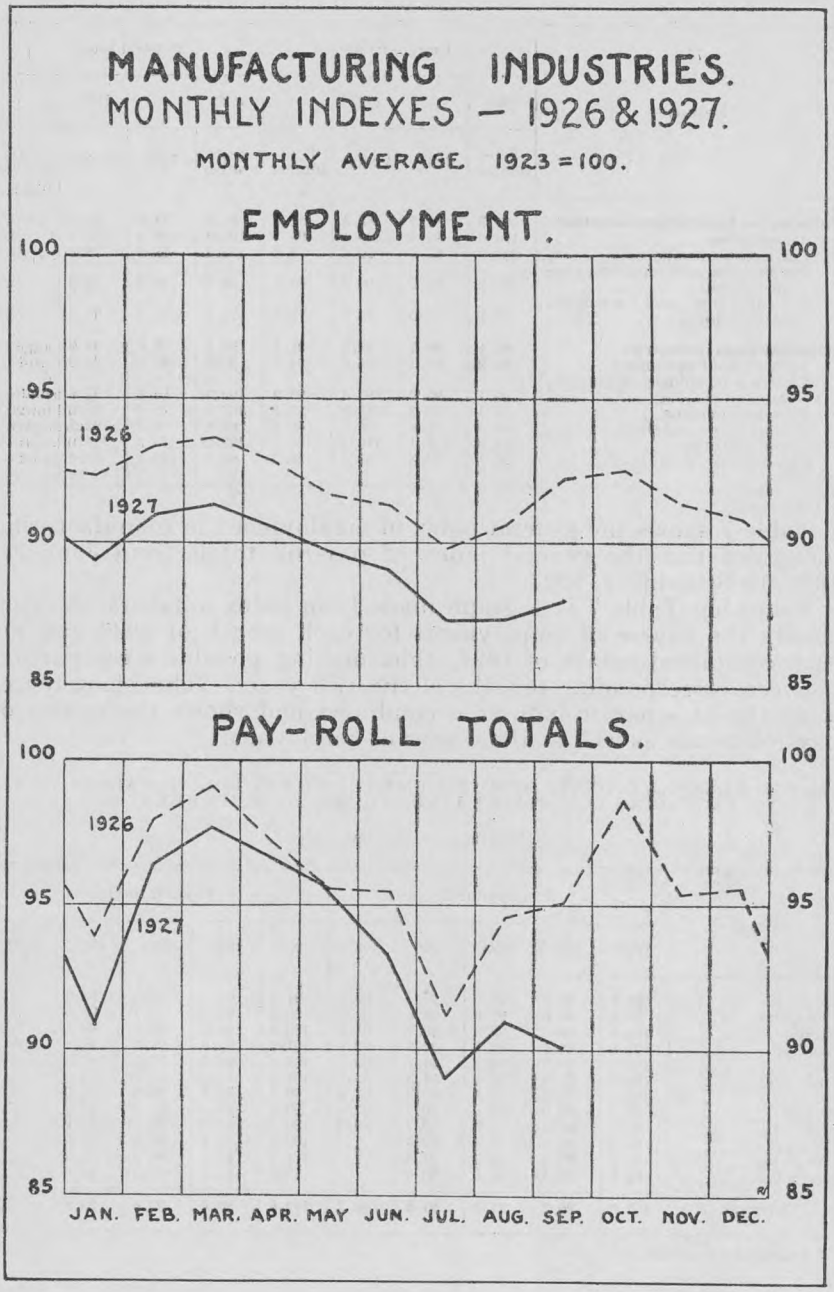
Following Table 7 is a graph made from index numbers, showing clearly the course of employment for each month of 1926 and for each completed month of 1927, thus making possible a comparison between corresponding months of the two years. This chart represents the 54 separate industries combined and shows the course of pay-roll totals as well as the course of employment.

TABLE 7.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY, 1923, TO SEPTEMBER, 1927

[Monthly average, 1923=100]

Month	Employment					Pay-roll totals				
	1923	1924	1925	1926	1927	1923	1924	1925	1926	1927
January	98.0	95.4	90.0	92.3	89.4	91.8	94.5	90.0	93.9	90.9
February	99.6	96.6	91.6	93.3	91.0	95.2	99.4	95.1	97.9	96.4
March	101.8	96.4	92.3	93.7	91.4	100.3	99.0	96.6	99.1	97.7
April	101.8	94.5	92.1	92.8	90.6	101.3	96.9	94.2	97.2	96.6
May	101.8	90.8	90.9	91.7	89.7	104.8	92.4	94.4	95.6	95.6
June	101.9	87.9	90.1	91.3	89.1	104.7	87.0	91.7	95.5	93.3
July	100.4	84.8	89.3	89.8	87.3	99.9	80.8	89.6	91.2	89.1
August	99.7	85.0	89.9	90.7	87.4	99.3	83.5	91.4	94.6	91.0
September	99.8	86.7	90.9	92.2	88.0	100.0	86.0	90.4	95.1	90.1
October	99.3	87.9	92.3	92.5	----	102.3	88.5	96.2	98.6	----
November	98.7	87.8	92.5	91.4	----	101.0	87.6	96.2	95.4	----
December	96.9	89.4	92.6	90.9	----	98.9	91.7	97.3	95.6	----
Average	**100.0**	**90.3**	**91.2**	**91.9**	[1]**89.3**	**100.0**	**90.6**	**93.6**	**95.8**	[1] **93.4**

[1] Average for 9 months.



Proportion of Time Worked and Force Employed in Manufacturing Industries in September, 1927

REPORTS in September, 1927, from 8,695 establishments show that 1 per cent of these establishments were idle, 79 per cent were operating on a full-time schedule, and 21 per cent on a part-time schedule; 39 per cent of the establishments had a full normal force of employees, and 60 per cent were operating with reduced forces. The establishments in operation were employing an average of 89 per cent of a full normal force of employees, and were operating an average of 97 per cent of full time.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN SEPTEMBER, 1927

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating with—		Average per cent of normal full force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
Food and kindred products	**1,362**	(1)	**79**	**21**	**98**	**52**	**48**	**92**
Slaughtering and meat packing	146	------	89	11	99	43	57	92
Confectionery	231	1	83	16	98	27	72	82
Ice cream	167	1	95	5	99	14	85	79
Flour	274	------	78	22	94	69	31	97
Baking	533	------	69	31	99	69	31	98
Sugar refining, cane	11	------	100	------	100	27	73	82
Textiles and their products	**1,368**	**1**	**84**	**15**	**98**	**45**	**55**	**92**
Cotton goods	407	(1)	90	10	100	57	42	97
Hosiery and knit goods	179	------	87	13	97	45	55	90
Silk goods	157	------	78	22	98	43	57	93
Woolen and worsted goods	161	------	84	16	98	33	67	86
Carpets and rugs	20	5	65	30	93	30	65	83
Dyeing and finishing textiles	84	------	62	38	96	29	71	90
Clothing, men's	168	2	90	8	99	45	53	93
Shirts and collars	50	------	84	16	98	44	56	92
Clothing, women's	95	2	85	13	98	38	60	87
Millinery and lace goods	47	------	77	23	95	23	77	81
Iron and steel and their products	**1,489**	**1**	**65**	**35**	**94**	**22**	**77**	**83**
Iron and steel	162	4	68	28	93	17	79	79
Cast-iron pipe	38	------	50	50	87	34	66	89
Structural ironwork	124	------	84	16	98	36	64	87
Foundry and machine-shop products	829	(1)	64	36	94	16	84	82
Hardware	48	------	44	56	90	15	85	84
Machine tools	124	------	74	26	97	15	85	82
Steam fittings and steam and hot-water heating apparatus	94	------	59	41	94	50	50	93
Stoves	70	------	54	46	91	53	47	94
Lumber and its products	**939**	**1**	**81**	**18**	**98**	**35**	**64**	**86**
Lumber, sawmills	402	1	89	9	99	37	62	86
Lumber, millwork	197	------	76	24	97	22	78	79
Furniture	340	(1)	74	26	96	41	58	91
Leather and its products	**310**	------	**89**	**11**	**98**	**45**	**55**	**93**
Leather	111	------	86	14	98	38	62	89
Boots and shoes	199	------	90	10	99	48	52	96
Paper and printing	**713**	(1)	**89**	**11**	**99**	**54**	**46**	**95**
Paper and pulp	165	1	84	16	97	49	50	95
Paper boxes	147	------	83	17	98	37	63	92
Printing, book and job	258	(1)	90	9	99	51	48	94
Printing, newspapers	143	------	100	------	100	80	20	100
Chemicals and allied products	**295**	**1**	**80**	**19**	**98**	**31**	**68**	**77**
Chemicals	95	------	84	16	98	40	60	91
Fertilizers	156	2	73	25	96	24	74	64
Petroleum refining	44	------	98	2	100	34	66	87

[1] Less than one-tenth of 1 per cent.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN SEPTEMBER, 1927—Continued

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating with—		Average per cent of normal full force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
Stone, clay, and glass products	**528**	**2**	**77**	**21**	**96**	**33**	**65**	**87**
Cement	78	1	94	5	100	28	71	91
Brick, tile, and terra cotta	312	3	73	25	95	32	65	85
Pottery	56	------	59	41	93	45	55	89
Glass	82	------	89	11	97	33	67	87
Metal products, other than iron and steel	**183**	**1**	**70**	**29**	**95**	**25**	**74**	**83**
Stamped and enameled ware	52	------	81	19	98	31	69	85
Brass, bronze, and copper products	131	1	66	33	94	23	76	82
Tobacco products	**137**	**1**	**72**	**27**	**96**	**45**	**54**	**92**
Chewing and smoking tobacco and snuff	23	------	91	9	99	35	65	86
Cigars and cigarettes	114	2	68	31	96	46	52	93
Vehicles for land transportation	**1,043**	(1)	**84**	**16**	**98**	**41**	**58**	**89**
Automobiles	140	1	75	24	96	34	64	79
Carriages and wagons	59	------	92	8	100	24	76	77
Car building and repairing, electric-railroad	333	------	89	11	99	63	37	95
Car building and repairing, steam-railroad	511	(1)	82	17	98	31	69	90
Miscellaneous industries	**328**	**1**	**72**	**27**	**96**	**31**	**68**	**83**
Agricultural implements	77	1	60	39	96	21	78	76
Electrical machinery, apparatus, and supplies	129	------	75	25	96	33	67	86
Pianos and organs	31	3	77	19	97	32	65	89
Rubber boots and shoes	10	------	70	30	98	90	10	100
Automobile tires	49	------	63	37	93	35	65	83
Shipbuilding, steel	32	------	97	3	100	28	72	73
All industries	**8,695**	**1**	**79**	**21**	**97**	**39**	**60**	**89**

[1] Less than one-tenth of 1 per cent.

Employment and Total Earnings of Railroad Employees, August, 1926, and July and August, 1927

THE number of employees on the 15th of August, 1927, and the total earnings of employees in the entire month of August, 1927, on Class I railroads of the United States, are shown in the table following, together with similar information for July, 1927, and August, 1926. The data are presented for all occupations combined, excluding executives and officials, and also for the six general groups of occupations; under each group data are shown separately for a few of the more important occupations.

Class I railroads are roads having operating revenues of $1,000,000 a year and over.

EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES—AUGUST, 1926, AND JULY AND AUGUST, 1927

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

Occupation	Number of employees at middle of month			Total earnings		
	August, 1926	July, 1927	August, 1927	August, 1926	July, 1927	August, 1927
Professional, clerical, and general	**287,427**	**282,554**	**280,926**	**$39,611,010**	**$39,761,287**	**$40,487,030**
Clerks	168,770	163,993	162,806	22,057,293	21,844,577	22,335,860
Stenographers and typists	25,513	25,354	25,248	3,147,417	3,181,461	3,243,792
Maintenance of way and structures	**469,246**	**487,429**	**470,563**	**44,110,838**	**44,132,344**	**45,287,945**
Laborers, extra gang and work train	85,978	95,014	89,033	7,129,613	7,353,750	7,444,254
Laborers, track and roadway section	238,728	249,940	240,289	18,094,827	18,133,629	18,652,275
Maintenance of equipment and stores	**514,351**	**489,934**	**482,397**	**68,230,082**	**63,711,201**	**65,683,390**
Carmen	112,081	104,730	103,762	16,821,974	15,458,541	16,159,743
Machinists	59,776	58,509	57,490	9,599,625	9,022,725	9,340,734
Skilled trades helpers	113,301	107,858	106,338	12,683,390	11,864,902	12,276,224
Laborers (shops, engine houses, power plants, and stores)	42,393	41,292	40,464	4,660,765	3,927,301	3,936,442
Common laborers (shops, engine houses, power plants, and stores)	60,511	56,541	55,258	5,002,032	4,512,247	4,679,392
Transportation, other than train, engine, and yard	**210,268**	**206,027**	**205,428**	**20,026,296**	**25,718,239**	**26,194,390**
Station agents	30,677	30,460	30,413	4,797,726	4,773,881	4,895,650
Telegraphers, telephoners, and towerman	25,574	24,614	24,407	3,911,299	3,805,589	3,814,018
Truckers (stations, warehouses, and platforms)	37,995	35,729	35,680	3,572,424	3,367,194	3,549,740
Crossing and bridge flagmen and gatemen	22,433	21,989	22,006	1,695,356	1,700,879	1,703,711
Transportation (yardmasters, switch tenders, and hostlers)	**24,399**	**23,516**	**23,086**	**4,620,364**	**4,589,849**	**4,580,906**
Transportation, train and engine	**330,540**	**316,810**	**316,740**	**66,628,585**	**63,590,903**	**67,201,663**
Road conductors	37,943	36,361	36,401	8,994,105	8,736,507	9,130,376
Road brakemen and flagmen	75,801	72,078	72,090	13,315,153	12,638,734	13,394,436
Yard brakemen and yard helpers	54,033	52,270	51,739	9,444,165	9,232,908	9,675,523
Road engineers and motormen	44,940	42,960	43,323	12,096,847	11,214,468	12,075,398
Road firemen and helpers	46,300	43,936	44,217	8,995,225	8,640,680	9,074,009
All occupations	**1,836,171**	**1,806,270**	**1,779,140**	**249,227,175**	**241,503,823**	**249,435,324**

State Reports on Employment

California

THE September, 1927, Labor Market Bulletin, issued by the Bureau of Labor Statistics of California, shows the following changes in volume of employment and pay roll from August, 1926, to August, 1927, in 776 establishments in that State:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 776 CALIFORNIA ESTABLISHMENTS, AUGUST, 1927, COMPARED WITH AUGUST, 1926

Industry	Number of establishments reporting	Employees		Weekly pay roll	
		Number in August, 1927	Per cent of change as compared with August, 1926	Amount in August, 1927	Per cent of change as compared with August, 1926
Stone, clay, and glass products:					
Miscellaneous stone and mineral products	13	1,740	+18.4	$58,994	+22.6
Lime, cement, plaster	8	2,017	−7.9	63,901	−11.5
Brick, tile, pottery	22	3,307	+17.1	83,653	+14.1
Glass	9	827	+4.4	28,165	+11.1
Total	52	7,891	+8.5	234,713	+7.2
Metals, machinery, and conveyances:					
Agricultural implements	6	1,433	+19.1	39,950	+21.6
Automobiles, including bodies and parts	14	1,832	−42.3	61,589	−42.4
Brass, bronze, and copper products	9	874	−19.3	25,936	−14.2
Engines, pumps, boilers, and tanks	7	643	+3.7	20,709	+5.3
Iron and steel forging, bolts, nuts, etc	6	2,587	+.7	82,418	−5.5
Structural and ornamental steel	20	4,634	+7.4	158,256	+11.3
Ship and boat building and naval repairs	7	4,930	−1.9	166,053	+.1
Tin cans	7	2,282	−17.3	63,502	−18.2
Other iron-foundry and machine-shop products	71	6,935	−10.4	213,593	−12.2
Other sheet-metal products	19	1,557	−3.0	43,393	−10.0
Cars, locomotives, and railway repair shops	17	4,373	−.5	130,821	+2.5
Total	183	32,080	+7.0	1,006,220	−7.0
Wood manufactures:					
Sawmills and logging	24	13,095	+1.3	374,723	−1.0
Planing mills, sash and door factories, etc	58	10,213	−1.2	284,773	−4.8
Other wood manufactures	41	5,260	+7.9	155,462	+10.6
Total	123	28,568	+1.5	814,953	−.4
Leather and rubber goods:					
Tanning	7	791	−3.3	22,514	+9.0
Finished leather products	5	482	−3.0	11,890	+4.0
Rubber products	7	2,541	−7.8	74,627	−8.6
Total	19	3,814	−6.3	109,031	−4.2
Chemicals, oils, paints, etc:					
Explosives	4	497	−1.4	14,873	−1.5
Mineral oil refining	7	10,446	−15.5	398,909	−13.8
Paints, dyes, and colors	7	651	−7.0	17,918	+1.0
Miscellaneous chemical products	14	1,881	−12.3	50,453	−14.1
Total	32	13,475	−14.3	482,153	−13.0
Printing and paper goods:					
Paper boxes, bags, cartons, etc	13	1,944	+2.6	52,276	+5.9
Printing	59	2,470	−3.7	87,465	−9.2
Publishing	17	3,491	+2.4	132,464	+2.3
Other paper products	10	1,150	−.8	29,496	+4.7
Total	99	9,055	+.3	301,701	−.5
Textiles:					
Knit goods	13	1,072	+6.3	22,609	+3.3
Other textile products	6	1,605	−.5	35,377	−.8
Total	19	2,677	+2.1	57,986	+.7
Clothing, millinery, and laundering:					
Men's clothing	26	2,784	−4.0	60,320	−1.2
Women's clothing	9	835	+6.0	17,405	+1.1
Millinery	7	735	+25.6	14,414	+25.6
Laundering, cleaning, and dyeing	19	3,188	+5.1	72,329	+4.6
Total	61	7,542	+3.2	164,468	+3.5

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 776 CALIFORNIA ESTABLISHMENTS, AUGUST, 1927, COMPARED WITH AUGUST, 1926—Continued

Industry	Number of establishments reporting	Employees		Weekly pay roll	
		Number in August, 1927	Per cent of change as compared with August, 1926	Amount in August, 1927	Per cent of change as compared with August, 1926
Foods, beverages, and tobacco:					
Canning, preserving of fruits and vegetables	34	30,509	−1.5	$535,824	−20.4
Canning, packing of fish	7	1,047	+4.1	17,326	−111.8
Confectionery and ice cream	26	1,746	−8.1	44,209	−6.4
Groceries not elsewhere specified	5	469	−17.6	12,279	−6.5
Bread and bakery products	20	3,389	+.9	93,406	+1.5
Sugar	5	3,352	+2.9	86,024	+.8
Slaughtering and meat products	15	2,648	+1.4	81,451	+4.8
Cigars and other tobacco products	4	967	−4.1	17,528	−13.3
Beverages	3	399	−1.5	10,973	−7.4
Dairy products	11	2,983	+12.2	95,766	+5.6
Flour and grist mills	12	797	−4.0	21,391	−13.2
Ice manufactures	15	1,193	−11.4	41,508	−7.7
Other food products	13	1,109	+11.0	21,919	−.7
Total	170	50,608	−.6	1,079,604	−10.8
Water, light, and power	5	7,725	−16.0	229,992	−19.2
Miscellaneous	13	2,122	−4.7	57,946	−1.0
Grand total, all industries	776	165,557	−3.2	4,538,772	−6.6

Illinois

THE following statistics showing the changes in employment and earnings in Illinois factories in July, 1927, as compared with June, 1927, are taken from the August, 1927, issue of the Labor Bulletin, published by the Illinois Department of Labor:

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FACTORIES FROM JUNE TO JULY, 1927

Industry	Per cent change from June to July, 1927			
	Employment			Total earnings
	Males	Females	Total employees	
Stone, clay, and glass products:				
Miscellaneous stone and mineral products	−6.0	−18.0	−6.4	−10.6
Lime, cement, and plaster	+2.5	−20.0	+2.1	−5.7
Brick, tile, and pottery	−.5	+19.1	−.3	+.1
Glass	−2.1	−2.2	−2.1	−11.9
Total	−2.0	−2.4	−2.0	−6.1
Metals, machinery, conveyances:				
Iron and steel	−1.7	−17.3	−1.8	−10.6
Sheet metal work and hardware	−8.8	−13.1	−8.9	−9.4
Tools and cutlery	−5.4	+8.7	−4.1	−12.8
Cooking, heating, ventilating apparatus	−1.3	−25.1	−2.7	+.6
Brass, copper, zinc, babbitt metal	−7.2	−23.8	−7.5	−7.3
Cars and locomotives	−9.0	+6.9	−8.8	−18.5
Automobiles and accessories	−2.5	−46.8	−6.0	−12.7
Machinery	−1.9	−6.3	−1.7	−4.9
Electrical apparatus	−9.5	−18.8	−5.6	−16.3
Agricultural implements	−5.2	−39.5	−5.6	−6.8
Instruments and appliances	+2.1	−27.6	−2.1	−9.4
Watches, watch cases, clocks, and jewelry	−34.0	−39.7	−36.5	−31.2
Total	−5.2	−23.6	−6.1	−11.3
Wood products:				
Sawmill and planing-mill products	+3.1	−13.9	+2.9	+1.8
Furniture and cabinet work	−4.4	−8.7	−4.8	−10.5
Pianos, organs, and other musical instruments	+.8	−10.3	−.7	−29.1
Miscellaneous wood products	−.3	+4.6	+.1	−9.6
Household furnishings	−2.3	−11.0	−5.1	−2.7
Total	−1.3	−7.8	−2.0	−10.8

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FACTORIES FROM JUNE TO JULY, 1927—Continued

Industry	Per cent change from June to July, 1927			
	Employment			Total earnings
	Males	Females	Total employees	
Furs and leather goods:				
Leather	+2.4	+6.4	+2.9	+4.7
Furs and fur goods	−18.8	0.	−11.5	−3.4
Boots and shoes	+7.7	+7.4	+3.2	−2.3
Miscellaneous leather goods	+1.5	−5.2	−2.8	−15.6
Total	+5.4	+4.3	+2.5	−2.3
Chemicals, oils, paints, etc:				
Drugs and chemicals	−5.3	−28.6	−15.1	−16.6
Paints, dyes, and colors	−7.3	−38.7	−7.3	−11.2
Mineral and vegetable oils	−5.1	−2.7	−5.0	−6.8
Miscellaneous chemical products	−4.8	−9.5	−5.5	−9.4
Total	−5.4	−19.9	−7.2	−9.9
Printing and paper goods:				
Paper boxes, bags, and tubes	−.5	+4.6	+.9	+1.5
Miscellaneous paper goods	+.8	+.9	+.8	−1.9
Job printing	+1.2	−.1	+.9	+1.7
Newspapers and periodicals	−9.3	+4.2	−5.1	−3.6
Edition bookbinding	−2.1	−6.6	−3.4	−5.1
Total	−1.4	+.7	−.6	−.2
Textiles:				
Cotton and woolen goods	+.7	−2.9	−.9	−3.4
Knit goods, cotton and woolen hosiery	−5.2	+2.8	−7.5	−17.5
Thread and twine	−10.8	−10.9	−9.7	−1.71
Total	−4.2	−2.9	−7.0	−14.3
Clothing, millinery, laundering:				
Men's clothing	+1.2	+.6	+2.1	+8.1
Men's shirts and furnishings	−5.6	−10.8	+5.1	+4.5
Overalls and work clothing	−1.8	−.8	−.7	−9.7
Men's hats and caps	0	−19.4	−8.5	−.9
Women's clothing	+10.9	−2.2	+.5	+4.7
Women's underwear	−1.1	−4.1	−2.9	−4.8
Women's hats	−8.0	−6.8	−7.1	−20.2
Laundering, cleaning, and dyeing	−7.2	+1.2	−2.2	−4.0
Total	+.2	−.5	+.8	+4.7
Food, beverages, and tobacco:				
Flour, feed, and other cereal products	+1.8	−6.6	+1.0	+.1
Fruit and vegetable canning and preserving	+14.2	+10.5	+13.4	+13.6
Miscellaneous groceries	+1.0	+4.2	+7.6	−9.9
Slaughtering and meat packing	+.2	−1.7	+.4	+1.0
Dairy products	−1.7	−6.1	−2.0	+2.7
Bread and other bakery products	−3.0	−9.4	−5.4	−6.0
Confectionery	−6.4	−13.2	−5.5	−5.6
Beverages	+2.2	−45.7	−2.5	−6.9
Cigars and other tobacco products	−1.1	+1.6	+.4	−9.5
Manufactured ice	+12.3		+12.3	+22.8
Ice cream	−2.9	+6.7	−2.2	+21.2
Total	0	−5.0	+.4	−.6
Total, all manufacturing industries	−3.3	−8.2	−3.6	−6.9
Trade—Wholesale and retail:				
Department stores	+6.5	−8.9	−2.8	−5.4
Wholesale dry goods	0	−1.9	−1.0	−1.0
Wholesale groceries	+2.0	+41.8	+15.3	+2.0
Mail-order houses	+5.3	+6.5	+3.4	+4.5
Total	+5.2	+3.7	+2.7	+2.9
Public utilities:				
Water, light, and power	+2.4	−1.7	−1.5	−2.2
Telephone	+3.4	+2.0	+2.5	−.8
Street railways	−1.3	−7.8	−.1	−1.5
Railway-car repair shops	−.2	+4.0	−.2	−7.2
Total	+1.6	+1.9	+.7	−2.3
Coal Mining	−13.7		−13.7	−16.2
Building and contracting:				
Building construction	+10.8		+10.8	+4.1
Road construction	+6.0		+6.0	+13.6
Miscellaneous contracting	−12.2		−12.2	−8.5
Total	+6.5		+6.5	+2.6
Grand total, all industries	−2.1	−3.7	−2.3	−5.3

Iowa

THE September, 1927, issue of the Iowa Employment Survey, published by the State bureau of labor, contains the following statistics showing the changes in number of employees in specified industries in Iowa in September, 1927, as compared with the previons month:

CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, AUGUST TO SEPTEMBER, 1927

Industry	Number of firms reporting	Number of employees on pay rolls, September, 1927	Per cent of change as compared with August, 1927
Food and kindred products:			
Meat packing	7	5,476	−7.2
Cereals	3	1,284	+16.2
Flour	3	120	+3.4
Bakery products	9	1,056	+9.2
Confectionery	4	131	+33.7
Poultry, produce, butter, etc	3	261	+14.0
Sugar, starch, sirup, glucose, etc	3	1,182	+7.6
Other food products, coffee, etc	8	583	+62.8
Total	40	10,093	+2.2
Textiles:			
Clothing, men's	10	1,060	+1.3
Millinery	2	144	−3.4
Clothing, women's, and woolen goods	3	581	+2.8
Hosiery, awnings, etc	5	652	−2.3
Buttons, pearl	7	466	+8.4
Total	27	2,903	+1.6
Iron and steel works:			
Foundry and machine shops	28	3,306	+.9
Brass, bronze products, plumbers' supplies	5	550	+3.0
Autos, tractors, and engines	6	2,070	−3.3
Furnaces	6	392	+.8
Pumps	5	375	−3.4
Agricultural implements	10	1,104	−9.8
Washing machines	9	2,436	−.2
Total	69	10,233	−1.6
Lumber products:			
Millwork, interiors, etc	17	2,844	−5.2
Furniture, desks, etc	8	1,203	−.7
Refrigerators	3	104	−7.2
Coffins, undertakers' supplies	5	154	+.7
Carriages, wagons, truck bodies	5	113	+.9
Total	38	4,418	−3.6
Leather products:			
Shoes	3	424	+0.5
Saddlery and harness	7	231	+17.3
Fur goods and tanning	4	65	−1.5
Gloves and mittens	3	237	−18.0
Total	17	957	−1.8
Paper products, printing and publishing:			
Paper products	5	342	+3.0
Printing and publishing	14	2,637	+5.0
Total	19	2,979	+4.8
Patent medicines, chemicals and compounds	6	222	+2.8
Stone and clay products:			
Cement, plaster gypsum	7	1,981	+2.7
Brick and tile	14	1,224	−4.0
Marble and granite, crushed rock and stone	3	83	−13.6
Total	24	3,288	−.4
Tobacco and cigars	4	286	+.4
Railway car shops	8	9,636	−1.4
Various industries:			
Auto tires and tubes	2	154	0.0
Brooms and brushes	5	139	−15.8
Laundries	6	367	+3.7
Mercantile	9	3,274	+6.4
Public service	4	3,807	−.6
Seeds	2	249	+16.9
Wholesale houses	23	1,107	−.5
Commission houses	11	373	−5.6
Other industries	9	1,238	−3.1
Total	71	10,708	+1.2
Grand total	323	55,723	+.1

Maryland

THE following employment statistics for specified industries in Maryland were furnished by the commissioner of labor and industries of that State:

CHANGES IN EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARYLAND, AUGUST TO SEPTEMBER, 1927

Industry	Establishments reporting for both months	Employment		Pay roll	
		Number of employees, September, 1927	Per cent of change as compared with August, 1927	Amount, September, 1927	Per cent of change as compared with August, 1927
Beverages and soft drinks	4	183	−14.7	$5,401	−15.6
Boots and shoes	8	1,376	+4.5	26,042	+4.7
Boxes, paper and fancy	7	405	+6.9	5,356	+6.9
Boxes, wooden	5	235	+4.4	3,752	+2.0
Brass and bronze	4	2,171	−12.9	55,163	+4.3
Brick, tile, etc	5	659	−10.6	18,324	−8.5
Brushes	5	612	+2.5	11,486	−1.7
Car building and repairing	4	356	−.02	11,860	−1.4
Chemicals	6	1,338	+13.1	35,123	+6.8
Clothing, men's outer garments	3	1,855	−16.0	39,663	−7.5
Clothing, women's outer garments	5	744	−.4	9,769	+14.8
Confectionery	6	1,024	+40.9	12,976	+18.6
Cotton goods	5	2,050	+1.5	32,155	+2.8
Fertilizer	4	752	+23.9	16,705	+18.8
Food preparation	4	128	−14.0	3,303	−6.7
Foundry	9	1,098	−1.0	27,428	−2.0
Furnishing goods, men's	5	971	+1.6	13,934	+10.3
Furniture	9	716	+6.0	19,481	+14.9
Glass manufacture	3	674	+38.1	14,946	+42.0
Ice cream	3	174	−5.7	5,693	−6.8
Leather goods	4	597	−.3	12,791	+2.3
Lithographing	3	519	−.8	15,352	−1.4
Lumber and planing	8	611	−1.1	16,057	−4.6
Mattresses and spring beds	4	177	+15.7	5,010	+4.0
Pianos	3	870	−10.5	23,618	−1.2
Plumbers' supplies	4	1,081	−3.9	25,207	−15.9
Printing	10	1,359	+2.3	46,911	+5.0
Rubber-tire manufacturing	1	2,727	−.1	167,677	+15.4
Shipbuilding	3	817	+13.1	20,616	+5.0
Shirts	4	580	+3.2	8,075	+9.7
Silk goods	3	404	−9.9	5,849	−13.3
Stamping and enameling ware	4	1,101	−5.7	22,291	−.4
Tinware	4	3,256	+10.8	75,979	+17.5
Tobacco	6	605	−4.0	8,369	+.8
Miscellaneous	19	4,965	+3.2	117,095	+1.9

Massachusetts

A PRESS release from the Department of Labor and Industries of Massachusetts shows the following changes in volume of employment in various industries in that State from July, 1927, to August, 1927:

NUMBER OF EMPLOYEES IN 1,018 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO JULY 15 AND AUGUST, 15, 1927

Industry	Number of establishments	Number of wage earners employed			
		July, 1927	August, 1927		
			Full time	Part time	Total
Bookbinding	15	902	693	223	916
Boot and shoe cut stock and findings	43	2,209	2,301	----------	2,301
Boots and shoes	80	23,694	22,215	2,539	24,754
Boxes, paper	27	2,003	1,090	999	2,089
Boxes, wooden packing	12	996	598	328	926
Bread and other bakery products	48	4,551	4,152	251	4,403
Carpets and rugs	5	3,425	3,228	194	3,422
Cars and general shop construction and repairs, steam railroads	4	2,814	----------	2,814	2,814
Clothing, men's	28	3,990	3,842	203	4,045
Clothing, women's	32	1,310	1,122	228	1,350
Confectionery	17	3,404	3,393	488	3,881
Copper, tin, sheet iron, etc	15	480	437	40	477
Cotton goods	52	40,218	35,152	4,146	39,298
Cutlery and tools	20	1,753	1,455	620	2,075
Dyeing and finishing textiles	9	6,459	6,552	35	6,587
Electrical machinery, apparatus, and supplies	14	8,982	8,247	608	8,855
Foundry products	26	2,702	1,788	906	2,694
Furniture	36	3,491	3,036	533	3,569
Gas and by-products	13	1,218	1,159	52	1,211
Hosiery and knit goods	12	3,432	3,118	1,301	4,419
Jewelry	33	2,203	1,650	735	2,385
Leather, tanned, curried, and finished	32	6,137	6,057	281	6,338
Machine-shop products	45	5,524	4,457	985	5,442
Machine and other tools	26	2,532	2,322	307	2,629
Motor vehicles, bodies, and parts	16	2,898	1,150	1,464	2,614
Musical instruments	13	1,061	734	269	1,003
Paper and wood pulp	26	6,075	4,870	1,346	6,216
Printing and publishing, book and job	49	3,105	2,746	383	3,129
Printing and publishing, newspaper	18	2,278	2,248	8	2,256
Rubber footwear	3	7,347	6,057	2,803	8,860
Rubber goods	7	2,725	2,538	95	2,633
Silk goods	10	4,055	3,582	475	4,057
Slaughtering and meat packing	5	1,634	267	1,268	1,535
Stationery goods	12	1,582	1,761	----------	1,761
Steam fittings and steam and hot-water heating apparatus	9	1,689	1,598	111	1,709
Stoves and stove linings	5	1,093	478	1,045	1,523
Textile machinery and parts	12	3,983	450	3,575	4,025
Tobacco	5	647	597	50	647
Woolen and worsted goods	55	18,159	12,700	5,238	17,938
All other industries	129	29,296	23,008	7,464	30,472
Total, all industries	1,018	222,056	182,848	44,410	227,258

New Jersey

THE following data showing the changes in volume of employment and pay roll from July to August, 1927, in 851 establishments in that State is furnished by the New Jersey Department of Labor:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 851 NEW JERSEY ESTABLISHMENTS, AUGUST, 1927, COMPARED WITH JULY, 1927

Industry	Number of plants reporting	Employees		Weekly pay roll	
		Number in August, 1927	Per cent of change as compared with July, 1927	Amount in August, 1927	Per cent of change as compared with July, 1927
Food and kindred products:					
Baking	16	1,377	−2.4	$45,639	+0.9
Canning and preserving	8	3,869	+7.9	82,625	+8.1
Confectionery and ice cream	7	346	+12.3	8,763	+11.9
Provisions	3	1,332	+1.2	38,520	−.7
Other food products	12	3,019	+67.3	87,413	+82.8
Total	46	9,943	+18.0	262,960	+21.6
Textiles and their products:					
Carpets and rugs	3	1,183	+.7	34,151	+6.8
Clothing	29	4,073	−1.2	80,572	−.4
Cotton goods	15	7,155	−3.2	133,766	+18.4
Dyeing and finishing textiles	38	11,241	+4.1	290,837	+6.7
Hats and caps	6	1,129	+4.0	36,585	+17.6
Hosiery and knit goods	17	3,761	+3.8	105,079	+8.0
Millinery and lace	9	862	−4.5	14,356	−12.4
Shirts and collars	9	2,016	+5.2	37,348	+2.7
Silk goods	57	8,512	+1.1	204,321	−2.2
Woolen and worsted goods	18	10,118	+1.5	290,103	+10.9
Miscellaneous textile products	10	1,838	−4.9	41,998	+.2
Total	211	51,888	+1.1	1,269,116	+6.5
Iron and steel and their products:					
Cast-iron pipe	6	3,423	−2.6	104,316	+10.0
Electrical machinery, apparatus, and supplies	28	19,654	−1.3	516,563	+.4
Foundry and machine-shop products	79	18,248	−.2	531,253	−.5
Hardware	7	889	−2.1	25,367	−8.0
Iron and steel forgings	8	838	+4.4	24,666	+3.8
Machine tools	22	3,236	+1.2	93,384	+2.5
Steam fittings and steam and hot-water heating apparatus	13	3,815	−2.5	113,422	+1.6
Structural-iron work	10	1,547	+.2	43,142	−7.5
Total	173	51,750	−.8	1,452,113	+.6
Lumber and its products:					
Furniture	5	1,237	+1.3	35,832	+4.7
Lumber and millwork	13	694	−1.8	20,068	−.7
Total	18	1,931	+.1	55,900	+2.7
Leather and its products:					
Boots and shoes	7	1,185	+3.4	30,818	+18.3
Leather	21	3,212	+1.2	97,994	+7.6
Leather products	4	512	−.2	11,256	+3.7
Total	32	4,909	+1.6	140,068	+9.4
Tobacco products	12	3,496	−.4	63,290	+2.0
Paper and printing:					
Paper and pulp	22	3,799	−1.2	103,573	+3.8
Paper boxes	18	1,523	−1.2	30,670	−.8
Printing, book and job	12	2,236	−6.0	70,956	−13.2
Printing, newspaper	10	2,038	−.5	81,472	−.7
Total	62	9,596	−2.2	296,671	−2.7

