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## This Issue in Brief

*The productivity of railroad labor in the United States*, measured by the average number of traffic units per employee, has increased about 40 per cent since 1915 and about 150 per cent since 1890. Moreover, these increases have been almost uninterrupted, as indicated by the tables and charts. See page 1.

*A labor turnover index is now being compiled monthly for 175 manufacturing companies* employing about 800,000 wage earners. For the month of December, 1926, the accession rate was 27.1 and the total separation rate 30.6. The total separation rate was made up of a voluntary quit rate of 20.0, a lay-off rate of 7.1, and a discharge rate of 3.5. Page 9.

*Lunch rooms have become an established feature of most industrial establishments.* In a survey recently made by the Bureau of Labor Statistics it was found that 303 of 430 establishments had lunch rooms. The cafeteria is by far the most popular form of service. Prices are usually very reasonable, as there is seldom any attempt at profit and in many cases the service is rendered at a loss. A number of companies employ a dietitian to supervise the selection, preparation, and service of the food. Page 13.

*Wages in the boot and shoe industry in the United States* were slightly higher in 1926 than in 1924. Compared with 1913, hours per week in 1926 were 11.4 per cent lower, earnings per hour 118.3 per cent higher, and full-time earnings per week 93.9 per cent higher. Detailed data from the recent survey by the Bureau of Labor Statistics are given on page 77.

*The pension systems maintained by private employers can not be relied upon to solve the problems of old-age dependency*, according to the research director of the Pennsylvania Old Age Pension Commission, who concludes, after a careful study of these systems, that they are inadequate in scope, that in a majority of instances their financial position is insecure, that their cost makes them almost impossible as a permanent policy for most employers, and that they do not even accomplish the results hoped for in the way of improving the relations between employers and employees. Page 48.

*The fatal accidents in the home amount to no less than 17,000 per year*, almost equal to the number of automobile fatalities. More than one-third of the fatal home accidents involve children under 15, while one-fourth involve people over 65. One-tenth of the domestic accidents are due to falls, one-tenth to burns, and one-tenth to drowning. Page 36.

*Accidents at coke ovens in 1925* were fewer in relation to number of persons employed than in any preceding year for which figures are available, according to the latest report on the subject by the United States Bureau of Mines. The fatality rate was the same as in 1924, the lowest ever attained. The nonfatal injury rate was lower than in 1924 and represented the best record to date of report. Page 32.

*More than 200,000 pieces of mining apparatus and equipment now in use in the mines of the United States bear the United States Bureau of Mines seal of approval as to safety, in the form of a safety label. Included in this equipment are miners' electric cap lamps, gas masks and self-contained oxygen breathing apparatus, electrically driven coal-cutting machines, etc. It is said that it will soon be possible to obtain approved apparatus for practically every use in underground coal mining. Page 37.*

*Building and loan associations in the United States number more than 12,000, with a total membership of almost 10,000,000 persons and total assets of \$5,500,000, according to a recent report of the United States League of Local Building and Loan Associations. Page 42.*

*Labor banks in the United States had total deposits of \$109,000,000 and total resources of \$127,000,000 at the end of 1926, according to a compilation prepared by the Amalgamated Clothing Workers of America. Page 43.*

*The subject of the proper use of leisure, with particular reference to those employments in which the hours of labor have been decreased in recent years, has become a much discussed topic. A selected bibliography is given on page 167.*

*A change in the housing policy of the English Government along two lines was accomplished by parliamentary action during the autumn session. The Government subsidy is to be materially reduced for all houses not completed by October 1, 1927, while new subsidies are to be given for improving or reconstructing rural buildings which may be used for housing purposes. Page 40.*

*The Japanese health insurance act, which became effective July 1, 1926, covers practically all wage earners in mines and factories, and provides for medical treatment and cash benefits amounting to 60 per cent of the worker's daily wage. The fund is supported by contributions by employers, employees, and the State. Page 64.*

# MONTHLY LABOR REVIEW

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## Productivity of Railroad Labor

By WALTER H. DUNLAP, C. E.

THE productive output of railroad labor in the United States has increased about 40 per cent since 1915 and about 150 per cent since 1890. These figures are the result of a study covering all employees of Class I railroads in the United States based on number of traffic units per employee for the period 1890 to 1915 and number of traffic units per "hour on duty" from 1915 to 1926. Similar figures based on traffic units per man-hour of train and engine crews show an increase in productivity of these workers of 33.9 per cent from 1915 to 1926. No attempt is here made to determine the cause of these increases in productivity, nor to allocate the credit for the increases as between increased efficiency of labor, the introduction of new machines or processes, better management, or increased traffic.

Labor Productivity of all Employees and of Train and Engine crews, 1915-1926

TABLE 1 shows index numbers of traffic units per man-hour for all employees and for train and engine crews<sup>1</sup> on Class I line-haul railroads for each year from the 2½-year base period, July, 1914-December, 1916, to 1926. This base period was selected because the rules for reporting service of employees prescribed by the Interstate Commerce Commission were changed as of July 1, 1914, prior to which hours were not reported. In the first year under the new rules (the 1915 fiscal year) about 20 of the larger carriers failed to report any data for employees, and it is felt that the data as reported by the others were not so well and as carefully collected as in succeeding reports. In 1916 the change was made from the fiscal to the calendar year, thereby giving three full yearly reports covering a period of 2½ years.

Traffic units here used as the measure of transportation output are computed by adding the ton-miles to three times the number of passenger-miles, this being the generally accepted method of combining these two incommensurate units in studies dealing with Class I roads. Figures for the year 1926 are based on returns for the 10 months, January to October.

<sup>1</sup>Train and engine service has been computed separately, because this work is so directly and closely related to the transportation output.

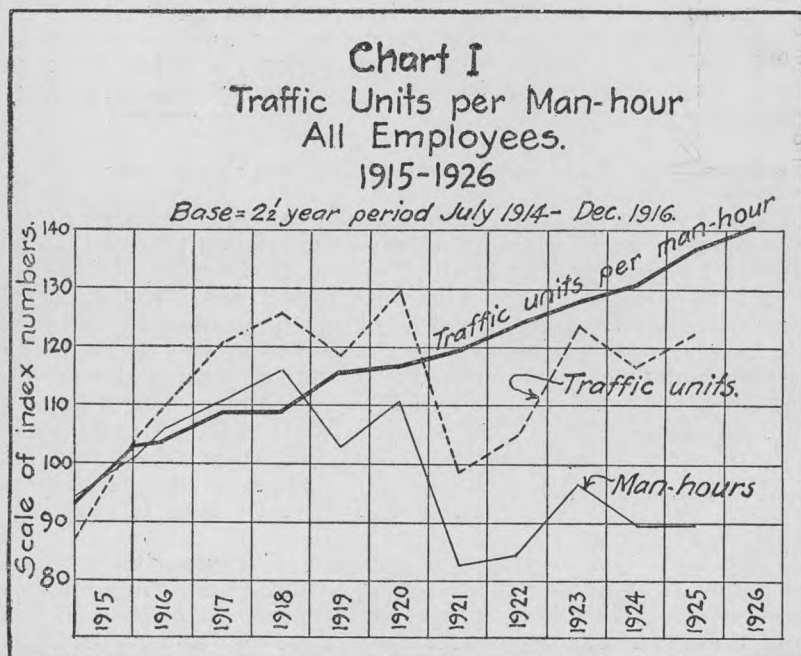
TABLE 1.—INDEX NUMBERS OF PRODUCTIVITY OF RAILROAD LABOR IN THE UNITED STATES, 1915 TO 1926

[July 1, 1914—Dec. 31, 1916=100.0]

Year ending—	Traffic units	All employees		Train and engine crews	
		Hours on duty	Traffic units per man-hour	Hours on duty	Traffic units per man-hour
June 30, 1915.....	86.8	93.6	92.8	90.8	95.6
June 30, 1916.....	103.6	100.9	102.7	101.3	102.2
Dec. 31, 1916.....	109.6	105.6	103.8	107.9	101.6
Dec. 31, 1917.....	120.6	110.6	109.0	115.7	104.2
Dec. 31, 1918.....	125.4	116.0	108.1	117.7	106.6
Dec. 31, 1919.....	118.3	102.4	115.6	102.3	115.7
Dec. 31, 1920.....	129.5	110.8	116.8	115.6	112.0
Dec. 31, 1921.....	98.4	83.0	118.5	84.3	116.7
Dec. 31, 1922.....	104.8	85.2	123.0	88.2	118.8
Dec. 31, 1923.....	123.8	97.6	126.8	103.2	119.9
Dec. 31, 1924.....	116.7	89.7	130.1	93.5	124.9
Dec. 31, 1925.....	122.6	89.5	137.0	93.8	130.7
10 months, 1926.....	( <sup>1</sup> )	( <sup>1</sup> )	140.5	( <sup>1</sup> )	134.5

<sup>1</sup> Index numbers based upon figures representing only a part of the year's operations would not be comparable with those based upon the entire year's operations. Derivative figures (traffic units per man-hour) are exempt from this restriction.

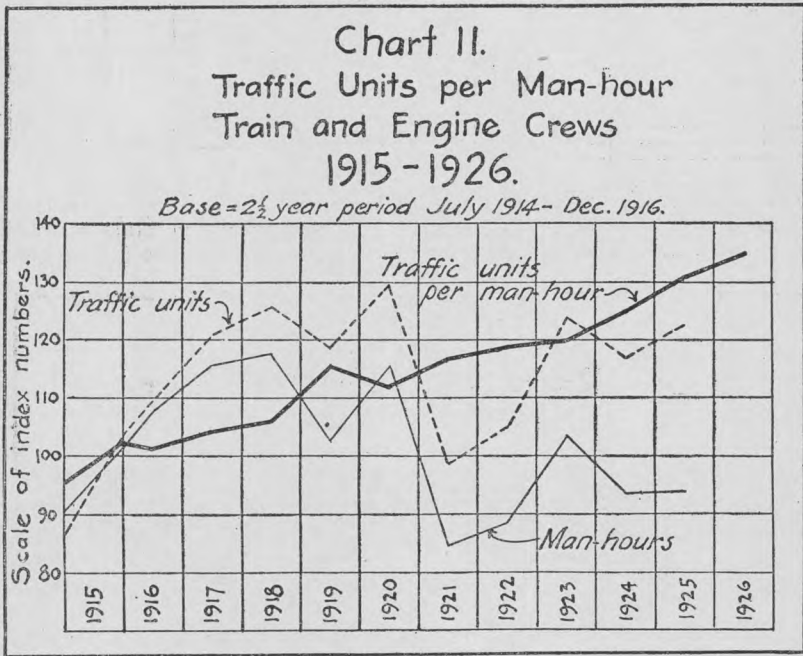
As shown in the table, the output per man-hour of all employees increased 40.5 per cent during the 11-year period ending in 1926. For train and engine crews alone the increase was 34.5 per cent.



In this connection it may be noted that one important division of railroad work—that commonly known as “railroad shop work”—is not immediately connected with transportation and, indeed, may



be farmed out to outside parties. If this outside contracting practice had been followed to a greater extent in the later years of the present study than in the base period, the labor productivity index for the later years would be unduly high, for such work would appear in the reports of the railroads in the expense account but not in the man-hours worked. A complete analysis on this point is impossible because of lack of information. Figures of the United States Census, however, show that the number of employees of railroad shops, while fluctuating considerably by census years, shows an increase from 1914 to 1925 equal at least to the increase in other classes of railroad employees. Therefore it is evident that the inclusion of shop employees has not tended to raise the index numbers of all employees as presented above.



Both curves on Charts I and II show a remarkable record of steady year-by-year progress in adapting the number and effectiveness of the man-hours to the traffic offered. That is, when traffic decreases, man-hours decrease still more, and when traffic increases, man-hours increase at a slower rate, either event causing the productivity curve to rise.

Productivity of All Employees, 1890 to 1926

TABLE 2 shows index numbers of productivity of all employees from 1890 to 1926. It is based on traffic units per employee for the period 1890-1914 and traffic units per man-hour for the period 1915-1926, hours not having been reported prior to 1915. The justification for this statistical substitution is given on page 8.

The table shows an increase in productivity of 154 per cent in the 37½ years from July 1, 1889 to 1926, or an average of 4.1 per cent per year. In general, the trend of the curve (see Chart III) is quite smooth from year to year. Productivity, however, increased faster during the latter part of this period than in the first part, the rate of increase for the 23 years from July 1, 1889, to June 30, 1912, being only 2 per cent per year as against 5.1 per cent per year for the 14½ years from July 1, 1912 to 1926. During the period ending with December 31, 1925, traffic increased 366.8 per cent, or 10 per cent per year, while man-hours increased only 88.5 per cent, or 2.4 per cent per year.

TABLE 2.—INDEX NUMBERS OF PRODUCTIVITY OF ALL RAILROAD EMPLOYEES IN THE UNITED STATES, 1890 TO 1926

Year ending—	Traffic units	Man-hours <sup>1</sup>	Traffic units per man-hour	Year ending—	Traffic units	Man-hours <sup>1</sup>	Traffic units per man-hour
June 30, 1890	100.0	100.0	100.0	June 30, 1909	273.9	200.6	136.6
June 30, 1891	104.9	104.7	100.2	June 30, 1910	315.0	226.8	138.9
June 30, 1892	114.8	109.6	104.8	June 30, 1911	310.5	213.5	145.4
June 30, 1893	122.0	116.6	104.6	June 30, 1912	319.4	219.2	145.7
June 30, 1894	110.2	104.0	106.0	June 30, 1913	357.4	234.8	152.2
June 30, 1895	109.0	104.8	104.0	June 30, 1914	347.8	218.9	158.9
June 30, 1896	120.3	110.3	109.1	June 30, 1915	330.5	197.1	167.7
June 30, 1897	118.0	109.9	107.4	June 30, 1916	394.5	212.5	185.7
June 30, 1898	138.0	116.7	118.2	Dec. 31, 1916	417.2	222.4	187.6
June 30, 1899	149.8	124.0	120.9	Dec. 31, 1917	459.0	233.1	196.9
June 30, 1900	169.8	135.8	125.0	Dec. 31, 1918	477.3	244.3	195.3
June 30, 1901	178.2	143.0	124.7	Dec. 31, 1919	450.4	215.7	208.8
June 30, 1902	193.6	158.7	122.0	Dec. 31, 1920	492.9	233.4	211.1
June 30, 1903	211.2	175.2	120.5	Dec. 31, 1921	374.7	174.9	214.2
June 30, 1904	215.0	173.0	124.3	Dec. 31, 1922	398.8	170.4	222.3
June 30, 1905	230.7	184.5	125.1	Dec. 31, 1923	471.2	205.7	229.1
June 30, 1906	260.7	203.0	128.4	Dec. 31, 1924	444.5	189.0	235.1
June 30, 1907	286.1	223.2	128.2	Dec. 31, 1925	466.8	188.5	247.6
June 30, 1908	273.5	191.7	142.7	10 months, 1926	(?)	(?)	254.0

<sup>1</sup> Man-hours for the years 1890-1914 are assumed to be proportional to number of employees. See text under the heading "Employees and man-hours," p. 7.

<sup>2</sup> Index numbers based upon figures representing the operations of only a part of the year would not be comparable with those based upon the entire year's operations. Derivative figures (traffic units per man-hour) are exempt from this restriction.

### Basic Data

TABLE 3 gives the actual figures from which the indexes previously presented have been derived. The sources of the data are shown in the subsequent explanations of methods and sources, and the short title "Stat." is used in referring to the annual reports of the Interstate Commerce Commission on the Statistics of Railways in the United States, this being the customary abbreviation.

Chart III  
 Traffic Units per Man-hour.  
 1890-1926.  
 Base, 1890=100.

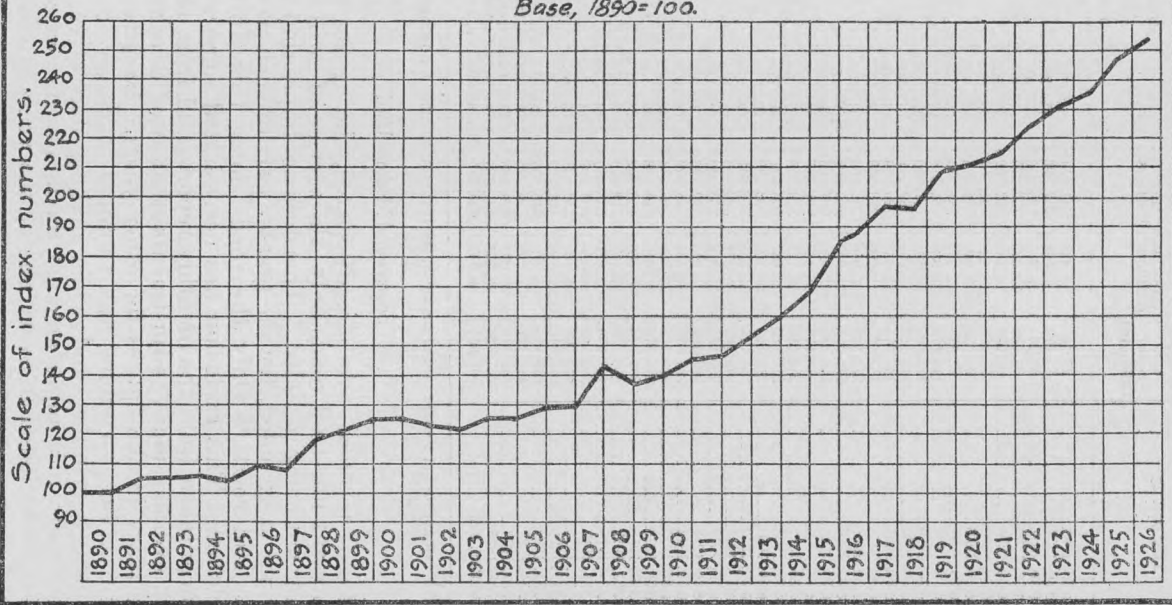


TABLE 3.—STATISTICS OF CLASS I RAILROADS IN THE UNITED STATES (LINE-HAUL ROADS ONLY)<sup>1</sup>

Year ending—	Net revenue ton-miles (millions)	Passenger-miles (millions)	Traffic units (millions)	All employees		Train and engine crews	
				Number	Hours on duty (thousands)	Number of employees	Hours on duty (thousands)
June 30, 1890.....	76, 207	11, 848	111, 751	749, 301			
June 30, 1891.....	81, 074	12, 044	117, 206	784, 285			
June 30, 1892.....	88, 241	13, 363	128, 330	821, 415			
June 30, 1893.....	93, 588	14, 229	136, 275	873, 602			
June 30, 1894.....	80, 335	14, 289	123, 202	779, 608			
June 30, 1895.....	85, 228	12, 188	121, 792	785, 034			
June 30, 1896.....	95, 328	13, 049	134, 475	826, 620			
June 30, 1897.....	95, 139	12, 257	131, 910	823, 476			
June 30, 1898.....	114, 078	13, 380	154, 218	874, 558			
June 30, 1899.....	123, 667	14, 591	167, 440	928, 924			
June 30, 1900.....	141, 597	16, 038	189, 711	1, 017, 653			
June 30, 1901.....	147, 077	17, 354	199, 139	1, 071, 169			
June 30, 1902.....	157, 289	19, 690	216, 359	1, 189, 315			
June 30, 1903.....	173, 221	20, 916	235, 969	1, 312, 537			
June 30, 1904.....	174, 522	21, 923	240, 291	1, 296, 121			
June 30, 1905.....	186, 463	23, 800	257, 863	1, 382, 196			
June 30, 1906.....	215, 878	25, 167	291, 379	1, 521, 355			
June 30, 1907.....	236, 601	27, 719	319, 758	1, 672, 074			
June 30, 1908.....	218, 382	29, 083	305, 631	1, 436, 275			
June 30, 1909.....	218, 803	29, 109	306, 130	1, 502, 823			
June 30, 1910.....	255, 017	32, 338	352, 031	1, 699, 420			
June 30, 1911.....	249, 843	32, 371	346, 956	1, 599, 854			
June 30, 1912.....	259, 982	32, 316	356, 930	1, 642, 119			
June 30, 1913.....	297, 723	33, 875	399, 348	1, 759, 020			
June 30, 1914.....	284, 925	34, 567	388, 626	1, 640, 029			
June 30, 1915.....	273, 913	31, 790	369, 283	1, 491, 849	4, 598, 317	254, 662	789, 563
June 30, 1916.....	339, 870	33, 646	440, 808	1, 599, 158	4, 957, 655	288, 063	881, 194
Dec. 31, 1916.....	362, 444	34, 586	466, 202	1, 647, 097	5, 189, 791	302, 572	937, 810
Dec. 31, 1917.....	394, 465	39, 477	512, 896	1, 732, 876	5, 437, 977	332, 539	1, 006, 100
Dec. 31, 1918.....	405, 379	42, 677	533, 410	1, 841, 575	5, 701, 417	346, 680	1, 023, 094
Dec. 31, 1919.....	364, 293	46, 358	503, 367	1, 913, 422	5, 032, 493	318, 206	889, 551
Dec. 31, 1920.....	410, 306	46, 849	550, 853	2, 022, 832	5, 446, 741	339, 201	1, 004, 974
Dec. 31, 1921.....	306, 840	37, 313	418, 779	1, 659, 513	4, 081, 773	295, 738	733, 194
Dec. 31, 1922.....	339, 285	35, 470	445, 695	1, 626, 834	4, 186, 151	297, 084	766, 785
Dec. 31, 1923.....	412, 727	37, 957	526, 598	1, 857, 674	4, 798, 505	337, 228	897, 479
Dec. 31, 1924.....	388, 415	36, 091	496, 688	1, 751, 362	4, 410, 451	313, 646	812, 783
Dec. 31, 1925.....	413, 823	35, 950	521, 673	1, 747, 207	4, 399, 170	317, 042	815, 689
10 months, 1926.....	367, 064	29, 941	456, 887	1, 783, 298	3, 756, 287	323, 835	694, 495

<sup>1</sup>For explanation of sources and of methods, see text immediately following this table.

#### Sources and Methods Used

*Roads included.*—As already stated, the figures used in the study represent line-haul roads only, the service of switching and terminal roads not being included. This does not imply that yard and terminal service is excluded, for the greater part of such work is done by the line-haul roads.<sup>2</sup> Only the roads doing this work exclusively are excluded. This exclusion has necessitated some adjustment of the figures taken from the monthly reports and from the 1921 Stat., but has avoided many adjustments that would otherwise have been necessary in the figures for other years. Because of the nature of their service, switching and terminal roads do not report ton-miles or passenger-miles, and when making derivative figures involving these units, it is important that the figures for switching and terminal roads be included in every one of the years studied, or excluded in every year.

For the years 1890–1910, the figures represent the operations of all railroads in the country as taken from Schedule 53 in the 1921 Stat., while those for the years 1911–1926 represent Class I roads only

<sup>2</sup>In the four years, 1922–1925, the number of all employees of Class I, line-haul roads, constituted 98.78 per cent of that for all Class I roads, including switching and terminal companies.

(i. e., roads having annual operating expenses of \$1,000,000 or more). Limitations of data made this change necessary. As, however, Class I roads include about 95 per cent of the employees of all roads, the error thus introduced by the change from all roads to Class I roads in 1911 can not be very great. But there is an error due to the fact that the Class I roads have a greater traffic density than the smaller roads and thus the number of traffic units per man-hour is greater on Class I roads than on the smaller roads. For the five years 1911-1916 (omitting 1915 as defective) the reports of the Interstate Commerce Commission give the data necessary for computing these averages for both Class I roads and for all roads. Such a computation shows that traffic units per employee for all roads were 97.41 per cent of those for Class I roads only. If this relation can be assumed to have held throughout the period 1890 to 1926, then the increase in productivity of all employees, if based on all roads only or on Class I roads only throughout the period 1890-1926, would be slightly lower than as given in Table 2 (i. e., about 147 per cent instead of 154 per cent).

*Employees and man-hours.*—From July 1, 1889, to June 30, 1914, number of employees was reported as of the last day of the fiscal year, this one count sufficing for the total year. Beginning July 1, 1914, 6 counts per year were taken and since July 1, 1921, 4 counts per month, or 48 counts per year.

Prior to July, 1914, "total number of days worked" was reported by the carriers, but compilations of these figures by the Interstate Commerce Commission were published only as average daily compensation of each class of employees, carried to three significant figures, thus rendering laborious and uncertain the task of computing yearly totals for days worked. Beginning July, 1914, "total number of hours on duty during the year" was reported, and from July, 1921, to the present the reports contain, among other items, the number of hours of "straight time actually worked" and the number of hours of "overtime paid for," the sum of which approximates the "hours on duty" as reported July, 1914-June, 1921. In the present study, "hours on duty" have been used, as requiring the fewest number of adjustments in the published compilations of the Interstate Commerce Commission.

In the 1921 Stat., no combination of the figures published for the second half year will give figures for hours comparable with those for the first half, and the monthly wage reports had to be resorted to. The hours on duty, as computed<sup>3</sup> from the monthly reports, were added to the hours in the first half year as taken from the Stat., and the sum properly reduced to eliminate switching and terminal roads.<sup>4</sup> The same procedure is necessary for 1922 except that the year is not divided as in 1921. The figures for 1923 and 1926 were computed from the monthly reports. The monthly reports were also the source for hours on duty of train and engine crews for the second half of 1921, to which were added those for the first half year taken from the Stat., and the sum was reduced to eliminate switching and terminal roads.<sup>5</sup>

<sup>3</sup> Sum of straight time actually worked and overtime paid for. Days of daily paid workers converted to hours on the basis of 8 hours per day.

<sup>4</sup> The percentage of reduction used is 1.326, based on the fact that employees of line-haul roads only constituted 98.674 per cent of those of all Class I roads, including switching and terminal roads.

<sup>5</sup> Percentage of reduction used was 1.924, based on the fact that in 1924, hours on duty of train and engine crews of line-haul roads only constituted 98.076 per cent of those of all Class I roads including switching and terminal roads.

Figures for 1922, 1923, 1925, and 1926 were computed from the monthly reports and reduced to eliminate switching and terminal roads.

In order to determine the productivity of labor, two series of index numbers were developed: (1) Traffic units per employee 1890-1926 and (2) traffic units per man-hour 1915-1926. For a period of four and one-half years, July, 1914-December, 1918, these two series were found to be very nearly identical, after which they diverged. The divergence was due to change in average number of hours per day, and as there was no great change in this respect from 1890 to 1914, hours for these years have been taken as being proportional to number of employees, thereby permitting the two series to be combined into one. This procedure gives conservative results, for the tendency has been toward the shorter, rather than the longer, workday.

*Traffic units.*—The transportation output of the railroads is measured by two incommensurable units, ton-miles in freight service and passenger-miles in passenger service. Freight service is much the more important, the number of ton-miles running from eight to eleven times the number of passenger-miles, but judging by relative costs, each passenger-mile requires from 2.54 to 3.86 times as many man-hours as a ton-mile. As only a small percentage of the employees are directly and exclusively related to either freight or passenger service, a common measuring unit has been devised called the "traffic unit," the proportions of ton-miles to passenger-miles composing this unit being, in the absence of any more reasonable basis, determined on the basis of relative cost. Therefore for the purposes of this study the unit of transportation output employed is the traffic unit, the number of traffic units for any period being computed by adding three times the number of passenger-miles to the number of ton-miles.

This factor three has been generally used and accepted as an average value applicable to studies concerning all Class I roads, but if used for individual roads very untrustworthy results might be obtained. It would be preferable to use a separate factor applicable to each particular year, but the necessary data are lacking. However, the differences tend to compensate each other, for in those years when the factor as determined by cost would approach the 3.86 limit, the number of passenger-miles is comparatively small, and in those years when it would approach the 2.54 limit, the number of passenger-miles is comparatively large, the effect in either case being to equalize the variations to a fairly stable normal. The use of a constant value tends to increase the index number of productivity in such years as 1919-1921 and to decrease the index in such years as 1924-1926. Segregation of expense accounts as between freight and passenger service does not appear in the Stats. prior to 1915.

*Ton-miles.*—For measuring the transportation output of freight service, net revenue ton-miles are used throughout; that is, the weight of the freight in the cars for which revenue was received. This excludes the weight of company freight in the cars, and the weight of the cars themselves which at times becomes quite an item as when empty cars are returned for loads. Net revenue ton-miles were selected because figures for all years are available in such form as to require the least amount of adjustment.