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 851 NEW JERSEY ESTABLISHMENTS, AUGUST, 1927, COMPARED WITH JULY, 1927—Continued

Industry	Number of plants reporting	Employees		Weekly pay roll	
		Number in August, 1927	Per cent of change as compared with July, 1927	Amount in August, 1927	Per cent of change as compared with July, 1927
Chemicals and allied products:					
Chemicals	42	8,793	−1.4	$251,442	+1.4
Explosives	6	2,362	+2.7	71,014	+18.1
Oils and greases	9	1,427	−3.2	42,360	−1.8
Paints and varnish	13	1,728	+.2	53,968	+2.8
Petroleum refining	8	14,621	−1.7	487,477	−1.5
Total	78	28,931	−1.2	906,261	+.8
Stone, clay, and glass products:					
Brick, tile, and terra cotta	26	4,285	−1.0	132,842	+7.0
Glass	7	2,980	−6.8	64,980	−2.6
Pottery	20	4,036	+4.3	129,793	+8.2
Other products	2	994	−.7	36,261	+.7
Total	55	12,295	−.8	363,876	+4.9
Metal products, other than iron and steel:					
Brass, bronze, and copper products	11	597	−.7	19,913	+1.2
Sheet metal and enamel ware	21	4,306	−1.0	118,883	+5.6
Smelting and refining	9	3,731	+0.1	121,330	+2.2
Wire and wire goods	14	7,376	+1.4	206,754	+19.3
Total	55	16,010	+.4	466,880	+10.0
Vehicles for land transportation:					
Automobiles and parts	13	6,202	+1.3	197,248	+1.2
Car building and repairing, steam railroad	9	4,784	+1.8	145,094	+3.9
Total	22	10,986	+1.5	342,342	+2.3
Miscellaneous industries:					
Cork and cork specialties	5	1,488	−4.6	39,691	−3.7
Jewelry and novelties	28	3,735	−.3	108,191	+2.8
Laundries	8	969	+.5	20,099	+3.3
Musical instruments	4	7,590	+3.1	216,572	+.2
Rubber tires and goods	29	9,206	----------	257,477	+3.8
Shipbuilding	6	6,257	−3.9	197,760	−1.9
Miscellaneous	7	2,868	−5.4	88,699	−3.2
Total	87	32,113	−.8	928,489	+.5
Grand total, all industries	851	233,848	−.4	6,537,966	+3.5

Pennsylvania

THE following statistics on changes in employment, in weekly man-hours, and in pay-roll totals, from August to September, 1927, were furnished by the Bureau of Statistics of the Department of Labor and Industry of Pennsylvania:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES, IN TOTAL WEEKLY MAN-HOURS, AND IN WEEKLY PAY ROLL IN 491 PENNSYLVANIA ESTABLISHMENTS BETWEEN AUGUST AND SEPTEMBER, 1927

Industry	Number of plants reporting	Wage earners, week ending Sept. 15, 1927		Total weekly man-hours, week ending Sept. 15, 1927		Total weekly pay roll: Per cent of change as compared with August, 1927
		Number	Per cent of change as compared with August, 1927	Number	Per cent of change as compared with August, 1927	
Metal manufactures:						
Automobiles, bodies, and parts	15	9,523	+6.5	432,109	+1.6	+2.4
Car construction and repair	12	7,830	+.7	342,217	−2.2	−5.0
Electrical machinery and apparatus	13	5,108	+5.2	240,857	+.9	+1.7
Engines, machines, and machine tools	29	8,039	−3.6	363,814	−9.8	−9.8
Foundries and machine shops	42	7,242	−1.7	305,558	−9.7	−8.2
Heating appliances and apparatus	7	1,913	+1.3	94,227	+.5	−2.1
Iron and steel blast furnaces	9	7,567	−3.0	349,987	−6.1	−5.5
Iron and steel forgings	6	1,399	−2.2	48,326	−19.2	−24.5
Steel works and rolling mills	22	30,719	+.8	1,344,733	−2.1	−3.3
Structural-iron works	11	1,809	+.4	80,824	−14.0	−13.4
Miscellaneous iron and steel products	17	10,550	−.9	471,252	−6.6	−7.1
Shipbuilding	3	3,367	−16.8	145,174	−7.0	−10.8
Hardware	6	1,124	−1.0	46,529	+1.7	+1.6
Nonferrous metals	7	785	+2.6	37,379	+3.8	+.8
Total	199	96,975	−.3	4,302,936	−4.2	−4.9
Textile products:						
Carpets and rugs	5	1,669	+3.3	81,472	+2.7	+8.9
Clothing	11	1,045	+1.0	45,578	+3.9	+3.2
Cotton goods	12	1,540	+2.5	72,006	−2.1	+.8
Silk goods	22	9,084	+3.6	389,194	+.9	0
Woolens and worsteds	8	2,533	+4.8	118,576	+2.1	+5.0
Knit goods and hosiery	10	2,342	+.9	108,894	+.4	−4.5
Dyeing and finishing textiles	5	687	−3.4	29,838	−2.6	−3.9
Total	73	18,900	+2.9	845,558	+1.0	+1.2
Foods and tobacco:						
Bakeries	18	1,619	+.2	83,293	+.5	−.2
Confectionery and ice cream	10	2,659	+2.6	143,283	+6.9	+4.4
Slaughtering and meat packing	9	1,259	+.1	64,143	+1.5	+3.9
Cigars and tobacco	6	295	+2.1	11,265	−3.5	−.9
Total	43	5,832	+1.4	301,984	+3.5	+2.7
Building materials:						
Brick, tile, and terra cotta products	14	2,543	+3.1	118,816	+3.4	+2.8
Cement	7	3,935	−2.1	228,303	−6.3	−6.3
Glass	12	4,339	+2.4	198,678	+.1	+1.7
Total	33	10,817	+.9	545,797	−2.0	−1.4
Construction and contracting:						
Buildings	16	1,386	−1.6	56,601	+2.3	−.5
Street and highway	4	2,437	+18.2	135,751	+28.6	+26.4
General	9	2,254	−3.3	113,033	−3.0	−2.5
Total	29	6,077	+4.8	305,385	+10.1	+8.4
Chemicals and allied products:						
Chemicals and drugs	10	813	+1.5	45,767	+1.2	+1.3
Paints and varnishes	6	975	−.3	42,127	−10.1	−9.6
Petroleum refining	3	4,256	−21.8	197,602	−9.1	−3.4
Total	19	6,044	−16.3	285,496	−7.8	−3.7

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES, IN TOTAL WEEKLY MANHOURS, AND IN WEEKLY PAY ROLL IN 491 PENNSYLVANIA ESTABLISHMENTS BETWEEN AUGUST AND SEPTEMBER, 1927—Continued

Industry	Number of plants reporting	Wage earners, week ending Sept. 15, 1926		Total weekly manhours, week ending, Sept. 15, 1927		Total week pay roll: Per cent of change as compared with August, 1927
		Number	Per cent of change as compared with August, 1927	Number	Per cent of change as compared with August, 1927	
Miscellaneous industries:						
Lumber and planing-mill products	18	1,189	+.3	53,208	−6.5	−7.1
Furniture	15	1,609	+4.1	78,962	+6.2	+5.2
Leather tanning	9	2,229	+1.8	110,147	+.1	+.5
Leather products	5	128	−4.5	6,238	+3.5	+3.4
Boots and shoes	10	1,850	−.9	85,450	−4.7	−5.0
Paper and pulp products	12	3,002	−.3	161,607	+.9	+1.9
Printing and publishing	23	1,418	+1.4	64,680	+3.0	+4.1
Rubber tires and goods	3	819	−2.3	40,604	−4.5	−5.8
Total	95	12,244	+.6	600,896	−.3	+.2
Grand total, all industries	491	156,889	−.3	7,188,052	−2.4	−2.9

Wisconsin

THE August, 1927, issue of the Wisconsin Labor Market, issued by the State industrial commission, contains the following data on volume of employment in Wisconsin industries in July, 1927:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN FROM JULY, 1926, AND JUNE, 1927, TO JULY, 1927

Industry	Per cent of change			
	June, 1927, to July, 1927		July, 1926, to July, 1927	
	Employment	Pay roll	Employment	Pay roll
Manual				
Agriculture	−7.8	+30.1	+10.7	−12.7
Logging	+28.3	−28.0	+13.0	+22.1
Mining	−8.3	−12.0	+3.0	−.4
Lead and zinc	−11.5	−14.0	+6.4	+2.8
Iron	−.5	−7.5	−3.7	−6.5
Stone crushing and quarrying	−5.3	−16.5	+12.0	+4.1
Manufacturing	+3.2	−4.1	−5.0	−5.2
Stone and allied industries	−.1	+6.6	+10.5	+15.7
Brick, tile, and cement blocks	+4.9	−1.1	+4.5	+2.6
Stone finishing	−3.2	+10.3	+14.8	+22.4
Metal	+.6	−7.1	−10.1	−11.1
Pig iron and rolling-mill products	+37.6	+26.3	−11.8	−21.6
Structural-iron work	+10.3	+24.3	+4.6	+11.0
Foundries and machine shops	−1.4	−13.2	−1.6	−2.9
Railroad repair shops	+.4	−2.7	−1.7	+2.1
Stoves	−.6	−12.4	−14.4	−22.8
Aluminum and enamel ware	−3.8	−26.8	+.9	−12.1
Machinery	+3.8	−9.9	−19.1	−17.1
Automobiles	−2.8	−16.6	−24.2	−30.0
Other metal products	+.1	+14.0	−4.4	−2.8
Wood	−.2	−5.0	−2.6	−2.3
Sawmills and planning mills	−.3	−.7	−6.4	−7.9
Box factories	+13.2	+7.9	−1.7	−4.8
Panel and veneer mills	+2.7	−7.0	−5.0	−2.3
Furniture	−3.4	−16.5	−.3	−.5
Sash, door, and interior finish	−1.0	−2.0	+3.0	+6.6
Other wood products	0	−7.6	−6.9	−12.3

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN FROM JULY, 1926, AND JUNE, 1927, TO JULY, 1927—Continued

Industry	Per cent of change			
	June, 1927, to July, 1927		July, 1926, to July, 1927	
	Employment	Pay roll	Employment	Pay roll
Manual—Continued				
Manufacturing—Continued.				
Rubber	−1.6	−17.3	+15.6	+8.7
Leather	+.9	−3.6	−16.8	−21.4
Tanning	+2.3	−4.0	−40.2	−43.2
Boots and shoes	+.4	−4.8	−13.2	−14.8
Other leather products	+.2	−1.0	+18.5	+12.7
Paper	+1.3	−4.2	−.1	+2.8
Paper and pulp mills	+1.7	−5.9	−1.4	+1.7
Paper boxes	−.3	0	+.4	−1.6
Other paper products	+.8	+1.8	+6.1	+12.9
Textiles	−.4	−5.9	+1.7	+3.3
Hosiery and other knit goods	−1.8	−10.5	+.1	0
Clothing	+.7	+2.1	+3.5	+7.0
Other textile products	+2.3	−10.8	+3.4	+4.6
Foods	+32.7	+14.9	−9.8	−8.2
Meat packing	−17.1	−16.4	+14.6	+21.6
Baking and confectionery	−3.1	−.9	−1.2	−1.4
Milk products	−3.9	−3.9	+4.4	+.1
Canning and preserving	+582.7	+502.4	−26.3	−36.7
Flour mills	−.7	−.7	+2.5	−7.6
Tobacco manufacturing	+.7	+.7	+3.7	+49.1
Other food products	−5.0	−5.0	−6.4	−1.8
Light and power	−.8	−.5	+13.1	+15.7
Printing and publishing	+1.2	−.6	+8.1	+10.7
Laundering, cleaning, and dyeing	+1.6	+.6	+3.7	+3.4
Chemical (including soap, glue, and explosives)	+.1	+1.6	−2.7	+1.4
Construction:				
Building	+12.2	+10.4	+6.1	+9.9
Highway	+2.9	+2.3	−9.5	−8.1
Railroad	+1.2	+.8	−14.5	−8.0
Marine, dredging, sewer-digging	−4.3	−8.4	+73.7	+98.5
Communication:				
Steam railways	+7.5	+8.0	+1.6	+8.1
Electric railways	−2.2	+.5	+6.6	+6.8
Express, telephone, and telegraph	+7.6	+4.2	+5.9	+3.3
Wholesale trade	−1.9	−11.3	−7.8	−8.8
Hotels and restaurants	+.4	----------	−1.1	----------
Nonmanual				
Manufacturing, mines, and quarries	+.4	−.1	+4.0	+5.8
Construction	−.6	+6.4	+5.5	+24.2
Communication	−.4	−.4	−1.3	+3.7
Wholesale trade	+.4	−.5	−2.6	−11.2
Retail trade—Sales force only	−.4	+28.0	+15.2	+40.4
Miscellaneous professional services	−.5	+2.3	+12.0	+10.1
Hotels and restaurants	−1.0	----------	+14.7	----------

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices [1] received by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food September 15, 1926, and August 15 and September 15, 1927, as well as the percentage changes in the year and in the month. For example, the retail price per pound of pork chops was 42.5 cents on September 15, 1926; 37.7 cents on August 15, 1927; and 40.7 cents on September 15, 1927. These figures show a decrease of 4 per cent in the year and an increase of 8 per cent in the month.

The cost of the various articles of food combined shows a decrease of 2.9 per cent September 15, 1927, as compared with September 15, 1926, and an increase of 1.0 per cent September 15, 1927, as compared with August 15, 1927.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE SEPTEMBER 15, 1927, COMPARED WITH AUGUST 15, 1927, AND SEPTEMBER 15, 1926

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (−) Sept. 15, 1927 compared with—	
		Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927
		Cents	*Cents*	*Cents*		
Sirloin steak	Pound	41.9	43.7	43.8	+5	+0.2
Round steak	do	36.4	38.1	38.1	+5	0
Rib roast	do	30.6	31.7	31.7	+4	0
Chuck roast	do	22.7	23.9	24.0	+6	+0.4
Plate beef	do	14.5	15.3	15.5	+7	+1
Pork chops	do	42.5	37.7	40.7	−4	+8
Bacon	do	51.9	46.5	46.5	−10	0
Ham	do	60.4	54.3	53.8	−11	−1
Lamb, leg of	do	39.1	39.2	38.7	−1	−1
Hens	do	37.8	35.4	35.4	−6	0
Salmon, canned, red	do	37.2	32.9	33.9	−9	+3
Milk, fresh	Quart	14.0	14.1	14.1	+1	0
Milk, evaporated	15–16 oz. can	11.5	11.6	11.6	+1	0
Butter	Pound	52.5	51.4	53.4	+2	+4
Oleomargarine (all butter substitutes)	do	30.2	28.0	27.8	−8	−1
Cheese	do	36.1	37.0	37.7	+4	+2
Lard	do	22.3	18.9	19.2	−14	+2
Vegetable lard substitute	do	25.9	25.0	25.1	−3	+0.4
Eggs, strictly fresh	Dozen	51.5	42.0	48.7	−5	+16
Bread	Pound	9.4	9.3	9.3	−1	0

[1] In addition to monthly retail prices of food and coal, the bureau publishes the prices of gas and electricity from each of 51 cities for the dates for which these data are secured.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE SEPTEMBER 15, 1927, COMPARED WITH AUGUST 15, 1927, AND SEPTEMBER 15, 1926—Continued

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (−) Sept. 15, 1927 compared with—	
		Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927
		Cents	*Cents*	*Cents*		
Flour	Pound	5.8	5.6	5.5	−5	−2
Corn meal	do	5.1	5.2	5.3	+4	+2
Rolled oats	do	9.1	9.0	9.0	−1	0
Corn flakes	8-oz. pkg	10.9	9.7	9.7	−11	0
Wheat cereal	28-oz. pkg	25.4	25.5	25.5	+0.4	0
Macaroni	Pound	20.2	20.1	20.1	−0.4	0
Rice	do	11.7	10.7	10.6	−9	−1
Beans, navy	do	9.1	9.5	9.6	+5	+1
Potatoes	do	3.9	3.4	3.2	−18	−6
Onions	do	5.3	6.4	5.5	+4	−14
Cabbage	do	4.2	4.4	4.1	−2	−7
Beans, baked	No. 2 can	11.7	11.5	11.4	−3	−1
Corn, canned	do	16.4	15.6	15.6	−5	0
Peas, canned	do	17.4	16.7	16.7	−4	0
Tomatoes, canned	do	11.8	12.0	11.9	+1	−1
Sugar	Pound	7.0	7.3	7.2	+3	−1
Tea	do	77.0	77.6	77.2	+0.3	−1
Coffee	do	51.0	47.4	47.3	−7	−0.2
Prunes	do	17.1	15.5	15.0	−12	−3
Raisins	do	14.8	14.3	14.3	−3	0
Bananas	Dozen	34.4	33.7	33.5	−3	−1
Oranges	do	50.7	53.8	55.2	+9	+3
Weighted food index					−2.9	+1.0

Table 2 shows for the United States average retail prices of specified food articles on September 15, 1913, and on September 15 of each year from 1921 to 1927, together with percentage changes in September of each of these specified years, compared with September, 1913. For example, the retail price per pound of ham was 28.1 cents in September, 1913; 51.4 cents in September, 1921; 48.4 cents in September, 1922; 46.6 cents in September, 1923; 46.9 cents in September, 1924; 54.9 cents in September, 1925; 60.4 cents in September, 1926; and 53.8 cents in September, 1927.

As compared with September, 1913, these figures show increases of 83 per cent in September, 1921; 72 per cent in September, 1922; 66 per cent in September, 1923; 67 per cent in September, 1924; 95 per cent in September, 1925; 115 per cent in September, 1926; and 91 per cent in September, 1927.

The cost of the various articles of food combined showed an increase of 50 per cent in September, 1927, as compared with September, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE SEPTEMBER 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH SEPTEMBER 15, 1913

[Percentage of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on Sept. 15—								Per cent of increase Sept. 15 of each specified year compared with Sept. 15, 1913						
		1913	1921	1922	1923	1924	1925	1926	1927	1921	1922	1923	1924	1925	1926	1927
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.							
Sirloin steak	Pound	26.3	38.9	38.7	41.1	40.2	41.6	41.9	43.8	48	47	56	53	58	59	67
Round steak	do	23.2	34.4	33.6	35.5	34.3	35.6	36.4	38.1	48	45	53	48	53	57	64
Rib roast	do	20.1	28.6	28.1	29.4	29.0	30.1	30.6	31.7	42	40	46	44	50	52	58
Chuck roast	do	16.4	20.5	20.0	21.0	20.9	22.0	22.7	24.0	25	22	28	27	34	38	46
Plate beef	do	12.3	13.3	12.6	13.1	13.2	13.9	14.5	15.5	8	2	7	7	13	18	26
Pork chops	do	22.8	37.6	36.4	36.7	35.8	40.4	42.5	40.7	65	60	61	57	77	86	79
Bacon	do	28.1	43.0	40.4	39.4	39.3	49.4	51.9	46.5	53	44	40	40	76	85	65
Ham	do	28.1	51.4	48.4	46.6	46.9	54.9	60.4	53.8	83	72	66	67	95	115	91
Lamb, leg of	do	18.7	32.8	35.9	37.5	36.8	38.5	39.1	38.7	75	92	101	97	106	109	107
Hens	do	21.5	38.2	34.9	35.0	35.3	36.6	37.8	35.4	78	62	63	64	70	76	65
Salmon, canned, red	do	----	35.4	31.7	31.3	31.3	34.1	37.2	33.9	----	----	----	----	----	----	----
Milk, fresh	Quart	8.9	14.1	13.1	14.0	13.9	14.2	14.0	14.1	58	47	57	56	60	57	58
Milk, evaporated	[1]	----	13.5	10.8	12.2	11.1	11.5	11.5	11.6	----	----	----	----	----	----	----
Butter	Pound	37.7	50.6	46.7	55.0	48.5	55.8	52.5	53.4	34	24	46	29	48	39	42
Oleomargarine (all butter substitutes)	do	----	28.9	27.3	28.5	29.8	30.6	30.2	27.8	----	----	----	----	----	----	----
Cheese	do	22.1	32.6	32.1	37.0	34.6	37.0	36.1	37.7	48	45	67	57	67	63	71
Lard	do	16.1	17.9	17.2	17.9	20.0	24.0	22.3	19.2	11	7	11	24	49	39	19
Vegetable lard substitute	do	----	21.3	23.0	23.0	25.5	25.9	25.9	25.1	----	----	----	----	----	----	----
Eggs, strictly fresh	Dozen	37.7	50.4	44.8	48.6	51.9	51.9	51.5	48.7	34	19	29	38	38	37	29
Bread	Pound	5.6	9.6	8.7	8.7	8.8	9.4	9.4	9.3	71	55	55	57	68	68	66
Flour	do	3.3	5.6	4.9	4.5	5.1	6.1	5.8	5.5	70	48	36	55	85	76	67
Corn meal	do	3.1	4.4	3.9	4.2	4.8	5.4	5.1	5.3	42	26	35	55	74	65	71
Rolled oats	do	----	9.9	8.7	8.8	8.9	9.2	9.1	9.0	----	----	----	----	----	----	----
Corn flakes	[2]	----	12.0	9.8	9.7	10.1	11.0	10.9	9.7	----	----	----	----	----	----	----
Wheat cereal	[3]	----	29.7	25.6	24.4	24.2	24.8	25.4	25.5	----	----	----	----	----	----	----
Macaroni	Pound	----	20.6	19.9	19.7	19.6	20.4	20.2	20.1	----	----	----	----	----	----	----
Rice	do	8.7	9.0	9.6	9.5	10.3	11.3	11.7	10.6	3	10	9	18	30	34	22
Beans, navy	do	----	8.1	10.8	10.9	9.9	10.2	9.1	9.6	----	----	----	----	----	----	----
Potatoes	do	1.9	4.0	2.3	3.4	2.6	3.6	3.9	3.2	111	21	79	37	89	105	68
Onions	do	----	5.7	5.1	6.2	5.8	6.4	5.3	5.5	----	----	----	----	----	----	----
Cabbage	do	----	5.4	3.7	4.6	4.2	4.7	4.2	4.1	----	----	----	----	----	----	----
Beans, baked	[4]	----	14.1	13.4	12.9	12.6	12.4	11.7	11.4	----	----	----	----	----	----	----
Corn, canned	[4]	----	16.1	15.3	15.5	16.0	18.1	16.4	15.6	----	----	----	----	----	----	----
Peas, canned	[4]	----	17.7	17.5	17.6	18.2	18.4	17.4	16.7	----	----	----	----	----	----	----
Tomatoes, canned	[4]	----	12.5	13.1	12.9	13.4	13.5	11.8	11.9	----	----	----	----	----	----	----
Sugar, granulated	Pound	5.7	7.3	7.9	9.6	8.6	7.0	7.0	7.2	28	39	68	51	23	23	26
Tea	do	54.5	69.2	68.2	69.7	71.0	75.8	77.0	77.2	27	25	28	30	39	41	42
Coffee	do	29.8	35.6	36.2	37.6	44.3	51.0	51.0	47.3	19	21	26	49	71	71	59
Prunes	do	----	18.9	20.9	18.8	17.4	17.3	17.1	15.0	----	----	----	----	----	----	----
Raisins	do	----	29.1	22.1	17.1	15.2	14.4	14.8	14.3	----	----	----	----	----	----	----
Bananas	Dozen	----	37.7	34.0	37.8	35.2	34.6	34.4	33.5	----	----	----	----	----	----	----
Oranges	do	----	53.1	64.8	51.0	48.8	61.0	50.7	55.2	----	----	----	----	----	----	----
Weighted food index [5]		----	----	----	----	----	----	----	----	49.4	36.3	45.7	43.3	55.2	54.7	50.3

[1] 15–16-ounce can.
[2] 8-ounce package.
[3] 28-ounce package.
[4] No. 2 can.
[5] Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2 ,weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chop, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese rice, coffee, and tea.

Table 3 shows the changes in the retail prices of each of 22 articles of food for which prices have been secured since 1913, as well as the changes in the amounts of these articles that could be purchased for $1 in specified years, 1913 to 1926, and in August and September, 1927.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1 IN EACH YEAR, 1913 TO 1926, AND IN AUGUST AND SEPTEMBER, 1927

Year	Sirloin steak		Round steak		Rib roast		Chuck roast		Plate beef		Pork chops	
	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1	Average retail price	Amt. for $1
	Cents per lb.	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	25.4	3.9	22.3	4.5	19.8	5.1	16.0	6.3	12.1	8.3	21.0	4.8
1920	43.7	2.3	39.5	2.5	33.2	3.0	26.2	3.8	18.3	5.5	42.3	2.4
1921	38.8	2.6	34.4	2.9	29.1	3.4	21.2	4.7	14.3	7.0	34.9	2.9
1922	37.4	2.7	32.3	3.1	27.6	3.6	19.7	5.1	12.8	7.8	33.0	3.0
1923	39.1	2.6	33.5	3.0	28.4	3.5	20.2	5.0	12.9	7.8	30.4	3.3
1924	39.6	2.5	33.8	3.0	28.8	3.5	20.8	4.8	13.2	7.6	30.8	3.2
1925	40.6	2.5	34.7	2.9	29.6	3.4	21.6	4.6	13.8	7.2	36.6	2.7
1926	41.3	2.4	35.6	2.8	30.3	3.3	22.5	4.4	14.6	6.8	39.5	2.5
1927:												
August	43.7	2.3	38.1	2.6	31.7	3.2	23.9	4.2	15.3	6.5	37.7	2.7
September	43.8	2.3	38.1	2.6	31.7	3.2	24.0	4.2	15.5	6.5	40.7	2.5

Year	Bacon		Ham		Hens		Milk		Butter		Cheese	
	Cents per lb.	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per qt.*	*Qts.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	27.0	3.7	26.9	3.7	21.3	4.7	8.9	11.2	38.3	2.6	22.1	4.5
1920	52.3	1.9	55.5	1.8	44.7	2.2	16.7	6.0	70.1	1.4	41.6	2.4
1921	42.7	2.3	48.8	2.0	39.7	2.5	14.6	6.8	51.7	1.9	34.0	2.9
1922	39.8	2.5	48.8	2.0	36.0	2.8	13.1	7.6	47.9	2.1	32.9	3.0
1923	39.1	2.6	45.5	2.2	35.0	2.9	13.8	7.2	55.4	1.8	36.9	2.7
1924	37.7	2.7	45.3	2.2	35.3	2.8	13.8	7.2	51.7	1.9	35.3	2.8
1925	46.7	2.1	52.6	1.9	36.6	2.7	14.0	7.1	54.8	1.8	36.7	2.7
1926	50.3	2.0	57.4	1.7	38.8	2.6	14.0	7.1	53.1	1.9	36.6	2.7
1927:												
August	46.5	2.2	54.3	1.8	35.4	2.8	14.1	7.1	51.4	1.9	37.0	2.7
September	46.5	2.2	53.8	1.9	35.4	2.8	14.1	7.1	53.4	1.9	37.7	2.7

Year	Lard		Eggs		Bread		Flour		Corn meal		Rice	
	Cents per lb.	*Lbs.*	*Cents per doz.*	*Dozs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	15.8	6.3	34.5	2.9	5.6	17.9	3.3	30.3	3.0	33.3	8.7	11.5
1920	29.5	3.4	68.1	1.5	11.5	8.7	8.1	12.3	6.5	15.4	17.4	5.7
1921	18.0	5.6	50.9	2.0	9.9	10.1	5.8	17.2	4.5	22.2	9.5	10.5
1922	17.0	5.9	44.4	2.3	8.7	11.5	5.1	19.6	3.9	25.6	9.5	10.5
1923	17.7	5.6	46.5	2.2	8.7	11.5	4.7	21.3	4.1	24.4	9.5	10.5
1924	19.0	5.3	47.8	2.1	8.8	11.4	4.9	20.4	4.7	21.3	10.1	9.9
1925	23.3	4.3	52.1	1.9	9.4	10.6	6.1	16.4	5.4	18.5	11.1	9.0
1926	21.9	4.6	48.5	2.1	9.4	10.6	6.0	16.7	5.1	19.6	11.6	8.6
1927:												
August	18.9	5.3	42.0	2.4	9.3	10.8	5.6	17.9	5.2	19.2	10.7	9.4
September	19.2	5.2	48.7	2.1	9.3	10.8	5.5	18.2	5.3	18.9	10.6	9.4

Year	Potatoes		Sugar		Tea		Coffee	
	Cents per lb.	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*	*Cents per lb.*	*Lbs.*
1913	1.7	58.8	5.5	18.2	54.4	1.8	29.8	3.4
1920	6.3	15.9	19.4	5.2	73.3	1.4	47.0	2.1
1921	3.1	32.3	8.0	12.5	69.7	1.4	36.3	2.8
1922	2.8	35.7	7.3	13.7	68.1	1.5	36.1	2.8
1923	2.9	34.5	10.1	9.9	69.5	1.4	37.7	2.7
1924	2.7	37.0	9.2	10.9	71.5	1.4	43.3	2.3
1925	3.6	27.8	7.2	13.9	75.5	1.3	51.5	1.9
1926	4.9	20.4	6.9	14.5	76.7	1.3	51.0	2.0
1927:								
August	3.4	29.4	7.3	13.7	77.6	1.3	47.4	2.1
September	3.2	31.3	7.2	13.9	77.2	1.3	47.3	2.1

Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years, for 1913 and 1920 to 1926,[2] and by months for 1926, and for January through September, 1927. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of sirloin steak for the year 1926 was 162.6, which means that the average money price for the year 1926 was 62.6 per cent higher than the average money price for the year 1913. As compared with the relative price, 159.8 in 1925, the figures for 1926 show an increase of nearly three points, but an increase of 1.75 per cent in the year.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles has varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100 are 152.4 for August, 1927, and 154.0 for September, 1927.

[2] For index numbers of each month, January, 1913, to December, 1925, see Bulletin No. 396, pp. 44 to 61, and Bulletin No. 418, pp. 38 to 51.

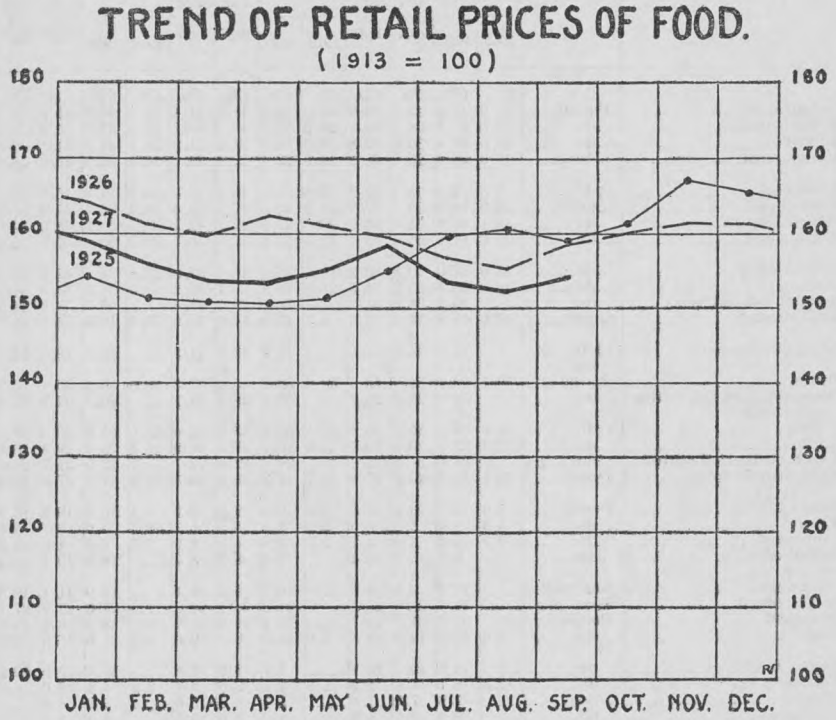
TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD, BY YEARS, 1913 AND 1920 TO 1926, AND BY MONTHS FOR 1926, AND JANUARY THROUGH SEPTEMBER, 1927

[Average for year 1913=100.0]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Hens	Milk	Butter	Cheese
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	209.9	187.6	183.0	188.2
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	186.4	164.0	135.0	153.9
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	169.0	147.2	125.1	148.9
1923	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	164.3	155.1	144.7	167.0
1924	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	165.7	155.1	135.0	159.7
1925	159.8	155.6	149.5	135.0	114.1	174.3	173.0	195.5	171.8	157.3	143.1	166.1
1926	162.6	159.6	153.0	140.6	120.7	188.1	186.3	213.4	182.2	157.3	138.6	165.6
1926: January	160.6	157.0	151.5	138.1	119.8	173.8	178.5	198.1	181.2	159.6	144.6	170.1
February	159.8	156.1	148.0	138.1	120.7	172.9	181.1	199.3	182.6	159.6	142.3	169.7
March	160.2	156.5	151.0	138.1	120.7	177.1	179.3	200.7	185.0	157.3	139.9	168.3
April	161.8	157.8	152.5	139.4	121.5	182.4	179.6	202.6	190.1	156.2	132.9	165.2
May	163.4	160.5	153.5	140.6	120.7	191.9	182.6	207.8	192.5	156.2	130.5	162.9
June	165.4	162.3	154.5	141.9	120.7	200.0	190.7	221.9	188.7	155.1	131.3	161.5
July	165.4	162.8	155.1	141.9	119.8	198.6	193.7	226.4	184.0	155.1	130.8	161.1
August	164.6	162.3	153.5	140.6	118.2	192.9	192.6	225.7	177.9	156.2	132.1	161.5
September	165.0	163.2	154.5	141.9	119.8	202.4	192.2	224.5	177.5	157.3	137.1	163.3
October	163.4	161.4	154.5	142.5	120.7	202.9	191.5	222.3	176.5	157.3	141.8	166.1
November	161.0	159.2	152.5	141.9	121.5	187.1	188.9	217.1	174.2	158.4	145.4	167.0
December	160.2	158.3	152.5	141.9	123.1	177.1	183.7	212.3	174.6	159.6	154.8	169.2
1927: January	160.6	158.3	153.0	141.9	124.0	174.3	181.1	211.2	180.8	158.4	152.5	170.1
February	161.0	158.7	153.5	141.9	123.1	171.0	179.6	210.8	180.8	158.4	153.5	170.1
March	161.8	159.6	153.5	142.5	123.1	174.3	179.3	210.0	181.7	158.4	154.6	168.8
April	164.6	163.2	156.1	145.6	125.6	175.7	178.2	210.8	182.6	157.3	152.5	167.9
May	166.5	165.5	157.6	146.9	125.6	173.3	176.3	209.3	180.3	156.2	139.4	167.4
June	166.9	165.9	157.1	146.9	125.6	165.2	174.4	206.3	170.4	156.2	135.2	167.4
July	171.7	170.0	160.1	149.4	126.4	166.2	172.6	203.0	167.1	157.3	134.2	167.0
August	172.0	170.9	160.1	149.4	126.4	179.5	172.2	201.9	166.2	158.4	134.2	167.4
September	172.4	170.9	160.1	150.0	128.1	193.8	172.2	200.0	166.2	158.4	139.4	170.6

Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Potatoes	Sugar	Tea	Coffee	All articles[1]
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	186.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4
1921	113.9	147.5	176.8	175.8	150.0	109.2	182.4	145.5	128.1	121.8	153.3
1922	107.6	128.7	155.4	154.5	130.0	109.2	164.7	132.7	125.2	121.1	141.6
1923	112.0	134.8	155.4	142.4	136.7	109.2	170.6	183.6	127.8	126.5	146.2
1924	120.3	138.6	157.1	148.5	156.7	116.1	158.8	167.3	131.4	145.3	145.9
1925	147.5	151.0	167.9	184.8	180.0	127.6	211.8	130.9	138.8	172.8	157.4
1926	138.6	140.6	167.9	181.8	170.0	133.3	288.2	125.5	141.0	171.1	160.6
1926: January	141.1	156.2	167.9	187.9	173.3	133.3	341.2	121.8	139.9	172.1	164.3
February	140.5	127.0	167.9	190.9	173.3	133.3	335.3	121.8	139.9	172.1	161.5
March	138.6	111.6	167.9	187.9	173.3	134.5	329.4	121.8	139.9	172.1	159.9
April	136.1	111.9	167.9	184.8	170.0	134.5	394.1	120.0	140.3	171.5	162.4
May	136.1	112.8	167.9	184.8	170.0	134.5	352.9	121.8	140.4	171.1	161.1
June	143.0	118.0	167.9	184.8	170.0	134.5	294.1	125.5	141.4	171.1	159.7
July	144.9	122.0	167.9	181.8	170.0	134.5	241.2	125.5	141.5	171.5	157.0
August	143.7	130.1	167.9	181.8	170.0	133.3	211.8	127.3	141.7	171.1	155.7
September	141.1	149.3	167.9	175.8	170.0	134.5	229.4	127.3	141.5	171.1	158.5
October	138.6	168.7	167.9	172.7	170.0	133.3	223.5	129.1	142.1	170.8	160.0
November	133.5	191.3	167.9	172.7	170.0	129.9	235.3	129.1	141.7	170.5	161.6
December	129.1	189.0	167.9	169.7	170.0	128.7	235.3	132.7	141.4	170.1	161.8
1927: January	126.6	162.0	167.9	169.7	170.0	126.4	235.3	136.4	142.5	168.5	159.3
February	124.1	128.1	167.9	169.7	170.0	124.1	223.5	136.4	142.3	167.4	156.0
March	122.8	102.6	167.9	166.7	170.0	124.1	217.6	134.5	142.6	165.4	153.8
April	120.9	98.3	167.9	166.7	170.0	123.0	217.6	132.7	142.6	163.8	153.6
May	120.3	97.4	167.9	166.7	170.0	121.8	264.7	132.7	142.3	161.7	155.4
June	119.0	97.1	166.1	166.7	173.3	123.0	352.9	132.7	142.1	160.7	158.5
July	119.0	107.0	166.1	166.7	173.3	123.0	247.1	134.5	142.5	159.7	153.4
August	119.6	121.7	166.1	169.7	173.3	123.0	200.0	132.7	142.6	159.1	152.4
September	121.5	141.2	166.1	166.7	176.7	121.8	188.2	130.9	141.9	158.7	154.0

[1] 22 articles in 1913–1920; 43 articles in 1921–1927.