## Factory Labor Turnover—Two New Monthly Indexes

By W. A. BERRIDGE, BROWN UNIVERSITY AND METROPOLITAN LIFE INSURANCE CO.

SINCE May, 1925, certain Rhode Island manufacturers have been reporting on their monthly labor turnover experience to the Bureau of Business Research at Brown University. They now number about 45, and employ about 25,000 wage earners.<sup>1</sup> Since January, 1926, certain national manufacturers have been reporting, on a similar schedule, to the Metropolitan Life Insurance Co. In this investigation the reporting manufacturers now number about 175; they employ about 800,000 wage earners,<sup>1</sup> or between 8 and 10 per cent of the total number employed in American factory industries according to the censuses of manufactures. In both cases, the index numbers form only part of a comprehensive project for measuring, analyzing, and so far as possible, improving the stability of labor.

The form circulated each month calls simply for the following six items:

1. Total accessions.
2. Total separations:
  - (a) Voluntary quits.
  - (b) Lay-offs.
  - (c) Discharges.
3. Average number on pay roll.

The collecting organization then figures, for each reporting manufacturer, the ratio of each of the first five items to the average number on pay roll. Each of the five resulting sets of rates is then arrayed in order of magnitude. After considerable experimental study of the distribution thus formed, the central or median item was decided upon as the most reliable and significant form of average for the purpose at hand. The median rate successfully controls the influence of extremely high or low rates, and that of companies having unusually large work forces; it tends to approximate the mode or "normal"; it is easily determined; and it seems to avoid some of the difficulties arising from a changing size of sample (number of reporting companies). The median was therefore adopted for all but the total separation rate, which is the sum of the medians for the three component rates above specified.

Chart 1 presents a graphic conspectus of the two sets of index numbers resulting from these investigations—that of Brown University (May, 1925, through December, 1926) at the left, that of the Metropolitan Life Co. (January through December, 1926) at the right. Although all the curves are plotted at monthly intervals, the chart is scaled in equivalent annual rates. In each case the full line represents the total separation rate (ignoring "miscellaneous" separations). The area beneath the full line is divided to show the changing composition of the total separation rate—the voluntary quit rate, the lay-off rate, and the discharge rate being represented by the three component areas or zones. The accession rate is shown by the crossed line.

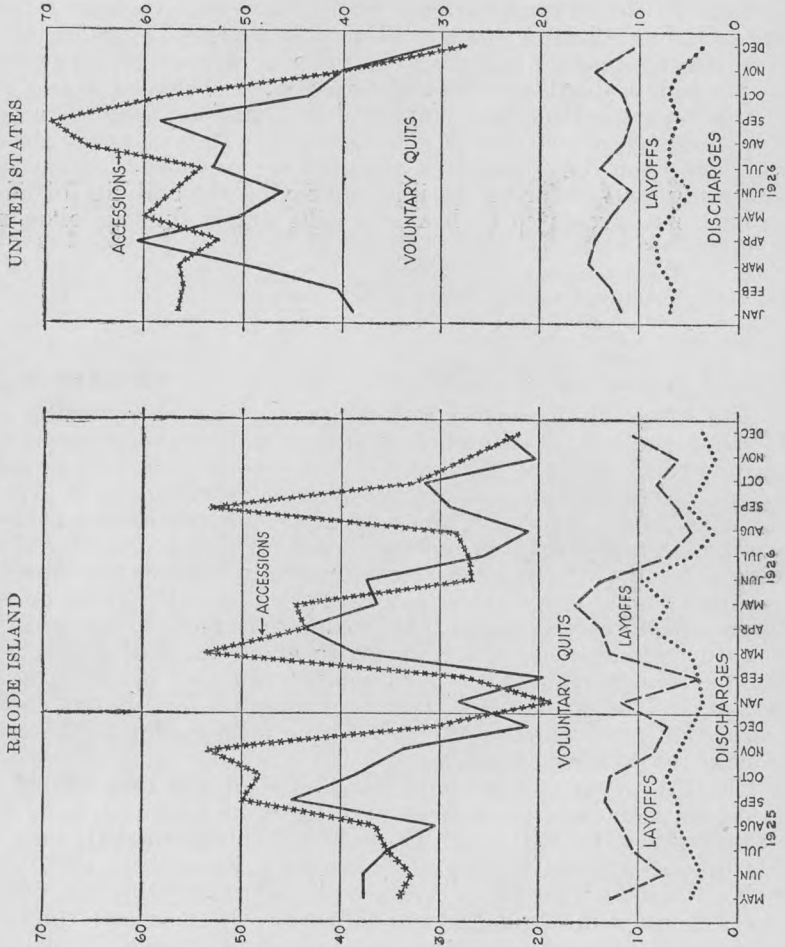
To study the earlier effects of seasonal and cyclical changes upon labor turnover experience, each of the indexes is being extended back to 1919 as rapidly as the collection of returns from representative

<sup>1</sup> Figures as of early February, 1927.

establishments makes that possible. Thus far, such an extension has been completed only for the voluntary quit rate. This more extended picture is shown in Chart 2 for both the national and the Rhode Island groups.

These two charts and their companion tables present several interesting problems of interpretation; only a part of them can yet be solved, and a treatment of even these is beyond the scope of the pres-

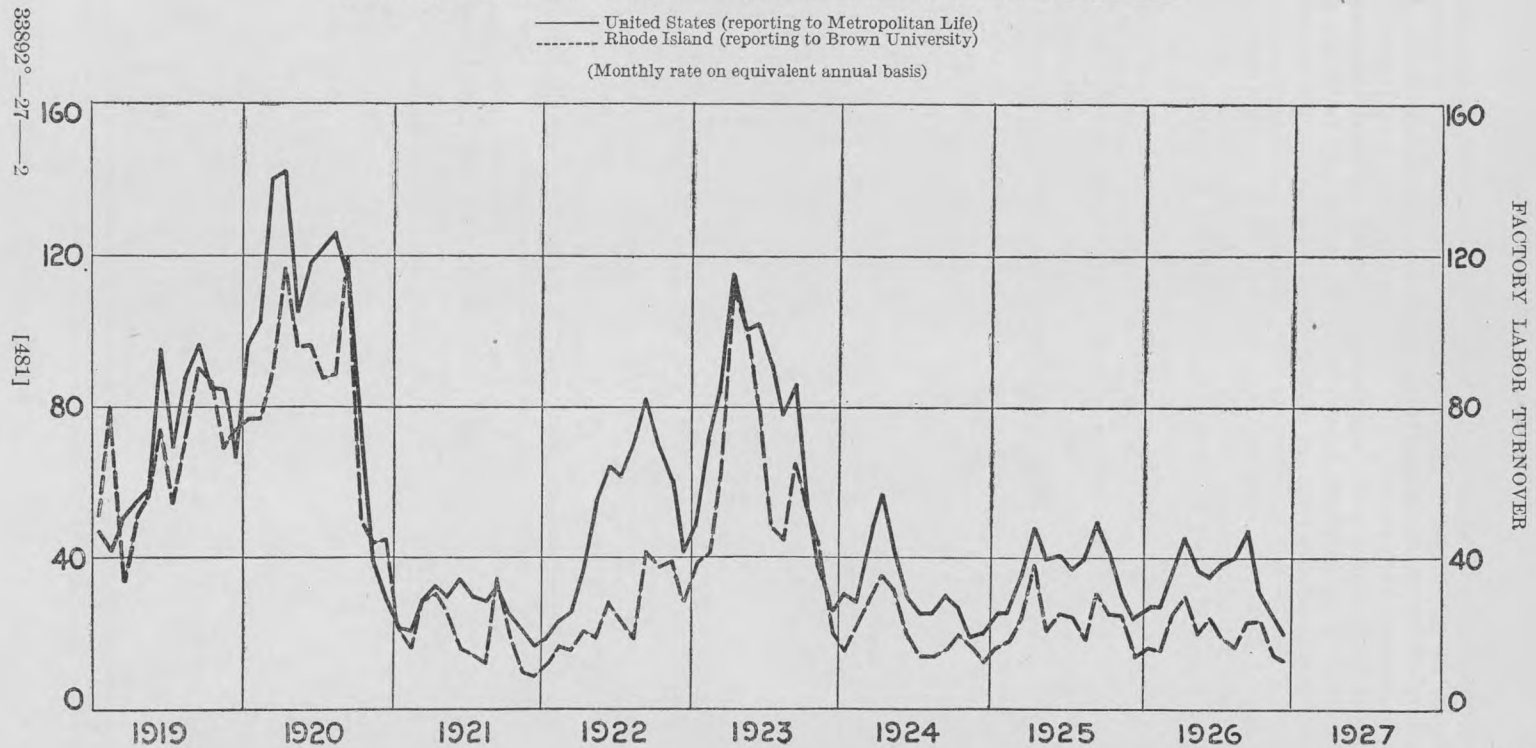
CHART 1.—RECENT LABOR TURNOVER EXPERIENCE OF TWO GROUPS OF MANUFACTURERS  
(Monthly rate on equivalent annual basis)



ent descriptive article. Suffice it to say that systematic efforts are being made to throw more light upon them by intimate study of length of service distribution, sex distribution, plant location, production stabilization, personnel policy, and other factors which are known or supposed to affect labor turnover experience. Such information is already proving highly valuable in interpreting the relationships between the composite experience measured by these indexes and the experience of an individual company or plant.



CHART 2.—INDEXES OF VOLUNTARY QUIT RATE AMONG SELECTED FACTORIES



Among the next steps in the index-number section of these investigations is the preparation of corresponding indexes for (a) certain regional labor markets and (b) certain selected industries. Among the manufacturers reporting to the Metropolitan Life Insurance Co. certain well-represented industries will be selected for intensive analysis. This can not, however, be done for any large number of industries until the number of reporting establishments is somewhat larger. Partly with a view to such enlargement, certain properly equipped local organizations are being invited to cooperate in the company's undertaking. Before the end of 1927, more information along this and other lines of attack should be available.

TABLE 1.—AVERAGE TURNOVER RATES IN EACH MONTH OF 1926 IN SELECTED AMERICAN FACTORIES

[Monthly rate stated on equivalent annual basis <sup>1</sup>]

Month	Rhode Island factories reporting to Brown University					Factories reporting to Metropolitan Life Insurance Co.				
	Accession rate	Total separation rate <sup>2</sup>	Voluntary quit rate	Lay-off rate	Discharge rate	Accession rate	Total separation rate <sup>2</sup>	Voluntary quit rate	Lay-off rate	Discharge rate
1926										
January.....	18.8	28.3	16.5	8.2	3.5	56.5	38.9	27.1	4.7	7.1
February.....	27.4	19.6	15.6	0.0	3.9	56.1	40.4	27.4	6.5	6.5
March.....	54.2	38.9	25.9	8.2	4.7	56.5	50.6	35.3	7.1	8.2
April.....	43.8	43.8	30.4	4.9	8.5	52.3	60.8	46.2	6.1	8.5
May.....	44.7	36.5	20.0	0.4	7.1	60.0	50.6	37.7	5.9	7.1
June.....	26.8	37.7	24.3	3.7	9.7	57.2	46.2	35.3	6.1	4.9
July.....	27.1	25.9	18.8	2.4	4.7	54.2	53.0	38.9	7.1	7.1
August.....	28.3	21.2	16.5	2.4	2.4	65.9	51.8	40.0	4.7	7.1
September.....	53.5	29.2	23.1	1.3	4.9	69.4	58.4	47.5	4.9	6.1
October.....	33.0	31.8	23.6	4.7	3.5	57.7	43.6	31.8	4.7	7.1
November.....	28.0	20.7	14.6	3.7	2.4	40.2	40.2	25.6	8.5	6.1
December.....	22.4	23.6	13.0	7.1	3.5	27.1	30.6	20.0	7.1	3.5

<sup>1</sup> The annual turnover rates are derived from the monthly rates by multiplying each monthly rate by 365 and dividing by the number of calendar days in the month represented.

<sup>2</sup> Arithmetic sum of last three columns.

TABLE 2.—AVERAGE (MEDIAN) VOLUNTARY QUIT RATE IN SELECTED FACTORIES

[Monthly rate stated on equivalent annual basis <sup>1</sup>]

Month	1919	1920	1921	1922	1923	1924	1925	1926
	Rhode Island factories numbering up to 40							
January.....	50.7	76.7	21.2	11.8	38.9	15.3	16.5	16.5
February.....	80.6	76.9	15.6	16.9	41.6	22.7	18.2	15.6
March.....	33.0	89.7	28.3	15.3	62.5	29.5	24.8	26.0
April.....	50.0	117.1	30.5	20.7	112.2	35.4	39.0	30.5
May.....	56.6	95.6	24.8	18.9	101.5	31.9	21.2	20.1
June.....	74.4	96.4	15.9	28.1	80.5	19.5	25.6	24.4
July.....	54.3	87.3	14.2	23.6	48.4	14.2	24.8	18.9
August.....	74.3	88.5	11.8	18.9	44.8	14.2	18.9	16.5
September.....	90.3	120.8	34.2	41.5	65.9	15.9	31.7	23.2
October.....	86.1	50.7	18.9	37.8	53.1	20.1	26.0	23.6
November.....	68.3	43.9	9.8	39.0	42.7	17.1	25.6	14.6
December.....	74.3	44.8	8.3	28.3	21.2	13.0	14.2	13.0
Average.....	66.1	82.4	19.4	25.1	59.5	20.7	23.9	20.2

<sup>1</sup> Index obtained by multiplying each month's median rate by 365, and dividing by the number of calendar days in that month. As 1920 and 1924 were leap years, the figures for each month in those years were multiplied by 366 and divided by the number of days in that month.