Retail Prices of Food in

AVERAGE retail food prices are shown in Table 5 for 40 cities 15, 1927. For 11 other cities prices are shown for the same not scheduled by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

[Exact comparisons of prices in different cities can not be made for some articles,

Article	Unit	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
		1913	1926			1913	1926			1913	1926		
		C	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24. 0	41. 0	43. 1	43. 9	25. 0	40. 2	41. 5	41. 4	28. 1	40. 7	42. 2	42. 1
Round steak	do	21. 5	37. 1	38. 9	40. 1	23. 0	36. 7	38. 5	38. 1	22. 5	35. 5	36. 3	36. 6
Rib roast	do	19. 6	33. 4	33. 0	32. 8	19. 0	30. 2	31. 6	31. 2	20. 6	28. 3	31. 1	29. 8
Chuck roast	do	16. 0	24. 3	25. 0	25. 2	16. 0	22. 1	23. 4	23. 1	16. 3	22. 9	23. 8	24. 0
Plate beef	do	9. 5	13. 5	15. 2	15. 2	12. 6	15. 1	15. 6	15. 6	10. 5	13. 9	15. 9	14. 2
Pork chops	do	24. 0	38. 6	35. 1	37. 9	22. 0	43. 3	37. 7	39. 4	21. 4	39. 4	34. 9	36. 9
Bacon, sliced	do	33. 1	49. 6	44. 5	44. 0	26. 5	47. 0	42. 7	42. 1	35. 0	50. 6	48. 0	47. 0
Ham, sliced	do	31. 0	61. 8	56. 4	55. 7	32. 0	61. 8	57. 7	56. 5	32. 5	60. 0	55. 0	55. 3
Lamb, leg of	do	20. 0	37. 9	40. 3	40. 2	19. 3	40. 2	38. 9	37. 8	23. 3	38. 5	42. 2	41. 6
Hens	do	20. 5	36. 7	33. 2	34. 5	21. 8	39. 4	37. 1	37. 2	18. 0	36. 8	33. 2	31. 6
Salmon, canned, red	do	-----	35. 1	34. 0	34. 2	-----	36. 0	29. 7	31. 4	-----	40. 7	33. 9	34. 2
Milk, fresh	Quart	10. 0	18. 8	18. 0	18. 0	8. 7	13. 0	14. 0	14. 0	10. 3	18. 0	16. 3	16. 7
Milk, evaporated	15–16 oz. can.	-----	13. 8	13. 5	13. 5	-----	11. 2	11. 3	11. 3	-----	12. 6	12. 6	12. 8
Butter	Pound	39. 7	56. 1	52. 9	53. 6	38. 6	56. 3	55. 6	57. 3	38. 8	56. 4	55. 1	56. 2
Oleomargarine (all butter substitutes).	do	-----	32. 0	26. 2	26. 2	-----	30. 1	28. 1	27. 1	-----	36. 4	32. 2	32. 5
Cheese	do	25. 0	34. 9	36. 2	36. 8	22. 5	33. 6	35. 5	36. 4	23. 0	35. 6	36. 5	36. 7
Lard	do	15. 8	22. 6	19. 0	19. 7	15. 3	20. 9	17. 7	17. 9	15. 3	23. 0	19. 3	18. 9
Vegetable lard substitute	do	-----	24. 0	21. 9	22. 3	-----	24. 6	22. 4	22. 7	-----	22. 0	21. 7	21. 8
Eggs, strictly fresh	Dozen	33. 7	46. 3	40. 6	47. 4	34. 7	47. 3	36. 4	43. 3	32. 6	47. 1	37. 5	42. 9
Bread	Pound	5. 9	10. 7	10. 8	10. 8	5. 5	9. 8	9. 9	9. 9	5. 4	10. 4	10. 3	10. 3
Flour	do	3. 4	6. 6	6. 5	6. 5	3. 2	5. 5	5. 3	5. 2	3. 5	6. 9	6. 7	6. 7
Corn meal	do	2. 7	4. 3	3. 9	4. 1	2. 5	3. 8	4. 1	4. 2	2. 5	4. 2	4. 3	4. 2
Rolled oats	do	-----	9. 7	9. 3	9. 4	-----	8. 4	8. 2	8. 2	-----	10. 0	10. 1	10. 1
Corn flakes	8-oz. pkg.	-----	11. 5	9. 8	9. 8	-----	10. 1	9. 1	9. 1	-----	11. 9	11. 1	10. 6
Wheat cereal	28-oz. pkg.	-----	26. 4	26. 8	26. 4	-----	24. 6	24. 4	24. 2	-----	27. 0	27. 7	27. 7
Macaroni	Pound	-----	21. 7	21. 7	21. 7	-----	19. 1	19. 0	18. 9	-----	18. 9	18. 8	18. 8
Rice	do	8. 6	12. 1	10. 3	9. 8	9. 0	10. 7	9. 8	9. 6	8. 2	11. 6	10. 8	10. 3
Beans, navy	do	-----	10. 5	10. 2	10. 7	-----	7. 7	8. 2	8. 5	-----	10. 5	10. 2	10. 2
Potatoes	do	2. 3	5. 1	4. 4	4. 2	1. 8	4. 1	3. 0	3. 1	2. 2	5. 4	5. 0	4. 8
Onions	do	-----	7. 8	7. 7	7. 8	-----	5. 1	5. 7	5. 0	-----	8. 0	8. 6	7. 5
Cabbage	do	-----	4. 9	5. 4	4. 9	-----	4. 0	3. 9	3. 5	-----	5. 4	5. 9	5. 4
Beans, baked	No. 2 can	-----	11. 8	11. 1	11. 3	-----	10. 5	10. 4	10. 4	-----	11. 9	11. 7	11. 3
Corn, canned	do	-----	18. 0	18. 2	18. 2	-----	14. 9	14. 4	14. 4	-----	18. 9	16. 1	16. 0
Peas, canned	do	-----	19. 9	20. 1	20. 1	-----	15. 3	14. 5	14. 8	-----	21. 8	19. 9	20. 2
Tomatoes, canned	do	-----	11. 1	11. 5	11. 5	-----	10. 0	10. 6	10. 3	-----	11. 1	11. 1	10. 5
Sugar, granulated	Pound	5. 9	7. 4	7. 6	7. 7	5. 2	6. 5	6. 4	6. 4	5. 8	7. 5	7. 8	7. 8
Tea	do	60. 0	105. 9	103. 8	102. 6	56. 0	74. 8	73. 1	73. 6	61. 3	96. 0	96. 3	96. 0
Coffee	do	32. 0	51. 6	49. 6	48. 5	24. 8	48. 0	42. 7	42. 7	28. 8	54. 3	51. 6	51. 4
Prunes	do	-----	19. 7	17. 8	16. 4	-----	14. 2	13. 2	13. 0	-----	20. 6	19. 2	18. 5
Raisins	do	-----	18. 2	16. 3	16. 3	-----	13. 4	13. 2	12. 9	-----	16. 1	14. 7	14. 7
Bananas	Dozen	-----	25. 5	27. 5	29. 0	-----	25. 0	26. 4	23. 6	-----	37. 1	37. 3	37. 8
Oranges	do	-----	51. 7	51. 6	53. 1	-----	51. 7	55. 6	56. 1	-----	51. 6	50. 9	53. 4

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

51 Cities on Specified Dates

for September 15, 1913 and 1926, and for August 15 and September dates with the exception of September 15, 1913, as these cities were

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

particularly meats and vegetables, owing to differences in trade practices]

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept 15, 1927
1913	1926						1913	1926						1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 35. 8	[1] 67. 0	[1] 68. 8	[1] 71. 6	49. 3	53. 9	54. 1	23. 3	41. 7	44. 1	44. 0	31. 7	32. 9	32. 8	21. 4	33. 0	33. 4	33. 3
35. 6	52. 9	55. 7	56. 5	42. 7	46. 4	47. 0	19. 8	35. 7	37. 5	37. 4	27. 5	30. 6	29. 1	20. 4	30. 5	30. 7	31. 0
25. 6	39. 2	39. 9	40. 9	36. 9	40. 3	40. 2	17. 0	30. 4	32. 0	31. 9	27. 2	29. 0	28. 7	20. 4	27. 0	27. 0	26. 7
18. 7	28. 2	29. 2	30. 5	27. 5	30. 4	30. 9	15. 5	23. 4	24. 8	25. 2	19. 0	21. 5	20. 2	15. 0	18. 8	20. 9	20. 8
------	18. 4	19. 9	20. 5	11. 9	12. 7	12. 5	11. 5	14. 1	14. 2	15. 0	12. 1	12. 9	13. 4	12. 1	14. 0	15. 0	14. 9
25. 0	45. 5	40. 9	44. 8	46. 7	41. 4	43. 6	23. 0	45. 6	42. 3	45. 9	41. 9	35. 5	38. 0	25. 0	37. 5	34. 7	34. 7
25. 8	49. 9	44. 6	45. 5	55. 1	51. 0	50. 3	23. 3	48. 1	42. 2	42. 0	59. 3	55. 4	54. 6	27. 0	46. 5	39. 3	40. 4
32. 0	66. 3	59. 1	58. 8	66. 0	57. 5	57. 7	28. 0	59. 3	53. 0	52. 4	61. 7	60. 0	58. 8	28. 8	55. 9	50. 3	49. 7
20. 5	41. 1	40. 3	39. 8	41. 0	40. 8	39. 6	15. 3	34. 6	34. 8	33. 9	38. 2	38. 9	37. 0	22. 5	42. 1	40. 0	39. 8
26. 2	41. 6	38. 8	39. 0	40. 1	39. 6	39. 8	21. 0	37. 9	36. 5	36. 1	34. 6	32. 9	33. 2	21. 9	40. 9	35. 1	35. 7
------	35. 9	32. 7	33. 2	34. 6	31. 5	31. 9	-----	36. 3	31. 3	31. 8	32. 5	31. 9	31. 4	-----	36. 7	30. 2	31. 8
8. 9	14. 9	14. 8	15. 3	16. 0	16. 0	16. 0	8. 0	13. 0	13. 0	13. 0	14. 3	14. 0	14. 0	12. 0	18. 0	19. 0	19. 0
------	12. 2	12. 2	12. 1	11. 6	11. 5	11. 6	-----	11. 2	11. 3	11. 3	11. 1	11. 2	11. 1	-----	12. 0	11. 8	11. 8
37. 4	52. 5	52. 2	54. 3	52. 2	52. 6	54. 3	35. 8	52. 6	51. 2	54. 1	50. 8	49. 2	52. 0	37. 0	49. 3	49. 8	49. 5
------	29. 3	28. 3	28. 1	29. 8	27. 4	27. 8	-----	28. 2	28. 0	27. 8	------	------	------	-----	30. 8	29. 8	29. 2
22. 4	37. 3	38. 6	38. 9	40. 0	41. 0	40. 9	19. 5	36. 5	38. 0	38. 7	35. 7	36. 5	36. 1	20. 5	33. 2	33. 6	34. 4
15. 8	22. 2	19. 1	19. 5	22. 1	18. 4	18. 9	14. 4	21. 1	17. 7	18. 3	25. 9	23. 2	23. 4	15. 3	23. 7	20. 6	20. 6
------	24. 9	25. 2	25. 4	25. 9	25. 2	25. 3	-----	26. 3	25. 7	25. 8	29. 8	29. 7	30. 4	-----	24. 3	21. 7	21. 6
47. 1	71. 3	62. 4	68. 4	69. 3	56. 7	66. 6	33. 8	53. 2	43. 1	51. 1	56. 6	46. 8	50. 6	33. 3	53. 6	40. 0	48. 2
5. 9	9. 1	8. 5	8. 5	8. 8	8. 8	8. 8	5. 6	8. 9	8. 7	8. 7	9. 8	9. 8	9. 8	6. 4	10. 2	10. 9	10. 9
8. 7	6. 3	6. 1	6. 1	6. 1	5. 7	5. 7	3. 0	5. 3	5. 1	5. 0	5. 9	5. 5	5. 4	3. 8	6. 9	6. 9	6. 8
3. 5	6. 2	6. 7	6. 7	8. 1	7. 7	7. 8	2. 6	5. 2	5. 1	5. 2	5. 8	6. 0	6. 0	2. 6	4. 0	4. 0	4. 0
------	9. 1	9. 1	9. 1	8. 6	8. 5	8. 4	-----	8. 6	8. 7	8. 7	7. 3	7. 5	7. 5	-----	9. 4	9. 5	9. 5
------	10. 8	10. 0	9. 9	10. 5	9. 7	9. 7	-----	10. 2	9. 5	9. 0	12. 2	10. 4	10. 7	-----	11. 8	10. 2	10. 3
------	24. 5	25. 2	25. 2	24. 7	24. 8	24. 8	-----	24. 6	24. 6	24. 5	28. 4	28. 5	28. 5	-----	26. 3	25. 8	25. 8
------	22. 3	22. 7	22. 4	22. 5	22. 7	22. 7	-----	21. 6	21. 1	21. 2	18. 7	19. 5	19. 5	-----	18. 9	18. 4	18. 7
9. 4	12. 1	11. 9	12. 0	11. 7	11. 5	11. 4	9. 3	11. 5	10. 2	10. 1	12. 5	11. 2	11. 0	5. 5	9. 5	7. 2	7. 2
------	9. 8	10. 4	10. 3	9. 3	9. 6	9. 6	-----	8. 8	8. 9	9. 0	10. 4	10. 1	10. 1	-----	10. 3	9. 6	9. 8
1. 7	3. 4	3. 0	3. 2	3. 6	3. 0	3. 0	2. 0	3. 7	2. 7	2. 6	2. 7	2. 9	2. 1	2. 3	4. 4	3. 6	3. 6
------	5. 8	5. 9	5. 2	5. 9	6. 7	5. 6	-----	6. 1	7. 0	6. 0	4. 3	6. 1	4. 8	-----	5. 4	7. 3	6. 5
------	5. 2	5. 2	5. 1	4. 2	5. 2	4. 8	-----	3. 5	4. 4	3. 6	4. 5	5. 1	3. 9	-----	4. 8	5. 2	4. 4
------	13. 0	13. 4	13. 1	11. 5	11. 5	11. 7	-----	9. 8	10. 0	9. 9	14. 5	14. 0	13. 3	-----	9. 7	10. 0	10. 0
------	19. 0	17. 9	17. 7	19. 6	18. 1	18. 1	-----	16. 5	15. 4	15. 0	15. 8	15. 5	14. 6	-----	15. 0	14. 4	14. 8
------	20. 4	20. 2	19. 9	21. 2	20. 8	20. 7	-----	16. 6	15. 9	15. 6	14. 4	14. 1	13. 8	-----	17. 5	16. 5	16. 5
------	11. 9	11. 6	11. 0	13. 2	13. 4	13. 1	-----	13. 0	13. 3	13. 0	13. 3	13. 3	12. 8	-----	9. 9	10. 2	9. 9
5. 6	6. 8	7. 2	7. 2	6. 6	7. 1	7. 1	5. 6	6. 7	6. 9	6. 9	8. 4	8. 7	8. 6	5. 4	6. 5	6. 7	6. 8
58. 6	73. 3	74. 9	72. 9	60. 3	60. 9	60. 9	45. 0	68. 9	67. 6	67. 1	83. 3	82. 2	82. 8	50. 0	73. 9	82. 4	82. 4
33. 0	55. 2	52. 0	51. 1	48. 6	45. 9	45. 9	29. 3	49. 1	45. 4	45. 6	57. 0	53. 8	54. 0	26. 3	46. 6	44. 0	43. 1
------	16. 8	15. 5	15. 4	16. 0	16. 0	15. 8	-----	16. 5	14. 2	14. 4	17. 2	15. 4	15. 0	-----	15. 3	13. 6	13. 5
------	13. 6	13. 4	13. 2	14. 5	14. 3	14. 3	-----	14. 4	13. 5	13. 7	15. 3	15. 0	15. 1	-----	14. 7	14. 6	14. 4
------	43. 9	41. 5	42. 9	34. 0	35. 0	35. 0	-----	40. 7	40. 9	41. 2	[2] 14. 5	[2] 13. 1	[2] 11. 7	-----	38. 6	25. 0	25. 6
------	54. 2	61. 2	64. 4	58. 2	63. 1	64. 4	-----	51. 7	56. 9	60. 6	47. 1	53. 9	53. 5	-----	46. 7	42. 9	46. 9

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Chicago, Ill.				Cincinnait, Ohio.				Cleveland, Ohio			
		Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
		1913	1926			1913	1926			1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	24.3	44.8	46.9	47.2	23.7	38.9	39.6	40.2	25.4	40.0	43.1	42.4
Round steak	do	21.4	36.9	38.0	38.3	21.2	35.1	35.6	36.1	22.9	34.0	36.7	36.3
Rib roast	do	20.3	35.7	35.9	35.8	18.5	30.8	31.1	31.1	18.9	27.9	30.1	30.3
Chuck roast	do	15.9	25.4	25.7	26.6	14.5	21.9	22.6	22.8	16.9	22.9	24.7	24.9
Plate beef	do	11.9	15.0	15.0	15.4	11.7	15.5	15.8	15.8	11.7	13.0	14.2	14.4
Pork chops	do	21.8	42.9	36.8	42.6	22.7	41.9	37.4	40.3	24.4	45.1	39.5	43.5
Bacon, sliced	do	32.6	55.4	50.1	50.9	26.0	46.5	40.9	40.6	29.6	52.1	45.8	45.1
Ham, sliced	do	32.2	57.8	54.4	54.5	29.8	60.6	54.4	52.2	37.3	63.0	53.8	53.3
Lamb, leg of	do	19.9	40.6	39.1	38.5	16.8	37.8	36.1	35.4	18.7	37.8	38.5	37.4
Hens	do	19.2	37.9	36.2	36.1	26.0	37.2	35.5	33.5	21.9	39.4	36.2	35.1
Salmon, canned, red	do	----	37.7	34.7	35.9	----	37.5	31.2	33.0	----	35.9	33.6	34.3
Milk, fresh	Quart	8.0	14.0	14.0	14.0	8.0	14.0	13.3	13.3	8.0	13.7	14.0	14.0
Milk, evaporated	15-16 oz. can.	----	10.9	11.3	11.2	----	10.8	11.3	11.3	----	11.1	11.4	11.4
Butter	Pound	35.3	50.5	50.3	52.7	38.0	50.8	49.5	51.1	38.3	55.5	53.9	57.1
Oleomargarine (all butter substitutes).	do	----	27.0	27.0	27.1	----	30.3	27.7	28.0	----	32.2	29.2	29.3
Cheese	do	25.7	40.9	42.0	42.0	21.0	36.0	36.4	37.4	24.0	36.2	38.7	38.4
Lard	do	15.0	21.9	19.1	19.4	14.3	20.8	17.1	18.1	16.4	23.6	20.3	20.6
Vegetable lard substitute	do	----	26.3	26.3	26.5	----	26.1	25.9	26.1	----	27.6	26.8	26.8
Eggs, strictly fresh	Dozen	30.4	50.5	42.3	46.0	30.1	46.7	40.3	45.9	36.8	55.8	43.9	52.8
Bread	Pound	6.1	9.8	9.9	9.9	4.8	9.2	8.9	8.9	5.6	7.9	7.7	7.7
Flour	do	2.9	5.4	5.2	5.1	3.3	6.0	5.8	5.8	3.2	6.0	5.7	5.6
Corn meal	do	2.8	6.0	6.6	6.4	2.7	4.0	4.2	4.5	2.9	5.4	5.7	5.6
Rolled oats	do	----	8.3	8.5	8.6	----	8.6	8.8	8.8	----	9.5	9.4	9.4
Corn flakes	8-oz. pkg.	----	10.1	9.5	9.5	----	10.4	9.3	9.4	----	11.2	9.7	9.8
Wheat cereal	28-oz. pkg.	----	24.5	25.1	25.2	----	24.7	24.8	25.1	----	25.2	25.7	25.7
Macaroni	Pound	----	19.0	19.0	19.1	----	18.2	18.4	18.3	----	21.7	21.7	21.5
Rice	do	9.0	11.6	11.2	10.8	8.8	11.4	9.9	9.7	9.0	11.8	11.3	10.9
Beans, navy	do	----	9.2	9.7	9.6	----	7.5	8.6	8.7	----	7.6	8.7	8.8
Potatoes	do	1.8	3.8	3.6	3.2	2.4	4.3	3.7	3.3	2.0	4.4	3.2	3.4
Onions	do	----	5.0	6.4	5.5	----	4.7	5.8	4.7	----	5.3	6.3	5.0
Cabbage	do	----	4.1	4.2	4.0	----	4.0	4.4	4.1	----	4.5	4.7	4.6
Beans, baked	No. 2 can	----	12.6	13.0	12.8	----	10.7	10.4	10.6	----	12.9	12.9	13.1
Corn, canned	do	----	16.5	16.0	15.7	----	14.8	14.9	15.2	----	17.1	16.9	16.6
Peas, canned	do	----	16.7	16.8	16.6	----	16.7	16.8	16.6	----	17.8	18.2	18.2
Tomatoes, canned	do	----	14.0	13.9	13.9	----	11.5	11.9	11.7	----	13.5	14.1	14.1
Sugar, granulated	Pound	5.2	6.7	7.1	7.1	5.6	7.0	7.5	7.5	5.6	7.1	7.5	7.4
Tea	do	55.0	73.2	73.5	72.0	60.0	77.7	75.5	75.5	50.0	79.0	81.6	81.8
Coffee	do	30.7	51.2	47.9	47.1	25.6	46.4	42.6	42.5	26.5	54.7	50.3	49.9
Prunes	do	----	18.4	17.3	17.3	----	17.1	15.4	15.2	----	17.5	15.2	15.3
Raisins	do	----	15.4	15.2	15.0	----	15.2	14.6	14.6	----	14.9	14.7	14.8
Bananas	Dozen	----	40.0	39.2	39.8	----	36.3	36.1	36.1	----	[3] 10.2	[3] 10.3	[3] 10.3
Oranges	do	----	53.2	57.8	63.0	----	47.7	51.4	52.2	----	53.5	56.0	59.8

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "rump" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Columbus, Ohio			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
			1913	1926			1913	1926			1913	1926			1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
40.7	41.7	41.9	23.0	36.3	37.7	36.9	24.3	34.9	35.5	35.5	26.3	43.0	44.3	44.8	[1]35.6	[1]60.9	[1]66.3	[1]65.3
36.1	37.1	37.6	21.3	33.0	34.1	34.2	21.4	31.6	32.8	32.0	21.0	35.3	37.9	37.6	28.4	46.5	49.7	49.4
30.8	32.2	32.3	20.8	27.4	28.8	27.9	17.8	24.3	25.6	25.3	20.0	30.5	32.9	32.8	23.2	31.8	34.4	33.6
24.6	26.0	26.5	16.9	23.5	23.7	23.9	15.8	19.7	20.9	20.7	15.0	23.0	25.1	25.1	18.4	22.4	25.1	25.3
16.0	16.6	16.8	13.2	18.2	17.7	18.5	9.7	11.1	12.2	12.2	11.0	14.2	15.1	15.3	-----	13.9	13.9	15.0
39.5	36.2	37.7	22.0	38.2	35.6	37.4	20.4	39.4	34.9	37.4	22.3	46.4	40.3	44.8	22.2	40.8	37.0	39.5
53.6	48.2	48.2	38.3	49.7	46.2	47.0	29.0	52.6	46.2	47.3	24.7	54.7	48.2	48.5	25.7	46.5	43.6	43.1
58.8	54.2	51.8	32.5	63.2	57.1	56.2	33.3	61.5	51.8	51.6	27.0	65.0	58.4	55.8	33.0	58.4	53.9	52.9
44.6	44.4	44.2	23.3	44.3	45.0	43.4	16.0	37.8	37.0	36.8	16.0	41.2	40.7	38.9	19.2	42.2	42.3	41.5
37.1	36.0	35.4	18.7	31.1	30.7	30.7	19.7	30.2	29.4	29.6	20.5	39.7	36.9	36.7	24.5	43.0	42.7	43.7
39.8	36.3	35.9	-----	40.2	35.9	37.2	-----	35.5	33.8	34.5	-----	37.0	33.5	35.0	-----	38.8	34.8	34.8
12.0	12.0	12.0	10.0	12.0	13.0	13.0	8.4	12.0	12.0	12.0	8.0	14.0	14.0	14.0	9.0	14.4	15.0	15.0
11.3	11.5	11.6	-----	13.0	13.1	13.1	-----	10.8	10.7	10.7	-----	11.2	11.4	11.4	-----	12.7	12.7	12.8
51.1	50.6	53.4	38.3	52.8	50.2	52.1	38.6	44.9	43.7	48.3	35.9	53.1	51.9	55.3	35.3	51.3	51.9	52.6
29.7	27.7	28.0	-----	33.9	30.5	30.6	-----	29.0	24.9	24.6	-----	28.6	26.6	26.8	-----	30.4	30.5	30.8
35.2	36.1	36.9	20.0	34.9	36.8	38.9	26.1	37.0	37.1	37.9	20.7	37.9	39.1	39.4	23.2	37.9	40.4	40.4
20.1	16.6	16.7	16.5	25.7	23.4	23.3	16.5	22.8	19.0	19.1	16.9	22.6	18.9	19.4	15.3	21.3	18.1	18.8
26.0	26.5	26.2	-----	25.2	23.7	23.4	-----	25.2	22.6	22.4	-----	27.1	26.7	26.8	-----	26.7	26.4	26.7
42.8	33.6	40.4	[2]	45.3	35.3	43.0	32.1	46.1	37.5	40.7	32.0	48.0	40.9	47.8	46.9	68.2	56.3	68.5
8.1	7.7	7.7	5.3	9.5	9.5	9.5	5.5	8.3	8.0	8.0	5.6	8.2	8.5	8.5	6.2	9.2	9.2	9.1
5.6	5.3	5.3	3.2	5.6	5.5	5.5	2.6	4.6	4.4	4.3	3.1	5.7	5.4	5.4	3.4	6.3	5.8	5.6
3.7	3.7	4.1	3.3	4.5	4.5	4.5	2.6	4.2	4.5	4.4	2.8	5.8	6.0	6.0	3.5	6.7	6.7	6.8
9.4	9.3	9.2	-----	10.2	10.5	10.3	-----	8.5	7.6	7.6	-----	9.4	9.5	9.5	-----	9.4	9.4	9.4
10.8	9.7	9.8	-----	11.2	10.6	10.6	-----	11.1	9.6	9.8	-----	10.6	9.8	9.8	-----	11.3	10.1	10.0
25.0	26.4	26.1	-----	27.6	27.2	27.2	-----	24.8	24.6	24.8	-----	25.9	25.5	25.7	-----	25.3	25.0	25.0
21.7	21.0	21.0	-----	21.4	21.5	21.5	-----	20.3	19.7	19.7	-----	22.3	22.4	22.1	-----	24.5	24.2	24.2
13.6	12.1	12.1	9.3	12.9	11.6	11.7	8.6	11.2	9.9	9.8	8.4	12.7	11.8	11.8	10.0	11.9	11.0	11.1
7.7	8.5	8.8	-----	10.5	11.0	11.2	-----	9.9	10.6	10.7	-----	8.3	8.6	9.1	-----	9.7	10.6	10.8
4.2	3.4	3.3	2.8	5.3	5.6	5.0	1.8	3.1	3.2	2.5	1.9	3.6	2.9	2.9	1.9	3.2	2.8	2.9
5.5	7.2	6.1	-----	6.0	7.9	7.4	-----	4.3	6.1	4.8	-----	4.9	5.9	4.7	-----	5.3	7.0	5.5
4.5	4.6	4.2	-----	5.3	6.4	6.1	-----	2.2	2.2	2.4	-----	4.1	3.3	3.5	-----	3.6	4.7	4.5
12.1	12.6	12.6	-----	13.4	13.2	13.0	-----	11.8	11.0	10.9	-----	11.7	11.5	11.3	-----	12.4	12.1	11.5
15.7	14.1	13.9	-----	17.9	18.6	18.4	-----	14.8	14.1	13.9	-----	16.5	16.2	16.4	-----	16.6	16.5	16.3
15.1	14.7	14.8	-----	21.4	22.1	21.4	-----	15.7	14.8	15.2	-----	17.3	16.9	17.2	-----	18.5	18.1	18.1
12.7	13.3	13.3	-----	12.3	12.6	12.6	-----	12.3	12.0	11.9	-----	11.7	12.5	12.7	-----	11.9	13.2	13.2
7.2	7.8	7.8	5.9	7.8	8.0	8.0	5.9	7.5	7.8	7.8	5.7	7.2	7.5	7.5	5.7	6.8	7.2	7.2
89.3	90.2	88.0	66.7	104.7	107.5	107.1	52.8	69.5	69.2	68.0	43.3	74.4	75.5	74.5	44.2	59.9	63.8	63.8
51.6	48.6	47.9	36.7	60.3	56.7	57.1	29.4	51.6	48.9	48.9	29.3	52.1	48.3	47.8	33.0	52.7	48.7	48.8
17.4	17.0	16.6	-----	21.1	20.7	21.1	-----	18.4	15.7	14.8	-----	19.2	17.1	16.7	-----	15.7	14.8	14.5
15.2	14.6	14.5	-----	16.5	16.5	16.3	-----	14.7	14.0	14.0	-----	15.8	15.0	14.8	-----	14.5	13.8	13.9
37.2	38.6	38.6	-----	33.8	35.0	35.0	-----	[2]10.8	[2]10.9	[2]10.3	-----	33.9	33.9	35.0	-----	[3]9.4	[3]9.6	[3]9.6
48.8	56.2	54.0	-----	54.0	53.2	54.7	-----	42.5	44.6	48.5	-----	52.6	56.9	60.1	-----	49.5	54.0	54.6

[2] No quotation.

[3] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
					1913	1926			1913	1926		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	33.8	35.0	34.6	26.0	39.1	41.4	41.3	25.8	37.3	35.4	35.4
Round steak	do	32.0	33.2	33.5	25.2	38.2	39.1	38.6	21.5	32.3	31.7	31.3
Rib roast	do	27.1	27.1	27.3	17.8	29.4	30.4	30.8	22.5	29.1	27.1	27.1
Chuck roast	do	21.0	21.6	21.3	16.3	24.7	25.2	25.3	15.0	20.9	19.8	20.1
Plate beef	do	17.3	17.8	18.0	12.5	15.4	15.7	16.1	11.4	12.5	12.5	12.8
Pork chops	do	37.9	33.6	35.5	22.8	41.9	36.1	40.8	23.5	39.4	32.9	33.3
Bacon, sliced	do	51.8	46.5	46.6	30.8	49.0	42.4	42.3	29.0	49.4	42.8	42.1
Ham, sliced	do	57.1	52.1	50.8	31.7	62.1	52.5	52.7	30.3	58.0	51.4	49.5
Lamb, leg of	do	35.7	34.3	34.2	20.7	42.5	42.5	39.0	20.8	38.8	36.2	38.0
Hens	do	40.5	32.9	34.6	21.0	39.8	36.3	36.6	23.5	39.3	32.9	34.0
Salmon, canned, red	do	36.4	30.8	32.6	-----	35.8	33.5	34.0	-----	38.4	33.8	33.9
Milk, fresh	Quart	15.6	15.6	15.6	8.0	12.0	12.0	12.0	12.3	22.0	20.3	20.3
Milk, evaporated	15–16 oz. can	11.5	11.6	11.6	-----	10.8	10.8	10.8	-----	11.9	11.9	11.9
Butter	Pound	52.2	47.9	49.2	36.8	50.5	50.4	52.2	39.8	54.0	51.8	53.3
Oleomargarine (all butter substitutes)	do	29.7	27.8	27.6	-----	30.5	29.4	29.2	-----	32.1	30.9	30.3
Cheese	do	31.9	33.5	34.4	21.3	35.1	37.2	37.7	22.5	34.4	34.5	35.7
Lard	do	22.6	21.3	21.3	15.2	20.1	16.8	17.4	15.5	24.0	21.1	21.3
Vegetable lard substitute	do	21.0	16.8	17.8	-----	26.8	27.4	27.4	-----	25.4	22.5	22.9
Eggs, strictly fresh	Dozen	41.8	35.5	41.5	30.4	43.5	33.1	37.3	36.7	59.5	46.1	53.1
Bread	Pound	8.8	8.5	8.5	5.1	8.1	8.1	8.1	6.2	11.0	10.9	10.9
Flour	do	5.8	5.1	5.1	3.2	5.7	5.5	5.5	3.8	6.9	6.6	6.6
Corn meal	do	4.2	4.3	4.5	2.6	4.2	4.2	4.2	3.1	4.3	4.3	4.3
Rolled oats	do	8.9	8.9	8.9	-----	8.1	8.3	8.3	-----	9.8	9.3	9.6
Corn flakes	8-oz. pkg	11.8	9.5	9.2	-----	10.1	9.4	9.3	-----	11.2	10.0	9.9
Wheat cereal	28-oz. pkg	25.6	25.0	25.0	-----	25.1	25.1	25.6	-----	24.6	24.8	24.4
Macaroni	Pound	18.4	18.6	18.6	-----	19.2	19.7	19.6	-----	20.0	19.4	19.4
Rice	do	9.9	9.0	8.9	9.2	12.1	10.7	10.6	6.6	11.2	9.6	9.4
Beans, navy	do	9.5	10.1	10.2	-----	7.7	8.7	8.7	-----	10.3	9.6	9.3
Potatoes	do	4.7	5.0	4.7	2.1	4.5	3.3	3.0	2.6	5.1	4.3	4.4
Onions	do	4.9	7.0	5.9	-----	5.1	7.3	6.3	-----	7.4	7.9	7.2
Cabbage	do	4.9	5.4	5.5	-----	4.3	4.6	4.5	-----	5.4	4.9	4.6
Beans, baked	No. 2 can	11.1	11.0	11.0	-----	10.6	10.3	10.3	-----	11.4	10.7	10.8
Corn, canned	do	14.9	13.9	14.1	-----	15.0	13.9	13.8	-----	20.7	17.8	17.8
Peas, canned	do	13.6	13.7	13.3	-----	15.2	13.7	13.6	-----	19.6	17.8	18.1
Tomatoes, canned	do	10.1	10.6	10.5	-----	11.3	13.0	12.6	-----	10.4	10.1	9.8
Sugar, granulated	Pound	7.0	6.9	6.9	6.0	7.3	7.5	7.6	5.9	7.3	7.6	7.5
Tea	do	82.8	84.7	84.8	60.0	86.7	87.9	85.3	60.0	101.6	98.9	97.7
Coffee	do	45.6	40.9	40.5	30.0	51.1	47.4	47.5	34.5	50.3	47.3	47.3
Prunes	do	16.3	15.4	14.5	-----	19.3	18.5	17.9	-----	18.3	16.8	16.4
Raisins	do	14.7	14.5	13.9	-----	15.9	15.2	15.2	-----	16.4	14.7	15.3
Bananas	Dozen	28.3	26.2	26.2	-----	31.4	30.5	31.6	-----	29.2	31.0	28.3
Oranges	do	39.8	45.6	39.1	-----	48.3	50.8	51.3	-----	95.3	60.0	60.0