TABLE 2.—AVERAGE (MEDIAN) VOLUNTARY QUIT RATE IN SELECTED FACTORIES—Continued

	1919	1920	1921	1922	1923	1924	1925	1926
American factories numbering up to 160—Rate not adjusted for seasonal variation								
January.....	47.2	96.8	21.2	18.9	48.4	30.7	26.0	27.1
February.....	41.6	103.3	20.8	23.4	71.5	27.7	26.0	27.3
March.....	50.7	140.4	29.5	26.0	85.0	44.8	35.4	35.4
April.....	54.9	142.7	32.9	36.6	115.9	57.3	48.8	46.4
May.....	57.8	105.0	29.5	55.5	100.3	42.5	40.1	37.8
June.....	95.2	118.3	34.2	61.4	102.5	30.5	41.5	35.4
July.....	68.4	122.7	29.5	61.4	92.0	26.0	37.8	38.9
August.....	88.5	126.3	28.3	70.8	77.9	26.0	40.1	40.1
September.....	96.4	114.7	32.9	83.0	86.6	30.5	50.0	47.6
October.....	85.0	72.0	24.8	69.6	54.3	27.1	42.5	31.9
November.....	84.2	39.0	20.7	61.0	37.8	19.5	30.5	25.6
December.....	66.1	29.5	16.5	41.3	26.0	21.2	24.8	20.0
Average.....	69.7	100.9	26.7	51.0	74.8	32.0	37.0	34.5
American factories numbering up to 160—Rate adjusted for seasonal variation								
January.....	95.6	142.8	29.5	24.8	70.8	44.8	34.2	37.8
February.....	80.6	161.3	33.8	35.1	105.3	40.3	42.9	41.6
March.....	59.0	158.1	30.7	27.1	93.2	41.3	33.0	36.6
April.....	59.8	120.8	23.2	34.2	92.7	45.1	36.6	39.0
May.....	66.1	90.9	22.4	50.7	88.5	34.2	34.2	33.0
June.....	85.4	100.0	25.6	56.1	81.7	23.2	31.7	26.8
July.....	89.7	118.0	26.0	54.3	73.2	21.2	29.5	33.0
August.....	115.6	106.2	24.8	59.0	61.4	20.1	31.9	37.8
September.....	83.0	91.5	26.8	75.6	64.7	23.2	31.7	39.0
October.....	100.3	76.7	24.8	73.2	54.3	27.1	31.9	31.9
November.....	124.4	56.1	26.8	80.5	51.2	25.6	40.3	33.6
December.....	127.4	49.6	28.3	68.4	43.7	34.2	42.5	33.0
Average.....	90.6	106.0	26.9	53.3	73.4	31.7	35.0	35.3

### Lunch Rooms in Industrial Establishments

THE operation of many industries at the present time not only involves the manufacture of the particular product or the maintenance of the particular service for which the industry is organized, but also includes the provision, within the industry, of many special services for the health and comfort of the employees, supplied often on a scale which makes them a special management problem. Among the more important features of personnel work which contribute especially to the health and general well-being of the employees are the provision of adequate hospitals, with physicians and trained nurses in attendance, and of plant lunch rooms. An account of the work of industrial medical departments was given in the January issue of the Review, and the present article deals with the restaurant facilities provided in industrial establishments.

In the survey recently made by the United States Bureau of Labor Statistics, showing the extent and nature of the personnel activities carried on by employers for the benefit of their employees, schedules were secured from a total of 430 firms with approximately 1,977,000 employees. Of these companies, 303, with 1,175,388 employees, provided some form of lunch-room service for their employees, and in the 262 establishments which reported the number of employees using the lunch rooms it was found that an average of about 30 per

cent patronized them daily, although, of course, individual establishments showed very much larger percentages.

In certain industries lunch rooms may be taken for granted, since the nature of the business is such that the provision of a place for the employees to eat is a necessity. This is true in department stores and large offices where employees manifestly could not be allowed to eat at counters or desks, and in certain industries or processes where the materials used are of such a nature that eating in the work places constitutes a serious health hazard or where it might result in spoilage of work. Aside from such special considerations as this, however, the determining factors seem to be the lack of proper eating places in the immediate vicinity, the desire to keep the employees in the establishment during the lunch hour, and frequently the wish to give employees better and more nourishing food than they would be likely to get outside, since there is a tendency on the part of many workers to economize on food to the detriment of their health and efficiency. The provision of appetizing and nourishing food is regarded by most firms as an important factor in maintaining the health and efficiency of the working force, particularly as it is the best meal of the day for many of the workers. A number of the firms stated that an increase in production had followed the installation of lunch-room service.

There is a decided increase in the number of plant lunch rooms as compared with the number in operation 10 years ago when a similar study was made by the bureau. About the same number of firms were scheduled in the previous study, but at that time only a little more than half of the companies visited maintained lunch rooms while about 70 per cent of the firms scheduled operate them at the present time. In spite of the fact that there was an increase in the total number of lunch rooms, 16 of the firms visited had discontinued serving lunch to employees, the reason given in 13 cases being that the majority of the employees lived near the plant and patronage was not sufficient to warrant continuing the service; one was closed for financial reasons; another, serving a free lunch, gave the employees an opportunity to vote on the matter with the result that they chose an increase in their pay instead of the free lunch; and in the remaining case no reason was given for discontinuing the service.

The following table shows the number of establishments and of employees covered in the study, the number of establishments having employees' lunch rooms, and the number of employees using lunch rooms, by industries:

## NUMBER OF ESTABLISHMENTS HAVING LUNCH ROOMS, AND NUMBER OF EMPLOYEES USING LUNCH ROOMS

Industry	Establishments covered in study		Establishments having lunch rooms		Establishments reporting number of employees using lunch rooms		
	Number	Employees	Number	Employees	Number of establishments	Total employees	Employees using lunch rooms
<b>Manufacturing:</b>							
Automobiles and airplanes.....	19	247,939	19	247,939	15	140,787	28,831
Boots and shoes.....	5	25,040	5	25,040	5	25,040	5,110
Chemicals, soaps, and allied products.....	7	13,905	6	11,355	6	11,355	5,055
Cigars and tobacco.....	3	15,854	3	15,854	3	15,854	4,262
Clothing and furnishings.....	16	27,467	14	22,467	13	16,348	7,420
Electrical supplies.....	19	80,595	17	75,247	16	74,214	13,424
Fine machines and instruments.....	12	53,192	11	44,279	11	44,279	14,575
Food products.....	12	21,415	12	21,296	10	18,347	9,840
Furniture.....	4	3,870	3	2,760	3	2,760	650
Gold and silver ware.....	3	6,605	2	3,605	2	3,605	575
Iron and steel.....	12	323,384	3	14,312	2	10,200	1,100
Leather.....	3	3,390	1	2,260	1	2,260	450
Machine shops.....	49	125,907	36	88,259	30	76,988	18,423
Oil refining.....	3	22,078	3	22,078	2	8,340	1,600
Paper.....	11	12,739	8	9,721	7	6,946	2,780
Rubber goods.....	11	65,418	10	64,118	9	47,411	9,810
Slaughtering and meat packing.....	4	23,400	4	23,400	3	15,100	3,975
Textiles.....	56	86,853	19	39,415	18	38,760	10,375
Miscellaneous.....	29	45,553	21	38,007	18	33,130	11,591
Total.....	278	1,204,604	197	771,412	174	591,724	149,846
<b>Mining (coal and other).....</b>	24	56,265	4	4,535	1	1,250	313
Offices.....	19	40,246	15	33,237	13	30,278	22,993
<b>Public utilities:</b>							
Steam and electric railroads.....	15	371,645	7	90,651	1	4,000	400
Gas, electricity, telephone, and telegraph.....	19	127,786	14	110,115	12	38,022	6,600
Taxicabs.....	2	8,945	1	7,700	1	7,700	5,775
Total.....	36	508,376	22	208,466	14	49,722	12,775
<b>Stores.....</b>	52	137,250	52	137,250	50	132,308	53,804
<b>Other industries.....</b>	21	30,983	13	20,488	10	15,644	7,168
<b>Grand total.....</b>	430	1,977,724	303	1,175,388	262	820,926	246,899

## Establishments Having General Restaurant Service

MANY companies go to great expense in providing lunch-room service, since frequently many hundreds of workers must be seated at one time and in addition to the very considerable amount of space required for the lunch room there must be added the space needed for the kitchen, the refrigerating system, and the storage of supplies. In old plants usually such space as is available is adapted for these purposes or the plan, later described, of serving from booths or counters in the plant is utilized, while in newer plants if circumstances warrant maintaining a restaurant this is included in the construction plans. In some cases a separate building houses the lunch room and recreation rooms, and sometimes a limited number of employees are served in the club house if it is near enough to the plant. Mining districts have their mess halls, and occasionally there are boarding houses and hotels run by the companies for the benefit of the workers.

It is obvious that the amount of space devoted to the plant lunch rooms represents an outlay from which little or no tangible return is received, and this seems especially true in industries in which but

one meal a day is served, although these rooms are frequently used for social affairs outside of plant hours. In many instances also, in addition to up-to-date furniture and serving equipment, much attention is paid to making the lunch room an attractive place in which to spend the lunch period, and the rooms are almost uniformly clean and well kept. The cafeterias all have equipment for keeping the food hot or cold, as the case may be, and in many cases the kitchens are models with their many types of labor-saving equipment.

In industries where large numbers of men and women are employed it is usual to provide a separate lunch room for the women.

Provision is made in the majority of cases for those employees who wish to bring all or part of their lunch from home. In 206 establishments employees are free to take their home lunches to the cafeterias and eat them there whether they purchase anything or not, but they sometimes hesitate to do this and in some respects a separate room is more desirable. A few companies stated that lack of room in the cafeteria made it unwise to divide the space with those bringing lunches from home even though there was otherwise no objection.

Thirty-nine of the companies visited furnish separate rooms for those bringing lunches from home, and in most of these rooms there is some provision for cooking. There are always separate rooms for men and girls and quite frequently separate rooms for office and factory girls. Occasionally there is complete kitchenette equipment, including an ice box, but more often only a gas plate or an electric plate and tables and chairs. One company having two such rooms, one for men and one for women, reports that about 300 people take advantage of them daily. In some instances the matron in charge of the rest room makes coffee in the rest room or lunch room and has it ready for the girls.

One steam-railway company furnishes a room where the men can cook and eat their lunches, the men either bringing them from home or purchasing something outside to cook. Cooking utensils, a gas stove, and dishes are provided and the men wash their own dishes and help keep the place in order. This room is used by about 30 men a day.

One concern utilized a small building across the street, fitting it up as a kitchenette and lunch room for the girls. This is used by about 75 girls a day. Another firm, employing 1,000 girls, has a room furnished with tables and chairs and a player piano, where the girls eat lunches brought from home. The arrangement used by this company for disposing of the lunches in the morning has proven very satisfactory. A large rack with numbered compartments like post-office boxes is placed at the entrance in the morning. The numbers on the compartments correspond to the numbers on the chairs and tables in the lunch room. Each girl places her lunch in her compartment in the morning on entering, after which the rack is taken to the lunch room. Before noon the lunches are distributed according to number. This is done by the maids, who also serve coffee, tea, or milk, a charge of 2 cents each being made. Once a year the girls are given an opportunity to vote on continuing the plan or having a 25-cent lunch served, as is done for the men. A large majority always vote in favor of continuing the present plan, as many of them live at home and their lunches cost them less under this arrangement. The room is used by about 850 girls daily.

## Kinds of Service

VARIOUS factors have to be taken into consideration in the adoption of a plan of service for lunch rooms in industrial plants, such as the length of the lunch period, the number to be served in a given length of time, and the amount of space available for this purpose. In the very large plants the distance from work to the lunch rooms is also a matter to be considered.

The cafeteria is by far the most popular form of service, since of the 303 companies maintaining lunch rooms, 259 have cafeterias; 26 have restaurants and 18 have both. As a rule the restaurant is maintained for the benefit of the office employees and the cafeteria for other workers, this form of service being preferable for factory workers because of the larger numbers to be served. A number of firms have in connection with the cafeteria a smaller room where service can be had for a small extra charge or where a regular meal is served with the charge for service included. These rooms are not largely used as a rule, the majority preferring the quicker service and greater variety in the cafeteria. It is interesting to note the great increase in cafeterias during the past 10 years. At the time of the previous survey in 1916 there were 112 cafeterias and 128 restaurants in 223 plants as compared with 277 cafeterias and 44 restaurants in 303 establishments at the present time.

In some of the larger plants the distance is too great to use one central dining room and lunch rooms have been installed at convenient places throughout the plant. These lunch rooms are equipped with steam tables and facilities for serving, the food, as a rule, being prepared in a central kitchen and brought to the steam tables in wagons. In this way large numbers can be served in a short time. One company using this plan has 9 such stations in one plant, in which 1,000 people can be served in 10 minutes. In addition to conserving time in going to and from lunch, this plan makes it possible to provide separate lunch rooms for those whose work is of such a nature that they hesitate to wear their work clothes to the general lunch room. It would seem that the system of scattered lunch rooms is preferable to any of the various methods for serving in the workrooms—a practice which is generally conceded to be undesirable, particularly from the standpoint of health.

An example of the extension of the lunch-room service so that all the employees can be reached, by installing booths or stations throughout the plant, is that of a company employing about 7,600 people. The plan was adopted about nine years ago and at the present time from 80 to 90 per cent of the employees are being served daily. In addition to one lunch room with service, used mainly by the office force, there are about 20 booths at convenient locations throughout the plant, each booth equipped with a gas stove and with dishes for serving. The food for all the booths is prepared in one kitchen and is taken to the booths just before lunch time, the hot dishes being taken in large cans on wagons and placed on the fire in the booth. Sandwiches are wrapped in oiled paper of different colors indicating the variety so they can be quickly selected. There is a variety of food—soup, vegetables, meat, pie, cake, coffee, and cold milk in summer, each article costing 5 cents. Paper plates and spoons are used and a special nonresinous pulp cup, which does

not soften with the heat, is supplied for the soup and coffee. At lunch time the line passes by the booth and the workers take their lunches to wherever they choose to eat them. Shopmen are chosen by the foremen to take the food to the stations and wait on the booths during the lunch hour, the company paying them for this service. About 200 men are served daily at each booth and this number can be served in from 4 to 6 minutes.

The company believes the popularity of the plan is due to the quality of the food, reasonable prices, and the fact that the men prefer not to go to a dining room in their work clothes. Selling tickets for lunch in advance of the lunch hour was tried, but the plan involved a great deal of clerical work, so it was discontinued and a cash register was installed at each booth. There is a restaurant for the office force in a separate building but there is also a booth convenient to the offices, and of the 500 office people an average of 300 patronize the booth and 200 eat in the restaurant. Meals are served from the booths at noon and at 6 p. m. and coffee is taken through the plant at 2 a. m. for the night workers.