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
1913	1926			1913	1926			1913	1926			1913	1926			1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
24.7	39.6	38.7	39.0	25.0	34.2	36.5	37.3	24.0	36.8	37.6	39.0	23.0	36.4	37.5	37.2	[1]37.0	[1]58.1	[1]62.4	[1]60.0
22.3	34.8	34.7	34.2	20.0	31.6	34.5	35.4	21.0	30.3	30.8	31.6	20.0	32.3	33.3	34.6	30.5	47.1	48.6	46.9
17.7	27.2	27.5	27.4	20.0	27.3	28.0	30.0	19.6	29.6	29.0	31.2	18.2	26.6	27.5	27.1	21.0	30.2	29.7	29.9
15.4	20.0	20.1	20.5	17.5	22.2	22.5	22.8	15.8	20.3	21.0	20.7	15.9	19.4	21.3	21.3	16.8	23.9	24.9	24.6
12.1	13.1	13.9	14.5	13.0	15.5	16.7	17.8	12.1	13.8	13.6	14.0	13.1	16.4	17.7	17.3	----	16.7	16.9	17.5
22.8	42.8	35.5	40.5	21.5	37.6	33.6	35.3	25.4	47.3	45.8	47.6	21.6	38.9	35.6	37.1	23.0	41.8	36.9	40.8
31.3	52.4	44.6	45.1	36.7	54.3	46.9	47.7	33.1	62.1	54.7	54.4	29.5	52.0	46.9	47.7	24.0	42.8	39.0	38.7
30.3	60.8	51.7	51.7	30.0	58.9	50.8	49.6	35.8	71.8	66.4	68.1	29.0	55.7	50.4	50.0	29.5	51.3	46.3	45.1
18.3	35.0	36.5	35.3	20.0	39.5	40.8	41.4	18.8	36.8	36.1	37.4	17.8	39.2	41.3	41.3	21.8	39.0	39.1	38.3
16.8	32.9	30.1	29.8	20.0	29.7	28.3	28.4	26.2	44.6	40.3	40.7	21.8	38.0	33.3	32.9	25.0	44.1	42.5	41.9
----	38.8	35.5	35.8	----	36.1	32.1	32.8	----	34.4	31.3	32.3	----	38.2	31.3	32.4	----	37.0	33.3	34.1
9.3	13.0	13.0	13.0	10.0	15.0	15.0	15.0	10.0	15.0	15.0	15.0	8.8	12.0	12.0	12.0	8.0	14.0	14.8	14.8
----	11.7	11.7	11.8	----	11.9	12.0	12.0	----	10.2	10.3	10.2	----	11.9	12.0	12.0	----	12.9	12.9	12.9
38.8	51.0	48.4	51.4	42.5	51.7	50.5	50.9	43.5	54.4	51.6	54.9	39.6	53.2	51.4	52.4	39.0	53.3	53.8	54.2
----	27.7	25.5	25.5	----	30.2	27.5	28.2	----	31.6	26.2	26.2	----	31.4	27.4	27.4	----	26.3	25.8	25.8
21.8	35.7	35.9	37.1	23.3	34.3	36.8	37.2	19.5	39.4	38.1	38.3	22.5	36.9	37.0	37.5	21.5	36.5	36.6	36.9
16.4	22.9	19.0	19.7	16.5	24.0	21.5	21.5	17.9	24.0	19.6	19.7	16.3	21.8	18.0	18.6	16.3	21.4	17.8	18.5
----	27.3	27.4	27.6	----	24.1	20.9	20.5	----	26.0	24.4	24.8	----	30.6	28.0	28.6	----	26.0	25.8	26.0
28.8	42.1	33.7	40.1	32.5	44.4	37.1	42.5	46.3	54.0	41.9	47.1	30.0	45.1	33.8	42.1	36.3	63.7	55.0	63.2
6.0	9.8	9.6	9.6	6.0	9.5	9.2	9.2	6.0	8.6	8.4	8.5	5.7	9.3	9.2	9.2	5.9	8.7	8.7	8.7
3.0	5.6	5.2	5.1	3.6	6.4	6.1	6.0	3.5	5.4	5.2	5.2	3.5	6.1	6.0	6.0	3.4	6.0	5.8	5.8
2.8	4.9	4.9	4.9	2.5	4.1	4.1	4.0	3.3	5.4	5.4	5.6	2.5	3.7	4.2	4.2	3.5	5.3	5.2	5.4
----	9.4	9.0	9.1	----	10.8	10.0	10.2	----	10.2	10.0	10.0	----	8.4	8.5	8.5	----	9.0	9.1	9.2
----	12.0	10.1	10.0	----	12.1	10.2	10.2	----	10.1	9.4	9.4	----	10.6	9.5	9.6	----	11.1	9.5	9.6
----	26.9	26.7	26.9	----	25.7	25.9	26.4	----	25.0	24.8	24.9	----	26.5	25.0	25.1	----	25.6	25.6	25.9
----	20.3	19.9	19.9	----	20.4	20.2	20.2	----	18.3	18.3	18.5	----	18.6	18.7	18.9	----	24.2	23.8	23.8
8.7	11.8	9.9	10.1	8.3	10.2	8.8	8.9	7.7	11.1	10.2	10.0	8.3	11.5	11.2	11.4	8.8	11.0	10.1	10.0
----	9.2	9.6	9.6	----	9.5	8.5	9.3	----	8.9	10.0	9.9	----	7.9	8.3	8.9	----	8.9	9.2	9.2
2.0	3.7	2.3	2.2	2.4	4.6	4.9	3.9	1.7	3.8	3.7	3.4	2.4	4.1	2.8	2.9	1.6	3.0	2.8	3.0
----	5.4	7.0	6.0	----	6.3	7.2	6.3	----	4.7	5.8	5.2	----	5.4	6.3	6.1	----	4.6	5.8	4.9
----	3.7	4.1	4.3	----	4.4	5.5	4.3	----	4.3	5.1	4.5	----	4.8	5.0	5.1	----	4.1	3.3	3.3
----	12.7	12.3	12.4	----	10.8	10.5	10.2	----	11.3	11.0	10.8	----	10.3	10.2	10.2	----	13.7	13.2	13.2
----	15.2	14.2	14.3	----	16.6	16.6	16.0	----	16.2	15.8	15.7	----	15.1	15.2	15.4	----	17.4	16.1	15.7
----	15.6	14.9	14.9	----	18.7	17.6	17.6	----	17.7	16.9	16.4	----	16.3	14.8	14.8	----	19.1	17.3	18.0
----	12.3	11.4	11.4	----	10.6	10.7	10.1	----	[2]15.4	[2]15.0	[2]15.0	----	10.0	11.1	11.1	----	11.7	12.7	12.5
5.9	7.4	7.6	7.5	5.7	7.7	7.9	7.7	5.7	6.7	7.0	7.0	5.7	7.3	7.5	7.5	5.6	7.0	7.3	7.5
54.0	86.4	89.1	90.2	50.0	107.9	107.4	104.5	54.5	75.8	74.9	74.1	65.0	85.5	90.7	90.6	47.0	62.7	63.5	64.2
27.8	54.4	48.7	48.5	30.8	53.9	51.3	50.8	36.3	53.6	51.4	51.2	27.5	50.9	47.6	47.2	32.0	52.2	47.7	47.9
----	18.2	16.4	15.5	----	18.2	17.1	15.1	----	16.8	14.0	13.5	----	17.9	16.9	18.9	----	15.8	14.1	13.7
----	15.0	14.9	14.8	----	15.6	15.5	15.3	----	13.2	12.6	12.7	----	15.5	14.6	14.9	----	14.3	14.0	13.8
----	[3]10.2	[3]10.1	[3]10.0	----	[3]9.5	[3]9.0	[3]8.3	----	[3]9.7	[3]9.6	[3]9.6	----	[3]10.1	[3]9.5	[3]9.9	----	[3]9.3	[3]9.2	[3]9.3
----	47.2	50.2	49.6	----	48.4	47.3	50.9	----	44.5	55.0	51.1	----	45.9	46.2	47.3	----	54.1	58.5	56.5

[2] No 2½ can.

[3] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
		1913	1926			1913	1926			1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	24.0	36.7	38.6	39.3	23.6	39.1	41.3	41.4	24.0	32.8	36.6	36.1
Round steak	do	20.0	34.0	35.8	36.4	21.6	34.8	36.8	36.7	21.3	30.7	32.3	31.8
Rib roast	do	21.0	27.3	27.3	28.4	19.2	28.7	29.4	29.1	19.3	26.4	29.2	28.6
Chuck roast	do	15.0	19.1	21.0	22.0	16.4	24.4	25.7	25.8	17.0	20.8	24.2	23.2
Plate beef	do	11.9	14.8	17.2	17.6	12.0	14.4	15.2	15.3	10.4	12.6	13.6	13.6
Pork chops	do	22.5	36.3	32.4	34.9	21.6	43.2	36.7	41.3	20.8	39.4	34.0	37.2
Bacon, sliced	do	31.0	45.3	39.8	41.2	28.6	51.8	46.3	45.9	27.7	52.8	46.3	46.5
Ham, sliced	do	30.0	58.8	53.5	52.8	29.0	56.2	49.0	47.5	32.7	60.4	53.1	51.2
Lamb, leg of	do	20.6	40.0	37.9	38.0	20.5	38.6	39.8	38.2	14.8	35.1	35.9	34.3
Hens	do	19.5	31.4	29.8	30.0	19.8	33.6	31.7	31.0	19.4	30.8	30.7	30.3
Salmon, canned, red	do	-----	35.4	31.6	33.8	-----	34.0	32.8	33.2	-----	39.6	36.0	36.6
Milk, fresh	Quart	10.0	15.0	15.0	15.0	7.0	11.0	11.0	11.0	7.7	11.0	11.0	11.0
Milk, evaporated	15–16 oz. can	-----	11.5	11.8	11.6	-----	11.1	11.2	11.3	-----	11.6	11.7	11.7
Butter	Pound	38.0	51.3	51.2	52.4	34.8	49.8	48.4	52.5	34.6	49.7	47.3	50.4
Oleomargarine (all butter substitutes).	do	-----	26.1	25.7	25.6	-----	27.5	26.3	26.4	-----	28.4	25.2	25.4
Cheese	do	20.8	33.3	34.3	36.8	21.3	34.0	35.5	35.9	20.8	33.8	35.9	36.3
Lard	do	16.3	19.4	16.5	16.9	15.8	22.3	19.1	19.3	15.7	20.8	18.1	18.3
Vegetable lard substitute	do	-----	23.5	21.8	21.8	-----	26.7	26.7	26.6	-----	27.3	26.6	27.0
Eggs, strictly fresh	Dozen	29.0	42.8	35.5	39.2	30.0	41.6	36.6	43.1	29.6	42.6	33.1	37.9
Bread	Pound	6.0	9.6	9.5	9.5	5.7	9.0	9.0	9.1	5.6	9.3	8.9	8.9
Flour	do	3.5	6.3	6.1	6.1	3.1	5.3	5.1	5.0	3.0	5.5	5.2	5.1
Corn meal	do	2.2	3.7	4.1	4.1	3.3	5.3	5.7	5.6	2.5	5.3	5.4	5.4
Rolled oats	do	-----	9.4	9.0	9.0	-----	8.5	8.3	8.4	-----	8.4	7.9	7.9
Corn flakes	8-oz. pkg	-----	11.1	9.9	9.8	-----	10.4	9.1	9.2	-----	10.7	10.1	10.0
Wheat cereal	28-oz. pkg	-----	25.6	26.0	25.8	-----	24.4	24.7	24.7	-----	25.3	25.6	25.7
Macaroni	Pound	-----	19.6	19.3	19.4	-----	17.9	17.6	17.4	-----	19.3	18.9	19.1
Rice	do	7.5	10.6	8.8	8.9	9.0	11.9	10.5	10.6	8.6	11.9	10.5	10.5
Beans, navy	do	-----	9.4	8.9	9.3	-----	8.2	8.5	8.6	-----	9.0	9.5	9.8
Potatoes	do	2.2	4.4	4.9	3.8	1.6	3.5	3.1	2.8	1.4	3.1	2.2	1.8
Onions	do	-----	5.3	5.8	5.1	-----	5.0	6.4	5.2	-----	5.0	6.6	5.4
Cabbage	do	-----	4.0	4.7	4.1	-----	3.6	3.6	3.4	-----	3.6	2.8	3.2
Beans, baked	No. 2 can	-----	11.8	11.2	11.0	-----	11.0	10.8	10.8	-----	12.3	12.1	12.0
Corn, canned	do	-----	16.1	14.8	14.7	-----	15.6	15.2	15.5	-----	15.4	13.2	13.5
Peas, canned	do	-----	17.2	15.8	15.8	-----	16.4	15.1	15.2	-----	15.3	14.1	14.2
Tomatoes, canned	do	-----	10.6	9.9	9.9	-----	13.3	13.5	13.3	-----	13.6	13.4	13.3
Sugar, granulated	Pound	5.9	7.0	7.1	7.1	5.5	6.7	7.0	6.9	5.8	7.3	7.5	7.3
Tea	do	63.8	96.7	98.6	98.4	50.0	70.8	71.2	71.3	45.0	60.0	60.8	60.8
Coffee	do	27.5	51.0	47.6	47.3	27.5	47.1	42.1	41.9	30.8	53.9	50.5	50.2
Prunes	do	-----	17.5	14.7	14.6	-----	16.9	15.5	14.6	-----	16.9	15.5	14.9
Raisins	do	-----	15.6	14.7	14.7	-----	14.8	14.6	14.4	-----	15.1	14.9	14.3
Bananas	Dozen	-----	[2] 8.7	[2] 8.5	[2] 8.4	-----	[2] 9.4	[2] 9.3	[2] 9.3	-----	[2] 11.1	[2] 10.7	[2] 10.7
Oranges	do	-----	46.2	49.2	47.6	-----	49.2	50.8	52.0	-----	49.2	57.0	60.3

[1] Whole.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Mobile, Ala			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Sept. 15, 1926	Aug. 15, 1927	Sept 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
			1913	1926			1913	1926			1913	1926			1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
35.0	35.4	35.9	28.0	46.5	48.8	48.3	32.2	53.8	58.3	58.3	22.5	36.0	37.6	37.5	26.4	46.4	49.5	49.7
34.0	34.6	35.0	28.0	43.2	46.4	46.2	29.6	43.7	46.7	47.5	18.5	31.8	33.0	33.3	25.7	44.5	47.1	47.0
28.0	29.2	29.1	21.2	35.8	37.6	37.5	24.2	36.1	38.4	38.3	17.5	30.0	31.4	31.2	21.5	39.3	41.1	41.0
22.0	22.5	23.6	18.0	25.0	25.1	26.9	20.0	27.3	28.5	29.2	14.3	21.3	21.6	21.3	16.1	25.3	26.7	27.0
17.0	17.3	17.8	12.0	13.3	13.2	13.7	-----	15.5	16.7	15.9	11.2	17.5	17.2	17.7	14.6	20.0	21.0	21.4
40.5	36.7	38.2	25.0	44.5	38.5	41.7	24.0	43.8	38.2	42.0	25.0	39.7	37.4	40.4	23.0	46.3	40.5	44.5
51.3	46.1	46.2	26.2	49.2	45.7	46.0	29.3	51.8	45.5	44.7	32.1	50.6	46.2	46.4	26.2	52.2	48.0	48.5
55.5	52.7	51.8	[1]22.0	58.1	53.5	53.8	32.8	63.8	58.0	57.3	28.8	56 1	50.4	50.1	30.0	65.4	58.7	59.4
40.0	41.4	41.4	20.8	39.7	39.0	38.9	20.5	40.8	40.5	40.0	20.0	39.7	39.3	38.8	15.3	37.7	38.3	38.3
37.2	34.2	33.6	23.6	38.6	36.8	37.3	24.2	42.5	40.7	40.2	22.5	38.2	35.1	37.1	21.8	40.3	38.4	38.7
40.6	31.2	31.3	-----	36.7	30.2	31.4	-----	35.3	31.2	33.9	-----	39.5	37.1	37.4	-----	36.2	31.2	33.0
17.8	17.8	17.8	9.0	15.0	15.0	16.0	9.0	16.0	16.0	16.0	9.5	14.0	14.0	14.0	9.0	15.0	15.0	16.0
11.7	11.7	11.5	-----	11.2	11.3	11.3	-----	11.9	12.1	12.1	-----	11.0	11.2	11.2	-----	11.1	11.1	11.1
53.3	52.4	52.4	39.2	53.5	52.6	55.5	35.2	51.1	52.1	52.4	36.8	51.7	52.0	53.5	37.4	53.5	52.6	55.7
30.6	29.3	29.3	-----	30.5	29.1	29.8	-----	30.9	29.8	29.5	-----	30.5	28.7	28.7	-----	30.2	27.6	27.7
35.7	36.1	37.3	24.8	39.8	39.5	44.1	22.0	38.1	39.2	39.4	21.4	35.2	36.9	37.9	19.6	37.8	38.6	39.8
21.8	19.3	19.2	16.6	22.4	19.5	19.4	15.6	22.2	18.5	18.5	15.1	21.8	19.3	19.2	16.3	22.3	19.7	20.5
21.8	20.0	21.2	-----	25.7	25.6	25.6	-----	25.9	25.6	25.5	-----	21.9	18.5	19.0	-----	26.2	25.9	25.9
52.6	40.7	45.6	49.6	61.8	48.8	59.4	45.7	67.1	56.6	64.4	32.0	45.0	40.6	42.6	44.2	64.0	52.6	60.6
9.6	10.1	10.1	5.6	9.3	9.5	9.5	6.0	9.2	9.2	9.2	5.1	8.9	8.8	8.8	6.0	9.6	9.7	9.7
6.5	6.1	6.1	3.7	5.8	5.6	5.5	3.2	6.0	5.6	5.5	3.8	7.0	6.7	6.7	3.2	5.7	5.7	5.5
3.9	4.1	4.1	3.6	6.6	6.5	6.5	3.2	6.7	6.8	6.8	2.9	4.0	4.2	4.4	3.4	6.4	6.5	6.4
8.7	8.4	8.5	-----	8.5	8.4	8.5	-----	9.3	9.3	9.1	-----	8.9	8.9	8.9	-----	8.6	8.7	8.6
11.3	9.5	9.5	-----	10.0	8.8	8.6	-----	10.8	10.1	10.0	-----	10.1	9.8	9.7	-----	10.0	8.8	8.6
25.1	24.4	24.3	-----	24.3	24.1	24.1	-----	24.6	24.8	24.9	-----	24.4	24.5	24.6	-----	24.0	24.0	23.9
20.9	20.6	20.7	-----	21.1	21.5	21.4	-----	21.9	22.2	22.2	-----	9.9	10.7	10.7	-----	20.9	20.9	21.1
11.3	10.0	10.0	9.0	11.3	10.8	10.7	9.3	11.9	10.8	10.3	7.4	9.9	9.9	9.7	8.0	10.9	9.7	9.7
8.9	8.8	8.6	-----	9.4	9.8	9.8	-----	9.5	9.5	9.3	-----	8.3	8.6	8.6	-----	10.2	10.0	10.2
4.9	4.8	4.4	2.5	3.5	3.0	3.3	1.8	3.5	2.8	3.1	2.3	4.5	4.3	4.2	2.5	3.6	3.2	3.3
5.3	6.4	5.4	-----	5.9	6.1	5.5	-----	5.7	6.9	5.9	-----	3.9	4.9	4.6	-----	5.6	6.5	5.4
4.8	5.3	4.8	-----	4.1	5.0	4.5	-----	4.3	4.4	4.5	-----	4.2	4.8	4.6	-----	3.8	4.0	3.7
10.9	10.5	10.3	-----	10.7	10.8	10.6	-----	11.5	11.1	11.5	-----	10.9	10.6	10.8	-----	10.6	10.7	10.9
17.5	15.7	15.1	-----	16.6	15.2	15.7	-----	18.8	18.6	18.4	-----	15.1	14.8	14.7	-----	14.9	13.9	14.3
16.2	15.6	15.4	-----	17.8	15.8	16.8	-----	20.2	18.9	18.4	-----	17.0	17.0	17.0	-----	15.4	14.7	14.4
10.8	10.8	10.5	-----	10.9	11.2	10.9	-----	12.5	13.2	13.8	-----	10.3	10.8	10.6	-----	10.4	11.5	11.3
7.0	7.1	7.2	5.4	6.4	6.9	6.8	5.5	6.7	7.2	7.2	5.4	6.4	6.8	6.8	5.1	6.2	6.6	6.4
79.8	77.8	80.0	53.8	63.5	62.8	61.0	55.0	60.7	57.4	58.9	62.1	82.0	78.8	78.8	43.3	64.6	66.3	66.5
50.3	47.5	47.3	29.3	49.8	45.8	46.3	33.8	52.9	49.3	48.9	26.1	36.5	35 6	35.6	27.2	47.2	44.4	45.2
18.4	16.6	15.6	-----	15.5	14.5	14.5	-----	16.9	15.6	14.6	-----	18.4	17.0	16.6	-----	15.6	13.9	13.4
14.6	14.2	13.8	-----	14.6	14.3	14.2	-----	14.0	14.0	13.8	-----	14.1	13.8	13.7	-----	14.7	13.9	13.9
21.4	23.9	21.9	-----	38.1	37.5	38.3	-----	34.2	35.9	33.2	-----	16.4	16.7	17.5	-----	37.3	37.1	35.4
45.5	49.3	47.5	-----	54.4	57.4	59.0	-----	52.2	61.0	59.6	-----	45.0	49.4	45.6	-----	61.3	64.6	65.8

[1]Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15— 1913	Sept. 15— 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	42.0	42.2	42.1	25.6	38.4	40.1	39.9	35.6	36.1	35.7
Round steak	do	35.4	36.5	36.3	22.8	36.2	37.8	38.1	34.1	34.8	34.6
Rib roast	do	32.4	33.4	32.7	19.1	26.2	27.4	27.8	25.3	25.5	25.5
Chuck roast	do	23.6	23.3	23.6	16.7	21.7	22.9	23.1	21.7	22.6	22.5
Plate beef	do	16.0	16.2	16.3	11.4	12.3	12.8	13.2	14.7	15.0	14.8
Pork chops	do	39.9	36.2	38.2	22.0	40.9	35.7	38.6	38.1	33.2	35.8
Bacon, sliced	do	50.1	44.3	43.1	28.6	55.3	48.9	48.2	53.0	50.8	48.8
Ham, sliced	do	53.2	47.8	46.7	29.0	62.4	53.8	51.2	58.6	54.2	55.0
Lamb, leg of	do	41.1	41.7	41.3	17.5	36.5	37.9	37.5	40.7	42.5	40.0
Hens	do	37.9	35.9	35.1	16.9	32.6	29.6	30.9	34.8	32.9	32.4
Salmon, canned, red	do	37.9	33.9	35.1	------	38.6	34.4	35.1	38.1	33.5	34.8
Milk, fresh	Quart	17.5	17.5	17.5	8.2	11.3	10.8	11.3	11.7	13.0	13.0
Milk, evaporated	15–16 oz. can	11.1	11.7	11.8	------	11.6	11.8	11.8	11.5	11.4	11.2
Butter	Pound	54.9	55.3	55.3	36.6	49.1	48.4	48.3	48.1	47.3	49.8
Oleomargarine (all butter substitutes).	do	28.6	26.8	26.3	------	30.2	26.2	26.1	30.0	27.7	27.7
Cheese	do	33.7	35.2	35.8	23.3	34.7	36.3	38.0	35.7	36.2	36.6
Lard	do	21.6	18.8	19.2	17.8	24.1	19.6	19.7	23.0	18.8	18.8
Vegetable lard substitute	do	23.2	23.0	22.9	------	27.9	25.9	25.9	26.9	27.1	27.8
Eggs, strictly fresh	Dozen	48.1	40.5	51.9	28.3	39.6	30.9	35.8	41.4	33.0	39.4
Bread	Pound	9.9	9.9	9.9	5.2	10.2	9.7	9.7	10.1	10.0	10.0
Flour	do	5.9	5.7	5.7	2.8	5.0	4.6	4.6	5.8	5.3	5.3
Corn meal	do	4.4	4.6	4.7	2.5	5.0	4.6	4.7	4.7	4.8	4.9
Rolled oats	do	8.7	8.7	8.6	------	10.3	10.1	10.1	9.1	9.2	9.2
Corn flakes	8-oz. pkg	10.3	9.7	9.7	------	12.5	10.3	10.2	11.9	10.2	10.2
Wheat cereal	28-oz. pkg	24.2	25.0	25.2	------	28.3	27.9	27.9	25.3	26.3	26.3
Macaroni	Pound	19.3	19.1	19.1	------	21.1	21.3	21.3	20.0	18.6	18.6
Rice	do	12.0	11.5	11.5	8.5	11.7	11.1	11.1	12.1	11.5	11.4
Beans, navy	do	8.0	8.2	8.2	------	9.7	10.2	10.3	8.4	8.9	8.9
Potatoes	do	4.4	3.8	3.9	1.7	3.6	2.9	2.6	3.6	3.2	2.7
Onions	do	5.7	7.0	5.6	------	5.7	6.9	5.4	6.2	8.3	6.9
Cabbage	do	4.6	4.9	4.5	------	3.6	3.8	3.6	3.4	4.2	3.8
Beans, baked	No. 2 can	9.9	9.9	9.9	------	13.6	13.0	13.0	12.2	11.1	11.1
Corn, canned	do	16.4	14.7	14.7	------	16.2	16.4	16.2	15.3	14.4	14.6
Peas, canned	do	21.9	19.2	18.7	------	15.8	15.3	15.3	18.0	16.9	17.1
Tomatoes, canned	do	9.7	9.9	9.9	------	13.7	12.9	12.8	13.7	12.6	12.5
Sugar, granulated	Pound	6.6	6.9	6.9	6.1	7.3	7.7	7.6	7.5	8.4	8.4
Tea	do	91.1	95.8	96.4	56.0	78.8	77.8	77.8	67.9	70.8	70.9
Coffee	do	51.1	47.7	46.9	30.0	57.5	53.4	53.4	51.9	47.8	46.9
Prunes	do	15.7	16.0	15.7	------	17.8	16.4	16.4	20.2	17.4	17.0
Raisins	do	14.7	14.3	14.5	------	15.9	15.2	15.2	15.6	14.5	14.5
Bananas	Dozen	33.5	34.5	34.5	------	[3] 11.6	[3] 10.7	[3] 11.0	[3] 9.8	[3] 9.8	[3] 9.6
Oranges	do	55.0	53.8	50.6	------	45.1	44.5	46.5	44.9	48.2	51.0

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.			
Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
1913	1926			1913	1926						1913	1926			1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1]31.7	[1] 56.0	[1] 59.8	[1] 59.8	27.7	47.2	49.8	49.8	[1] 63.2	[1] 66.1	[1] 64.7	23.9	29.3	31.5	31.7	[1] 40.2	[1] 70.9	[1] 75.3	[1] 75.3
27.1	43.5	46.7	45.9	24.7	40.2	42.0	41.9	47.7	49.3	48.5	21.4	26.6	28.8	29.0	31.6	49.6	52.5	52.1
22.3	36.6	38.4	38.3	22.2	34.1	35.7	35.5	30.3	32.5	32.2	19.5	25.5	26.3	25.8	24.2	38.5	40.5	40.1
18.2	26.6	28.2	27.8	17.5	25.1	27.1	27.7	21.6	22.7	22.3	16.9	17.9	19.8	19.7	18.8	28.7	31.4	30.4
12.5	12.9	13.7	14.0	12.8	12.7	13.8	14.1	16.4	18.7	18.3	13.9	12.7	14.2	14.3	-----	18.1	17.9	18.0
23.2	47.9	43.6	45.6	25.2	44.7	42.0	45.4	43.5	38.8	42.7	24.4	41.2	36.8	39.6	22.0	47.7	42.0	46.7
28.2	49.8	46.2	45.7	30.4	56.6	51.3	51.4	46.9	43.5	42.9	31.5	58.2	53.6	53.3	22.2	47.3	42.2	42.4
32.6	62.8	57.9	56.4	31.6	66.0	60.8	59.3	62.8	55.2	55.7	32.5	59.4	56.3	55.8	34.3	64.9	55.6	53.8
19.7	40.7	41.6	40.8	20.0	40.5	42.0	41.0	39.8	42.3	39.1	16.4	35.2	36.9	35.8	18.0	42.4	41.4	40.1
22.9	41.4	38.9	39.0	25.8	42.1	42.0	42.1	42.6	41.8	40.8	21.3	34.2	31.7	31.6	25.0	42.6	39.7	39.2
-----	37.1	29.2	32.2	-----	38.4	30.3	31.8	38.9	32.1	33.4	-----	38.3	32.8	33.7	-----	37.8	32.2	33.1
8.0	12.0	13.0	13.0	8.6	14.0	14.0	14.0	13.8	13.8	13.8	9.7	12.0	12.0	12.0	9.0	14.8	15.5	15.5
-----	11.4	11.7	11.7	-----	11.5	11.2	11.1	12.4	12.6	12.7	-----	10.8	10.9	10.7	-----	12.5	12.1	12.1
42.5	56.3	55.0	57.5	39.3	54.1	53.6	56.5	53.3	54.7	55.0	42.0	53.1	51.5	54.4	38.2	52.4	51.4	52.0
-----	30.7	28.3	28.5	-----	31.0	30.0	30.7	28.2	27.5	27.5	-----	30.3	27.3	26.8	-----	29.5	27.1	28.1
25.0	39.2	39.0	40.0	24.5	38.0	39.8	40.1	37.7	38.3	37.9	20.8	37.8	37.2	38.5	22.0	36.2	36.9	37.2
15.9	22.1	18.0	18.0	15.7	22.6	18.5	18.6	21.4	18.1	18.2	18.3	24.3	20.2	20.3	15.7	21.1	18.4	18.6
-----	25.6	25.4	25.4	-----	27.5	27.4	27.3	25.2	26.7	26.9	-----	28.7	28.6	28.3	-----	27.0	26.5	26.2
39.7	54.3	42.4	52.1	34.8	51.2	43.4	49.7	64.0	56.9	63.1	40.0	46.9	35.1	43.5	46.0	70.2	59.8	68.0
4.8	9.5	9.4	9.4	5.5	9.3	9.0	9.0	10.1	10.3	10.3	5.6	9.4	9.3	9.3	5.9	9.2	9.1	9.1
3.2	5.8	5.2	5.2	3.2	5.6	5.2	5.3	5.8	5.5	5.5	2.9	5.1	5.1	5.1	3.5	6.1	6.0	5.8
2.7	4.8	4.7	4.8	2.8	6.2	5.8	5.9	5.1	5.0	5.0	3.4	5.0	6.1	5.5	3.1	5.1	5.0	5.2
-----	8.6	8.8	8.6	-----	9.3	9.0	9.1	8.0	8.0	8.0	-----	10.1	10.4	10.2	-----	9.1	9.1	9.1
-----	10.1	9.4	9.5	-----	10.5	9.8	10.0	11.6	9.6	9.6	-----	11.3	9.5	9.6	-----	10.8	9.6	9.5
-----	24.4	24.7	24.6	-----	25.2	25.2	25.1	25.9	25.4	25.6	-----	26.9	26.7	26.6	-----	25.4	24.9	24.9
-----	20.7	20.7	20.7	-----	23.1	23.3	23.3	24.9	24.4	24.0	-----	17.3	18.3	18.2	-----	23.4	23.4	23.2
9.8	12.4	11.3	11.3	9.2	12.8	11.7	11.4	13.0	12.5	12.3	8.6	11.0	10.3	10.5	9.3	11.8	10.6	10.8
-----	8.7	9.1	9.0	-----	8.2	8.9	8.9	9.5	10.0	10.4	-----	9.9	11.1	11.2	-----	9.3	10.1	10.1
2.2	4.5	3.3	3.5	2.1	4.0	2.9	3.2	3.1	2.9	2.6	1.3	2.6	2.8	2.7	1.8	3.4	2.8	3.1
-----	5.2	5.5	4.9	-----	6.2	6.5	5.3	4.9	5.7	4.9	-----	3.5	4.5	3.7	-----	4.7	5.2	4.7
-----	4.1	4.1	3.8	-----	5.2	4.7	4.4	4.0	3.8	2.7	-----	4.2	3.7	3.8	-----	3.3	4.8	4.3
-----	10.5	10.8	10.9	-----	12.5	12.4	12.8	15.0	14.4	14.1	-----	13.4	12.0	12.0	-----	11.2	11.2	11.2
-----	15.0	14.3	14.5	-----	16.2	15.8	16.0	16.7	13.8	14.4	-----	18.4	18.9	18.3	-----	17.8	16.8	17.2
-----	15.2	15.0	15.0	-----	17.0	16.6	16.9	18.6	17.7	17.5	-----	18.7	18.3	18.1	-----	19.6	18.4	18.9
-----	11.3	11.7	11.7	-----	12.4	12.4	11.9	11.6	12.8	13.1	-----	[3] 16.6	[2] 16.8	[2] 16.6	-----	13.6	13.1	13.1
5.0	6.6	6.7	6.7	5.8	7.1	7.3	7.3	6.8	7.3	7.3	6.3	7.2	7.3	7.2	5.3	6.7	7.0	7.0
54.0	72.2	67.6	67.8	58.0	85.2	83.3	83.0	61.6	62.2	62.2	55.0	75.8	77.1	78.0	48.3	61.8	60.6	60.8
24.5	46.1	38.5	39.2	30.0	51.5	46.8	46.0	53.8	49.4	49.5	35.0	52.8	51.3	51.3	30.0	53.5	48.9	48.8
-----	14.7	13.6	13.3	-----	18.7	16.4	16.3	15.4	14.5	13.8	-----	13.3	11.5	11.4	-----	16.5	14.8	13.6
-----	13.9	13.6	13.4	-----	14.7	14.3	14.3	13.6	13.4	13.1	-----	13.9	13.6	13.5	-----	14.3	13.8	14.0
-----	30.4	30.0	29.6	-----	40.6	38.3	38.2	[3] 10.8	[3] 11.1	[3] 11.0	-----	[3] 12.6	[3] 12.7	[3] 12.8	-----	33.1	32.5	33.3
-----	53.9	52.3	56.9	-----	52.0	60.8	60.0	61.0	66.3	66.4	-----	45.5	50.2	52.5	-----	61.3	65.5	69.5

[2] No. 2½ can.