Similar plans with variations are used in many other plants. Carts or wagons are sent through the plant and various devices are used for keeping the food hot. One firm serves the different articles in individual pasteboard containers, sending them through the plant on wagons. Another has counters which are brought on the wagons with the food and set up at lunch time, while others have stationary counters throughout the plant. In some plants the machines are not stopped at lunch time and operators have lunch brought to them from the cafeteria, having given their orders in the morning.

One company, employing about 6,000 people, finds it necessary to vary the service to suit the needs of the different plants. In one plant the employees are forbidden to eat at their work places and a lunch room is provided which gives both cafeteria and restaurant service. Those not wishing to wait on themselves may have a regular dinner costing 30 cents served to them. Although the average check in the cafeteria is about the same as the price of the dinner the majority prefer the cafeteria. In another plant of the same company there is a small cafeteria serving less than 100 while four lunch carts sent to different parts of the works serve an average of 1,000 persons daily. From 80 to 100 gallons of coffee, 25 gallons of soup, and 900 cuts of pie, in addition to large quantities of sandwiches, etc., are dispensed from these carts.

A number of firms have stations throughout the plant where coffee and milk are served.

One small plant having no available space for a cafeteria adopted the plan of preparing the food in the kitchen and taking it to the different floors on carts. Order blanks are given out and each employee wishing to do so orders lunch for the following day. There is one room with tables and chairs which accommodates about 20, but the majority eat in the workrooms or wherever they wish. About 93 per cent of the employees take advantage of this plan, and since lunches are ordered in advance there are no left-overs and the food is fresh each day. This plan is followed in another plant having limited space, the orders being given in the morning and the food being taken to the different floors on individual trays.



### Character of Management

**I**N the majority of cases the lunch rooms are managed by the company and if an outsider has charge, as in a few cases, the company still has supervision as to prices and the quality of the food. A number of firms manage the office restaurant themselves while the cafeteria for factory workers is run by an outsider, but in almost every case the company furnishes heat, light, space, and equipment.

There are 265 lunch rooms managed by the company, 33 run by an outsider, and in 23 the management is turned over to the employees, either the employees' association, the benefit association, or a committee appointed by the management. With all overhead expenses paid by the company, these organizations are usually able to show a small surplus. Occasionally they are run on the cooperative basis but more often the profit is turned over to the organization having charge.

One lunch room, where 600 people are served daily, is run entirely by the thrift club composed of employees. The club started by furnishing coffee and milk to overtime workers; they then added sandwiches to the menu, then other articles, until now a regular meal is served. Last year the club, after replacing some equipment, had a surplus of \$286, the company furnishing space, light, heat, and gas.

### Prices Charged for Meals

**T**HE prices charged in the industrial lunch rooms vary according to the efficiency in management, the quality of the service rendered, and the loss which the employer expects to meet. In general the prices are reasonable, as there is no disposition to make any money on the lunch room except in the few cases where it is turned over to an outside manager or where an association of employees operates it and expects to make a small surplus for the organization.

The usual prices charged in cafeterias for meats range from 10 to 20 cents; salads, 10 to 15 cents; sandwiches, soups, and vegetables, 5 to 10 cents; bread and butter, 2 to 5 cents; desserts, 5 to 10 cents; and coffee, tea, and milk, 3 to 5 cents; although the prices may be lower or higher in some cases. The average check was reported to be from 25 to 35 cents in 150 cases, while in 36 cases it varied between 35 and 50 cents, and in about 80 cases it ranged from 15 to 25 cents. The prices charged for table d'hôte meals ranged from 20 to 50 cents. In a number of places it was found that in the cafeteria for factory workers a special lunch consisting of stew or one of the cheaper meats, a vegetable, bread and butter, tea, coffee, or milk, and a dessert could be purchased for 20 cents. These lunches are served either at the regular cafeteria counter or at a special counter. The average prices of lunches quoted do not of course include the purchases of the large number of employees who buy only one or two articles to supplement the lunches brought from home.

### Menus

**A**S the cafeteria has come to be the accepted method of serving employees, there is usually a sufficiently wide range of choice offered in the menus. There is an opportunity, also, to educate the

employees in the elements of a well-balanced meal and a number of companies have a dietitian who has general supervision of the food and the lunch room. In other cases the nurses or doctors interest themselves in the quality of the food served and advise employees as to the kinds of food they should eat. In several of the places visited, the nurse sees that a special diet is prepared for individuals needing it. One company states that its woman employees usually have a very light breakfast and try to save on food in order to buy clothes. The welfare director, who has direct charge of the cafeteria, and the nurse cooperate closely and they have made a persistent and steady effort to get the girls to select nourishing food, special attention being paid to those who are underweight. A demand for foods which were considered specially good has often been created by giving samples of specially prepared puddings, custards, salads, etc., with the result that these became the most popular items on the menu. In another plant, in which the girls receive a free lunch, they are watched carefully by the nurse and if they are underweight they are given a special diet, while a nutrition specialist in the medical department of a company employing large numbers of both men and women cooperates with the manager of the cafeteria not only in providing the special articles of diet needed by those under her care but in providing the most wholesome food possible for all the employees. In still another instance, in which more than 8,000 employees receive a free meal each day, a trained dietitian is in charge and the food value of every item is listed on the menu. In this cafeteria there is a special diet for those who are overweight.

#### Methods of Payment

**I**N general, methods of paying in industrial lunch rooms do not differ greatly from those in outside cafeterias, as the cash register is used in the majority of cases. In one lunch room, where a special 25-cent lunch is served, a card and seat number are given to each one patronizing the lunch room. Cards are punched and each one pays at the end of two weeks, an allowance being made on the bill if he has missed more than one meal a week.

Another company has worked out a method of ordering and paying for meals in advance. Printed menu cards with table and seat numbers are given to all who wish to have lunch served to them in the cafeteria. The employees check the menu cards indicating the articles wanted, and paste coupons on the back covering the amount of the meals. These cards are sent to the manager, who has the lunches ordered on the table at lunch time. There is no extra charge for service, but orders must be given in advance, since the girls who serve these lunches also serve the cafeteria counters.

#### Establishments Serving Free Meals

**I**N comparatively few instances are meals served free to employees, although a number of companies provide the tea and coffee either in connection with the regular cafeteria service or in those instances where some provision is made for those bringing lunch from home. Seven firms, however, serve a free lunch to everyone in their employ, the number of employees ranging from 200 to 8,500. This is not

regarded by these companies as a gift but as a supplement to the salary, and it is felt that it adds greatly to the efficiency of the workers, since many would not have a substantial lunch if it were not provided in this way. The lunch furnished by these establishments usually consists of soup, meat, two vegetables, bread and butter, coffee, tea, or milk, and dessert. One company serving a free lunch to its 900 employees has, in addition to the cafeteria, four other lunch rooms with service for executives and heads of departments. The average cost to the company per meal, including meals served in these rooms, is 34 cents; in the cafeteria alone the average cost per meal is 28 cents. Another firm has served a luncheon free to its employees over a period of nearly 20 years. The luncheon, which is of good quality and adequate variety, is served every day except Saturday, when the office closes at 12 o'clock. The cafeteria form of service is used, and more than 8,000 are served daily. A street-railway company employing 4,000 people serves a free lunch to 400 who work in the shop. In several instances a free lunch is served just to the office force. One of these companies, which serves 110 people a day, estimates the cost per meal at 60 cents.

A large food manufacturing establishment serves an à la carte lunch to the 450 men for 10 cents, while the 300 girls are served the same meal free. It is estimated that this meal costs the company 41 cents.

One firm serves free coffee to 300 shop people daily and another to the night force and early morning cleaning girls. It is quite a common custom to serve free supper to those staying to attend classes, club meetings, or rehearsals. A number of companies give free supper to the band members on rehearsal nights, and one company gives free lunch to the members of the orchestra on the days when they give a noon concert in the lunch room.

Employees receiving less than \$18 a week are given meals at half price by one concern.

#### Financial Results of Operating Restaurants

OF the 217 lunch rooms managed entirely by the company, 134 have reported a deficit, 79 are self-supporting, and 4 reported a surplus. Of the 4 companies having a surplus, 2 have, in addition to their cafeterias, lunch counters and lunch carts, which help to make them self-supporting. Another one of the four concerns reporting a surplus serves more than 5,000 people a day, buys through the worker's cooperative store in very large quantities, and does all the baking for the workers' store. In order further to reduce costs each one returns his own tray when the meal is finished. One company reports that if the number served drops below 1,100 a day, it loses money on the lunch room.

Many stated that the aim is to make the lunch room self-supporting, at least to make returns cover cost of food and labor, but they seem to be unable to do this and serve a wholesome meal at a moderate price. Another concern has a large attractive lunch room which is rented to other organizations for banquets. By renting the room and serving the banquets the deficit is somewhat reduced. The factory girls do the serving and are paid for their time.

One firm, serving an average of 1,000 people a day, had in 1924 a deficit of \$34,233, which included \$5,500 for depreciation. This company has two small service rooms for executives, one large service room for office people, and two cafeterias—one for office and one for factory workers. Factory workers are free to use the office restaurant, paying extra for service. The lunch in the restaurant averages 45 to 55 cents a day, with 5 cents extra for service. The average in either of the cafeterias is 35 cents.

Another concern reports that the lunch room costs it about \$25,000 a year, including overhead expenses, and that the charge for meals covers the cost of food and about one-half the cost of labor. This company has one large main dining room, with six counters for cafeteria service, seating about 1,500, this number being served in 10 minutes. At five of the counters a plate lunch is served for 20 cents, and there is one counter where special articles can be obtained. About 650 order the plate luncheon, the average per meal at the other counter being 22 cents. Besides the cafeteria this company maintains a dining room, with service for managers and submanagers, which seats 75. The entire staff for both dining rooms and the kitchen consists of 16 full-time and 31 part-time workers, the part-time workers being employed only at the noon hour.

One company having booths through the plant reports that the average cost per month of running all the booths from January, 1925, through October, 1925, including food, labor, cups, plates, and miscellaneous expense, was \$7,611.81 and the average receipts \$7,348.57, making an average loss of \$263.24. The average loss per month in the restaurant during the same period was \$312.08.

# PRODUCTIVITY OF LABOR

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## Change in Molding Time Required on Radial Drill Bases

**W**HEN radial drill bases were made in New England foundries 30 to 35 years ago, the pattern was to all intents and purposes the duplicate of the casting. The base was made some 12 to 15 inches deep, in order that its long, broad surface might be rigid enough to stand the weight of the casting which would be placed upon it for drilling. The underside of the base was filled with strengthening ribs.

In molding this base the pattern was placed upside down from the position it would occupy as a part of the radial drill. The flanges, or, as they might be called, webs, which crossed the inside of the base from end to end and crosswise, created a large number of separate depressions, or, as they are called in the foundry, pockets. All of these had to be carefully secured by "gaggers" and "sodgers." The sand in each pocket had to be carefully rammed, to be followed by a very thorough ramming of the sand in the cope (the upper half of the mold). This work might take two days, then the cope had to be vented thoroughly so that the gases could escape quickly when the iron entered the mold.

At this time it took the molder (who generally received a higher rate than the minimum because of his higher skill) and his helper a week to make the largest radial drill bases. If the molder met with hard luck, which frequently happened when the "cope" was lifted off, the job of molding and pouring might require six days for its performance.

At the present time the same type of base is made in one day by a molder and a helper, the molder receiving only the minimum day rate.

The method of molding has been completely changed. The pattern used is no longer a replica of the casting, except so far as the bottom and the sides of the mold are concerned. It is merely a block of wood. No cope is used in making the mold.

The pattern is placed upon a level bed. Dry sand cores are placed against the sides of the pattern, and sand is rammed firmly back of these. The pattern is then removed, and the bottom of the mold finished, which is, on this kind of a job, a comparatively easy process. Cores, made around cast-iron arbors, take the place of the green sand cope formerly used. These cores are about 2 feet wide and some 20 inches longer than the width of the mold. They are brought to the molder's floor by a crane and lowered over the mold. Railway rails are then placed over these cores, these rails running the entire length of the mold. The rails are secured to bed plates buried in the floor, far beneath the bottom of the mold. Wedges are then driven between these rails and the cores, so that the latter are firmly fastened down. The remaining work for the molder is to

build the basin through which the melted iron is to be conveyed to the mold.

Formerly much of the molder's skill was required in the ramming of the green sand cope, and the finishing of that part of the mold. All of this is eliminated through the use of the dry sand cores just referred to.

This modern method has obviated much of the molder's skill, as well as many hours of labor. Now, one coremaker could probably make all of the cores used in connection with the base in little more than a day, or, if he had a helper, in less than a day.

There is another factor in addition to the increased per capita production which must be considered—the very great increase in tonnage per square yard of the foundry floor. If a casting which formerly took a week to make can now be made on the same floor in a day, the increase of production per square yard of floor has a very material effect in reducing overhead charges and increasing the earning capacity of foundry space.

# INDUSTRIAL RELATIONS AND LABOR CONDITIONS

## Statistical Analysis of the Personnel of a Silk Mill

**A**N ANALYSIS of the personnel of the Cheney Bros. silk mill was presented at the American Management Association office executives' conference held at Cleveland, October 11, 1926, by Mr. J. P. Lamb, employment manager of the company.

The plant is situated in a town of 23,000 people, in which there is only one other large-scale manufacturing plant. The company, which has been in existence for nearly 90 years in the same locality, occupies 36 acres of floor space and in addition owns 295 dwellings and 3 boarding houses, affording altogether living accommodations for 426 families.

The normal working force, exclusive of the sales organization, comprises 4,400 persons, 89 per cent of whom are wage earners, 6 per cent clerical workers, and 5 per cent salaried employees and supervisory force. Approximately 60 per cent of the force are males and 40 per cent females.

Some 16 to 18 nationalities are represented among the workers, the outstanding ones being American born, constituting 46 per cent, Irish 18 per cent, Italian 9 per cent, and Austrian and German 6 per cent. Thirteen per cent are native born and of native parentage, 33 per cent native born but of foreign parentage, and 54 per cent are foreign born. As compared with the general population, the working force of the mill shows a considerably larger proportion of foreign born, but the speaker stated that this condition is doubtless typical of that of most New England textile mills.