[3] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Richmond, Va.				Rochester, N. Y.			St. Louis, Mo.			
		Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
		1913	1926						1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.6	39.6	42.0	41.8	42.1	43.9	44.2	26.0	37.7	39.2	39.0
Round steak	do	20.0	35.1	36.6	37.6	35.4	36.3	36.8	24.3	36.3	38.0	38.3
Rib roast	do	18.9	31.5	32.5	30.5	30.4	32.5	32.3	19.5	30.3	30.8	30.8
Chuck roast	do	15.5	22.9	23.8	23.6	24.8	25.6	26.1	15.6	21.0	22.8	22.5
Plate beef	do	12.5	15.9	17.1	17.3	14.0	13.7	14.4	12.4	14.1	15.0	15.2
Pork chops	do	22.0	43.6	37.8	41.5	45.9	40.9	44.4	21.0	39.8	35.0	37.4
Bacon, sliced	do	27.0	48.6	42.4	42.8	47.6	41.5	41.6	27.5	48.8	42.7	43.0
Ham, sliced	do	26.0	49.0	45.8	46.4	60.2	53.7	54.1	27.3	59.1	51.3	51.0
Lamb, leg of	do	19.3	45.6	43.2	43.6	38.3	38.7	38.7	18.3	37.5	37.7	37.4
Hens	do	19.8	35.5	33.2	32.9	41.6	38.6	38.9	17.1	34.6	31.9	31.7
Salmon, canned, red	do	----	36.8	34.5	34.0	36.8	31.5	34.2	----	37.9	33.7	34.0
Milk, fresh	Quart	10.0	14.0	14.0	14.0	12.5	12.8	13.5	9.0	13.0	13.0	13.0
Milk, evaporated	15-16 oz. can	----	12.6	12.7	12.4	11.6	11.4	11.3	----	10.3	10.9	10.9
Butter	Pound	39.6	57.2	56.0	56.1	51.5	51.6	52.4	36.8	53.6	52.7	55.3
Oleomargarine (all butter substitutes).	do	----	31.9	31.4	31.4	30.8	29.2	29.8	----	27.7	26.8	26.7
Cheese	do	21.8	35.8	36.6	36.8	35.0	36.5	38.6	19.3	33.7	36.0	36.8
Lard	do	15.4	21.9	18.1	18.8	20.8	17.7	18.4	14.3	18.6	15.2	15.9
Vegetable lard substitute	do	----	25.9	25.9	25.9	24.6	24.3	24.7	----	26.0	25.8	25.5
Eggs, strictly fresh	Dozen	33.3	46.9	37.6	43.2	55.6	40.2	48.0	27.3	42.9	36.2	40.7
Bread	Pound	5.4	9.4	9.4	9.4	8.9	9.0	9.0	5.5	9.8	9.9	9.9
Flour	do	3.3	6.0	5.5	5.6	5.8	5.5	5.4	2.9	5.4	5.3	5.3
Corn meal	do	2.2	4.6	4.7	4.9	5.6	5.7	6.2	2.5	4.3	4.6	4.7
Rolled oats	do	----	9.1	8.5	8.6	9.4	9.2	9.4	----	8.7	8.4	8.5
Corn flakes	8-oz. pkg	----	10.8	9.7	9.7	10.3	9.4	9.4	----	10.1	8.8	8.9
Wheat cereal	28-oz. pkg	----	25.8	25.8	25.9	25.4	24.8	25.0	----	24.4	24.8	24.7
Macaroni	Pound	----	20.2	20.4	20.9	21.0	19.5	20.3	----	21.1	19.9	20.1
Rice	do	10.0	13.2	12.0	11.9	10.8	10.4	10.0	8.4	10.8	10.2	10.2
Beans, navy	do	----	9.3	9.0	9.1	8.9	8.9	9.4	----	7.9	8.7	8.7
Potatoes	do	1.9	4.6	3.6	3.4	3.7	2.6	2.5	2.0	4.3	3.5	3.4
Onions	do	----	6.7	7.6	7.1	5.3	6.0	4.9	----	5.2	6.4	5.9
Cabbage	do	----	4.8	3.9	4.0	3.2	3.3	2.5	----	3.5	4.1	4.0
Beans, baked	No. 2 can	----	10.1	10.1	10.1	10.4	10.3	10.2	----	10.6	10.4	10.3
Corn, canned	do	----	15.4	14.8	15.1	16.1	15.0	16.6	----	15.9	15.2	15.2
Peas, canned	do	----	20.3	18.9	18.8	18.4	17.2	18.0	----	16.5	15.2	15.3
Tomatoes, canned	do	----	10.1	10.5	10.5	13.8	13.1	13.4	----	11.1	11.3	11.3
Sugar, granulated	Pound	5.4	6.9	7.0	7.1	6.4	6.6	6.6	5.5	7.1	7.2	7.2
Tea	do	56.0	91.4	91.4	91.5	68.7	69.8	69.7	55.0	73.6	76.5	76.5
Coffee	do	27.4	49.5	45.6	46.2	47.9	41.4	44.3	24.4	48.3	45.3	45.1
Prunes	do	----	17.9	15.4	15.5	16.9	15.8	15.2	----	18.4	17.4	17.7
Raisins	do	----	14.8	14.1	14.1	14.3	14.6	14.6	----	15.0	14.4	14.4
Bananas	Dozen	----	37.7	36.7	36.5	37.7	34.0	36.4	----	32.9	31.5	32.5
Oranges	do	----	55.0	53.5	48.3	52.4	54.6	56.2	----	48.0	51.9	54.1

[1] No. 2½ can.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.				Salt Lake City, Utah				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
1913	1926			1913	1926			1913	1926						1913	1926		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
27.2	37.0	40.1	39.9	22.6	30.9	33.2	33.1	21.3	31.5	33.2	33.2	34.6	35.8	35.8	26.0	51.4	52.6	53.7
23.6	31.9	34.7	34.1	20.0	27.3	30.6	30.6	19.7	28.9	30.1	30.4	28.8	30.0	29.6	22.5	42.6	44.4	44.5
20.4	30.3	31.6	32.1	19.4	23.6	25.9	25.1	21.1	29.4	30.1	30.6	28.8	27.9	27.9	23.0	37.5	37.8	38.5
16.8	23.9	25.9	24.6	15.0	17.9	19.6	19.6	15.0	18.8	19.7	19.7	18.7	19.0	18.8	17.6	27.7	28.7	28.8
10.6	13.2	14.7	14.5	12.5	12.5	14.2	14.2	13.8	14.4	15.1	15.5	14.8	16.3	15.8	11.9	11.9	13.3	13.7
21.4	38.2	32.7	37.6	23.8	40.7	35.6	39.4	23.7	46.6	42.6	43.3	36.2	32.3	32.5	22.5	47.2	41.3	44.0
26.3	50.3	44.4	45.2	30.0	53.0	46.9	46.9	34.4	65.0	57.5	56.7	47.1	41.9	41.9	27.5	54.1	48.3	47.9
28.8	56.6	48.2	48.2	30.0	61.0	57.1	57.5	33.0	69.5	63.3	63.8	51.1	45.0	45.0	31.7	64.1	58.9	56.5
16.7	34.2	33.6	32.8	17.5	34.3	35.2	35.1	16.5	37.8	37.7	38.8	41.0	41.0	40.0	19.0	45.9	46.4	46.1
19.6	30.8	29.1	28.8	23.3	32.9	29.6	29.8	24.2	44.1	41.4	41.8	35.5	31.1	32.6	22.7	45.1	43.4	42.5
-----	39.1	36.3	37.5	-----	36.2	34.8	35.3	-----	33.5	30.6	32.0	39.1	33.5	34.3	-----	36.2	34.0	35.4
7.8	11.0	11.0	11.0	8.7	11.3	11.0	11.0	10.0	14.0	14.0	14.0	17.0	17.0	17.0	8.8	12.0	12.0	12.0
-----	11.9	12.0	12.2	-----	10.6	10.6	10.7	-----	10.2	10.5	10.4	11.2	11.4	11.6	-----	11.6	11.9	11.9
35.0	49.0	46.0	48.6	39.0	49.0	48.2	51.2	42.9	54.8	53.7	56.0	54.5	52.1	53.1	36.4	51.6	51.7	53.0
-----	27.5	24.8	23.2	-----	30.2	28.0	27.2	-----	31.4	27.0	26.0	34.6	32.2	31.1	-----	29.2	28.4	28.2
21.0	33.9	35.8	36.1	24.2	29.5	30.7	30.9	19.5	38.5	38.3	39.2	35.2	35.2	36.1	18.3	35.1	35.4	35.9
15.4	21.5	18.3	18.7	19.8	24.8	20.5	21.0	18.7	25.3	22.7	22.8	21.6	18.1	18.9	16.5	22.4	18.9	19.8
-----	27.1	28.1	28.5	-----	29.9	29.2	29.0	-----	28.2	28.2	28.1	20.3	17.0	17.5	-----	26.3	26.0	25.9
28.1	41.8	33.8	38.8	36.0	44.8	34.0	38.7	46.4	53.5	40.7	47.2	54.6	45.9	49.5	39.3	54.1	44.5	50.9
6.0	9.9	10.0	9.3	5.9	9.9	9.7	9.7	5.9	9.8	9.5	9.5	10.4	10.7	10.7	5.6	10.4	10.7	10.7
3.0	5.8	5.4	5.3	2.5	4.2	4.2	4.1	3.4	5.7	5.7	5.6	6.8	6.6	6.6	3.5	6.4	5.9	5.9
2.3	5.3	5.2	5.7	3.4	5.6	5.6	5.6	3.5	6.3	6.5	6.4	3.7	3.7	3.8	-----	7.8	7.8	7.8
-----	9.9	10.2	10.3	-----	8.9	8.8	8.8	-----	9.5	10.0	10.1	8.8	8.6	8.6	-----	10.0	9.8	9.8
-----	11.9	10.7	10.2	-----	12.5	10.2	10.0	-----	10.5	10.0	9.9	10.2	9.6	9.7	-----	10.9	10.1	10.1
-----	26.7	26.4	26.7	-----	25.5	25.5	25.7	-----	25.9	25.3	25.3	24.4	24.3	24.3	-----	25.6	25.1	25.1
-----	18.7	18.7	18.8	-----	20.2	19.9	20.1	-----	16.2	15.8	16.1	18.2	18.2	18.3	-----	23.6	23.1	22.9
10.0	12.2	10.5	10.4	8.2	11.2	9.6	9.2	8.5	12.0	11.5	11.3	10.5	9.7	9.6	8.4	11.8	11.2	11.2
-----	9.3	9.5	9.6	-----	9.4	9.5	9.3	-----	9.5	10.3	10.3	10.5	9.4	9.8	-----	10.9	10.6	10.8
1.3	3.1	2.4	1.7	1.4	2.6	2.4	2.0	1.7	3.5	3.6	3.3	4.9	3.8	4.1	1.8	3.6	2.9	3.0
-----	5.2	7.3	5.4	-----	2.7	5.3	3.1	-----	4.0	4.3	4.1	6.7	6.9	6.7	-----	5.1	6.7	5.6
-----	3.4	2.6	2.0	-----	3.1	3.0	3.0	-----	-----	-----	-----	4.6	5.3	4.8	-----	3.4	3.5	3.2
-----	13.7	13.6	13.9	-----	14.3	12.9	13.0	-----	13.5	13.0	12.8	12.1	12.1	12.2	-----	11.1	11.4	11.2
-----	15.3	14.3	14.4	-----	15.3	14.4	14.4	-----	18.2	18.2	17.9	15.6	15.2	15.2	-----	17.4	16.8	16.6
-----	15.9	15.3	15.5	-----	15.9	15.5	15.7	-----	18.6	17.9	17.6	16.6	16.7	16.8	-----	17.8	17.2	16.9
-----	14.1	14.3	14.1	-----	14.7	13.9	13.6	-----	[1]15.3	15.1	[1]15.1	10.0	10.0	9.9	-----	12.2	12.2	12.2
5.7	7.6	7.4	7.4	6.2	7.8	8.1	8.1	5.6	6.9	7.0	7.0	6.9	6.9	7.0	5.8	6.8	7.2	7.1
45.0	69.9	68.1	65.7	65.7	88.3	86.5	86.5	50.0	68.8	72.4	72.8	82.5	81.7	82.2	52.5	67.3	71.2	71.3
30.0	52.8	50.8	52.4	35.8	56.7	55.1	54.4	32.0	53.5	52.0	51.7	48.3	45.5	45.1	31.3	52.4	49.1	49.4
-----	16.7	15.1	15.8	-----	15.2	14.3	14.3	-----	15.2	12.7	12.0	15.9	14.9	14.2	-----	17.7	16.1	15.6
-----	15.8	15.4	15.6	-----	14.5	13.7	13.3	-----	13.1	13.2	12.8	14.9	14.6	14.2	-----	15.0	14.7	14.6
-----	[2]11.4	[2]10.3	[2]10.5	-----	[2]13.5	[2]12.8	[2]12.1	-----	28.3	31.3	30.0	32.1	29.6	29.6	-----	32.9	32.9	32.9
-----	51.4	53.4	55.7	-----	43.0	48.3	50.5	-----	47.6	50.3	51.3	47.6	46.9	46.5	-----	52.7	59.5	60.5

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Article	Unit	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Sept. 15—		Aug. 15, 1927	Sept. 15, 1927	Sept. 15, 1926	Aug. 15, 1927	Sept. 15, 1927	Sept. 15—		Aug. 15, 1927	Sept. 15, 1927
		1913	1926						1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	24.0	33.5	34.7	34.8	35.9	37.1	37.1	27.4	46.7	50.1	49.3
Round steak	do	20.7	29.3	30.6	30.7	35.4	36.1	36.5	24.1	40.4	43.1	42.8
Rib roast	do	19.3	26.9	27.7	28.2	24.0	24.4	24.4	21.3	34.3	34.8	34.9
Chuck roast	do	16.0	19.1	20.5	20.4	21.4	22.6	22.5	17.3	25.1	26.4	25.9
Plate beef	do	13.0	14.8	15.1	15.4	14.1	14.2	14.5	12.4	13.8	13.9	14.2
Pork chops	do	24.3	42.5	38.6	40.5	40.0	31.4	35.0	24.1	47.5	42.2	44.2
Bacon, sliced	do	32.5	62.0	57.0	57.3	50.7	46.3	45.8	28.5	53.1	43.8	43.8
Ham, sliced	do	30.0	65.0	60.0	59.5	58.9	50.4	49.6	30.0	62.1	57.2	57.2
Lamb, leg of	do	19.3	36.5	36.6	35.8	39.5	41.3	38.8	19.4	41.2	40.7	38.5
Hens	do	23.3	33.7	33.2	31.1	36.7	33.0	33.0	22.5	40.9	37.1	38.3
Salmon, canned, red	do		37.7	35.8	35.8	41.0	34.4	36.2		38.0	33.1	33.3
Milk, fresh	Quart	8.6	13.0	12.0	12.0	12.5	14.4	14.4	8.2	14.0	15.0	15.0
Milk, evaporated	15–16 oz. can		10.6	10.6	10.6	11.6	11.7	11.6		12.0	12.1	12.0
Butter	Pound	40.0	53.0	52.6	53.5	51.3	49.6	51.8	38.7	54.3	53.7	57.2
Oleomargarine (all butter substitutes)	do		30.8	27.2	26.7	30.6	27.9	28.1		31.5	28.9	27.9
Cheese	do	21.7	34.6	35.1	35.2	35.3	37.4	36.2	23.5	38.8	39.1	39.9
Lard	do	17.6	24.3	20.7	20.8	21.9	18.0	18.6	15.3	21.7	17.8	18.6
Vegetable lard substitute	do		28.4	27.3	27.4	28.0	27.5	27.5		25.9	24.5	24.7
Eggs, strictly fresh	Dozen	43.3	49.5	37.9	46.4	41.4	33.2	39.8	34.5	55.6	42.2	56.4
Bread	Pound	5.2	9.8	9.7	9.7	10.1	10.3	10.3	5.7	8.8	9.1	9.1
Flour	do	2.9	4.9	5.0	4.8	6.0	5.6	5.5	3.8	6.5	5.8	5.9
Corn meal	do	3.2	4.9	5.6	5.7	4.9	4.9	4.9	2.6	5.2	5.2	5.2
Rolled oats	do		8.9	8.6	8.5	10.0	10.1	10.1		9.2	9.3	9.3
Corn flakes	8-oz. pkg		11.8	10.4	10.2	11.6	10.2	10.3		10.8	9.5	9.5
Wheat cereal	28-oz. pkg		27.6	27.5	27.5	26.9	27.3	27.5		24.8	24.4	24.3
Macaroni	Pound		18.2	18.1	18.1	19.0	18.9	19.3		23.8	22.6	22.5
Rice	do	7.7	12.9	12.0	12.4	11.5	10.9	10.9	9.4	12.8	11.5	11.6
Beans, navy	do		10.2	11.1	11.5	8.9	9.1	9.5		8.2	9.0	8.8
Potatoes	do	1.4	2.6	3.1	2.4	4.0	3.6	3.0	2.0	4.3	3.4	3.6
Onions	do		3.9	5.0	4.0	5.3	6.7	5.8		6.0	6.3	5.8
Cabbage	do		4.1	4.9	4.4	4.1	3.4	3.9		4.8	4.4	4.1
Beans, baked	No. 2 can		12.9	11.9	11.6	10.9	10.3	10.4		10.6	10.0	10.2
Corn, canned	do		18.6	17.1	17.3	15.1	14.5	14.5		15.4	14.3	14.3
Peas, canned	do		19.7	18.3	18.4	16.9	15.9	16.1		16.5	15.9	15.0
Tomatoes, canned	do		[1] 17.9	[1] 16.7	[1] 16.4	13.8	13.6	13.6		10.2	10.1	9.8
Sugar, granulated	Pound	6.6	7.0	7.3	7.2	7.6	7.9	8.0	5.3	6.7	6.8	6.9
Tea	do	50.0	79.0	75.9	75.7	81.1	83.8	84.6	57.5	90.6	91.2	91.2
Coffee	do	28.0	52.1	49.0	49.2	52.7	49.7	49.7	28.8	48.6	43.0	41.0
Prunes	do		15.8	13.3	13.2	17.3	16.0	16.0		17.8	16.0	16.3
Raisins	do		14.8	14.0	13.9	16.0	15.3	15.4		15.0	14.6	14.4
Bananas	Dozen		[2] 13.6	[2] 12.5	[2] 12.4	[2] 10.0	[2] 10.0	[2] 9.3		34.7	31.8	32.7
Oranges	do		48.0	50.0	52.6	51.0	49.0	52.3		57.4	56.8	63.2

[1] No. 2½ can.

[2] Per pound.

Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food [3] in September, 1927, compared with the average cost in the year 1913, in September, 1926, and in August, 1927. For 12 other cities comparisons are given for the one-year and the one-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.[4]

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN SEPTEMBER, 1927, COMPARED WITH THE COST IN AUGUST, 1927, SEPTEMBER, 1926, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase September, 1927, compared with 1913	Percentage decrease September, 1927, compared with September, 1926	Percentage increase September, 1927, compared with August, 1927	City	Percentage increase September, 1927, compared with 1913	Percentage decrease September, 1927, compared with September, 1926	Percentage increase September, 1927, compared with August, 1927
Atlanta	59.1	3.4	1.3	Minneapolis	47.2	5.6	0.1
Baltimore	59.2	4.0	1.2	Mobile	----------	3.2	0.1
Birmingham	59.4	4.0	0.4	Newark	50.4	[2] 0.2	4.0
Boston	57.2	1.4	2.5	New Haven	55.2	1.6	1.6
Bridgeport	----------	1.4	1.8	New Orleans	53.5	1.0	0.8
Buffalo	57.2	3.3	1.7	New York	60.2	0.1	3.0
Butte	----------	3.0	[1] 1.0	Norfolk	----------	2.2	1.5
Charleston, S. C.	55.8	3.7	1.0	Omaha	47.1	5.7	0.7
Chicago	64.8	2.0	0.6	Peoria	----------	2.8	[1] 0.1
Cincinnati	55.1	4.7	0.4	Philadelphia	57.7	2.6	2.4
Cleveland	54.3	4.0	2.1	Pittsburgh	56.0	2.9	2.0
Columbus	----------	3.6	1.0	Portland, Me.	----------	1.5	0.1
Dallas	53.6	1.2	0.7	Portland, Oreg.	39.5	0.3	2.0
Denver	36.3	3.0	0.2	Providence	57.5	1.6	1.7
Detroit	63.1	2.1	1.8	Richmond	61.1	4.0	1.7
Fall River	54.6	[2] 0.1	1.8	Rochester	----------	3.3	2.7
Houston	----------	3.6	0.7	St. Louis	57.5	2.8	1.1
Indianapolis	48.9	5.0	0.7	St. Paul	----------	5.6	[1] 1.0
Jacksonville	49.7	7.6	1.1	Salt Lake City	31.8	2.5	0.5
Kansas City	46.5	6.2	1.7	San Francisco	50.2	2.0	1.1
Little Rock	45.4	3.7	[1] 0.6	Savannah	----------	4.5	1.1
Los Angeles	42.9	2.5	1.7	Scranton	58.7	1.8	1.4
Louisville	49.7	3.7	2.1	Seattle	43.2	2.6	0.2
Manchester	54.1	0.4	1.6	Springfield, Ill.	----------	2.5	0.4
Memphis	46.2	2.7	[1] 0.3	Washington, D. C.	63.8	2.7	3.2
Milwaukee	56.4	2.5	1.1				

[1] Decrease. [2] Increase.

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of September 99.3 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 45 cities had a perfect record; that is, every merchant who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Birmingham, Bridgeport,

[3] For list of articles see note 5, p. 177.

[4] The consumption figures used from January, 1913, to December, 1920, for each article in each city are given in the Labor Review for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the Labor Review for March, 1921, p. 26.

Buffalo, Butte, Charleston, S. C., Chicago, Cincinnati, Columbus, Dallas, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Paul, Salt Lake City, Savannah, Scranton, Seattle, Springfield, Ill., and Washington, D. C.

The following summary shows the promptness with which the merchants responded in September, 1927:

RETAIL PRICE REPORTS RECEIVED FOR SEPTEMBER, 1927

Item	United States	Geographical division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received	99.3	99.7	100.0	99.4	99.0	98.0
Number of cities in each section from which every report was received	45	13	8	12	7	5

Retail Prices of Coal in the United States [a]

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, September 15, 1926, and August 15 and September 15, 1927, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, SEPTEMBER 15, 1926, AND AUGUST 15 AND SEPTEMBER 15, 1927

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	Sept. 15	Aug. 15	Sept. 15
United States:					
Pennsylvania anthracite—					
Stove—					
Average price	**$7.99**	**$7.46**	**$15.55**	**$15.15**	**$15.38**
Index (1913=100)	**103.4**	**96.6**	**201.3**	**196.1**	**199.1**
Chestnut—					
Average price	**$8.15**	**$7.68**	**$15.30**	**$14.80**	**$15.03**
Index (1913=100)	**103.0**	**97.0**	**193.4**	**187.0**	**189.9**
Bituminous—					
Average price	**$5.48**	**$5.39**	**$9.25**	**$8.99**	**$9.20**
Index (1913=100)	**100.8**	**99.2**	**170.3**	**165.4**	**169.3**
Atlanta, Ga.:					
Bituminous	$5.88	$4.83	$8.15	$7.58	$8.35
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove	[1] 7.70	[1] 7.24	[1] 16.00	[1] 15.75	[1] 16.00
Chestnut	[1] 7.93	[1] 7.49	[1] 15.50	[1] 15.00	[1] 15.25
Bituminous			7.58	8.18	8.18

[1] Per ton of 2,240 pounds.

[a] Prices of coal were formerly secured semiannually and published in the March and September issue. Since June, 1920, these prices have been secured and published monthly.

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, SEPTEMBER 15, 1926, AND AUGUST 15 AND SEPTEMBER 15, 1927—Continued

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	Sept. 15	Aug. 15	Sept. 15
Birmingham, Ala.:					
Bituminous	$4.22	$4.01	$7.53	$7.30	$7.49
Boston, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.50	16.25	16.00	16.00
Chestnut	8.25	7.75	16.00	15.75	15.75
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove			15.00	14.50	14.50
Chestnut			15.00	14.50	14.50
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	$6.75	$6.54	13.75	13.74	13.99
Chestnut	6.99	6.80	13.39	13.34	13.59
Butte, Mont.:					
Bituminous			10.95	10.95	10.95
Charleston, S. C.:					
Bituminous	[1] 6.75	[1] 6.75	11.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove	8.00	7.80	16.90	16.70	16.95
Chestnut	8.25	8.05	16.65	16.20	16.45
Bituminous	4.97	4.65	8.91	9.16	9.32
Cincinnati, Ohio:					
Bituminous	3.50	3.38	7.50	7.10	7.08
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove	7.50	7.25	15.35	15.05	15.10
Chestnut	7.75	7.50	14.95	14.70	14.70
Bituminous	4.14	4.14	9.19	8.92	8.94
Columbus, Ohio:					
Bituminous			7.36	6.85	7.21
Dallas, Tex.:					
Arkansas anthracite—					
Egg			15.50	14.33	15.17
Bituminous	8.25	7.21	13.33	12.21	12.71
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	8.88	9.00	16.00	15.90	16.10
Stove, 3 and 5 mixed	8.50	8.50	16.50	15.90	16.10
Bituminous	5.25	4.88	10.73	9.78	10.25
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove	8.00	7.45	16.00	15.50	16.00
Chestnut	8.25	7.65	15.50	15.00	15.50
Bituminous	5.20	5.20	9.90	9.21	9.38
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.43	16.75	16.50	16.75
Chestnut	8.25	7.61	16.25	16.00	16.25
Houston, Tex.:					
Bituminous			11.50	11.60	11.80
Indianapolis, Ind.:					
Bituminous	3.81	3.70	7.18	6.96	7.26
Jacksonville, Fla.:					
Bituminous	7.50	7.00	14.00	12.00	13.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace			14.10	13.50	14.00
Stove No. 4			15.50	15.00	15.17
Bituminous	4.39	3.94	7.75	7.90	7.83
Little Rock, Ark.:					
Arkansas anthracite—					
Egg			14.00	13.50	13.50
Bituminous	6.00	5.33	10.35	9.96	10.15
Los Angeles, Calif.:					
Bituminous	13.52	12.50	15.63	15.55	16.25
Louisville, Ky.:					
Bituminous	4.20	4.00	6.63	6.94	7.01
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove	10.00	8.50	17.50	17.25	16.50
Chestnut	10.00	8.50	17.50	17.00	17.25
Memphis, Tenn.:					
Bituminous	[2] 4.34	[2] 4.22	7.25	8.30	8.30

[1] Per ton of 2,240 pounds.

[2] Per 10-barrel lot (1,800 pounds).

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, SEPTEMBER 15, 1926, AND AUGUST 15 AND SEPTEMBER 15, 1927—Continued

City, and kind of coal	1913		1926	1927	
	Jan. 15	July 15	Sept. 15	Aug. 15	Sept. 15
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove	$8.00	$7.85	$16.80	$16.40	$16.65
Chestnut	8.25	8.10	16.65	15.95	16.20
Bituminous	6.25	5.71	9.75	9.29	9.29
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove	9.25	9.05	18.10	17.90	18.15
Chestnut	9.50	9.30	17.95	17.45	17.70
Bituminous	5.89	5.79	11.09	11.16	11.66
Mobile, Ala.:					
Bituminous			9.64	9.46	9.08
Newark, N. J.:					
Pennsylvania anthracite—					
Stove	6.50	6.25	14.00	13.75	14.00
Chestnut	6.75	6.50	13.50	13.25	13.50
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove	7.50	6.25	15.35	14.65	14.90
Chestnut	7.50	6.25	15.35	14.65	14.90
New Orleans, La.:					
Bituminous	[2] 6.06	[2] 6.06	9.32	9.32	9.32
New York, N. Y.:					
Pennsylvania anthracite—					
Stove	7.07	6.66	14.75	14.08	14.33
Chestnut	7.14	6.80	14.54	13.79	14.04
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove			16.00	14.50	15.00
Chestnut			16.00	14.50	15.00
Bituminous			9.09	8.55	8.80
Omaha, Nebr.:					
Bituminous	6.63	6.13	10.02	9.75	10.02
Peoria, Ill.:					
Bituminous			6.81	6.96	6.94
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove	[1] 7.16	[1] 6.89	[1] 15.79	[1] 14.89	[1] 15.04
Chestnut	[1] 7.38	[1] 7.14	[1] 15.54	[1] 14.39	[1] 14.54
Pittsburgh, Pa.:					
Pennsylvania anthracite—					
Chestnut	[1] 8.00	[1] 7.44	15.13	14.63	15.00
Bituminous	[3] 3.16	[3] 3.18	5.55	5.53	5.76
Portland, Me.:					
Pennsylvania anthracite—					
Stove			16.80	16.56	16.74
Chestnut			16.80	16.56	16.74
Portland, Oreg.:					
Bituminous	9.79	9.66	13.37	13.33	13.64
Providence, R. I.:					
Pennsylvania anthracite—					
Stove	[4] 8.25	[4] 7.50	[4] 16.25	[4] 16.00	[4] 16.25
Chestnut	[4] 8.25	[4] 7.75	[4] 16.00	[4] 15.75	[4] 16.00
Richmond, Va.:					
Pennsylvania anthracite—					
Stove	8.00	7.25	15.92	15.50	15.83
Chestnut	8.00	7.25	15.92	15.50	15.83
Bituminous	5.50	4.94	9.67	9.61	9.77
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove			14.60	14.35	14.60
Chestnut			14.15	13.90	14.15
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove	8.44	7.74	16.93	16.70	16.75
Chestnut	8.68	7.99	16.68	16.25	16.30
Bituminous	3.36	3.04	6.35	7.44	7.57

[1] Per ton of 2,240 pounds.
[2] Per 10-barrel lot (1,800 pounds).
[3] Per 25-bushel lot (1,900 pounds).
[4] The average price of coal delivered in bin is 50 cents higher than here shown. Practically all coal is delivered in bin.

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, SEPTEMBER 15, 1926, AND AUGUST 15 AND SEPTEMBER 15, 1927—Continued

City, and kind of coal	1913		1927	1926	
	Jan. 15	July 15	Sept. 15	Aug. 15	Sept. 15
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove	$9.20	$9.05	$18.10	$17.90	$18.15
Chestnut	9.45	9.30	17.95	17.45	17.70
Bituminous	6.07	6.04	11.30	11.40	11.96
Salt Lake City, Utah:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	11.00	11.50	18.00	18.00	18.00
Stove, 3 and 5 mixed	11.00	11.50	18.00	18.00	18.00
Bituminous	5.64	5.46	8.04	7.73	8.34
San Francisco, Calif.:					
New Mexico anthracite—					
Cerillos egg	17.00	17.00	25.50	25.00	25.50
Colorado anthracite—					
Egg	17.00	17.00	25.00	24.50	25.00
Bituminous	12.00	12.00	16.67	15.40	16.63
Savannah, Ga.:					
Bituminous	----	----	[5] 11.25	[5] 10.38	[5] 11.75
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove	4.25	4.31	11.00	10.48	10.75
Chestnut	4.50	4.56	10.67	10.23	10.50
Seattle, Wash.:					
Bituminous	7.63	7.70	10.20	9.77	9.76
Springfield, Ill.:					
Bituminous	----	----	4.38	4.44	4.44
Washington, D. C.:					
Pennsylvania anthracite—					
Stove	[1] 7.50	[1] 7.38	[1] 15.80	[1] 15.25	[1] 15.51
Chestnut	[1] 7.65	[1] 7.53	[1] 15.51	[1] 14.73	[1] 14.99
Bituminous—					
Prepared sizes, low volatile	----	----	[1] 11.04	[1] 10.67	[1] 11.00
Prepared sizes, high volatile	----	----	[1] 8.75	[1] 9.00	[1] 9.00
Run of mine, mixed	----	----	[1] 7.75	[1] 7.78	[1] 7.88

[1] Per ton of 2,240 pounds.
[5] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

Index Numbers of Wholesale Prices in September, 1927 (Revised Series)

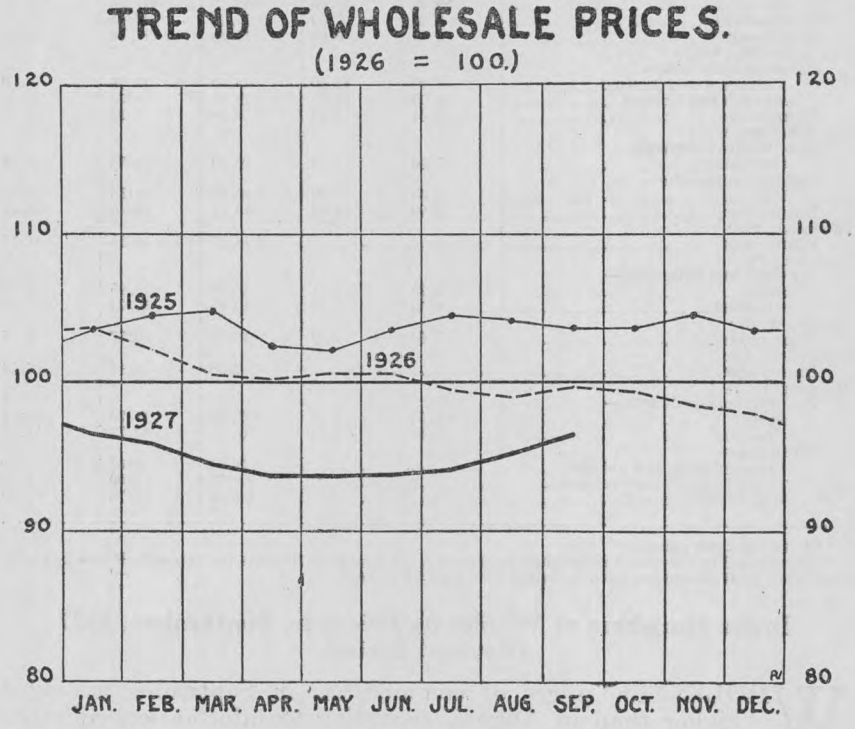
WHOLESALE prices of commodities in September averaged higher than in August, according to information collected in representative markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's revised index number, computed on prices in the year 1926 as the base, and including 550 commodities or price series, stands at 96.5 for September compared with 95.2 for the month before, a rise of 1⅓ per cent. Compared with September, 1926, however, with an index number of 99.7, a decrease of 3¼ per cent is shown.

Farm products rose from a level of 102.2 in August to 105.9 in September, due to advances in hogs, calves, beef steers, alfalfa hay, cotton, eggs, and lemons. Small price increases were shown for barley, oats, and rye, while corn and wheat declined sharply.

Foodstuffs were generally higher than in August, this being particularly true of butter, cheese, and most meats. Hides and leather products advanced slightly, as did textiles and coal, while petroleum products were somewhat cheaper.

Iron and steel products and nonferrous metals averaged lower than in August. Lumber also was cheaper, while no change in the general price level was reported for brick and Portland cement. Chemicals, including fertilizer materials and mixed fertilizers, were slightly higher, while cattle feed and crude rubber in the group of miscellaneous commodities were lower than in the month before.

Of the 550 commodities or price series for which comparable information for August and September was collected, increases were



shown in 171 instances and decreases in 134 instances. In 245 instances no change in price was reported.

Comparing prices in September with those of a year ago, as measured by changes in the index numbers, it is seen that farm products and hides and leather products were considerably higher, while decreases are shown for all other groups of commodities. These decreases range from less than 1 per cent in the case of textiles and house-furnishing goods to 7½ per cent in the case of building materials and 17 per cent in the case of fuel and lighting.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100]

Groups and subgroups	September, 1926	1927		
		August	September	Purchasing power of the 1926 dollar in September
				Cents
Farm products	99.3	102.2	105.9	94.4
Grains	95.3	108.3	102.9	97.2
Livestock and poultry	103.7	98.2	104.9	95.3
Other farm products	97.7	102.8	107.6	92.9
Foods	99.8	94.2	96.5	103.6
Butter, cheese, and milk	101.1	98.8	105.6	94.7
Meats	101.6	90.3	92.2	108.5
Other foods	98.0	95.0	95.8	104.4
Hides and leather products	98.8	111.7	112.5	88.9
Hides and skins	95.8	131.3	128.4	77.9
Leather	99.1	114.3	115.4	86.7
Boots and shoes	99.8	103.3	105.6	94.7
Other leather products	100.0	103.3	104.9	95.3
Textile products	98.9	96.2	98.5	101.5
Cotton goods	100.0	100.2	106.1	94.3
Silk and rayon	99.0	86.6	86.6	115.5
Woolen and worsted goods	98.4	97.3	97.3	102.8
Other textile products	98.5	95.7	95.9	104.3
Fuel and lighting	101.5	84.1	84.2	118.8
Anthracite coal	98.4	95.7	96.5	103.6
Bituminous coal	98.2	101.9	102.4	97.7
Coke	95.3	93.8	94.0	106.4
Manufactured gas	99.0	99.6	97.8	102.2
Petroleum products	105.4	66.5	66.4	150.6
Metals and metal products	101.2	98.0	97.6	102.5
Iron and steel	99.8	95.1	94.7	105.6
Nonferrous metals	102.2	92.5	90.7	110.3
Agricultural implements	100.0	99.3	99.3	100.7
Automobiles	102.3	102.2	102.2	97.8
Other metal products	99.8	100.7	100.7	99.3
Building materials	99.5	92.9	92.1	108.6
Lumber	98.5	92.2	91.0	109.9
Brick	97.7	93.2	93.2	107.3
Cement	99.4	96.5	96.5	103.6
Structural steel	102.1	91.9	93.2	107.3
Paint materials	102.7	92.5	90.0	111.1
Other building materials	99.8	93.0	92.3	108.3
Chemicals and drugs	100.2	95.4	96.4	103.7
Chemicals	101.0	100.2	101.4	98.6
Drugs and pharmaceuticals	101.1	86.7	86.7	115.3
Fertilizer materials	97.0	91.2	92.1	108.6
Fertilizers	100.0	89.7	91.7	109.1
House-furnishing goods	99.5	98.6	98.6	101.4
Furniture	99.5	97.8	97.6	102.5
Furnishings	99.4	100.0	99.3	100.7
Miscellaneous	94.2	89.9	89.2	112.1
Cattle feed	95.6	125.4	117.7	95.0
Paper and pulp	95.7	92.0	92.4	108.2
Rubber	85.1	71.9	69.2	144.5
Automobile tires	91.4	77.9	77.4	129.2
Other miscellaneous	100.0	100.0	100.2	99.8
All commodities	99.7	95.2	96.5	103.6

Average Wholesale Prices of Commodities, July to September, 1927

IN CONTINUATION of the plan of publishing each quarter in the Labor Review a detailed statement of wholesale price changes, there is presented herewith a list of the more important commodities included in the bureau's revised compilation, together with the latest record of price changes available at the time of its preparation. For convenience of comparison, index numbers based on average prices in the year 1926 as 100 are shown in addition to the money prices wherever such information can be supplied. Index numbers for the several groups and subgroups also are included in the table. To show more minutely the fluctuation in prices, all index numbers are published to one decimal fraction. Figures are given for July, August, and September, 1927.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
ALL COMMODITIES				**94.1**	**95.2**	**96.5**
GROUP 1.—FARM PRODUCTS				**97.6**	**102.2**	**105.9**
(a) Grains				**107.0**	**108.3**	**102.9**
Barley, malting, per bushel, Chicago	$0.786	$0.803	$0.829	113.3	115.7	119.5
Corn, per bushel, Chicago—						
Contract grades	1.021	1.085	.990	134.6	143.0	130.5
No. 3, mixed	.999	1.065	.974	135.8	144.7	132.4
Oats, No. 2, white, per bushel, Chicago	.477	.478	.491	110.9	111.1	114.2
Rye, No. 2, per bushel, Chicago	1.096	.968	.973	114.8	101.5	102.0
Wheat, per bushel—						
No. 2, red winter, Chicago	1.428	1.395	1.315	92.6	90.5	85.2
No. 2, hard, Kansas City	1.401	1.400	1.323	93.6	93.5	88.4
No. 1, northern spring, Minneapolis	1.440	1.427	1.323	93.0	92.1	85.4
No. 2, dark northern spring, Minneapolis	1.486	1.461	1.360	95.6	93.9	87.5
No. 1, hard white, Portland, Oreg	1.378	1.348	1.315	96.0	93.9	91.6
No. 2, red winter, St. Louis	1.455	1.452	1.444	93.6	93.4	92.9
(b) Livestock and poultry				**95.3**	**98.2**	**104.9**
Cattle, per 100 pounds, Chicago—						
Calves, good to choice, vealers	13.031	13.900	14.906	107.4	114.5	122.8
Cows—						
Fair to good	7.013	7.090	7.075	121.7	123.0	122.7
Good to choice	8.038	8.095	8.031	123.9	124.8	123.8
Steers—						
Fair to good	10.825	11.300	11.781	123.5	129.0	134.4
Good to choice	12.300	12.575	13.313	129.1	132.0	139.7
Hogs, per 100 pounds, Chicago—						
Fair to choice, heavy butchers	8.975	9.185	10.850	72.8	74.5	88.0
Fair to choice, light butchers	9.969	10.510	11.638	76.0	80.1	88.7
Sheep, per 100 pounds, Chicago—						
Ewes, native, all grades, fair to best	5.313	5.575	5.188	80.6	84.6	78.7
Lambs, western, fair to good	14.219	13.575	13.563	103.8	99.1	99.0
Wethers, fed, poor to best	6.500	6.500	6.813	79.4	79.4	83.3
Poultry, live fowls, per pound—						
Chicago	.215	.220	.199	85.5	87.5	79.3
New York	.248	.248	.273	83.1	83.3	91.5
(c) Other farm products				**95.9**	**102.8**	**107.6**
Beans, medium, per 100 pounds, New York	6.531	6.700	6.650	120.0	123.1	122.2
Cotton, middling, per pound—						
Galveston	.179	.200	.216	104.8	117.4	127.1
New Orleans	.177	.197	.214	104.9	116.9	127.2
New York	.180	.203	.218	102.6	116.0	124.5
Eggs, fresh, per dozen—						
Western, Boston	.248	.283	.336	69.4	79.3	94.3
Firsts, Chicago	.232	.265	.328	69.3	79.0	97.8
Extra firsts, Cincinnati	.260	.314	.385	73.1	88.3	108.2
Candled, New Orleans	.183	.258	.284	53.9	76.0	83.9
Firsts, New York	.248	.281	.343	69.6	79.0	96.3
Extra firsts, Philadelphia	.275	.330	.404	69.6	83.5	102.2
No. 1, extras, San Francisco	.223	.260	.318	74.7	87.3	106.8
Fruit—						
Apples, fresh—						
Baldwins, per barrel—						
Chicago	(1)	(1)	(1)			
New York	(1)	4.125	4.031		102.3	100.0
Winesaps, medium grade, per box, Portland, Oreg	(1)	(1)	1.638			76.8
Lemons, choice or fancy, California, per box, Chicago	8.469	8.800	12.938	152.0	158.0	232.2
Oranges, choice, California, per box, Chicago	7.156	8.325	8.844	120.1	139.8	148.5
Hay, per ton—						
Alfalfa, Kansas City	15.550	16.375	18.000	73.9	77.9	85.6
Clover, mixed, No. 1, Cincinnati	14.750	15.550	14.125	66.4	70.0	63.6
Timothy, No. 1, Chicago	18.000	19.300	17.625	76.7	82.2	75.1
Hops, prime to choice, Pacifics, per pound, Portland, Oreg	.199	.175	.203	82.5	72.6	84.1
Milk, fluid, per 100 pounds—						
Chicago	2.994	2.994	2.994	101.9	101.9	101.9
New York	3.517	3.517	3.936	98.2	98.2	109.9
San Francisco	3.140	3.140	3.140	100.3	100.3	100.3
Peanuts, per pound, Norfolk	.059	.061	.061	120.0	122.4	122.4

[1] No quotation.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP 1.—FARM PRODUCTS—Con.						
(c) **Other farm products**—Continued.						
Seeds—						
Alfalfa, per 100 pounds, Kansas City	[1]	$15.000	$16.500	-------	91.0	100.2
Clover, per 100 pounds, Chicago	$30.620	27.361	26.480	96.2	86.0	83.2
Flaxseed, per bushel, Minneapolis	2.215	2.271	2.197	95.1	97.5	94.4
Timothy, per 100 pounds, Chicago	4.440	3.880	3.370	72.7	63.5	55.1
Tobacco, leaf, average warehouse sales, per 100 pounds, Kentucky	8.786	15.730	15.594	103.7	185.7	184.1
Vegetables, fresh—						
Onions, per 100 pounds, Chicago	4.632	2.425	1.531	189.3	99.1	62.6
Potatoes, white, per 100 pounds—						
Boston	1.635	2.081	1.580	46.4	59.0	44.8
Chicago	2.138	1.990	1.938	70.9	66.0	64.3
New York	2.017	1.856	1.962	53.4	49.1	52.0
Portland, Oreg	3.406	2.406	1.913	118.6	83.8	66.6
Potatoes, sweet, per ⅝-bushel, Philadelphia	[1]	[1]	[1]	-------	-------	-------
Wool, per pound, Boston—						
Ohio, grease basis—						
Fine clothing	.390	.390	.390	97.1	97.1	97.1
Fine delaine	.460	.460	.460	98.6	98.6	98.6
Half blood	.450	.450	.450	97.5	97.5	97.5
Medium grades	.440	.440	.450	96.3	96.3	98.5
Territory, scoured—						
Staple, fine and fine medium	1.095	1.105	1.125	95.1	96.0	97.7
Half blood	1.006	1.023	1.023	96.1	97.7	97.7
Foreign—						
Argentine crossbreds, quarter blood, grease basis	.292	.315	.318	103.0	111.2	112.0
Australian, Geelong 56's, scoured basis	.660	.660	.660	97.3	97.3	97.3
Montevideo, one-fourth blood, 50's, grease basis	.361	.375	.376	97.9	101.7	102.0
GROUP II.—FOODS	----------	----------	----------	**93.9**	**94.2**	**96.5**
(a) **Butter, cheese, and milk**	----------	----------	----------	**97.9**	**98.8**	**105.6**
Butter, creamery, per pound—						
Boston—						
Extra	.416	.419	.459	94.8	95.5	104.6
Firsts	.396	.399	.426	93.9	94.8	101.0
Seconds	.367	.371	.386	93.8	94.9	98.7
Chicago—						
Extra	.399	.412	.449	93.0	96.1	104.8
Extra firsts	.386	.399	.428	93.0	96.3	103.3
Firsts	.368	.374	.386	94.2	96.0	98.9
Cincinnati, as to score	.370	.373	.398	93.7	94.5	100.7
New Orleans—						
Fancy	.449	.440	.450	94.3	92.5	94.6
Choice	.410	.428	.420	89.5	93.4	91.6
New York—						
Extra	.416	.417	.465	93.8	94.1	104.9
Firsts	.394	.400	.430	94.0	95.2	102.5
Seconds	.369	.378	.394	95.3	97.3	101.5
Philadelphia—						
Extra	.426	.430	.474	93.7	94.6	104.3
Extra firsts	.411	.414	.453	92.8	93.4	102.3
Firsts	.381	.388	.410	93.7	95.4	100.7
St. Louis, extra	.413	.429	.468	93.7	97.5	106.2
San Francisco—						
Extra	.418	.441	.468	95.8	101.3	107.4
Firsts	.399	.425	.442	95.4	101.7	105.7
Cheese, whole milk, per pound—						
Chicago	.223	.235	.249	102.9	108.4	114.9
New York	.243	.253	.262	107.2	111.2	115.3
San Francisco	.204	.210	.222	89.1	91.8	97.0
Milk, condensed, per case, New York	5.825	5.825	6.000	99.5	99.5	102.4
Milk, evaporated, per case, New York	4.581	4.575	4.575	104.3	104.1	104.1
Milk, fluid. (See Farm products.)						

[1] No quotation.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP II.—FOODS—Continued						
(*b*) **Meats**				**90.5**	**90.3**	**92.2**
Beef, fresh, carcass, steers, per pound—						
Chicago	$0.182	$0.185	$0.191	110.8	112.7	116.3
New York	.200	.200	.213	117.2	117.2	124.8
Beef, cured, family, per barrel (200 pounds), New York	19.500	20.400	23.000	83.0	86.8	97.9
Lamb, fresh, per pound, Chicago	.294	.265	.240	112.4	101.3	91.7
Mutton, fresh, dressed, per pound, New York	.156	.136	.115	108.4	94.3	79.8
Pork, cured—						
Bacon, per pound, Chicago	.270	.254	.257	88.8	83.5	84.5
Hams, per pound, Chicago	.243	.235	.224	79.0	76.2	72.9
Mess, per barrel (200 pounds), New York	33.000	31.800	32.250	88.1	84.9	86.1
Sides, clear, per pound, Chicago	.172	.167	.174	85.7	83.1	86.6
Sides, rough, per pound, Chicago	.168	.158	.161	84.7	79.5	81.3
Pork, fresh, dressed hogs, per pound, Chicago	.183	.183	.183	73.1	73.1	73.1
Poultry, per pound, dressed—						
Chicago	.218	.218	.230	80.4	80.6	85.0
New York	.260	.270	.274	82.9	86.0	87.3
Veal, fresh, good, per pound, Chicago	.195	.223	.234	104.2	118.9	125.1
(*c*) **Other foods**				**94.7**	**95.0**	**95.8**
Beans. (See Farm products.)						
Bread, loaf (per pound before baking)—						
Chicago	.075	.075	.075	100.0	100.0	100.0
Cincinnati	.069	.069	.069	97.6	97.6	97.6
New Orleans	.070	.070	.070	97.8	97.8	97.8
New York	.070	.070	.070	100.0	100.0	100.0
San Francisco	.069	.069	.069	89.8	89.8	89.8
Cocoa beans, Arriba, per pound, New York	.203	.194	.181	112.8	107.3	100.6
Coffee, Brazilian grades, per pound, New York—						
Rio, No. 7	.142	.139	.135	78.1	76.3	74.3
Santos, No. 4	.169	.170	.178	75.7	76.4	80.0
Copra, South Sea, per pound, New York	.052	.052	.052	90.2	90.0	89.5
Crackers, soda, per pound, New York	.140	.140	.140	100.0	100.0	100.0
Eggs. (See Farm products.)						
Fish—						
Cod, pickled, cured, per 100 pounds, Gloucester, Mass	6.500	6.750	7.000	89.6	93.0	96.4
Herring, pickled, per pound, New York	.145	.160	.180	109.8	121.1	136.3
Mackerel, salt, per pound, New York	.090	.090	.100	90.0	90.0	100.0
Salmon, canned, Alaska, red, per dozen cans, factory	2.694	3.020	3.050	81.0	90.8	91.7
Salmon, smoked, Alaska, per pound, New York	.420	.430	.430	109.6	112.2	112.2
Flour, rye, white, per barrel, Minneapolis	5.950	5.080	4.988	106.2	90.7	89.1
Flour, wheat, per barrel—						
Standard patents, hard winter, Buffalo	8.030	7.313	7.213	92.4	84.1	83.0
First clears, Buffalo	6.990	7.113	6.613	83.5	84.9	79.0
Short patents, winter, Kansas City	7.585	7.531	7.263	94.4	93.7	90.4
Straights, winter, Kansas City	6.920	6.769	6.644	95.4	93.3	91.6
Standard patents, Minneapolis	7.813	7.600	7.069	92.7	90.2	83.9
Second patents, Minneapolis	7.556	7.320	6.819	92.7	89.8	83.7
Patents, Portland, Oreg	8.012	7.757	7.128	100.3	97.2	89.3
Short patents, soft winter, St. Louis	6.940	7.244	6.869	88.6	92.5	87.7
Straights, soft winter, St. Louis	6.295	6.306	5.819	88.6	88.7	81.9
Standard patents, soft winter, Toledo	6.575	6.406	6.275	86.2	84.0	82.3
Fruit, canned, per dozen, New York—						
Peaches, 2½'s	1.775	1.775	1.775	91.0	91.0	91.0
Pineapples, 2½'s	2.250	2.250	2.250	104.7	104.7	104.7
Fruit, dried, per pound, New York—						
Apples, evaporated	.111	.126	.131	94.2	106.5	111.2
Currants, cleaned	.111	.108	.113	123.5	119.3	125.9
Prunes, California, 60-70's	.068	.065	.061	86.5	82.7	78.6
Raisins, coast, seeded	.069	.069	.069	75.1	75.1	75.1

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index-numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP II.—FOODS—Continued						
(c) **Other foods**—Continued.						
Fruit, fresh—						
Apples. (See Farm products.)						
Bananas, Jamaicas, per bunch, New York	$1.631	$2.025	$2.025	66.5	82.6	82.6
Lemons. (See Farm products.)						
Oranges. (See Farm products.)						
Glucose, 42° mixing, per 100 pounds, New York	3.160	3.160	3.160	91.9	91.9	91.9
Hominy grits, white, per 100 pounds, mill	2.145	2.121	1.850	137.7	136.1	118.7
Lard, prime, contract, per pound, New York	.132	.128	.133	87.8	85.1	88.6
Meal, corn, per 100 pounds—						
White, mill	2.145	2.121	1.850	137.7	136.1	118.7
Yellow, fancy, Philadelphia	3.210	3.388	3.080	120.5	127.2	115.7
Molasses, New Orleans, fancy, per gallon, New York	.650	.650	.650	123.1	123.1	123.1
Oatmeal, in 90-pound sacks, per 100 pounds, New York	3.597	3.472	3.417	117.1	113.0	111.2
Oleomargarine, standard, uncolored, per pound, Chicago	.215	.215	.239	94.2	94.2	104.7
Oleo oil, extra, per pound, Chicago	.134	.131	.135	111.3	109.1	112.4
Pepper, black, per pound, New York	.358	.354	.372	139.7	138.1	145.3
Rice, head, clean, per pound, New Orleans—						
Blue Rose, medium to good	.041	.041	.041	67.0	66.2	65.9
Honduras, medium to choice	.061	.062	.054	83.6	84.3	73.4
Salt, Chicago—						
American, medium, per barrel (280 pounds)	2.195	2.195	2.195	100.0	100.0	100.0
Granulated, per ton	6.600	6.600	6.600	87.9	87.9	87.9
Sugar, per pound, New York—						
Granulated	.059	.056	.058	107.3	101.5	106.0
Raw, 96°	.045	.045	.048	104.4	103.9	110.4
Tallow, edible, per pound, Chicago	.082	.086	.097	85.8	90.0	101.5
Tea, Formosa, fine, per pound, New York	.345	.345	.345	97.3	97.3	97.3
Vegetables, canned, per dozen—						
String beans, New York	1.150	1.150	1.025	128.8	128.8	114.8
Corn, factory	.975	.955	.950	108.3	106.1	105.5
Peas, New York	1.225	1.225	1.150	93.1	93.1	87.4
Tomatoes, New York	1.500	1.500	1.500	104.7	104.7	104.7
Vegetables, fresh—						
Onions. (See Farm products.)						
Potatoes. (See Farm products.)						
Vegetable oil—						
Coconut, per pound, New York	.096	.097	.099	90.8	91.3	93.4
Corn, per pound, New York	.110	.113	.117	91.4	93.4	97.1
Cottonseed, per pound, New York	.095	.100	.107	80.5	84.0	90.5
Olive, per gallon, New York	2.150	2.390	2.150	112.5	125.1	112.5
Peanut, per pound, mill	.125	.125	.125	111.0	111.0	111.0
Soya bean, per pound, New York	.120	.120	.120	95.2	95.2	95.2
Vinegar, cider, per gallon, New York	.190	.200	.205	102.3	107.6	110.3
GROUP III.—HIDES AND LEATHER PRODUCTS				**111.7**	**111.7**	**112.5**
(a) **Hides and skins**				**133.5**	**131.3**	**128.4**
Hides, per pound, Chicago—						
Country cows	.173	.171	.176	179.4	176.7	182.0
Packers'—						
Heavy, native steers	.219	.215	.224	156.4	153.2	159.9
Heavy, Texas steers	.199	.195	.213	148.9	146.1	159.6
Skins, per pound—						
Calf, No. 1, country, Chicago	.226	.212	.210	130.5	122.3	121.1
Goat, Brazil, first selection, New York	.759	.760	.768	103.6	103.7	104.8
Kip, No. 1, country, Chicago	.221	.210	.210	142.6	135.3	135.1
Sheep, packers', per pelt, Chicago	2.250	2.250	1.606	103.8	103.8	74.1
(b) **Leather**				**113.5**	**114.3**	**115.4**
Chrome calf, B grade, per square foot, Boston	.510	.510	.510	112.5	112.5	112.5
Glazed kid, top grade, per square foot, Boston	.675	.675	.675	100.0	100.0	100.0
Harness, California oak, per pound, general market	.478	.495	.495	109.5	113.3	113.3

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP III.—HIDES AND LEATHER PRODUCTS—Continued						
(*b*) **Leather**—Continued.						
Side, black, chrome, tanned, B grade, per square foot, Boston	$0.370	$0.370	$0.370	146.1	146.1	146.1
Sole, oak, per pound, Boston—						
In sides	.390	.390	.410	110.4	110.4	116.1
Scoured backs	.510	.530	.530	116.4	120.9	120.9
Sole, union backs, steers, per pound, New York	.490	.500	.525	114.4	116.7	122.5
(*c*) **Boots and shoes, factory**				**103.0**	**103.3**	**105.6**
Children's, per pair—						
Child's gun metal	1.330	1.330	1.615	100.0	100.0	121.4
Little boy's, tan calf, blucher	1.473	1.473	1.663	100.0	100.0	112.9
Misses', gun metal	1.568	1.568	1.900	100.0	100.0	121.2
Youths', tan calf, blucher	1.663	1.663	1.853	100.0	100.0	111.4
Men's, per pair—						
Black, calf, bal	5.000	5.000	5.000	101.6	101.6	101.6
Black, calf, blucher	6.400	6.400	6.500	100.0	100.0	101.6
Black, dress, welt, side leather	3.286	3.400	3.400	102.7	106.3	106.3
Black, vici kid	6.000	6.000	6.220	100.0	100.0	103.7
Chocolate, elk, blucher	1.967	1.974	2.000	114.1	114.6	116.1
Dress, medium grade	3.550	3.550	3.550	106.0	106.0	106.0
Gun metal, blucher	4.750	4.750	4.750	103.3	103.3	103.3
Mahogany, chrome, bal	3.650	3.650	3.650	101.4	101.4	101.4
Tan, dress, welt, calf	5.000	5.000	5.000	101.6	101.6	101.6
Tan, dress, welt, side leather	3.448	3.600	3.600	102.2	106.7	106.7
Work, medium grade	2.250	2.250	2.250	109.8	109.8	109.8
Women's, per pair—						
Black, kid, dress	4.000	4.000	4.000	98.2	98.2	98.2
Black, kid, McKay sewed	3.650	3.650	3.650	101.4	101.4	101.4
Medium grade	2.200	2.200	2.200	110.0	110.0	110.0
Better grade	3.050	3.050	3.050	107.0	107.0	107.0
Colored calf	4.250	4.250	4.250	102.4	102.4	102.4
Patent leather pump	3.750	3.750	3.750	104.2	104.2	104.2
(*d*) **Other leather products**				**101.6**	**103.3**	**104.9**
Gloves, per dozen pairs, factory—						
Men's	33.840	33.840	33.840	100.0	100.0	100.0
Women's	22.560	22.560	22.560	106.7	106.7	106.7
Harness (composite price), per set	45.869	47.448	49.592	102.0	105.5	110.3
Suitcases (composite price), each	8.070	8.070	9.543	102.1	102.1	120.8
Traveling bags (composite price), each	6.597	6.597	6.894	101.3	101.3	105.8
GROUP IV.—TEXTILE PRODUCTS				**94.3**	**96.2**	**98.5**
(*a*) **Cotton goods**				**96.1**	**100.2**	**106.1**
Blankets, colored, per pair, Boston	1.034	1.070	1.108	83.7	86.6	89.7
Denims, Massachusetts, 28-inch, per yard, mill	.164	.173	.201	97.0	102.1	118.8
Drillings, brown, per yard, mill—						
Massachusetts, 30-inch	.123	.133	.142	92.9	101.2	107.8
Pepperell, 29-inch	.114	.127	.144	89.4	99.6	113.2
Duck, per yard, mill—						
Eight-ounce, army	.187	.201	.215	94.7	102.1	108.9
Wide, 36-inch	.382	.396	.468	91.5	94.7	112.0
Flannel, per yard, mill—						
Colored, 27-inch	.110	.111	.123	87.4	87.8	97.3
Unbleached, 33-inch	.165	.181	.218	93.8	102.7	123.7
Gingham, per yard, mill—						
Amoskeag, 27-inch	.091	.095	.100	101.1	105.6	111.1
Security, 32-inch	.123	.123	.130	100.0	100.0	106.0
Hosiery, per dozen pairs, mill—						
Men's, combed yarn	1.550	1.600	1.600	95.4	98.5	98.5
Women's, silk mercerized	2.275	2.275	2.275	97.7	97.7	97.7
Muslin, bleached, per yard, mill—						
Fruit of the Loom	.162	.164	.166	96.6	98.3	99.5
Lonsdale	.137	.141	.147	91.0	93.2	97.5
Rough Rider	.154	.157	.160	107.6	109.7	112.0
Nainsook, Wamsutta	.225	.225	.243	98.8	98.8	106.7
Percale, Scouts, 38½-inch, per yard, mill	.127	.130	.145	98.3	100.8	111.9
Print cloth, per yard, mill—						
Twenty-seven inch	.056	.060	.065	106.9	115.5	125.1
Thirty-eight and one-half inch	.075	.084	.089	99.2	110.7	118.6
Sheeting, bleached, per yard, mill—						
10/4, Pepperell	.371	.404	.404	89.2	97.0	97.0
10/4, Wamsutta	1.140	1.140	1.140	100.0	100.0	100.0

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP IV.—TEXTILE PRODUCTS—Con.						
(a) Cotton goods—Continued.						
Sheeting, brown, per yard, mill—						
Indian Head, 36-inch	$0.110	$0.119	$0.143	89.5	97.4	116.7
4/4, Pepperell	.119	.128	.139	96.9	104.6	113.2
4/4, Trion	.087	.098	.110	93.8	105.9	118.0
Thread, 6-cord, 100 yards, per spool, mill	.036	.036	.036	100.0	100.0	100.0
Ticking, Amoskeag, 32-inch, per yard, mill	.207	.230	.260	101.3	112.4	127.1
Underwear, mill—						
Men's shirts and drawers, per dozen garments	6.039	6.177	6.287	88.3	90.3	92.0
Women's union suits, per dozen	8.500	8.870	9.500	86.1	89.8	96.2
Yarn, per pound, mill—						
Carded, white, northern, 10-1/s, cones	.305	.333	.377	94.2	102.6	116.3
Carded, white, northern, 22-1/s, cones	.354	.387	.406	98.7	107.8	113.2
Carded, single warp, 40/1s, southern spinning	.481	.512	.547	94.7	100.7	107.6
Twisted, 20/2, carded, weaving	.313	.347	.389	96.8	107.1	120.1
Twisted, 40/2, carded, weaving	.456	.475	.518	96.5	100.6	109.6
(b) Silk and rayon				**87.4**	**86.6**	**86.6**
Rayon, per pound, New York—						
150 A denier	1.500	1.500	1.500	82.9	82.9	82.9
150 B denier	1.450	1.450	1.450	85.7	85.7	85.7
300 A denier	1.300	1.300	1.300	81.1	81.1	81.1
300 B denier	1.280	1.280	1.280	84.9	84.9	84.9
Silk, raw, per pound, New York—						
China, steam filature, third category	5.418	5.270	5.265	85.3	83.0	82.9
Canton, double extra A-crack	3.989	3.915	3.906	85.7	84.1	83.9
Japan, double extra cracks	5.442	5.282	5.304	90.0	87.4	87.8
Japan, 13–15	5.292	5.145	5.096	85.4	83.1	82.3
Silk, spun, per pound, New York—						
Domestic, 60/1	4.077	3.920	3.881	86.9	83.5	82.7
Domestic, 60/2	4.978	4.704	4.704	83.4	78.8	78.8
Imported, 200/2, first quality	4.978	4.508	4.508	86.1	77.9	77.9
Hosiery, per dozen pairs, mill—						
Women's, pure silk	10.780	10.780	10.780	88.6	88.6	88.6
Women's, artificial silk	2.450	2.450	2.450	87.8	87.8	87.8
Men's, silk, mercerized top, heel, and toe	4.000	4.500	4.500	83.4	93.8	93.8
(c) Woolen and worsted goods				**97.2**	**97.3**	**97.3**
Blankets, all wool, 4 to 5 pounds, per pound, mill	1.313	1.313	1.313	97.3	97.3	97.3
Flannel, No. 6400, 54-inch, per yard, mill	1.715	1.715	1.715	102.2	102.2	102.2
Overcoating, per yard, mill—						
Heavy	3.000	3.000	3.000	98.6	98.6	98.6
Light	4.350	4.350	4.350	95.8	95.8	95.8
Suiting, per yard, mill—						
Serge, 116 M. B	3.848	3.848	3.848	100.8	100.8	100.8
Serge, 11-ounce, 56–58 inch	2.048	2.048	2.048	94.5	94.5	94.5
Uniform serge, fine grade, 12-ounce	2.678	2.678	2.678	97.3	97.3	97.3
Uniform serge, medium grade, 12-ounce	1.935	1.935	1.935	96.9	96.9	96.9
Unfinished worsted, 13-ounce	1.913	1.913	1.913	95.4	95.4	95.4
Trousering, 2,900 range, cotton warp, 11-ounce, per yard, mill	1.500	1.500	1.500	98.2	98.2	98.2
Underwear, men's, mill—						
Shirts and drawers, per dozen garments	28.000	28.000	28.000	93.3	93.3	93.3
Union suits, per dozen	27.440	27.440	27.440	90.3	90.3	90.3
Women's dress goods, per yard, mill—						
Broadcloth, 9½-ounce	2.255	2.255	2.255	95.6	95.6	95.6
Flannel, 12-ounce	1.900	1.900	1.900	97.7	97.7	97.7
Flannel, WFD, 54-inch	1.325	1.325	1.325	91.3	91.3	91.3
French serge, 39-inch	.975	.975	.975	94.3	94.3	94.3
Serge, 36-inch, cotton warp	.510	.510	[1]	111.3	111.3	-------
Sicilian cloth, 54-inch, cotton warp	.775	.775	.775	97.8	97.8	97.8
Yarns, per pound, mill—						
2/32s, crossbred stock, white	1.350	1.350	1.375	94.1	94.1	95.8
2/40s, half-blood, weaving	1.750	1.775	1.775	94.4	95.8	95.8
2/50s, fine, weaving	2.025	2.025	2.014	96.1	96.1	95.6
(d) Other textile products				**93.9**	**95.7**	**95.9**
Binder twine, standard, per bale (50 pounds), mill	6.056	6.056	6.056	92.7	92.7	92.7
Burlap, 10½-ounce, 40-inch, per yard, mill	.093	.101	.103	101.5	109.9	111.8

[1] No quotation.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP IV.—TEXTILE PRODUCTS—Con.						
(*d*) **Other textile products**—Continued.						
Hemp, manila, per pound, New York	$0.144	$0.149	$0.146	97.7	100.5	98.5
Jute, raw, medium grades, per pound, New York	.069	.080	.083	77.0	89.3	92.1
Linen shoe thread, 10s, Barbour, per pound, New York	1.946	1.946	1.946	100.0	100.0	100.0
Rope, pure manila, 5/8-inch and larger, per pound, New York	.245	.245	.240	97.5	97.5	95.5
Sisal, Mexican, per pound, New York	.076	.076	.076	83.4	83.4	83.4
GROUP V.—FUEL AND LIGHTING				**84.2**	**84.1**	**84.2**
(*a*) **Anthracite coal, per gross ton (composite price)**				**95.2**	**95.7**	**96.5**
Chestnut	13.148	13.209	13.217	95.5	95.9	96.0
Egg	12.665	12.779	12.942	95.3	96.2	97.4
Pea	10.614	10.661	10.838	99.6	100.1	101.7
(*b*) **Bituminous coal, per net ton (composite price)**				**100.0**	**101.9**	**102.4**
Mine run	4.251	4.275	4.274	98.5	99.1	99.1
Prepared sizes	4.741	4.904	5.012	98.9	102.3	104.5
Screenings	3.748	3.780	3.760	109.5	110.5	109.9
(*c*) **Coke, per net ton**				**93.7**	**93.8**	**94.0**
Beehive—						
Alabama, foundry, oven	6.000	6.000	6.000	108.0	108.0	108.0
Connellsville, furnace, oven	3.044	3.075	3.000	74.1	74.9	73.1
By-product—						
Alabama, Birmingham	5.500	5.500	5.688	96.0	96.0	99.3
New Jersey, Newark	10.180	10.180	10.180	95.8	95.8	95.8
(*d*) **Manufactured gas (composite price), per 1,000 cubic feet**	1.026	1.007	1.015	99.6	97.3	98.2
(*e*) **Petroleum products**				**68.1**	**66.5**	**66.4**
Petroleum, crude, per barrel, wells—						
California	.850	.850	.850	77.9	77.9	77.9
Kansas-Oklahoma	1.155	1.155	1.198	61.3	61.3	63.6
Pennsylvania	2.900	2.650	2.650	82.8	75.7	75.7
Fuel oil, refinery—						
Oklahoma, per barrel	.900	.870	.850	69.5	67.2	65.7
Pennsylvania, per gallon	.047	.046	.046	73.6	71.0	71.6
Gasoline, per gallon, refinery—						
California	.079	.074	.073	69.6	64.9	64.0
Oklahoma	.070	.065	.061	67.9	62.3	58.6
Pennsylvania	.088	.087	.082	68.5	68.1	64.1
North Texas	.066	.063	.061	64.8	61.3	59.1
Natural, Oklahoma	.044	.051	.055	49.0	57.4	61.5
Kerosene, refined, per gallon—						
Standard, New York	.064	.063	.064	74.6	72.8	74.4
Water white, refinery	.070	.068	.068	67.0	64.9	65.8
GROUP VI.—METALS AND METAL PRODUCTS				**97.7**	**98.0**	**97.6**
(*a*) **Iron and steel**				**95.5**	**95.1**	**94.7**
Iron ore, Mesabi, per gross ton, lower lake ports—						
Bessemer	4.400	4.400	4.400	100.0	100.0	100.0
Non-Bessemer	4.250	4.250	4.250	100.0	100.0	100.0
Pig iron, per gross ton—						
Basic, furnace	17.500	17.300	17.063	94.3	93.3	92.0
Bessemer, Pittsburgh	20.260	20.200	19.760	95.0	94.8	92.7
Foundry, No. 2, northern, Pittsburgh	19.760	19.360	19.260	95.8	93.9	93.4
Foundry, No. 2, southern, Birmingham	17.438	17.250	17.250	82.4	81.5	81.5
Ferromanganese, furnace	90.000	90.000	90.000	94.9	94.9	94.9
Spiegeleisen, furnace	33.750	33.500	33.500	99.9	99.2	99.2
Bar iron, per pound—						
Best, refined, Philadelphia	.028	.028	.027	96.6	96.6	93.2
Common, refined, Pittsburgh	.028	.028	.028	91.7	91.7	91.7
Bars, concrete reinforcing, 3/4-inch and larger, per 100 pounds, mill	1.825	1.800	1.825	91.6	90.4	91.6
Nails, wire, per 100 pounds, Pittsburgh	2.625	2.650	2.650	95.5	96.4	96.4
Pipe, cast iron, 6-inch, per net ton, New York	43.750	40.150	37.750	85.2	78.2	73.5

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP VI.—METALS AND METAL PRODUCTS—Continued						
(*a*) **Iron and steel**—Continued						
Pipe, black steel, per 100 feet, Pittsburgh	$4.261	$4.261	$4.261	100.0	100.0	100.0
Skelp, grooved, per 100 pounds, Pittsburgh	1.800	1.800	1.775	94.7	94.7	93.4
Steel billets, open-hearth, per gross ton, Pittsburgh	33.000	33.000	33.000	94.3	94.3	94.3
Steel merchant bars, per 100 pounds, Pittsburgh	1.800	1.800	1.775	90.2	90.2	88.9
Steel plates, tank, per pound, Pittsburgh	.018	.018	.018	95.7	95.7	94.7
Steel rails, open-hearth, per gross ton, mill	43.000	43.000	43.000	100.0	100.0	100.0
Steel scrap, per gross ton	12.063	12.300	12.250	89.5	91.2	90.9
Steel sheets, No. 27, box annealed, per pound, mill	.032	.032	.032	99.4	99.4	99.4
Steel, structural, per 100 pounds, mill	1.775	1.800	1.825	90.6	91.9	93.2
Terne plate, No. 8, I. C. package, per 200 pounds, mill	11.475	11.400	11.400	98.1	97.4	97.4
Tin plate, domestic, standard, coke, per 100 pounds, Pittsburgh	5.500	5.500	5.500	100.0	100.0	100.0
Wire, fence—						
Barbed, galvanized, per 100 pounds, mill	3.275	3,300	3.300	96.3	97.1	97.1
Galvanized, No. 9, per 100 pounds, Pittsburgh	3.000	3.000	3.000	96.8	96.8	96.8
Plain, annealed, per 100 pounds, Pittsburgh	2.550	2.550	2.550	96.2	96.2	96.2
Woven, per 100 rods, Pittsburgh	20.030	20.030	20.030	100.0	100.0	100.0
(*b*) **Nonferrous metals**				**89.3**	**92.5**	**90.7**
Aluminum, per pound, New York	.254	.254	.254	94.1	94.1	94.1
Antimony, per pound, New York	.120	.119	.111	75.0	74.5	69.8
Brass, sheets, per pound, mill	.177	.182	.183	92.9	95.9	96.0
Copper, ingot, electrolytic, per pound, refinery	.125	.133	.130	90.4	96.0	94.1
Copper, sheet, hot rolled, per pound, New York	.203	.210	.210	94.0	97.0	97.2
Copper wire, bare, per pound, mill	.147	.152	.153	90.6	94.1	94.2
Lead, pig, desilverized, per pound, New York	.063	.067	.063	74.7	79.2	74.6
Lead pipe, per 100 pounds, New York	7.735	8.090	7.900	78.0	81.6	79.7
Nickel, ingot, per pound, New York	.350	.350	.350	100.0	100.0	100.0
Quicksilver, per pound, New York	1.617	1.586	1.579	131.9	131.0	130.5
Silver, bar, fine, per ounce, New York	.567	.550	.558	90.8	88.1	89.3
Tin, pig, Straits, per pound, New York	.639	.645	.615	97.8	98.6	94.1
Zinc, sheet, per 100 pounds, La Salle, Ill	8.793	9.015	9.023	83.0	85.1	85.2
Zinc, pig, slab, per pound, New York	.066	.067	.066	85.1	86.8	85.3
(*c*) **Agricultural implements, factory**				**99.4**	**99.3**	**99.3**
Binder, grain, each	156.750	156.750	156.750	100.0	100.0	100.0
Cultivator, each	42.270	42.270	42.270	95.7	95.7	95.7
Drill, grain, each	90.720	90.720	90.720	99.0	99.0	99.0
Engine, 3-horsepower, each	76.000	76.000	76.000	100.0	100.0	100.0
Harrow, each—						
Spike, peg tooth	15.670	15.670	15.670	93.7	93.7	93.7
Spring tooth	19.470	19.470	19.470	88.3	88.3	88.3
Loader, hay, each	84.310	84.310	84.310	98.9	98.9	98.9
Mower, hay, each	59.140	59.140	59.140	100.0	100.0	100.0
Picker, corn, each	325.000	325.000	325.000	100.0	100.0	100.0
Planter, corn, each	57.710	57.710	57.710	100.0	100.0	100.0
Plow, tractor, each	104.500	104.500	104.500	100.0	100.0	100.0
Plow, walking—						
1-horse (composite price), each	7.260	7.210	7.210	99.7	99.1	99.1
2-horse (composite price), each	16.170	15.700	15.530	100.5	97.5	96.5
Rake, each—						
Self-dump	30.400	30.400	30.400	94.8	94.8	94.8
Side delivery	77.420	77.420	77.420	98.8	98.8	98.8
Separator, cream, each	61.270	61.270	61.270	103.2	103.2	103.2
Sheller, corn, each	26.600	26.600	26.600	100.0	100.0	100.0
Spreader, manure, each	114.000	114.000	114.000	100.0	100.0	100.0
Tractor, each	680.000	680.000	680.000	100.0	100.0	100.0
Wagon, 2-horse, each	103.070	103.070	103.070	100.0	100.0	100.0
(*d*) **Automobiles (composite price), each, f. o. b. factory**				**102.6**	**102.2**	**102.2**
Buick	1,493.000	1,503.000	1,503.000	101.7	102.4	102.4
Cadillac	3,563.000	3,563.000	3,837.000	95.5	95.5	102.8
Chevrolet	628.000	611.000	611.000	102.3	99.5	99.5