### Age Distribution

**O**F THE total force, 67 per cent are citizens, and 96½ per cent are literate.

The age distribution is as follows:

	Per cent
16 and under 20 years.....	11
20 and under 30 years.....	29
30 and under 40 years.....	28
40 and under 50 years.....	17
50 and under 60 years.....	10
60 and under 70 years.....	4
70 years and over.....	1
Total.....	100

### Occupations

**T**HE occupations in the plant cover a wide range, "from the lowest grade type of manual labor, with little or no demand upon mental processes, to the highly specialized professional pursuits, demanding long training and high intelligence." Not including

the subdivisions of work in many occupations, the pay roll covers 371 different occupations. Of the salaried group 16 per cent were promoted from clerical positions and 58 per cent from mill positions, it being the policy of the company wherever possible to make promotions from the working force, regardless of whether the job to be filled is a clerical or supervisory one.

### Length of Service

THE distribution of the personnel according to length of service is shown below:

DISTRIBUTION OF PERSONNEL, BY LENGTH OF SERVICE

Service group	Total force		Office force	
	Males	Females	Males	Females
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Under 1 year.....	5.43	10.03	2.03	11.21
1 year and under 5 years.....	17.62	29.41	23.65	26.72
5 and under 10 years.....	23.87	26.87	33.11	27.59
10 and under 15 years.....	18.72	14.64	23.65	12.93
15 and under 20 years.....	11.36	6.19	7.43	7.76
20 and under 25 years.....	8.44	4.40	1.35	6.90
25 and under 30 years.....	5.10	3.99	6.76	6.03
30 and under 35 years.....	3.58	1.92	1.35	.86
35 and under 40 years.....	3.75	1.17		
40 and under 45 years.....	1.07	.76		
45 and under 50 years.....	.78	.48		
50 and under 55 years.....	.24	.14		
55 and under 60 years.....	.04			

The average service of males in the total force is 13.93 years as compared with 9.54 years for females, or a difference of 4.39 years.

### Labor Stability

LABOR stability is shown in terms of turnover of working personnel. In the mills of the company, turnover figures include "all exits, whether voluntary or involuntary," but employees absent because of illness of themselves or their families are carried on the pay roll for six weeks, and those absent for other causes for three weeks, the pay roll being cleared as soon as definite information permits this.

The yearly rate of turnover among the whole working force in the plant, in terms of the percentage all exits form of the average daily number of persons employed, is shown below for the past 10 years:

	Turnover (per cent)
1917.....	57.83
1918.....	77.83
1919.....	57.59
1920.....	59.91
1921.....	36.30
1922.....	30.00
1923.....	36.37
1924.....	27.64
1925.....	26.74
1926.....	<sup>1</sup> 25.44

<sup>1</sup> First nine months.



Excluding lay-offs and discharges, the voluntary exits from all causes, including sickness of self and family, amounted to 21 per cent in 1925. For several years the records of turnover by sex reveal the fact that the excess of female turnover over that of male amounts to from 50 to 100 per cent per year, while the exits on account of sickness were 193 per cent greater for females than for males during the last year. By nationalities the turnover is greatest in both males and females of the Italian group, with but little difference between the turnover rate of other nationalities in either sex. An analysis of the exits reveals the surprisingly small proportion of total working force removed by discharge, not over 0.089 per cent in the last five years. The day of firing seems to have passed.

Married men are found to be the most stable employees, single women come next, single men next, and married women are the least stable. "Length of service is also another important consideration in labor turnover and stability increases with length of service, which includes the total personnel." For each service group the rate of turnover was as follows:

Length of service of—	Turnover (per cent)
Under 1 year.....	95
1 year and under 2 years.....	59
2 years and under 3 years.....	56
3 years and under 5 years.....	38
5 years and under 10 years.....	26
10 years and under 20 years.....	18
20 years and under 30 years.....	11
30 years and under 50 years.....	11

Records of causes of leaving are kept by the company, but no outstanding reasons are shown. "Turnover is greatly influenced by the number of jobs available. In times of labor scarcity and good business turnover increases, and in times of business depression turnover decreases. It is the problem of our management to reduce at all times the causes that impel good employees to leave the company."

### Earnings

**H**OURLY earnings which averaged 4 cents in 1843 now average 64.7 cents per hour.

With but few exceptions of short duration the trend of wages has been constantly upward during the last 83 years, while the trend of the length of the weekly working period has been constantly downward. Only two recessions of any magnitude have taken place. One occurred after the Civil War, between 1870 and 1880, which amounted to approximately 11 per cent and was occasioned by the resumption of specie payment. The other took place after the World War in 1921, amounting to approximately 14 per cent, which resulted from the depression of 1921 and 1922. This decrease has since been restored and wages existing before this reduction are exceeded by those paid at the present time.

The present average earnings of male employees on the pay roll are 71 cents per hour, of female employees 53 cents per hour, and of all employees 64.7 cents per hour. Average weekly earnings vary according to the per cent of full-time operation, ranging from \$28 to \$32 for all male employees and from \$18 to \$24 for all female employees.

Comparing earnings of to-day with those paid in 1914 shows an increase in average earnings from 24 cents to 71 cents per hour for males, from 15.7 cents to 53 cents for females, and from 20.4 cents to 64.7 cents for all employees. Average weekly earnings for males in 1914 were \$13.25, for females \$8.63, and all employees \$11.22 per week. Hourly earnings have increased over 200 per cent. While weekly wages have increased approximately 145 per cent for all employees during the period between 1914 and to-day, the purchasing value of the dollar has decreased to approximately 60 cents, so that real earnings as compared to 1914 show an increase of approximately 45 to 50 per cent during the 12 years, or an average yearly rate of increase of 4 per cent. In other words, for every dollar

received in weekly wages in 1914 the working force receives \$1.45 to \$1.50 on a comparative basis.

The present average earnings of all our employees exceed that of the average earnings in all industries, or the textile industries, and exceed the silk industry as a whole by approximately 35 per cent.

### Hours of Labor

**DURING** the 90 years the company has been in existence the normal working hours have been reduced from 72 to 48 per week. Hours actually worked average 45.5 for males, 42 for females, and 44.1 for both sexes.

### Labor Cost of Production

**AS COMPARED** with 1914, for each \$1,000 worth of product, the number of wage earners has decreased 46 per cent, the number of salaried employees has decreased 5 per cent, power consumed per hour has increased 21 per cent, and the cost of labor has declined 11 per cent and that of management 22 per cent.

In a comparison of production per wage earner in terms of 1914 dollars, the cost of labor has increased 65 per cent, the cost of management 45 per cent, the power consumed per hour 126 per cent, hours of work have decreased 13 per cent, while production has increased 86 per cent.

The lesson to be drawn from this study indicates that an increase in production has taken place during this period, which exceeded that of the increased cost of labor or of management. So that, notwithstanding the tremendous increase in wages during the last 12 years it has been exceeded by the increase in amount of production, per unit of production, and per wage earner.

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## Recognition of Unions in Argentina <sup>1</sup>

**O**N SEPTEMBER 27, 1926, the Argentine Senate approved a bill relating to employers' and workers' associations. According to its provisions, societies, associations, or trade-unions of workers in the same trade or similar trades, or in the same branch of industry, agriculture, commerce or transportation, shall be considered as included among the associations recognized by the Civil Code, provided they pursue one or more of the following aims: (1) Regulation of wages, working hours, and labor conditions of their members; (2) protection of individual rights of members in the performance of their work; (3) benefits for unemployment, sickness, invalidity, death, or military service; (4) development of employment exchanges for their members; and (5) development of technical and general education. Associations fulfilling these requirements shall have the rights and privileges conferred upon corporate bodies.

Applications for recognition are to be addressed to the director of the national labor department if the associations have their headquarters in the Federal District, or to the governor of the territory concerned if the headquarters are in another national territory. The request must be made by the members of the provisional committee of each association.

<sup>1</sup> Asociacion del Trabajo. Boletin de Servicios, Buenos Aires, Oct. 5, 1926, pp. 454-456.

### Agreement Concerning Recruitment of Native Laborers in Portuguese East Africa

A REPORT from the American consul, J. P. Moffitt, at Lourenço Marques, Portuguese East Africa, contains a detailed agreement made between Mozambique and San Thome, for a period of 10 years, regarding the recruiting of native laborers for the plantations of San Thome and Principe.

Under this agreement, recruiting agents must pay a tax of 25 escudos<sup>1</sup> in gold at par and in addition a tax of 20 escudos 50 centavos. The number of recruits is limited to 3,600 per year and may be recruited for a period of two or three years, the latter being a maximum. Families may be contracted for providing their number does not exceed 25 per cent of the total number of recruits. The length of the working-day shall be nine hours, but an hour overtime may be worked at double pay. Sunday work is prohibited. The minimum wage for male workers is to be 50 escudos and for women and minors between the ages of 14 and 18, 25 escudos. One-half of the wages earned by the native laborers during the period of their engagement shall be paid them upon their return to Mozambique. Clothing shall be furnished twice a year.

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### The Money Side of Labor Turnover

A WELL-KNOWN hat manufacturing company has had in operation for a number of years a bonus payment plan which was adopted "with a view to decreasing the labor turnover." It is of interest to know that the question of labor turnover was being considered at all by any one so far back as 1898. It was certainly 10 years later than this before any considerable number of establishments even had a record of the stability or lack of stability of their labor force and it was some years after that before there was any realization of the fact that a high labor turnover is an economic and an industrial loss. The statement which follows assumes that it was the money consideration involved in the bonus which alone determined the change in the labor turnover. It seems, however, that this leaves out of the reckoning certain psychological conditions which began to manifest themselves when the management of an establishment began to realize that it pays to hold permanently as large a percentage of the employees as possible. Consciously or unconsciously, a different attitude toward the employees creeps in; a different treatment of the men develops; the conditions of labor are made easier or at least more agreeable, so that it remains very much open to question as to whether the mere money element tells the whole story in the remarkable change in turnover as shown by the following extract from the statement issued by this company:

In 1897 only 35 per cent of the hat sizers had worked steadily during the entire year. It was decided to offer these men a 5 per cent bonus on all they earned during the year, payable at Christmas time, provided they worked steadily through the year. As a result, 50 per cent of the men worked continuously

<sup>1</sup> Portuguese escudo at par = \$1.08.

during 1898. The bonus was then increased to 10 per cent, with the result that in 1899, 67 per cent, and in 1900, 80 per cent of the men worked through the year. At Christmas in 1902 the bonus was raised to 20 per cent, and in consequence practically 100 per cent of the men have been working steadily ever since.

The plan was then put into operation in the trimming department, where most of the employees are girls, and it worked so well that it was applied to the entire plant. The plan, as now in force, pays every employee who has been with the company for six months or more, a bonus of 10 per cent for the year ending October 31, payable at Christmas, provided the employee has worked faithfully through the year.

# INDUSTRIAL ACCIDENTS AND HYGIENE

## Record of Industrial Accidents in the United States to 1925

THE latest statistics of industrial accidents on a national scale have been brought together as far as possible by the United States Bureau of Labor Statistics and are presented in its Bulletin No. 425, just published. This, the fourth bulletin on the subject by the bureau, brings the data up to 1925. The three Federal agencies collecting accident statistics (the Interstate Commerce Commission, the Bureau of Mines, and the Bureau of Labor Statistics) have so improved their methods of collecting and handling accident data that their statistics on railways, mining, and the iron and steel industry, respectively, while naturally not entirely complete, may fairly be claimed to be trustworthy. While the States have collected a mass of statistics, unfortunately they have adopted different procedures, which makes it difficult to combine their records into a national compilation. The Bureau of Labor Statistics, in its effort to promote accident prevention, has suggested five items that are essential in effective accident statistics: Exposure to hazard; number of accidents; severity of accidents; classification by industries; and causes of accidents. No State covers all these items and in most States no attempt is made to cover the very important item of exposure to hazard. Some States make no accident reports.

As reported by the States there were 10,537 fatal accidents and 1,687,957 nonfatal accidents in 1925, as compared with 11,479 fatal and 1,666,522 nonfatal accidents in 1924, and 11,062 fatal and 1,636,837 nonfatal accidents in 1920. An effort was made to classify the available State data for 1920 and 1924 by principal classification groups. As some of the important industrial States do not classify their data by industry the comparison by industry was inconclusive. As to causes of accidents the handling of tools and objects gave rise to the greatest number of accidents, there being 472,805 cases out of 1,552,065 accidents in the two periods, machinery coming next with a total of 294,951. "Bruises" and "cuts, lacerations, and punctures" led all the other groups in the nature of injury. As to location of injury the upper extremities were found to be the most often damaged, there being a total of 333,195 cases out of 801,633 accidents.

In its endeavor to encourage the development of accident rates the bureau has recently sought to utilize the data contained in the State accident reports in obtaining accident rates by relating such data to the employment data collected directly by the bureau. Ohio, Illinois, and Minnesota were the only States for which information was available for both 1924 and 1925.

For 1924 the accident frequency rates range from 4.96 per 1,000,000 hours' exposure for boots and shoes to 98.64 for automobile tires, while in 1925 the range is from 12.39 per 1,000,000 hours' exposure for boots and shoes to 89.36 for glass. The accident severity rates for 1924 ranged from 0.17 per 1,000 hours' exposure for boots and

shoes to 8.04 for planing mills, while for 1925 the range was from 0.19 per 1,000 hours' exposure for boots and shoes to 7.24 for structural-iron work.

In 12 industries there was a decline in accident frequency from 1924 to 1925, the greatest being in the following industries: Automobiles (58 per cent); agricultural implements, and electrical machinery (each 49 per cent); and planing mills (46 per cent). In six industries there was a rising frequency rate, the greatest increase being in the boot and shoe industry (150 per cent), followed by the stove industry (56 per cent) and the flour industry (42 per cent).

In accident severity also there was a decline in 12 industries, electrical machinery (73 per cent), glass and stoves (each 59 per cent), and machine tools (52 per cent) having the greatest decline, while in six industries accident severity increased, the greatest increase being in structural-iron work (97 per cent), flour (81 per cent), and agricultural implements (74 per cent).

Data for 1925 were gathered from 11 States and represented 1,272 plants in 24 industries, employing 555,988 full-year workers, sufficient to make the accident rates therefrom a fairly dependable index of average conditions. The highest frequency rates were for the automobile tire industry (59.08) and structural-iron work (50.95). The highest severity rates were for paper and pulp (4.85) and structural-iron work (4.54).

The Bureau of Labor Statistics has been collecting accident statistics of the iron and steel industry since 1910 and has constantly endeavored so to present these statistics as to make them significant and useful in accident prevention. These statistics show that there has been a steady decline in both accident frequency and severity in the industry. From 1910 to 1925 the decline in frequency was 62.1 per cent and in severity 51.9 per cent. This steady and quite considerable decline is also shown in all departments with the exception of foundries. Considered from the standpoint of accident severity machinery causes the greatest amount of damage, while handling of tools and material is the major factor in the frequency of accidents.

Accident data for the following industries, gathered from various sources, are also presented in the bulletin: Steam railways; electric railways; mines, quarries and metallurgical works; agricultural implements and supplies; building construction; explosives, dyes, and chemicals; light and power; camera manufacture; Portland cement; paper mills; petroleum refining; rubber; woodworking; and textiles.

Accident frequency rates in the various departments of the Federal Government and the National Safety Council compilation of American industrial accident experience in 1925 are also shown.

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### Coke-Oven Accidents in the United States During 1925

**A**CCIDENTS at coke ovens in 1925 were fewer in relation to number of persons employed than in any preceding year for which figures are available, according to a report (Technical Paper 408) on that subject recently issued by the United States Bureau of Mines. The fatality rate was the same as in 1924—1.16

per thousand 300-day workers—this rate being lower than in any year preceding 1924. The nonfatal injury rate, based upon all lost-time accidents, was 70.51, as compared with 79.54 in 1924. This is the best nonfatal injury record that has ever been attained, that for 1924 coming next, and 1915 next with a rate of 90.78, which was the lowest reached before 1924.

Operators of coke ovens, who voluntarily furnish accident data for their plants to the Bureau of Mines, reported 23,254 men employed in 1925—2,803 more than in 1924. These men worked a total of 7,216,239 man-shifts, an average of 310 workdays per man and a gain of 7 workdays per man over the preceding year. The total number of man-shifts worked represents a gain of 16 per cent over 1924.

Of the 1,724 injuries to coke-oven workers in 1925, 28 resulted in death, 44 in permanent partial disability, 406 in temporary disability exceeding 14 days, and 1,246 in temporary disability exceeding the remainder of the day on which the accident occurred, but not exceeding 14 days. The time lost through these accidents is estimated at 223,700 man-days, as compared with 195,200 in 1924, these figures in each year amounting to 3.1 per cent of the total number of man-days worked.

During the eight years 1918 to 1925, 25,053 accidents at coke ovens were reported to the Bureau of Mines. Of this number, 1.27 per cent resulted in death, 0.05 per cent in permanent total disability, 1.93 per cent in permanent partial disability, 18.55 per cent in disability of more than 14 days, and 78.20 per cent in disability of 1 to 14 days, inclusive. The average accident rate for this period was 1.63 killed and 126.50 injured per thousand 300-day workers.

Table 1 shows the number of men employed, days of labor performed, number of fatalities and injuries, and the fatality and injury rates per thousand 300-day workers at all coke ovens in the calendar years 1918 to 1925.

TABLE 1.—NUMBER OF EMPLOYEES, DAYS OF LABOR PERFORMED, FATALITIES, AND INJURIES AT COKE OVENS IN THE UNITED STATES, 1918 TO 1925

Year	Average days active	Men employed		Days of labor performed	Number killed		Number injured	
		Actual number	Equivalent in 300-day workers		Total	Per 1,000 300-day workers	Total	Per 1,000 300-day workers
1918.....	329	32,389	35,476	10,642,688	73	2.06	7,792	219.64
1919.....	289	28,741	27,674	8,302,059	53	1.92	4,031	145.66
1920.....	319	28,139	29,921	8,976,214	49	1.64	3,415	114.13
1921.....	257	16,204	13,868	4,160,298	17	1.23	1,853	133.62
1922.....	284	19,278	18,236	5,470,939	29	1.59	1,710	93.77
1923.....	324	23,729	25,627	7,688,160	45	1.76	2,593	101.18
1924.....	303	20,451	20,681	6,204,448	24	1.16	1,645	79.54
1925.....	310	23,254	24,054	7,216,239	28	1.16	1,696	70.51

Of the 7,246 men employed in beehive ovens in 1925, about 55 per cent worked 8 hours a day and 30 per cent 9 hours; 517 men were reported as working on the basis of 10 or 12 hours a day, the reports for 574 not stating the length of shift. Of the 16,008 men employed

at by-product ovens, 76 per cent worked 8 hours a day and 9 per cent 12 hours. Men working 9, 10, and 11 hours a day aggregated only 324, and reports covering 2,032 men did not indicate the length of shift. Table 2 shows the accident fatality and injury rates per million hours' exposure in beehive and in by-product coke ovens, classified by length of shift, for the years 1924 and 1925.

TABLE 2.—FATALITY AND INJURY RATES IN BEEHIVE AND BY-PRODUCT COKE OVENS, BY LENGTH OF SHIFT, 1924 AND 1925

Character of injury	1924			1925		
	Rate per million hours' exposure in shifts of—					
	8 hours	9 hours	12 hours	8 hours	9 hours	12 hours
<i>Beehive ovens</i>						
Fatalities.....	0.394				0.230	
Disabilities:						
Permanent partial.....	.197	1.929		0.465	.230	
Other serious.....	7.688	10.930		11.330	8.047	39.959
Slight.....	42.580	28.612		26.695	35.866	19.979
Total nonfatal injuries.....	50.465	41.471		38.490	44.143	59.938
Grand total.....	50.859	41.471		38.490	44.373	59.938
<i>By-product ovens</i>						
Fatalities.....	.598		0.538	.515	3.075	.533
Disabilities:						
Permanent partial.....	.673		.269	.888		1.067
Other serious.....	9.608		5.648	5.669		5.690
Slight.....	19.366		43.570	17.181		24.893
Total nonfatal injuries.....	29.647		49.487	23.738		31.650
Grand total.....	30.245		50.025	24.253	3.075	32.183

The rates at both beehive and by-product ovens were lower for plants that were active the greater number of days during the year. The injury rate at beehive ovens whose operating time averaged 300 or more days was 86.67 per thousand 300-day workers, while at plants which averaged less than 50 workdays per man the rate was 193.55. The corresponding figures for by-product ovens were 61.46 and 1,000, respectively. The Bureau of Mines hopes to continue the compilation of data according to the number of days the plants operate to see if later experience will confirm what the figures for 1925 seem to indicate—that among the benefits of full-time employment is greater safety to the men employed.

### Mine Accidents Due to Explosives

THE number of mine accidents in the United States due to the use of explosives is shown in a recent report (Technical Paper 406) of the United States Bureau of Mines. According to this report, during the past 14 years mining accidents due to explosives have caused 2.5 to 4.5 per cent of all fatalities at bituminous coal mines, 4.1 to 8.9 per cent at anthracite and bituminous mines combined, 8.7 to 14.2 per cent at metal mines, and 8.4 to 27.3 per cent at quarries.



The report states that complete data are not available on non-fatal accidents at coal mines, but special reports of nonfatal injuries from certain typical coal mines indicate that explosives cause less than 1 per cent of all injuries to coal-mine employees. Only 1.1 to 2 per cent of all nonfatal injuries at metal mines and from 1.7 to 6.3 per cent of those at quarries have been due to explosives. These figures are based on the bureau's definition of an injury as an accident that disables an employee for more than the remainder of the day or shift on which the accident occurred. For every fatality due to explosives since 1911 there have been 7.7 nonfatal injuries at metal mines and 8.9 nonfatal injuries at quarries.

In 1919 the fatality rate at anthracite mines was abnormally high because of a powder explosion in a tunnel at Wilkes-Barre which caused the death of 92 men. Omitting that year, it is said that fatalities from the use of explosives in the anthracite mines of Pennsylvania from 1911 to 1925 ranged from 37 to 62 per cent of the total number resulting from this cause in the United States as a whole. The production of coal in these mines during that period ranged from 11 to 18 per cent of the coal tonnage of the United States. The anthracite mines normally consume 49 to 73 per cent of all dynamite and other high explosives used at the coal mines in this country, 18 to 32 per cent of all permissible explosives, and 8 to 17 per cent of all black blasting powder.

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### The Safe Walkway and the "Fall of Man"

THE fatalities due to falls are more numerous than those due to conflagrations, surface cars, and industrial machinery combined. A considerable portion of these falls are due to the character or condition of the walkway surfaces. This is pointed out in an article by H. W. Mowery in the February, 1927, issue of the National Safety News.<sup>1</sup>

An interesting comparison may be made between the casualties of war and those due to falls in time of peace. The war deaths in the 150 years' existence of the United States have numbered 111,012. If it be assumed that the experience of nonregistration States is the same as that of the registration area, the number of fatalities due to falls would average about 14,000 per year, and eight years would pile up a total equaling the war deaths of 150 years.

Another view of the hazard may be taken by noting that the Aetna Life Insurance Co. has settled 33,360 claims due to falls, by the payment of \$2,318,337.

*Stairs.*—The seriousness of the danger on stairways is recognized in several States by provisions such as the following: "In factories over one story in height the stair treads shall be constructed and maintained so that persons walking thereon will not slip." The courts have recognized the obligation to provide against such hazard. In White Plains, N. Y., a girl was given an award of \$25,000 for injuries sustained on account of a defective stair tread in a school building. The State school code of New Jersey requires all concrete steps to be equipped with approved safety treads. Not only the

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<sup>1</sup>National Safety News, Chicago, February, 1927, p. 23.

antislip quality of the material but also other structural features and conditions of use must be considered. For example, for grades of more than 20 degrees and less than 50 degrees stairs should be used, while for less than 20 degrees a ramp is appropriate, and a grade of over 50 degrees calls for a fixed ladder.

*Ramps.*—The incline of a ramp should not usually be more than 15°, and an antislip surface should be secured by appropriate treatment.

*Floors.*—Materials for floors should not be chosen for their artistic effect without due attention to the qualities which will decrease the hazard of slipping. Perhaps more important than the original surface characteristics of the walkway material is, in certain cases, the method used in cleaning. For example, where soap is used in cleaning floors a film is formed over the surface which may become dangerously slippery on any day when atmospheric humidity is high.

*Sidewalks.*—It is not so much the original surface characteristics of sidewalk material that give rise to danger as it is coal-hole and man-hole covers. From one such cover in New York, nine casualties were reported to one insurance company in a single day. The hazard is not only that of slipping but the hole when open, unless effectively guarded, offers an even more serious danger from falling into it. Due to increased durability, it is very common to give sidewalk surfaces a "trowel" finish, which much increases the danger. Even when an abrasive is used in a finishing coat it is desirable that a wooden float be used. There is a real need of specifications regarding walkway surfaces which will serve as a guide in construction and maintenance.

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### Cost of Accidents in the Home

THE author of an article in the *National Safety News* of February 1927,<sup>1</sup> calls attention to the fact that the number of fatal accidents (17,000) occurring in the home is nearly equal to the number due to automobiles. The automobile casualties have come upon us so suddenly that they have naturally attracted a large amount of attention and much effort has been directed at their control, but not with the degree of success which might be desired. The attention of the public has very naturally been concentrated on the efforts directed toward industrial casualties and those of street and highway, and this has tended to obscure the importance of domestic happenings which result in death and injury. The facts regarding such injuries have not been brought to public attention, and thus far there has been no organized effort to control this class of hazards, but it is one of sufficient size and importance to deserve serious attention.

More than one-third of the accidental deaths occurring in the home involve children under 15 years of age while one-fourth involve persons over 65 years of age who are to a considerable degree infirm and helpless. The records of the Metropolitan Life Insurance Co. indicate that of the domestic accidents one-tenth are due to falls, one-tenth to burns, and one-tenth to drowning. The one-tenth due to burns arise from the gas and electric supply, the heat-

<sup>1</sup> *National Safety News*, February, 1927, p. 11: "Cost of accidents in the home," by E. W. Kopf.

ing apparatus, cooking and other devices requiring heat. The careless householder on occasion still fills a wooden box with hot ashes from the furnace or goes exploring for a gas leak with a lighted match.

It is rather surprising that drowning in bathtubs and other water containers is as serious a menace as are objects dangerous on account of heat. Also a very considerable proportion of the cases of fatal injury are due to accidental discharge of firearms, indicating the need of much more rigorous restriction of the sale and possession of such weapons.

The hazard of the family medicine closet is not inconsiderable. Adults are sometimes reckless in the use of poisonous substances but nearly one-half the fatalities from poisonous substances were of children under 15. Winding and narrow stairways present another source of danger.

Much of the gas dispensed in American cities contains a considerable proportion of carbon monoxide, and constant vigilance that the gas apparatus is in proper order is the only safeguard against casualty. We are, from time to time, reminded of the deadly character of carbon monoxide gas by the death of the citizen who starts his automobile engine in a closed garage.

Practically every one is exposed to these domestic dangers. As a beginning in combating them, a vigorous educational effort is necessary to acquaint the public with their seriousness.

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### Bureau of Mines Safety Labels

**M**ORE than 200,000 pieces of mining apparatus and equipment now in use in the mines of the United States bear the United States Bureau of Mines seal of approval as to safety, in the form of a safety label, according to a pamphlet entitled "Bureau of Mines safety labels," recently published as Information Circular 6005 of that bureau.

Of all approved devices the one most widely used is said to be the miner's electric cap lamp, nearly every one in use now having the bureau's label. Each of these lamps has been made safer by a spring or ejector in the headpiece which disconnects the bulb from the battery if the bulb glass is broken. As the majority of gas explosions have been caused by open lights, no type of open lamp has been approved. Many of the flame safety lamps now have the label, showing that they have stood a test in explosive mixtures of gas and air moving at velocities as high as 2,500 feet per minute. The lamp has two gauzes, a bonnet or shield, and an internal relighter, and is magnetically locked. Key-locked flame safety lamps are not approved, as they are too easily opened.

Other mine equipment bearing the safety label includes gas masks and self-contained oxygen breathing apparatus, electrically driven coal-cutting machines, electric drills, storage-battery locomotives, and shot-firing devices. In fact, it is said that it will soon be possible to obtain one or more kinds of apparatus with this label for practically every purpose for which machinery and apparatus are used in underground coal mining.