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP VI.—METALS AND METAL PRODUCTS—Continued						
(*d*) **Automobiles (composite price), each, f. o. b. factory**—Continued.						
Dodge	$884.000	$878.000	$878.000	101.2	99.2	99.2
Ford	453.000	453.000	453.000	109.8	109.8	109.8
Packard	3,263.000	3,263.000	3,263.000	90.7	90.7	90.7
(*e*) **Other metal products**				**100.6**	**100.7**	**100.7**
Sewing machines (composite price), each—						
Electric	82.100	82.100	82.250	105.8	105.8	106.1
Treadle	50.800	50.800	51.000	103.5	103.5	103.8
Stoves, cooking (composite price), each—						
Coal	61.600	61.600	61.600	98.0	98.0	98.0
Gas	63.400	63.400	63.400	100.8	100.8	100.8
Oil	61.550	61.550	61.550	98.9	98.9	98.9
GROUP VII.—BUILDING MATERIALS				**93.7**	**92.9**	**92.1**
(*a*) **Lumber**				**93.9**	**92.2**	**91.0**
Cypress, shop, per 1,000 feet, St. Louis	43.750	43.750	43.750	89.7	89.7	89.7
Douglas fir, per 1,000 feet, mill—						
No. 1 common sheathing	16.510	16.510	16.390	100.2	100.2	99.4
No. 2 and better drop siding	29.990	29.970	30.230	89.6	89.5	90.3
Gum, plain, sap, per 1,000 feet, St. Louis	62.000	59.667	55.000	112.0	107.8	99.4
Hemlock, northern, No. 1, per 1,000 feet, Chicago	34.000	34.000	36.000	99.7	99.7	105.5
Maple, hard, No. 1, per 1,000 feet, Chicago	51.500	51.500	51.500	92.5	92.5	92.5
Oak, plain, white, No. 1, per 1,000 feet, Cincinnati	65.000	63.000	63.000	98.5	95.4	95.4
Pine, white, No. 2, per 1,000 feet, Buffalo	47.000	46.000	45.000	93.9	91.9	89.9
Pine, yellow, flooring, per 1,000 feet, mill	38.310	37.680	37.490	84.9	83.5	83.1
Pine, yellow, timbers, per 1,000 feet, mill	26.500	25.370	24.000	95.2	91.1	86.2
Poplar, No. 1, per 1,000 feet, Cincinnati	53.000	53.000	52.000	95.7	95.7	93.9
Spruce, eastern, per 1,000 feet, Boston	32.750	32.500	32.250	99.2	98.4	97.7
Lath, per M—						
Douglas fir, No. 1, Chicago	6.600	6.433	6.400	87.0	84.8	84.3
Pine, yellow, No. 1, mill	3.280	3.100	3.260	66.1	62.5	65.7
Shingles, per M, mill—						
Cedar, red	2.470	2.660	2.790	90.7	97.7	102.4
Cypress	5.750	5.750	5.750	98.7	98.7	98.7
(*b*) **Brick, per M**				**93.3**	**93.2**	**93.2**
Common, building, plant (composite price)	13.988	13.978	13.970	100.5	100.5	100.4
Brick, front, New York	41.500	41.500	41.500	84.9	84.9	84.9
Brick, sand lime, plant	11.000	11.000	11.000	95.3	95.3	95.3
Paving blocks, 3½-inch, St. Louis	42.500	42.500	42.500	100.0	100.0	100.0
(*c*) **Cement, Portland, per barrel, plant (composite price)**	**1.683**	**1.683**	**1.683**	**96.5**	**96.5**	**96.5**
(*d*) **Structural steel**				**90.7**	**91.9**	**93.2**
(*e*) **Paint materials**				**91.5**	**92.5**	**90.0**
Barytes, western, per ton, New York	31.900	30.500	30.500	93.8	89.7	89.7
Bone black, powdered, per pound, New York	.055	.055	.055	100.0	100.0	100.0
Copal gum, manila, per pound, mill	.100	.100	.100	96.3	96.3	96.3
Lampblack, velvet, per pound, New York	.120	.120	.120	100.0	100.0	100.0
Linseed oil, raw, per pound, New York	.106	.107	.104	95.4	96.0	92.8
Litharge, commercial, per pound, New York	.089	.093	.088	79.3	82.4	78.5
Lithopone, domestic, per pound, New York	.053	.053	.053	95.8	95.8	95.8
Putty, commercial, per pound, New York	.060	.060	.060	150.0	150.0	150.0
Red lead, dry, per pound, New York	.099	.103	.098	84.4	87.4	83.6
Rosin, B grade, per barrel, New York	9.738	10.615	10.081	78.4	85.5	81.2
Shellac, T. N., per pound, New York	.572	.525	.505	166.7	153.0	147.1
Turpentine, Southern, per gallon, New York	.559	.591	.554	60.1	63.5	59.5
White lead, in oil, per pound, New York	.138	.138	.138	90.3	90.3	90.3
Zinc oxide, leaded grades, per pound, New York	.066	.066	.066	90.2	90.2	90.2

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP VII.—BUILDING MATERIALS—Continued						
(f) Other building materials				**94.0**	**93.0**	**92.3**
Asphalt, bulk, per ton, refinery	$12.000	$12.000	$12.000	100.0	100.0	100.0
Crushed stone, 1½-inch, per cubic yard, New York	1.840	1.750	1.750	103.8	98.7	98.7
Glass, plate, per square foot, New York—						
3 to 5 square feet	.320	.320	.320	80.3	80.3	80.3
5 to 10 square feet	.400	.400	.400	83.6	83.6	83.6
Glass, window, per 50 square feet, works—						
Single A	3.600	3.600	3.600	92.3	92.3	92.3
Single B	3.135	3.135	3.135	100.8	100.8	100.8
Gravel, building, per ton, plant (composite price)	.907	.902	.895	96.5	95.9	95.1
Hollow tile, building, per block, Chicago	.076	.076	.076	97.1	97.1	97.1
Lime, building, per ton, plant (composite price)	8.764	8.762	8.846	97.6	97.5	98.5
Lime, hydrated, per ton, plant (composite price)	9.743	9.701	9.702	97.6	97.2	97.2
Sand, building, per ton, plant (composite price)	.595	.587	.586	93.7	92.4	92.3
Slate, roofing, sea green, per 100 square feet, quarry	14.000	14.000	14.000	100.0	100.0	100.0
Copper, sheet. (See Metals and metal products).						
Copper, wire. (See Metals and metal products.)						
Nails, wire. (See Metals and metal products.)						
Pipe, cast-iron. (See Metals and metal products.)						
Pipe, lead. (See Metals and metal products.)						
Pipe, black steel. (See Metals and metal products.)						
Reinforcing bars. (See Metals and metal products.)						
Terneplate. (See Metals and metal products.)						
Zinc, sheet. (See Metals and metal products.)						
GROUP VIII.—CHEMICALS AND DRUGS				**95.3**	**95.4**	**96.4**
(a) Chemicals				**100.0**	**100.2**	**101.4**
Acid, per pound, New York—						
Acetic, 28 per cent, per 100 pounds	3.375	3.375	3.375	103.7	103.7	103.7
Boric	.083	.083	.083	93.1	93.1	93.1
Carbonic	.060	.060	.060	100.0	100.0	100.0
Muriatic, 20°, works, per 100 pounds	1.010	1.050	1.050	108.6	112.9	112.9
Nitric, 42°, per 100 pounds	6.500	6.500	6.500	101.4	101.4	101.4
Oleic, distilled	.088	.086	.088	94.4	93.1	94.4
Salicylic, U. S. P., New York	.400	.400	.400	116.9	116.9	116.9
Stearic, triple-pressed	.133	.133	.133	81.4	81.4	81.4
Sulphuric, 66°, per ton	15.000	15.000	15.000	102.7	102.7	102.7
Alcohol, per gallon, New York—						
Denatured	.512	.520	.545	139.5	141.7	148.5
Wood, refined	.660	.578	.550	104.1	91.1	86.8
Aluminum sulphate, commercial, per 100 pounds, New York	1.400	1.400	1.400	100.0	100.0	100.0
Ammonia, anhydrous, per pound, New York	.115	.115	.115	87.6	87.6	87.6
Anilin oil, per pound, New York	.150	.150	.150	91.4	91.4	91.4
Arsenic, white, powdered, per pound, New York	.038	.038	.040	107.1	107.1	114.3
Benzine, pure, per gallon, works	.230	.230	.230	95.1	95.1	95.1
Bleaching powder, per 100 pounds, works	2.000	2.000	2.000	100.0	100.0	100.0
Borax, crystals, per pound, New York	.043	.043	.041	87.4	87.4	85.0
Calcium arsenate, per pound, New York	.075	.075	.070	102.6	102.6	95.8
Calcium chloride, 73–75 per cent, per ton, New York	21.000	21.000	21.000	100.0	100.0	100.0
Caustic potash, 88–92 per cent, per pound, New York	.075	.075	.075	105.2	105.2	105.2

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP VIII.—CHEMICALS AND DRUGS—Continued						
(*a*) **Chemicals**—Continued.						
Coal-tar colors, per pound, New York—						
Black, direct	$0.400	$0.400	$0.400	116.2	116.2	116.2
Brown, sulphur	.240	.240	.240	113.0	113.0	113.0
Indigo, paste	.140	.140	.140	100.0	100.0	100.0
Jet, nigrosine	.400	.400	.400	87.8	87.8	87.8
Copper sulphate, per pound, New York	.049	.050	.050	105.1	106.4	106.4
Copperas, per ton, works	13.000	13.000	13.000	104.6	104.6	104.6
Copra. (See Foods.)						
Creosote oil, grade 1, per gallon, works	.160	.160	.160	113.6	113.6	113.6
Formaldehyde, per pound, New York	.095	.095	.090	98.3	98.3	93.2
Lime, acetate, per 100 pounds, New York	3.500	3.500	3.500	106.7	106.7	106.7
Naphthalene flake, per pound, New York	.045	.045	.045	81.8	81.8	81.8
Sal soda, per 100 pounds, New York	.900	.900	.900	89.0	89.0	89.0
Salt cake, ground, per ton, works	18.000	18.000	18.000	90.0	90.0	90.0
Soda ash, light, 58 per cent, per 100 pounds, New York	2.290	2.290	2.290	100.0	100.0	100.0
Soda, bicarbonate, per pound, works	.019	.019	.019	100.0	100.0	100.0
Soda, caustic, per pound, New York	.038	.038	.038	100.0	100.0	100.0
Sodium silicate, 40°, per 100 pounds, works	.750	.750	.750	96.2	96.2	96.2
Sulphur, crude, per ton, mines	18.000	18.000	18.000	98.8	98.8	98.8
Tallow, packers' prime, per pound, Chicago	.078	.078	.085	89.4	89.8	97.7
Toluene, pure, per gallon, works	.350	.350	.350	100.0	100.0	100.0
Vegetable oils, per pound—						
Coconut, (See Foods.)						
Corn. (See Foods.)						
Palm, niger, New York	.068	.069	.069	85.3	86.6	86.3
Palm kernel, crude, New York	.089	.091	.092	89.5	90.8	92.1
Soya bean. (See Foods.)						
(*b*) **Drugs and pharmaceuticals**				86.9	86.7	86.7
Acid, New York—						
Citric, domestic, per pound, crystals	.445	.445	.445	99.5	99.5	99.5
Tartaric, per pound, crystals	.370	.370	.370	126.2	126.2	126.2
Alcohol, grain, per gallon, New York	3.750	3.750	3.750	77.2	77.2	77.2
Camphor, Japanese, refined, slabs, per pound, New York	.644	.640	.638	87.0	86.4	86.1
Castor oil, medicinal, per pound, New York	.126	.125	.128	99.8	99.0	101.0
Cream of tartar, powdered, per pound, New York	.278	.278	.278	129.9	129.9	129.9
Epsom salts, U. S. P., per 100 pounds, New York	2.250	2.250	2.250	90.9	90.9	90.9
Glycerine, chemically pure, per pound, New York	.242	.240	.240	87.9	87.2	87.2
Menthol, imported, per pound, New York	4.320	4.188	4.150	84.7	82.1	81.4
Opium, U. S. P., per pound, New York	12.000	12.000	12.000	100.0	100.0	100.0
Peroxide of hydrogen, U. S. P., per gross 4-ounce bottles, New York	7.750	7.750	7.750	100.5	100.5	100.5
Phenol, U. S. P., per pound, New York	.160	.180	.175	81.3	91.4	88.9
Quinine, sulphate, domestic, per ounce, New York	.400	.400	.400	92.9	92.9	92.9
Soda phosphate, commercial, per pound, New York	.033	.033	.033	100.0	100.0	100.0
Zinc chloride, granular, per pound, New York	.064	.064	.063	98.6	98.6	97.5
(*c*) **Fertilizer materials**				93.8	91.2	92.1
Acid phosphate, per ton, Baltimore	8.500	8.375	8.500	88.6	87.3	88.6
Bones, ground, per ton, Chicago	28.000	28.000	28.000	105.6	105.6	105.6
Kainit, 12.4 per cent, per ton, New York	9.000	9.000	9.000	108.5	108.5	108.5
Manure salts, 20 per cent, per ton, New York	12.400	12.400	12.400	105.2	105.2	105.2
Muriate of potash, 80–85 per cent, per ton, New York	36.400	36.400	36.400	103.6	103.6	103.6
Nitrate of soda, 95 per cent, per 100 pounds, New York	2.390	2.250	2.268	93.7	88.2	88.9
Phosphate rock, Florida land pebble, per ton, mines	3.000	3.000	3.000	95.5	95.5	95.5
Sulphate of ammonia, per 100 pounds, New York	2.300	2.338	2.375	87.5	88.9	90.4

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP VIII.—CHEMICALS AND DRUGS—Continued						
(c) **Fertilizer materials**—Continued.						
Sulphate of potash, 90–95 per cent, per ton, New York	$47.300	$47.300	$47.300	102.7	102.7	102.7
Tankage, per ton, Chicago	36.650	31.700	32.488	105.9	91.6	93.9
(d) **Fertilizers, mixed, per ton (composite price)**				**86.6**	**89.7**	**91.7**
New England	35.698	35.698	35.698	92.1	92.1	92.1
Middle West	25.287	26.325	26.121	90.9	94.6	93.9
South Central and Southwest	20.372	23.606	25.622	73.0	84.5	91.8
Middle Atlantic	29.105	30.733	30.705	89.6	94.6	94.5
South Atlantic, 8–3–3	21.400	21.400	21.400	92.2	92.2	92.2
South Atlantic, other	24.510	24.510	26.090	81.9	81.9	87.2
GROUP IX.—HOUSE-FURNISHING GOODS				**98.0**	**98.6**	**98.6**
(a) **Furniture, factory (composite price)** [3]				**97.8**	**97.8**	**97.6**
Bed room, each—						
Beds	30.842	30.842	30.842	[4]	[4]	[4]
Chairs	7.924	7.924	7.924	[4]	[4]	[4]
Dressers and vanities	42.799	42.799	42.799	[4]	[4]	[4]
Rockers	7.522	7.522	7.522	[4]	[4]	[4]
Dining room—						
Buffets, china cabinets, and servers, each	40.333	40.333	40.333	[4]	[4]	[4]
Chairs, set of six	49.471	49.471	49.471	[4]	[4]	[4]
Tables, each	39.710	39.710	39.710	[4]	[4]	[4]
Kitchen—						
Cabinets, each	39.000	39.000	39.000	[4]	[4]	[4]
Chairs, per dozen	13.860	13.980	13.740	[4]	[4]	[4]
Refrigerators, each	18.230	18.230	17.770	[4]	[4]	[4]
Tables, each	6.150	5.817	5.817	[4]	[4]	[4]
Living room, each—						
Chairs	38.786	38.786	38.786	[4]	[4]	[4]
Davenports	63.393	63.393	63.393	[4]	[4]	[4]
Tables	22.450	22.450	22.450	[4]	[4]	[4]
(b) **Furnishings**				**99.1**	**100.0**	**99.3**
Blankets—						
Cotton. (See Textile products.)						
Wool. (See Textile products.)						
Carpets, per yard, factory—						
Axminster	3.120	3.120	3.120	100.0	100.0	100.0
Brussels	2.976	2.976	2.976	97.1	97.1	97.1
Wilton	4.800	4.800	4.800	94.6	94.6	94.6
Cutlery, factory—						
Carvers, per pair	1.350	1.350	1.350	100.0	100.0	100.0
Knives and forks, per gross	12.500	12.500	12.500	100.0	100.0	100.0
Pails, galvanized iron, per gross, factory	21.050	21.050	21.050	96.1	96.1	96.1
Sheeting, 10/4—						
Pepperell. (See Textile products.)						
Wamsutta. (See Textile products.)						
Tableware, factory—						
Dinner sets, 100-piece, semivitreous, per set	19.860	19.860	19.860	100.0	100.0	100.0
Dinner sets, 104-piece, vitreous, per set	45.700	45.700	46.518	100.0	100.0	101.8
Nappies, glass, 4-inch, common, per dozen	.200	.200	.200	100.0	100.0	100.0
Pitchers, glass, ½ gallon, common, per dozen	2.100	2.100	2.100	98.1	98.1	98.1
Tumblers, ⅓ pint, common, per dozen	.160	.160	.160	87.3	87.3	87.3
Plates, white, granite, per dozen	.980	.980	.980	100.0	100.0	100.0
Teacups and saucers, white granite, per dozen	1.260	1.260	1.260	100.0	100.0	100.0
Ticking, Amoskeag. (See Textile products.)						
Tubs, galvanized iron, per dozen, factory	6.475	6.475	6.475	98.9	98.9	98.9
Sewing machines, factory. (See Metals and metal products.)						

[3] Prices of individual articles of furniture are only roughly comparable from month to month, owing to frequent change of patterns announced by manufacturers.
[4] No exactly comparable 1926 base price.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER 1927—Continued

Commodity	Average prices			Index numbers (1926=100.0)		
	July, 1927	August, 1927	September, 1927	July, 1927	August, 1927	September, 1927
GROUP IX.—HOUSE FURNISHING GOODS—Continued						
(*b*) **Furnishings**—Continued.						
Stoves, cooking—						
Coal. (See Metals and metal products.)						
Gas. (See Metals and metal products.)						
Oil. (See Metals and metal products.)						
GROUP X.—MISCELLANEOUS				**89.3**	**89.9**	**89.2**
(*a*) **Cattle feed**				**115.4**	**125.4**	**117.7**
Bran, per ton, Minneapolis	$24.875	$26.400	$25.563	107.8	114.4	110.7
Cottonseed meal, prime, per ton, Memphis	32.750	37.250	37.250	114.7	130.5	130.5
Linseed meal, per ton, New York	46.700	48.375	49.000	97.8	101.4	102.7
Middlings, standard, per ton, Minneapolis	31.500	34.200	28.375	134.4	146.0	121.1
(*b*) **Paper and pulp**				**92.0**	**92.0**	**92.4**
Box board, per ton, mill—						
Chip	41.184	41.184	41.184	105.6	105.6	105.6
Manila-lined chip	51.084	51.084	51.084	104.4	104.4	104.4
85-pound test liner	64.350	64.350	66.825	105.0	105.0	109.0
Paper—						
Newsprint, rolls, contract, per 100 pounds, mills	3.250	3.250	3.250	94.2	94.2	94.2
Wrapping, manila, No. 1, jute, per 100 pounds, New York	9.250	9.250	9.250	83.9	83.9	83.9
Wood pulp—						
Mechanical, No. 1, domestic, per ton, mill	28.500	28.500	28.500	92.5	92.5	92.5
Sulphite, domestic, unbleached, news grade, per 100 pounds, New York	2.600	2.600	2.600	90.7	90.7	90.7
(*c*) **Rubber, crude, per pound, New York**				**72.0**	**71.9**	**69.2**
Para, island, fine	.255	.243	.230	67.1	63.9	60.5
Plantation, ribbed, smoked sheets	.352	.352	.339	72.2	72.3	69.6
(*d*) **Automobile tires (composite price), each, factory**				**77.9**	**77.9**	**77.4**
Balloon	14.045	14.045	14.045	76.8	76.8	76.8
Cord	10.948	10.948	10.948	78.1	78.1	78.1
Fabric	6.851	6.851	6.851	77.9	77.9	77.9
(*e*) **Other miscellaneous**				**100.0**	**100.0**	**100.2**
Cylinder oil, per gallon, refinery—						
Oklahoma	.170	.170	.170	94.4	94.4	94.4
Pennsylvania	.250	.251	.255	94.6	95.0	96.5
Neutral oil, per gallon, refinery—						
Gulf Coast	.109	.102	.105	84.6	79.3	81.6
Pennsylvania	.340	.344	.344	121.5	122.9	122.9
Soap, laundry, per 100 cakes—						
Cincinnati	4.180	4.180	4.180	93.5	93.5	93.5
Philadelphia	4.851	4.851	4.851	100.0	100.0	100.0
Starch, laundry, per pound, New York	.058	.058	.058	98.6	98.6	98.6
Tobacco, New York—						
Plug, per pound	.696	.696	.696	100.0	100.0	100.0
Smoking, 1-ounce bags, per gross	8.320	8.320	8.320	100.0	100.0	100.0

LABOR AWARDS AND DECISIONS

Awards and Decisions

Clothing Workers—Chicago

THE trade board in Chicago, in case No. 1094, June 8, 1927, commented upon mistakes of workers as follows:

What the board conceives to be the chief concern of the firm, and what is the chief interest of the board, is that periodically there should be epidemics of mistakes in this cutting room. Usually when disciplinary action is taken by the firm in connection with mistakes the same argument is made by the union that the cutters selected for discipline are no more guilty than others and frequently not so guilty and that they should not pay the penalty for the others. The board is forced to agree that frequently those suspended have better records than other cutters on the floor, or that the mistake at the time of suspension is less serious than mistakes which they or other cutters have made at other times without suspension. This, of course, is not an unusual situation. A firm will put up with mistakes to a point where it feels that something drastic must be done, with the result that the cutter who makes the next mistake of a serious nature is suspended. Ordinarily the board has taken the position that careless work produced by many if not most of the cutters in a cutting room will not be corrected by the discharge of a cutter or a few cutters. There are other more emphatic ways of impressing upon a group that each cutter must exercise greater care. The organization itself should accept responsibility for correcting such a situation. In this case the board understands that a number of shop meetings have been held; that the seriousness of the mistakes have been brought home to the cutters not only by the union but by the firm; and that individual cutters have been spoken to. The board can only say this: That if these measures fail the firm must at least be entitled to release those whose mistakes are most flagrant. The board will give these two cutters and the organization another opportunity to minimize mistakes and would make the suggestion to the firm that it cooperate wholeheartedly with the union in this further attempt, and that if further discipline shall prove necessary an attempt be made to select those whose record is poorest.

Fancy Leather Goods Industry—New York City

IN CASE No. 170, decided May 12, 1927, the chairman of the arbitration committee of the fancy leather goods industry of New York used the following words relative to a stoppage in a certain factory.

The impartial chairman has before him a mass of contradictory evidence. It is, however, admitted that the shop chairman had an argument with a fellow worker of sufficient length and loudness to attract the attention of several others. Also, that he refused to obey the repeated orders of the foreman to return to his machine. He denies that he incited the workers of the shop to leave. Something, however, caused the workers to immediately leave the shop, following him, the whole transaction taking place in a very few minutes, and there is no evidence that Mr. W. or any one having authority over the different groups attempted to dissuade the workers from making the stoppage.

The most limited view that can be taken of the action of Mr. W. shows that he is not fitted for the position of shop chairman, and it is hereby ruled that he is no longer to be shop chairman in this shop. In addition, Mr. W. is to

pay a fine of $25, which amount is to be collected by the firm and paid into the joint grievance board fund.

If Mr. W.'s theory is correct and the several hundred workers of this shop made a stoppage and walked out without any request or direction, then this group of workers is in a grave position. In any event, they did make a stoppage and must receive discipline. It is therefore ruled that every worker taking part in this stoppage should have deducted from his or her pay the amount which could have been earned during the hours or period of the stoppage. In the case of pieceworkers the time of the stoppage is to be ascertained and the amount deducted is to be based on the minimum rate set by the agreement. The firm is directed to submit to the impartial chairman a list of those engaged in the stoppage, showing the time lost and the amount to be deducted from each individual. For the present these fines are suspended but will become operative at the discretion of the impartial chairman.

On the claim of the firm for the assessment of damages against the union, the chairman finds that the union lived up to the requirement of the agreement "to immediately order the workers to resume work." There was a delay, however, occasioned by the union taking the position that even though Mr. W. had been discharged he was to return with all the other workers. The chairman believes that this is a wrong method of procedure in handling a case of discharge. Where a firm makes a discharge, no direct action should be taken by the workers or the union to effect the return of the discharged worker. The discharge should be settled by the impartial machinery, and, if the firm is at fault, it should be made to pay for its wrongful action.

Railroads—Decisions of Train Service Boards of Adjustment

Eastern Region

A DECISION of the Train Service Board of Adjustment for the Eastern Region, made in Docket No. 414, decided September 22, 1927, shows the desire of the board to have the carrier, in this case the Baltimore & Ohio Railroad, observe strictly the seniority clause in the agreement with their trainmen.

In this case the yardmaster called a yard brakeman at 5.30 a. m. for work at 7 a. m. and, not finding him in, left a call for him at 6.30. As the man was not at home at the last-named hour the yardmaster, fearing that the second man on the list, who lived six miles away, would be unable to report for work at 7 o'clock, called the third man, who lived but two blocks distant.

The committee claimed that according to the agreement the right to preference of work was governed by seniority in service and that the second brakeman, "being the oldest man on the board at the time, should have been called and used," and that the yardmaster, when unable to get the first man because of absence from home, should have then called the second man, who would have been able to get to work without delaying the engine. Claim was made for one day's pay for the second brakeman, and the board sustained the claim.

Southeastern Region

THE Train Service Board of Adjustment for the Southeastern Region rendered a decision September 28, 1927, Docket 282, relative to requiring yard crews at St. Augustine to couple air hose on freight equipment lined up for movement by through train.

The Florida East Coast Railway has general repair shops at St. Augustine, but that city is not an inspection point nor does the carrier employ car inspectors there. Outbound cars when ready for

movement are placed by the switching crew on a specific track, to be picked up later by the road crew. In order to avoid train delays the carrier required the yard crew to couple the air hose on these freight cars when placed on the pick-up track and test the air on the cars. This the Brotherhood of Railroad Trainmen considered to be contrary to the spirit of article 40, paragraph (a), of their agreement with the carrier, contending that this was not the duty of switchmen but of car inspectors, and appealed to the adjustment board for relief.

The carrier insisted that the order was issued to prevent train delays and to advance the movement of freight trains. The board, however, rendered a decision favoring the contention of the brotherhood.

Railroad Telegraphers—Washington Terminal Co.

AN ARBITRATION board, consisting of F. E. Blaser, representing the Washington Terminal Co., B. C. Lewis, representing the Railroad Telegraphers, and Leslie M. Shaw, appointed by the United States Board of Mediation, rendered a decision October 1, 1927, relative to certain demands of the telegraphers in the employ of the company. The arbitrators denied the request of the employees for an annual vacation, but granted one day of relief each two weeks without loss of pay, or overtime instead of the relief day, to all employees "filling positions necessary to the continuous operation of the carrier." The board also increased the pay of employees 2 cents per hour per position, to be apportioned as the parties might mutually agree.

Railway Clerks—Illinois Central Railroad Co.

ARTHUR M. Millard, Phil E. Ziegler, Richard P. Dee, with William Rogers Clay as chairman, constituting a majority of a board of arbitration, rendered a decision, August 23, 1927, in regard to demands made by the Brotherhood of Steamship Clerks, Freight Handlers, Express and Station Employees, employed by the Illinois Central and Yazoo & Mississippi Valley Railroads, increasing the wage rates of the employees by 5 per cent.

G. J. Bunting and Edward C. Craig, representing the carrier, dissented from the award on the ground that an increase in the rates was not justified by the evidence.

IMMIGRATION AND EMIGRATION

Statistics of Immigration for August, 1927

By J. J. Kunna, Chief Statistician United States Bureau of Immigration

THE statistics for August, 1927, show 47,429 aliens admitted and 23,336 departed. During the same month 57,701 American citizens returned to this country and 43,039 left for foreign lands. Compared with the passenger travel for the previous month, these figures for both aliens and citizens show a large increase in the inward movement, but a decrease in the outward.

Nearly three-fifths of the aliens admitted in August, 1927, were new arrivals coming to make their future homes in the United States, 28,418 being recorded as immigrants. The principal European sources from which this permanent immigration was drawn were Germany (3,232), Great Britian (1,594), Italy (1,491), the Irish Free State (1,422), Poland (942), Sweden (649), Norway (507), and France (423). The other countries of Europe sent 2,137 immigrants during August. A large proportion of the August immigrants was supplied by the Western Hemisphere, 15,606 immigrants being recorded as coming from the Americas. Canada again led the list with 8,131, followed by Mexico with 6,116. Central and South American countries contributed 692; the West Indies, 501; and Newfoundland, 166. Compared with the immigration for the previous month these figures show an increase from all the principal sources, except Italy and Mexico.

During August last, 1,574 aliens (1,048 male and 526 female) seeking admission to the United States were rejected for various causes under the immigration laws, mainly for failure to secure visas from American consuls. The vast majority of these aliens were debarred at stations along the northern and southern land borders, 1,073 having been turned back to Canada and 273 to Mexico. Of the remainder 103 were denied admission at New York and 125 at the other seaports of entry.

Deportations for a single month again passed the thousand mark. In August, 1,346 undesirable aliens were deported from the United States under warrant proceedings, the principal causes for their deportation being: Entering without immigration visa—surreptitious entries—650; criminal and immoral classes, 228; and mentally or physically defective, 172.

Of the 47,429 aliens admitted in August last, 26,195 arrived at New York and 3,301 at the other Atlantic seaports; 1,726 landed at Pacific ports, 622 at Gulf of Mexico ports, and 675 at ports in the outlying possessions of Alaska, Hawaii, and Porto Rico. Eight thousand six hundred and twenty-eight aliens entered the country via Canadian border land ports and 6,282 came through the stations

along the Mexican border. Over one-fourth of the total, or 13,935, came in under the immigration act of 1924 as natives of nonquota countries, principally Canada and Mexico; 11,626 entered as immigrants charged to the quota; and 9,488 as residents of the United States returning from a visit abroad. Visitors for business or pleasure numbered 6,376, and 2,464 were passing through the United States with some foreign country as their destination. Two thousand two hundred and thirty-five aliens were admitted this month as wives and children of American citizens, and 1,305 were scattered among the other admissible classes under the act of 1924.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT DURING JULY AND AUGUST, 1927

Period	Inward					Aliens debarred from entering [1]	Outward					Aliens deported after landing [2]
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total	
	Immigrant	Nonimmigrant	Total				Emigrant [2]	Nonemigrant [2]	Total [2]			
1927												
July	23,420	15,973	39,393	29,935	69,328	2,002	9,230	18,509	27,739	65,686	93,425	700
August	28,418	19,011	47,429	57,701	105,130	1,574	6,322	17,014	23,336	43,039	66,375	1,346
Total	51,838	34,984	86,822	87,636	174,458	3,576	15,552	35,523	51,075	108,725	159,800	2,046

[1] Not included among inward numbers, as they were not permitted to enter the United States.
[2] Deported aliens are included among the emigrant or the nonemigrant aliens.

TABLE 2.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JULY AND AUGUST, 1927, BY RACE OR PEOPLE, SEX, AND AGE GROUP

Race or people	Immigrant		Emigrant	
	August, 1927	July to August, 1927	August, 1927	July to August, 1927
African (black)	69	152	67	126
Armenian	102	219	4	10
Bohemian and Moravian (Czech)	164	226	45	275
Bulgarian, Serbian, and Montenegrin	44	82	145	294
Chinese	115	168	517	777
Croatian and Slovenian	72	130	93	114
Cuban	262	543	93	237
Dalmatian, Bosnian, and Herzegovinian	6	11	17	31
Dutch and Flemish	256	467	95	238
East Indian	5	7	3	9
English	3,566	6,816	887	2,064
Finnish	106	137	39	180
French	2,204	3,741	171	598
German	3,991	6,181	622	1,797
Greek	264	520	320	524
Hebrew	1,259	2,320	16	38
Irish	2,753	4,733	205	433
Italian (north)	222	443	112	399
Italian (south)	1,374	2,733	791	2,300
Japanese	67	104	84	158
Korean	4	7	8	11
Lithuanian	35	47	40	134
Magyar	121	202	58	178
Mexican	5,996	12,622	275	568
Pacific Islander			1	1
Polish	394	679	317	1,071
Portuguese	96	175	136	265
Rumanian	40	65	86	169
Russian	102	223	58	137

TABLE 2.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JULY AND AUGUST, 1927, BY RACE OR PEOPLE, SEX, AND AGE GROUP—Continued

Race or people	Immigrant		Emigrant	
	August, 1927	July to August, 1927	August, 1927	July to August, 1927
Ruthenian (Russniak)	47	63	15	20
Scandinavian (Norwegians, Danes, and Swedes)	1,553	2,370	239	596
Scotch	2,086	3,664	203	535
Slovak	122	307	76	143
Spanish	141	268	179	517
Spanish American	412	758	187	399
Syrian	39	122	38	53
Turkish	9	21	10	40
Welsh	155	286	12	22
West Indian (except Cuban)	85	116	38	60
Other peoples	80	110	20	31
Total	28,418	51,838	6,322	15,552
Male	15,369	28,272	4,358	9,965
Female	13,049	23,566	1,964	5,587
Under 16 years	4,771	9,105	325	725
16 to 44 years	20,997	37,754	4,407	10,960
45 years and over	2,650	4,979	1,590	3,867

TABLE 3.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND INTENDED FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JULY AND AUGUST, 1927, BY COUNTRY

[Residence for a year or more is regarded as permanent residence]

Country	Immigrant		Emigrant	
	August, 1927	July to August, 1927	August, 1927	July to August, 1927
Albania	53	69	13	17
Austria	108	167	52	142
Belgium	59	97	53	125
Bulgaria	25	41	19	28
Czechoslovakia	337	606	127	429
Danzig, Free City of	53	63	----	----
Denmark	179	293	37	122
Estonia	56	65	----	1
Finland	60	81	36	165
France, including Corsica	423	649	191	667
Germany	3,232	4,881	487	1,447
Great Britain and Northern Ireland:				
England	697	1,217	689	1,565
Northern Ireland	15	29	----	1
Scotland	764	1,175	136	392
Wales	133	247	3	8
Greece	200	421	304	504
Hungary	95	168	56	161
Irish Free State	1,422	2,160	156	363
Italy, including Sicily and Sardinia	1,491	3,012	902	2,689
Latvia	31	39	6	11
Lithuania	52	102	37	122
Luxemburg	10	14	2	4
Netherlands	140	231	46	113
Norway	507	664	93	178
Poland	942	1,728	315	1,058
Portugal, including Azores, Cape Verde, and Maderia Islands	70	122	130	254
Rumania	124	205	100	187
Russia	117	245	27	80
Spain, including Canary and Balearic Islands	42	88	143	429
Sweden	649	972	98	256
Switzerland	160	273	52	179
Turkey in Europe	8	63	4	5
Yugoslavia	122	192	220	385
Other Europe	21	46	10	16
Total, Europe	12,397	20,425	4,544	12,103

TABLE 3.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO, AND INTENDED FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JULY AND AUGUST, 1927, BY COUNTRY—Continued

[Residence for a year or more is regarded as permanent residence]

Country	Immigrant		Emigrant	
	August, 1927	July to August, 1927	August, 1927	July to August, 1927
Armenia		5	1	3
China	138	247	524	791
India	11	18	8	21
Japan	71	114	95	175
Palestine	17	79	8	18
Persia	6	6	4	8
Syria	18	86	34	48
Turkey in Asia	9	11	5	28
Other Asia	25	54	6	14
Total, Asia	295	620	685	1,106
Canada	8,131	15,311	253	486
Newfoundland	166	309	37	134
Mexico	6,116	12,839	233	600
Cuba	358	747	143	306
Other West Indies	143	231	110	256
British Honduras	9	15	1	3
Other Central America	211	398	80	178
Brazil	131	186		12
Other South America	341	554	158	282
Total, America	15,606	30,590	1,065	2,257
Egypt	25	40		
Other Africa	25	49	11	19
Australia	40	72	16	48
New Zealand	24	33	1	19
Other Pacific Islands	6	9		
Total, others	120	203	28	86
Grand total, all countries	28,418	51,838	6,322	15,552

TABLE 4.—ALIENS ADMITTED DURING AUGUST, 1927, AND FROM JULY 1 TO AUGUST 31, 1927, SHOWING PRINCIPAL CLASSES UNDER THE IMMIGRATION ACT OF 1924, BY PRINCIPAL PLACES OF BIRTH, AS SPECIFIED

Place of birth	Aliens admitted					
	Quota immigrant		Nonimmigrant and nonquota immigrant		Total during August, 1927	Grand total, July 1 to Aug. 31, 1927
	August, 1927	July to August, 1927	August, 1927	July to August, 1927		
Europe	11,337	18,076	15,667	28,544	27,004	46,620
Asia	131	255	1,822	3,386	1,953	3,641
Africa	50	83	85	153	135	236
Australia and Pacific islands	39	66	599	1,220	638	1,286
Canada, Mexico, and other America	69	108	17,630	34,931	17,699	35,039
Total	11,626	18,588	35,803	68,234	47,429	86,822

TABLE 5.—ALIENS ADMITTED DURING AUGUST, 1927, AND FROM JULY 1 TO AUGUST 31, 1927, BY CLASSES UNDER THE IMMIGRATION ACT OF 1924

[The number of immigrant aliens appearing in this table and in Table 4 is not comparable with the number of statistical immigrant aliens shown in the other tables, by races, ports of entry, etc.]

Class	August, 1927	July to August, 1927
Nonimmigrants		
Government officials, their families, attendants, servants, and employees	635	1,183
Temporary visitors for business or pleasure	6,376	12,936
In continuous transit through the United States	2,464	5,133
To carry on trade under existing treaty	130	227
Total	9,605	19,479
Nonquota immigrants		
Wives and children of United States citizens [1]	2,235	4,632
Returning residents	9,488	15,587
Natives of nonquota countries [2]	13,935	27,591
Wives and children of natives of nonquota countries [1]	83	194
Ministers of religious denominations and their wives and children	128	281
Professors of colleges, academies, seminaries, or universities, and their wives and children	24	32
Students	215	327
Veterans of the World War and their wives and children	86	104
Spanish subjects admitted to Porto Rico	4	7
Total	26,198	48,755
Quota immigrants (charged to quota), total	11,626	18,588
Grand total	47,429	86,822

[1] Wives, and unmarried children under 18 years of age, born in quota countries.
[2] Does not include aliens born in nonquota countries who were admitted under the act as Government officials, visitors, returning residents, etc.

ACTIVITIES OF STATE LABOR AGENCIES

AMONG the labor activities of the State bureaus the following, reported either directly by the bureaus themselves or through the medium of their printed reports, are noted in the present issue of the Labor Review:

California.—Changes in volume of employment and pay roll in 776 establishments, page 164.

Connecticut.—Hourly earnings, November 1, 1926, page 145.

Illinois.—Changes in employment and earnings in factories, page 165.

Iowa.—Changes in volume of employment in specified industries, page 167.

Massachusetts.—Changes in volume of employment in specified industries, page 168.

Missouri.—Work of negro industrial commission, page 133.

New Jersey.—Changes in volume of employment and pay roll in 851 establishments, page 170.

Pennsylvania.—Changes in employment and pay roll totals, page 172.

Tennessee.—Wages in 1926, page 147.

Wisconsin.—Changes in volume of employment, page 173.

New Department of Industrial Relations in California

ON MAY 12, 1927, the new Department of Industrial Relations of California came into existence. This department takes over the duties formerly vested in the department of labor and industrial relations, the commission of immigration and housing, the bureau of labor statistics, the industrial welfare commission, and the industrial accident commission. The divisions and personnel of the new department are given as follows in a recent letter from the director:

Department of industrial relations:
John A. McGilvray, director, 535–537 Forum Building, Sacramento.
Division of industrial accidents and safety—
John W. Carrigan, member of industrial accident commission.
J. E. Olmsted, member of industrial accident commission.
F. B. Lord, secretary.
E. G. Sheibley, chief engineer and superintendent of safety.
M. R. Gibbons, medical director.
G. C. Faulkner, attorney.
Address of division: State Building, Civic Center, San Francisco.
State compensation insurance fund—
Clark B. Day, manager, State Building, Civic Center, San Francisco.
Division of housing and sanitation—
Most Rev. E. J. Hanna, D. D., president.
Charles C. Chapman.
R. W. Kearney, chief of division.
Address of division: State Building, Civic Center, San Francisco.
Division of State employment agencies—
(Vacancy), chief of division.
Division of labor statistics and law enforcement—
Walter G. Mathewson, chief, State Building, Civic Center, San Francisco.
Division of industrial welfare—
A. B. C. Dohrmann, chairman.
Mrs. Katherine Philips Edson, chief.
George F. Neal.
James W. Costello.
(Vacancy).
Address of division: State Building, Civic Center, San Francisco.

PUBLICATIONS RELATING TO LABOR

Official—United States

ALABAMA.—Coal Mine Inspector. *Annual report, 1926. Birmingham, 1927. 124 pp.*

Contains data on coal and coke production in Alabama, 1870–1926, with data on fatal accidents in coal mines 1893–1926, and other information. In 1926 there was a total of 139 fatal accidents, falls of roof causing 42, explosions of coal dust 27, mine cars 24, electricity 18, explosions of gas 15, and other causes 13.

CONNECTICUT.—Department of Labor and Factory Inspection and Industrial Investigator. *Biennial reports. Hartford, 1926.* [*Various paging.*]

A table giving actual hourly earnings in the leading industrial establishments in Connecticut November 1, 1926, from the above volume, is reproduced on page 145 of this issue.

GEORGIA.—Department of Commerce and Labor. *Fourteenth and fifteenth reports, for the fiscal years 1925 and 1926. Atlanta, 1927. 79 pp.*

Contains statistics of important industries of the State, wages by occupations, and lists of manufacturers and of newspapers.

MARYLAND.—Commissioner of Labor and Statistics. *Thirty-fifth annual report, 1926. Baltimore, 1927. viii, 131 pp., chart.*

Contains data on child labor, strikes, fatal accidents in coal mines, factory inspection, employment, and administration of the 10-hour law for women employed in manufacturing, mercantile, or mechanical establishments.

MISSOURI.—Board for Vocational Education. *Bulletin No. 18: Report, July 1, 1924, to June 30, 1926. Jefferson City, 1926. 81 pp., maps, illustrations.*

—— Negro Industrial Commission. *Fourth biennial report, 1925–1926. Jefferson City* [*1927?*]. *80 pp., illus.*

Reviewed on page 133 of this issue.

NEBRASKA.—Board for Vocational Education. *Bulletin No. 14: Vocational education—a summary of activities* [*in Nebraska*] *for the year ending June 30, 1927. Lincoln, 1927. 16 pp.*

NEW JERSEY.—Board of Trustees of State Employees Retirement System. *Fourth annual report, June 30, 1926.* [*Trenton, 1926?*] *31 pp.*

—— Commissioner of Banking and Insurance. *Annual report relative to building and loan associations, June 30, 1926. Trenton, 1927. ix, 163 pp.*

Contains for each of 1,473 associations data showing financial condition May 31, 1926, shares, membership, and miscellaneous information.

NEW YORK.—Department of Labor. *Special bulletin No. 150: Chronic benzol poisoning among women industrial workers, prepared by Bureau of Women in Industry. New York, 1927. 64 pp.*

A digest of this bulletin is given on page 85 of this issue.

NORTH DAKOTA.—Department of Agriculture and Labor. *Nineteenth biennial report, for the period ending June 30, 1926.* [*Bismarck, 1927?*] *127 pp.*

Attention is called to the great demand for farm labor in this State during the spring seeding and the harvest threshing seasons. Recommendation is made to the legislature for an appropriation for a State free employment service for the benefit of the farmers, such appropriations having been discontinued since 1923.

PENNSYLVANIA.—Department of Internal Affairs. Bureau of Statistics and Information. *Fifth industrial directory of the Commonwealth of Pennsylvania [covering the calendar year 1924]. Harrisburg, 1925. 624 pp.*

SOUTH CAROLINA.—Department of Agriculture, Commerce and Industries. *Yearbook, 1926. Columbia [1927?]. 153 pp., map.*

Certain data on textile mills from this report are given below:

	1925	1926
Number of mills	220	218
Capital invested	$195, 027, 756	$192, 229, 505
Value of product	$236, 876, 213	$237, 731, 775
Total wages not including salaries	$43, 598, 618	$46, 590, 152

TENNESSEE.—Department of Labor. *Fourth annual report, 1926. Nashville, 1927. 131 pp.*

Wage data from this report are published on page 147 of this issue.

TEXAS.—Bureau of Labor Statistics. *Ninth biennial report, 1925–1926. Austin [1926?]. 141 pp., charts.*

Wage statistics for various industries take up a large part of the publication. Old-age pensions are discussed in considerable detail and their universal adoption throughout the Union is urged.

WISCONSIN WORKSHOP FOR THE BLIND. *Eleventh biennial report, for the biennial period ending June 30, 1926. Milwaukee [1926?]. (Reprinted from biennial report of State Board of Control of Wisconsin, pp. 399–407.)*

The Wisconsin Workshop for the Blind not only employs trained workers but conducts a training school in which the blind are fitted to become self-supporting. At the present time the work consists of basket making. During the year July 1, 1925, to June 30, 1926, 15,169 baskets were made and $35,570 worth sold. The average weekly wage paid to workmen during this period was $12.65, which included a bonus averaging $2.70.

UNITED STATES.—Civil Service Commission. *The retirement act as amended July 3, 1926, and March 3, 1927, with decisions, rulings, practice, and comments. Washington, 1927. iii, 28 pp. (Form 2368.)*

—— Department of Commerce. Bureau of Foreign and Domestic Commerce. *Trade promotion series No. 52: The Philippine Islands—a commercial survey, by O. M. Butler. Washington, 1927. vi, 130 pp., maps, illustrations.*

Extracts from the section of this bulletin relating to labor conditions in the Philippine Islands are published on page 49 of this issue.

—— —— Bureau of Standards. *Standards yearbook, 1927. Washington, 1927. vi, 392 pp., diagrams, illustrations.*

This is the first issue of a yearbook which the Bureau of Standards plans to publish annually.

The Standards yearbook represents an effort to present an adequate picture of the diversification and ramification of the standardization movement which has spread throughout the world with astonishing vitality during the 25 years that have elapsed since the establishment of the National Bureau of Standards. It contains outlines of the activities and accomplishments of not only this bureau and other agencies of the Federal Government and the States and municipalities, but also of the American societies and associations of which standardization is a major or very important activity. Descriptions and illustrations are presented of all the fundamental national standards of the United States. Moreover, outlines are given of the various foreign, national, and the several international standardizing agencies.

—— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 444: Decisions of courts and opinions affecting labor, 1926. Washington, 1927. xiii, 311 pp.*

Discussed briefly on page 98 of this issue.

—— —— —— *Bulletin No. 451: Safety code for forging and hot-metal stamping. Washington, 1927. iv, 34 pp., illus.*

UNITED STATES.—Department of Labor. Bureau of Labor Statistics. *Bulletin No. 453: Revised index numbers of wholesale prices, 1923 to July, 1927. Washington, 1927. iii, 31 pp.*

This bulletin presents the detailed results of the recently completed revision of the index numbers of wholesale prices constructed by the Bureau of Labor Statistics.

—— —— Employment Service. *A special survey made by the United States Employment Service showing employment prospects for the remainder of 1927. Washington, 1927. 18 pp.*

—— Treasury Department. Public Health Service. *Public health bulletin No. 165: Economic status and health—a review and study of the relevant morbidity and mortality data. Washington, 1927. iii, 74 pp., charts.*

Reviewed on page 38 of this issue.

Official—Foreign Countries

AUSTRALIA.—*Report of the Commonwealth and States of Australia third conference on industrial hygiene, Melbourne, May 26, 1927. Melbourne, 1927. 26 pp.*

Among the various subjects covered in this report are the activities of the industrial hygiene division of the Commonwealth Department of Health; progress in the various States in the matters of hygienic standards, restriction of employment of females and young persons, medical examination of young persons, regulation of lifting and carrying of weights, control of dangerous trades, notification of industrial diseases, etc.; industrial medical services; protection of workers in the painting trade; practicable measures to reduce present wastage resulting from industrial accidents; and exclusion from mines, quarries, etc., of persons suffering from tuberculosis. An appendix gives an analysis of health provisions in awards of the Commonwealth Arbitration Court, 1924–1926.

—— Bureau of Census and Statistics. *Labor report, 1925. No. 16. Melbourne, 1926. 167 pp.*

Much of the information given in the yearbooks of the separate States is brought together here, showing the data on a given topic for the Commonwealth as a whole. The material is treated under four heads, prices, wages, employment, and associations, and in many cases comparative data are given covering five years or more. The report is especially adapted for use in tracing the development of such matters as cost of living, trend of wages, changes in wages and hours of labor, the extent, causes, and results of industrial disputes, and the like.

—— *The pocket yearbook of Tasmania, 1927. Hobart [1927?]. 140 pp.*

A brief statistical summary of public activities and interests for the year ending June 30, 1926.

—— —— *Production bulletin No. 19: Summary of Australian production statistics for the years 1914–15 to 1924–25. Melbourne [1926?]. 181 pp.*

—— (QUEENSLAND).—Registrar of Friendly Societies, Building Societies, and Industrial and Provident Societies. *Forty-second report. Brisbane, 1927. 28 pp.*

The registrar reports that the year ending June 30, 1926, showed a marked revival both in numbers and in stability among the societies. There was an increase of 16 branches, and 7,080 new members were initiated, the largest number for any one year since 1913. The total sum disbursed in benefits was £184,615 (pound at par=$4.8665), of which £65,234 was sick pay, £28,026 was for funeral and special donations, and £91,355 for medical expenses.

AUSTRALIA.—(SOUTH AUSTRALIA).—Factories and Steam Boilers Department. *Report for the year 1926. Adelaide, 1927. 27 pp.*

During the year covered the number of factories increased from 2,136 to 2,160, and the number of employees from 27,838 to 30,204, the increase in both particulars being practically the same as in 1925. The number of accidents was smaller than in 1925—300, as against 342. Woodworking machinery was the leading cause, being responsible for 66 accidents, and the ironworking trade came second with a total of 22. Eight fatalities were included in the accidents. A general improvement in factory and shop conditions is noted. "The female inspectors in particular note a more general desire on the part of shop and factory occupiers to study the general welfare of employees, and now quite a number of rest rooms, lunch rooms and cloakrooms are provided, and in a few cases the advantages of first-aid outfits are recognized as part of the factory equipment for the welfare of the employees."

—— (VICTORIA).—Government Statist. *Forty-ninth annual report on friendly societies, for the year ending June 30, 1926. Melbourne, 1927. xv, 22 pp.*

In addition to the annual report, figures are given covering the growth of the friendly societies since 1895. In that period the number of societies, now 62, has exactly doubled, the membership has risen from 79,312 to 157,820, and the annual income from £313,370 to £820,550.

AUSTRIA.—Kammer für Arbeiter und Angestellte in Wien. *Wirtschaftsstatistisches Jahrbuch, 1926 Vienna, 1927. 504 pp., map.*

This yearbook compiled by the Austrian Chamber of Labor in Vienna gives very comprehensive statistical data regarding economic conditions in Austria in 1926, including a section on wages and salaries in various employments.

CANADA.—Department of Immigration and Colonization. *The immigration act and regulations. Ottawa, 1926. 47 pp.*

—— (BRITISH COLUMBIA).—Department of Labor. *Annual report, 1926. Victoria, 1927. 85 pp., charts.*

During the year covered by the report nearly all of the industries of British Columbia showed considerable progress, the pay roll of the Province reaching "a total which is easily a record for all time." The report includes detailed wage data, a summary of labor disputes in 1926, operations under the "Hours of work act," and a section on the male minimum wage.

—— —— Minimum Wage Board. *Report, 1926. Victoria, 1927. 14 pp. (Reprinted from the Annual Report of the Department of Labor, 1926.)*

—— (ONTARIO).—Minimum Wage Board. *Sixth annual report, 1926. Toronto, 1927. 39 pp.*

Includes a minimum budget for a single woman in Toronto, as revised in October, 1926. The total cost of such budget is $650.40 per year or $12.50 per week, the latter amount being distributed as follows: $7.00 for board and lodging, $2.39 for clothing, and $3.11 for sundries.

DENMARK.—Statistiske Departement. *Arbejdslønnen i industrien m.v. i Danmark 1914–1925. Copenhagen, 1927. 169 pp. Statistiske meddelelser, 4. række, 78. bind, 1. hæfte.*

Wages of industrial workers in Denmark, 1914–1925.

—— —— *Produktionsstatistik, 1926. Copenhagen, 1927. 76 pp. Statistiske meddelelser, 4. række, 79. bind. 3. hæfte.*

Statistics of production for more than 50 Danish industries for the year 1926 are given in this publication.

—— —— *Statistisk aarbog, 1927. Copenhagen, 1927. xxiv, 249 pp.*

A table on strikes and lockouts from this statistical annual is reproduced on page 143 of this issue.

ESTONIA.—[Central Bureau of Statistics?] *The Estonian yearbook, 1927, edited by Albert Pullerits, chief of the Central Bureau of Statistics of Estonia. Tallinn, Government Printing Office, 1927. 254 pp., illustrations, charts. (Printed in English.)*

This first issue of the Estonian yearbook contains detailed information regarding the Government, industries, and institutions of that country. The chapter on labor and social welfare includes sections on labor protection, social welfare, public health, the cooperative movement, and cost of living.

FRANCE.—Ministère du Travail, de l'Hygiène, de l'Assistance et de la Prévoyance Sociales. Bureau de la Statistique Générale. *Annuaire statistique, 1926. Paris, 1927. xvi, 410 pp.*

Includes a table showing wages of various classes of workers for specified periods beginning with 1806 and the wages of coal miners from 1844 to 1926. Figures on strikes in France as compared with six other countries are given.

GREAT BRITAIN.—[Census Office.] *Census of England and Wales, 1921. General report, with appendixes. London, 1927. vii, 211 pp., charts.*

—— Committee on Education and Industry in Scotland. *First report. London, 1927. 32 pp.*

The figures tend to show that in Scotland unemployment is not so prevalent among juveniles as among adults, but its effects are believed to be more detrimental to boys and girls. As remedies, the report suggests the use of overseas migration after suitable preliminary training; the extension of the work of juvenile training centers where needed; the use of "work certificates" in order to bring children between 14 and 16 under the supervision and control of some public authority; and the raising of the school-leaving age, coupled with a reduction of the age for entering unemployment insurance, so as to do away with the present period of nonsupervision.

—— Foreign Office. *China No. 2 (1927): Memorandum on labor conditions in China. London, 1927. 25 pp. (Cmd. 2846.)*

—— [Home Office. Factory Department.] *Annual report, for the year 1926. London, 1927. 139 pp. (Cmd. 2903.)*

Chapter I of this report gives the general report of the factory department on its work during the year 1926 on safety, dangerous trades, sanitation, employment, and welfare activities. Chapter IV, the report of the senior medical inspector on industrial diseases and poisons, is briefly reviewed on page 90 of this issue.

—— Mines Department. Safety in Mines Research Board. *Fifth annual report, including a report of matters dealt with by the health advisory committee, 1926. London, 1927. 55 pp.*

This report discusses the progress that has been made by the Safety in Mines Research Board in its various researches, the matters covered including coal dust and firedamp explosions, mining explosives, safety lamps, mechanical appliances, falls of ground, wire ropes, and mine rescue breathing apparatus. There is a brief discussion of the work of the health advisory committee of the Mines Department, and an account of the cooperative work of the Safety in Mines Research Board and the United States Bureau of Mines.

—— Ministry of Agriculture and Fisheries. *Economic series No. 7: Report on wool marketing in England and Wales. London, 1926. 66 pp., map, illustrations, diagrams.*

Contains two chapters dealing with cooperative marketing of wool, in which are described two large cooperative associations, the difficulties of cooperative development, and management problems in the cooperative organization.

GREAT BRITAIN. Ministry of Agriculture and Fisheries. *Economic series No. 8: Report on agricultural credit. London, 1927. 104 pp., folder.*

Reviews the problem of capitalization, the need for credit, and the existing facilities (including the cooperative credit society). The cooperative provision of credit is spoken of favorably, but it is recognized that it has not taken hold of the farmer as it might have, due largely to certain defects in the legislation under which these societies have operated and to the constitutional averseness of the English farmer to revealing what he regards as his private affairs in order to secure a loan. Certain changes are suggested which it is thought would give material advantage over the present scheme.

—— —— *Economic series No. 9: Report on the marketing of potatoes in England and Wales. London, 1926. vi, 107 pp., map, illustrations, diagrams.*

Contains a chapter reviewing the present position of cooperative marketing of potatoes in England and Wales, and the possibilities of large-scale cooperative organization, and illustrates these by the experience of marketing associations in the United States.

—— —— *Economic series No. 10: Report on egg marketing in England and Wales. London, 1926. vi, 153 pp., map, illustrations, diagrams.*

In nine parts, Part VIII dealing with cooperative organization for the marketing of eggs.

—— Ministry of Health. *Eighth annual report, 1926–27. London, 1927. xxxii, 284 pp. (Cmd. 2938.)*

Data on widows', orphans', and old-age contributory pensions, taken from this report, are published on page 108 of this issue.

—— Ministry of Labor. London Advisory Council for Juvenile Employment. *Third annual report, 1926–27. London, 1927. 18 pp.*

The committee reports that juvenile unemployment has not been greatly affected by the mining stoppage, and that the number of boys and girls registered as desiring work in March, 1927, compared not unfavorably with the corresponding number for March, 1926—4,330 as against 4,079. The report strongly indorses the plan of requiring work certificates for all children between 14 and 16 who wish to go to work. "We trust the adoption of such a scheme may not be long delayed, realizing its value as we do from the twofold aspect of exercising supervision over the individual young worker and affording a fuller measure of information when dealing with the many and varied problems of juvenile employment."

—— Permanent Consultative Committee on Official Statistics. *Guide to current official statistics of the United Kingdom. Volume V (1926). London, 1927. 273 pp.*

This is defined as a systematic survey of the statistics appearing in all official publications issued in 1926 and in certain selected publications issued in 1927.

HUNGARY.—Office Central Royal Hongrois de Statistique. *Recensement de la population en 1920. Part 2. Budapest, 1925. [Various paging.] (Publications statistiques hongroises, nouvelle série, vol. 71.)*

—— —— —— *Parts 3 and 4. Budapest, 1926. [Various paging.] (Publications statistiques hongroises, nouvelle série, vol. 72.)*

Part 2 of this report on the census of population of Hungary in 1920 contains a census of occupations and of large industrial and commercial enterprises, classified by communes. Part 3 includes detailed occupational statistics and Part 4 gives the occupations of the population combined with demographic data and figures regarding ownership of property.

INDIA (BOMBAY).—Labor Office. *Report on an inquiry into middle class unemployment in the Bombay Presidency. Bombay, 1927. 102 pp.*

Gives the result of an investigation into unemployment as of November, 1926, carried on by means of a questionnaire. The term "middle class," for the

purposes of this inquiry, was defined as covering educated persons engaged in nonmanual occupations, and was still further restricted to those with a knowledge of English. Of 20,446 schedules circulated among this class, 1,852 were returned filled out with sufficient accuracy to be used for tabulation. These confirmed the impression that unemployment is more general among the young, 65.98 per cent of those answering being under 27; the great majority were engaged in clerical work of the lower grades, and appeared to be insufficiently trained, nearly 50 per cent not possessing the minimum qualifications for entering the Government service. Retrenchment, illness, and the temporary character of the work undertaken were the leading causes to which unemployment was assigned. The average number of dependents per unemployed person was 3.12.

INTERNATIONAL LABOR OFFICE.—*Studies and reports, series A (industrial relations), No. 26: The trade-union movement in Soviet Russia. Geneva, 1927. xii, 287 pp.*

—— *Unemployment in 1925, by Henri Fuss. Geneva, 1926. 31 pp. (Reprinted from International Labor Review for August, 1926.)*

LEAGUE OF NATIONS.—International Labor Office. *C. E. I. No. 12: Reports on legislation concerning the movement of labor and migration in general. Geneva, 1926. 38 pp.*

Document prepared for the use of the International Economic Conference of May 4, 1927, at Geneva. The three principal subjects of this report are: (1) National regulations, (2) Migration in the British Empire, and (3) International regulations.

—— —— *C. E. I. 25: Migration in its various aspects. Geneva, 1926. 28 pp.*

Document prepared for the use of the International Economic Conference of May 4, 1927, containing statistics on European migration to overseas countries, on continental migration, and on seasonal influences on migration.

NORWAY.—[Departementet for Sociale Saker.] Arbeidsrådet og Fabrikktilsynet. *Årsberetninger, 1926. Oslo, 1927. 69 pp., chart, illustrations.*

In Norway workers in industrial undertakings are protected by the law of September 18, 1915, and the supplementary act of July 11, 1919, providing for an 8½-hour day and a 48-hour week. In 1925 there were under this legislation 10,970 establishments employing 167,240 workers, and in 1926 11,756 establishments with 158,230 workers. Of the workers in the latter year, 122,920 were males, of whom 47 were boys from 12 to 14 years of age, and 6,187, boys from 14 to 18 years of age. The female workers numbered 35,310, of whom 22 were from 12 to 14 years of age and 3,803 from 14 to 18 years of age.

POLAND.—Office Central de Statistique. *Enquête sur le rendement du travail des ouvriers dans l'industrie polonaise. Warsaw, 1927. 114 pp. (Statistique du travail, revue mensuelle, V année, fascicule particulier.)*

This special number of the Polish monthly review of labor statistics gives wages in Poland in various industries in 1924, in each of the five preceding years, and in 1913.

SWEDEN.—[Socialdepartementet.] Riksförsäkringsanstalten. *Olycksfall i arbete, år 1924. Stockholm, 1927. 52 pp.*

Report on industrial accidents in Sweden in 1924.

—— —— Statistiska Centralbyrån. *Statistisk årsbok för Sverige, 1927. Stockholm, 1927. xvii, 381 pp.*

Section VII of this statistical yearbook of Sweden for the year 1927 is devoted to industry; Section XII deals with prices, cost of living, and consumption; and Section XIII with social statistics, including wages, collective agreements, strikes and lockouts, and unemployment.

Unofficial

AMERICAN FEDERATION OF LABOR. Executive Council. *Report to the forty-seventh annual convention, Los Angeles, Calif., October 3, 1927. Washington, 1927. 98 pp.*

Reviewed on page 116 of this issue.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. *Education and training for the industries. Papers selected by the A. S. M. E. committee on education and training for the industries, largely from programs arranged by it for sessions held since 1923. New York, 29 West Thirty-ninth Street, 1927. 141 pp., illustrations, charts.*

BOMBAY TEXTILE LABOR UNION. *First annual report, 1926. Bombay, India, 1927. 28 pp.*

Reviewed on page 128 of this issue.

BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN. *Feeding the iron hog: The life and work of a locomotive fireman. Cleveland, 1927. 100 pp., illus.*

A popular account of the work and working conditions of the locomotive fireman, the special hazards of the job, wages, prospects, etc. Contains also a chapter dealing with the Brotherhood of Locomotive Firemen and Enginemen and its work, the various kinds of benefits paid, and so forth.

BUREAU OF RAILWAY NEWS AND STATISTICS. *Railway statistics of the United States of America for the year ended December 31, 1926, compared with the official reports for 1925 and recent statistics of foreign railways. Chicago, 1927. 143 pp., maps, illustrations.*

Contains data on number of employees and yearly and daily wages in the various railway occupations and on accidents to employees and passengers.

DAILY NEWS MISSION OF MINERS' LEADERS TO THE CONTINENT. *New European coal war: What the British industry has to face. London, Fleetgate Publications [1927?]. 29 pp.*

Reviewed on page 56 of this issue.

DEMANT, V. A., AND OTHERS. *Coal—a challenge to the national conscience. London, W. C. 1, Hogarth Press, 52 Tavistock Square, 1927. 84 pp.*

The title of the book indicates its general character. The writers (seven in number) believe that the present demoralization of the coal industry can not be attributed wholly to the attitude of either employers or employees or both, but is only part of a general communal failure to meet the new conditions brought about by the war. The war had been won by a community effort, which might have been carried over into the economic and industrial struggle following it. Instead, the country as a whole tried to return to the past, with disastrous consequences. The present difficulties can be solved, the writers think, but only by definite and concentrated study of conditions, and determined effort to secure the adoption of the methods indicated by such study.

DUNN, ROBERT W. *The Americanization of labor—the employers' offensive against the trade-unions. New York, International Publishers, 1927. 272 pp.*

The following is a partial list of the subjects covered: The open shop, the labor spy, the black list, company "welfare," the American plan, the company union, personnel activities, insurance and pensions, employee stock ownership, and methods of strike breaking.

FULLERTON, C. N. *Apprentice training on the Baltimore and Ohio. Washington, 1927. 11 pp. (Reprinted from American Federationist, August, 1927.)*

GARIS, ROY, L. *Immigration restrictions: A study of the opposition to and regulation of immigration into the United States. New York, Macmillan Co., 1927. xv, 376 pp., maps, charts.*

GITSHAM, E., AND TREMBATH, J. F. *A first account of labor organization in South Africa. Durban, 1926. 179 pp.*

An account of the trade-union movement in South Africa, with a description of the chief trade-unions, a discussion of the relation between the State and industrial organization, a review of the functions, methods, and policy of trade-unions, and a consideration of the problems of their organization, especially of the relative advantages of craft and industrial organization. A second part gives brief biographical sketches of the leaders of the movement. The book is written frankly from a trade-union standpoint, and is admittedly sketchy. It is put forward, however, as containing extracts "from the full story which has yet to be told by someone or by many," on the ground that it is desirable to record at least an outline of the chief events in the history of South African trade-unionism before the materials for the story slip away into oblivion.

GUILLAUME, ANDRÉ. *Un conseil paritaire de conciliation dans une manufacture. Paris, Librairie des Sciences Politiques et Sociales, 1927. xxi, 168 pp., chart.*

An account of a seven years' experiment with a joint conciliation council in the biscuit industry in France.

HARVARD UNIVERSITY. Graduate School of Business Administration. *Harvard business reports, vol 4. Chicago, A. W. Shaw Co., 1927. xv, 559 pp., charts.*

In this volume are grouped cases dealing with administrative aspects of the labor relationship between employers and employees. The cases have been arranged according to three general types of issues: First, current operating issues, including cases which refer to manning the enterprise, development of abilities, problems of leadership and supervision, and provision of incentives; second, questions regarding the channels through which such issues are negotiated, and the status collectively of employers and of employees, containing cases which apart from their immediate focus deal with employee representation or agreements with labor unions; and third, problems arising from those relations between employer and employee which are superimposed upon the labor relationship, including such topics as employee medical service, housing, and pensions.

HO, FRANKLIN L. *Prices and price indexes in China. Peking, Chinese Government Bureau of Economic Information, 1927. 35 pp., charts. (Reprinted from the Chinese Economic Journal, June, 1927.)*

An analysis of the price data and price indexes of the Bureau of Markets in Shanghai and the Bureau of Agriculture and Industry in Canton.

HOUSER, J. DAVID. *What the employer thinks: Executives' attitudes toward employees. Cambridge, Harvard University Press, 1927. ix, 226 pp. (Wertheim fellowship publications, I.)*

Reviewed on page 45 of this issue.

INNES, KATHLEEN E. *The League of Nations and the world's workers—an introduction to the work of the International Labor Organization. London, Hogarth Press, 1927. 48 pp.*

INTERNATIONAL FEDERATION OF TRADE UNIONS. *The trade-union movement of Sweden, by Sigfrid Hansson. Amsterdam, 1927. 56 pp.*

Included in the statistics of this document are tables showing the income and expenditures, 1888–1924, of various Swedish unions and also of the national center. In October, 1926, the membership of the national center was over 400,000 and at the time the book under review was written 34 unions were affiliated with the central body.

INTERNATIONAL METAL WORKERS' FEDERATION. *Reports of the secretary and of the national organizations, 1924–1926, to the eleventh International Metal Workers' Congress at Paris. Berne, Switzerland, 1927. 288 pp.*

LOUIS, PAUL. *Histoire de la classe ouvrière en France de la Révolution a nos jours. Paris, Librairie des Sciences Politiques et Sociales, 1927. 413 pp.*

The author holds that notwithstanding the reduction in the length of the working-day, the life of the laboring class in France is harder than it was formerly because of the rationalization of industry, the constant development of machinery rendering more acute the precariousness of the individual wage-earner's situation. Furthermore, he declares that real wages have greatly declined since 1913.

LUBIN, ISADOR, and EVERETT, HELEN. *The British coal dilemma. New York, Macmillan Co., 1927. xii, 370 pp. (Publication of the Institute of Economics, Washington, D. C.)*

This volume seeks to analyze the forces which have brought the British coal industry to an impasse, to appraise the various measures which have been advanced for its regeneration, and to indicate the lines along which, in the authors' opinions, constructive developments are to be sought.

MONTGOMERY, ROYAL E. *Industrial relations in the Chicago building trades. Chicago, University of Chicago Press, 1927. xi, 340 pp.*

A history and analysis of the numerous problems which have arisen in the relations of employers and employees in the Chicago building trades. Contains chapters on jurisdictional disputes, graft in the building trades, and the Landis arbitration and award.

MUIR, RAMSAY. *Trade-unionism and the trade-union bill. London, Williams & Norgate (Ltd.), Covent Garden, 1927. 172 pp.*

Published before the recent trade disputes act was passed, and intended for use in the campaign against it. The body of the book sets forth the trade-union view of the provisions of the new act, and an appendix by the legal subcommittee of the liberal industrial inquiry group gives the legal position of trade-unions under the law previous to the passage of this act.

NATIONAL ASSOCIATION OF MANUFACTURERS. Junior Education and Employment Committee. *National education and employment program. New York, 50 Church Street, 1927. 11 pp.*

Reviewed on page 110 of this issue.

NATIONAL RAILWAYS OF MEXICO. *Eighteenth annual report, for the fiscal year ended June 30, 1926. Mexico. D. F. [1926?]. 44 pp.*

Wages of Mexican railway workers in 1925 and 1926, taken from this report, are given on page — of this issue.

NEW YORK SABBATH COMMITTEE. *Influence of the weekly rest-day on human welfare. New York, 1927. 120 pp.*

NEWSHOLME, SIR ARTHUR. *Evolution of preventive medicine. Baltimore, Williams and Wilkins Co., 1927. xv, 226 pp., illustrations.*

A survey of the development of knowledge of the causes of communicable diseases and of measures for their prevention. It touches briefly on many of the superstitions and erroneous beliefs which prevailed in different periods and on the discoveries of various scientists and physicians. There is a chapter on sanitation and social improvement and one on poverty and preventive medicine.

OHIO STATE UNIVERSITY. Bureau of Business Research. *Monograph No. 7: Ohio employment studies, by Ralph J. Watkins. Columbus, 1927. vii, 65 pp., charts.*

PEDDIE, J. TAYLOR. *The cause of economic and social unrest. London, Longmans, Green & Co. (Ltd.), 1927. v, 76 pp.*

The thesis of this treatise is that "a monetary system that is akin to a barter economy is of fundamental importance." The author discusses the cost and difficulties involved in maintaining the gold standard, and the necessity for finding a practical and scientific remedy for them, in order that sound finance may be established, bringing with it a solution for the various social problems.

UNION SUISSE DES PAYSANS. *Publication No. 85: Vingt-neuvième rapport annuel du comité directeur de l'Union suisse des Paysans et du Secrétariat des Paysans suisses, 1926. Brugg, 1927. 99 pp.*

Twenty-ninth annual report of the executive board of the Swiss Farmers' Union on the work of the union during 1926. This organization is composed of agricultural associations of various types, having over 400,000 members. A number of the agricultural cooperative federations are affiliated with the union.

VRINAT, RENÉ. *L'effort industriel et social aux Etats-Unis. Paris, Albin Michel, 1927. 291 pp., illustrations.*

Among the subjects treated in this French study of industrial and social achievements in the United States are: Standardization and factory construction, the Wanamaker stores, Detroit and the Ford factories, the Chicago stockyards, the oil problem, the electrical industry, the compressed-air industry, the Steel Trust, and the American viewpoint on apprenticeship and vocational guidance.

WOLF, H. D. *The Railroad Labor Board. Chicago, University of Chicago Press, 1927. x, 473 pp.*

As set forth in the preface, "the present study attempts a survey of the work of the Railroad Labor Board. The author has endeavored to explain the problems which the Board had to meet, the manner in which it met them, and the events and circumstances which led to its abolition. As an introduction to this study a review is given of the changes made in wages, hours, and working conditions during the period of Government operation. In conclusion a short account is given of the machinery which has replaced the Railroad Labor Board, and of the present outlook for industrial peace on the railroads."

WOLL, MATTHEW, AND BENSON, CARVILLE D. *The birth and development of the Union Labor Life Insurance Co. [Washington?], 1927. 47 pp.*

Addresses delivered at the first annual meeting of the stockholders of the Union Labor Life Insurance Co., held at Baltimore, Md., March 14, 1927.

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