The label is stamped or otherwise shown on a metal part of the apparatus or on a plate that is fastened to it. Every label bears the Bureau of Mines seal, the number of the approval, and the name of the company to which the approval is granted; some of the labels have a caution statement telling how to take care of the apparatus. The approval plate is put on the lamp or other equipment by the manufacturer. He may put it only on equipment similar in all respects to that which was inspected, tested, and approved by the bureau. If he makes any change in it, thus making it different from that approved by the bureau, he must have the change approved before he has the right to put on the label. A record of just what the equipment embodies is on file with the Bureau of Mines.

The bureau publishes directions called "schedules" which are used as guides in testing equipment for approval. Any manufacturer can submit equipment for test under the conditions outlined in the schedule covering that equipment. If it meets all the requirements of the schedule it is approved.

Although the approved equipment may cost a little more as an initial investment, if it prevents one mine disaster during the life of the mine it is suggested that the increased cost will prove very cheap insurance.

It is pointed out that the approved equipment must be properly maintained and the conditions of approval obeyed in order to obtain the measure of safety in mines for which those interested are striving.

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### Poisoning From Carbon Paper

A CASE of septic poisoning resulting in death which was believed to have been caused by carbon paper has recently been reported to the Bureau of Labor Statistics. The fatal case was that of a man working in a Government office in Washington, and at the time the case was reported his successor was in a very serious condition in the hospital from the same cause. It was believed that the carbon paper had acted as a skin irritant and had provided the portal of entry for the infection.

Cases of dermatitis from printer's inks are not unusual and it appears that although the carbon paper does not become smeared on the hands and arms to the same extent as printing ink, it does rub off very considerably and typists have a good deal of difficulty in removing it from their hands. One case of poisoning from carbon paper is recorded in a recent report on occupational diseases in Ohio,<sup>1</sup> and it seems that, while cases of poisoning from this source are so infrequent that the danger has not been recognized by writers on occupational diseases, it does present a definite hazard.

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<sup>1</sup> See Labor Review, September, 1925, p. 134.

## Relation of Illumination to Efficiency on Fine Work

A JOINT report published recently by the British Industrial Fatigue Research Board and the Illumination Research Committee<sup>1</sup> presents the results of a continuing investigation of the relation of illumination to the efficiency of workers engaged on fine processes, typesetting by hand having been selected for the particular experiments described in this study. The direct method of lighting was employed, direct glare being avoided. The copy chosen was of a uniform character for which six-point type was used, and the work was done entirely by artificial light. In order to avoid week-end effects, all the tests, with the exception of the first, were made on Tuesday and Wednesday from 9 a. m. to 12.30 p. m. and from 1.30 to 5 p. m. The output was measured at half-hourly intervals and account taken of the errors made.

The results show that generally the output was greater on the second day of the test than on the first, although the report states that there may be doubt as to whether the rate attained on the second day could have been maintained if continuous work by artificial light had been prolonged for more than two days. The data gathered indicate that the optimum value of illumination for hand composing is of the order of 20 foot-candles,<sup>2</sup> the subjects used for the experiment complaining that the glare was uncomfortable when the illumination was as high as 24.5 foot-candles, although all direct glare in lighting was avoided, as already mentioned. On the other hand, it was found that "if the illumination is less than 2 foot-candles nearly one-quarter of the possible output is lost, while the number of mistakes is more than doubled and the fatigue experienced by the compositors is materially increased. Even when the illumination is as much as 7 foot-candles—a value which is probably higher than the present general practice—over 10 per cent of the possible output is lost and there is an unnecessarily high percentage of errors.

\* \* \* If work is done in artificial light only for a few hours a day, there is no evidence that any undue ocular fatigue is likely to result, providing the illumination is uniform and of the order of 10 foot-candles."

<sup>1</sup> Great Britain. Industrial Fatigue Research Board and the Illumination Research Committee. The relation between illumination and efficiency in fine work (typesetting by hand). London, 1926.

<sup>2</sup> The "foot-candle" is the unit of illumination used in Great Britain and the United States. A surface 1 foot square, situated 1 foot away from a light source of one candle-power, and normal to it, will have an illumination of 1 foot-candle. The amount of illumination, however, varies inversely as the square of the distance between the light source and the surface to be illuminated, so that a source of one candle power situated 2 feet away will provide an illumination of only one-quarter of a foot-candle.

# HOUSING

## Housing for Rural Workers in England

A BILL intended to improve the situation as regards housing for rural workers in England passed both Houses of Parliament and on December 15, 1926, received the royal assent. Under its terms local authorities may submit to the Minister of Health plans for the improvement or reconstruction of houses, or of buildings which might be used for housing purposes, within their districts, with the object of providing dwellings for agricultural laborers, and persons of similar economic position. If the Minister of Health approves such a plan, the local authority concerned may give financial help toward putting the specified buildings into condition for occupation. When this is done, the Government is authorized to assume a part of the expense incurred by the local authority. The Ministry of Labor Gazette (London) gives, in its issue for December, 1926, this summary of the provisions of the bill:

The reconstruction or improvement may consist of structural alteration, repair, addition, provision of water supply, drainage or sanitary conveniences, or the like; but shall not in any case include works of ordinary repair or upkeep, except so far as they are incidental to or connected with other works. In order to secure that the full benefit of the grant may accrue to the occupier of the dwelling, and that the occupier is of the class described, special conditions are to attach to the dwelling for a period of 20 years.

The act also authorizes the Government to contribute toward any expenses incurred by a local authority in making grants under schemes approved by the Minister of Health (or by the Scottish Board of Health, as the case may be). The Exchequer contributions are to be by way of annual payments for a period of 20 years, and are to be equal to one-half of the estimated average annual charges payable by the local authority.

The amount of the charge on the Exchequer will depend on the amount of the grants which local authorities find it necessary to give; but, on the assumption that the average amount of grants given was £75,<sup>1</sup> and that the number of dwellings in respect of which grants are given was 20,000, the maximum charge on the Exchequer, reckoning interest at 5 per cent, would be approximately £60,000 a year for 20 years. The maximum charge on the local rates would, under the scheme, be of the same amount.

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## Reduction in Amount of English Housing Subsidy

UNDER the housing act of 1924 the Minister of Health, acting in conjunction with the Scottish Board of Health, is empowered to issue orders "altering the amount or duration of the contributions payable by the minister or board in respect of houses not completed before a specified date." Acting upon this authorization, the Minister of Health laid before the House of Commons an order reducing the subsidy to be paid on houses not completed before October 1, 1927, and after much debate the House, on

<sup>1</sup> Pound at par=\$4.87; exchange rate is about \$4.85.

December 2, 1926, approved the order. The terms of the order are thus summarized in the Ministry of Labor Gazette (London), in its issue for December, 1926.

The order provides that, so far as respects houses which have not been completed before October 1, 1927, the contribution provided by the minister under sections 1 and 3 of the housing act of 1923, as amended by section 1 of the act of 1924, shall be reduced from £6<sup>1</sup> annually for 20 years to £4 annually for 20 years; and that for houses "subject to special conditions" and not completed before October 1, 1927, the contributions provided by the minister under section 2 of the act of 1924 shall be reduced from £9 annually for 40 years (£12 10s. for houses in an agricultural parish) to £7 10s. or £11 annually, respectively, for 40 years. The supplementary contributions payable by the London County Council under subsection (6) of section 1 of the act of 1923 and under subsection (5) of section 2 of the act of 1924 are also reduced.

It will be noticed that the order does not apply to any house completed before October 1, 1927. It should also be noted that though, as required by the act of 1924, the order is issued under the joint authority of the Minister of Health and of the Scottish Board of Health, it does not, in fact, apply to Scotland.

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<sup>1</sup> Pound at par = \$4.87; exchange rate is about \$4.85.

# COOPERATION

## Status of Building and Loan Associations, 1924-25

THE following table was taken from the report of the secretary of the United States League of Local Building and Loan Associations (Cincinnati, Ohio) to the thirty-fourth meeting of the league, held at Minneapolis, July 20-22, 1926. It shows the number of associations, membership, and assets of the local building and loan associations in the United States and, of the assets, the total outstanding in mortgage loans:

STATUS OF BUILDING AND LOAN ASSOCIATIONS, 1924-25, BY STATES

State	Number of associations	Total membership	Total assets	Mortgage loans
Arizona.....	6	5,530	\$2,371,970	\$2,060,659
Arkansas.....	63	46,286	27,551,264	(1)
California.....	152	156,388	140,657,891	130,883,648
Colorado.....	56	72,183	30,458,600	27,815,445
Connecticut.....	37	35,574	16,197,954	(1)
Delaware.....	40	14,500	7,412,252	6,486,716
District of Columbia.....	23	57,239	46,020,000	44,321,000
Florida.....	47	25,365	33,616,550	(1)
Illinois.....	852	783,888	317,403,747	301,325,212
Indiana <sup>2</sup> .....	397	349,879	218,479,623	199,982,657
Iowa.....	74	71,800	37,380,525	35,377,861
Kansas.....	148	172,272	93,267,836	81,255,584
Kentucky.....	145	125,200	64,192,658	(1)
Louisiana.....	94	162,148	129,924,059	(1)
Maine.....	39	25,787	16,631,015	(1)
Massachusetts.....	220	439,553	369,273,095	348,503,053
Michigan.....	90	177,883	96,302,277	88,636,859
Minnesota.....	83	66,429	25,212,662	21,995,587
Missouri.....	242	182,550	117,007,732	107,651,544
Montana.....	30	36,900	13,109,462	(1)
Nebraska.....	84	202,100	141,435,904	126,752,579
New Hampshire.....	28	14,773	8,145,484	7,788,965
New Jersey <sup>3</sup> .....	1,410	1,008,092	645,539,550	614,083,318
New Mexico.....	<sup>4</sup> 12	<sup>4</sup> 6,300	<sup>4</sup> 2,950,000	(1)
New York.....	305	447,721	258,089,817	240,359,492
North Carolina.....	246	92,007	81,188,546	73,014,392
North Dakota.....	17	13,960	6,965,555	6,014,163
Ohio.....	865	2,098,733	847,570,701	766,256,091
Oklahoma.....	88	146,210	93,061,767	84,612,070
Oregon.....	37	34,200	14,871,323	12,647,854
Pennsylvania.....	<sup>4</sup> 4,440	<sup>4</sup> 1,700,000	<sup>4</sup> 990,000,000	910,000,000
Rhode Island.....	7	29,248	17,075,323	16,223,294
South Carolina.....	<sup>4</sup> 150	<sup>4</sup> 25,000	<sup>4</sup> 20,000,000	(1)
South Dakota.....	27	7,950	4,951,443	(1)
Tennessee.....	21	8,775	5,212,066	4,989,527
Texas.....	119	83,562	51,971,859	(1)
Utah.....	24	51,000	24,458,736	21,840,942
Vermont.....	9	3,533	1,798,039	1,690,984
Washington.....	71	217,440	76,145,600	62,934,356
West Virginia.....	59	54,500	25,000,000	(1)
Wisconsin.....	167	200,939	149,648,269	144,999,013
Other States.....	<sup>4</sup> 1,379	<sup>4</sup> 433,600	<sup>4</sup> 239,625,000	594,506,774
Total.....	12,403	9,886,997	5,509,176,154	5,085,009,639

<sup>1</sup> Included with "other States."

<sup>2</sup> As of Dec. 31, 1925.

<sup>3</sup> As of May 31, 1925.

<sup>4</sup> Estimated.



## Condition of Labor Banks as of December 31, 1926

THE research department of the Amalgamated Clothing Workers of America has furnished the following data showing the condition of the various labor banks on December 31, 1926.

The number of banks remains the same as in the previous statement, given in the October, 1926, issue of the Labor Review. The Brotherhood of Locomotive Engineers Cooperative Trust Co. of New York City was sold to private interests in August, 1926, and the Brotherhood Savings & Trust Co. of Pittsburgh was closed in October, 1926. The loss of these two was offset by two new banks—the Gary Labor Bank and the Brotherhood National Bank of San Francisco.

During the last half of 1926 the surplus and profits of all the banks combined increased 0.4 per cent, the deposits 1 per cent, and the total resources 0.4 per cent.

## CONDITION OF LABOR BANKS AS OF DECEMBER 31, 1926

Name of bank and location	Surplus and profits	Total deposits	Total resources
Mount Vernon Savings Bank, <sup>1</sup> Washington, D. C.	\$144,208	\$4,237,408	\$4,825,216
Brotherhood of Locomotive Engineers Cooperative National Bank, Cleveland, Ohio	398,274	23,174,453	25,483,728
United Bank & Trust Co., Tucson, Ariz.	2,102	528,182	600,284
Peoples Cooperative State Bank, Hammond, Ind.	36,922	1,716,757	1,901,777
Nottingham Savings & Banking Co., Cleveland, Ohio	11,119	751,908	845,527
San Bernardino Valley Bank, San Bernardino, Calif.	29,240	1,860,163	2,065,427
Amalgamated Trust & Savings Bank, Chicago, Ill.	159,645	2,837,297	3,230,895
Transportation Brotherhoods National Bank, Minneapolis, Minn.	68,612	2,241,884	2,611,000
Amalgamated Bank of New York	230,426	7,824,520	8,642,113
Labor National Bank of Montana, Three Forks, Mont.	9,727	166,745	201,471
Federation Bank & Trust Co. of New York	948,165	16,551,141	19,081,983
Telegraphers National Bank, St. Louis, Mo.	192,368	6,266,662	7,217,467
Brotherhoods Cooperative National Bank, Spokane, Wash.	65,919	2,823,186	3,293,820
Brotherhood of Railway Clerks National Bank, Cincinnati, Ohio	52,183	3,788,101	4,254,937
United Labor Bank & Trust Co., Indianapolis, Ind.	7,815	875,323	1,117,126
International Union Bank, New York City	209,274	3,512,437	4,005,226
First National Bank in Bakersfield, Calif.	25,384	1,508,115	1,637,095
Labor National Bank, Great Falls, Mont.	18,755	549,397	668,152
Farmers & Workingmen's Savings Bank, Jackson, Mich.	18,827	792,858	911,948
The Peoples National Bank of Los Angeles, Calif.	54,363	3,520,701	4,206,603
Brotherhood of Locomotive Engineers National Bank, Boston, Mass.	76,108	3,550,176	4,388,631
Labor Cooperative National Bank, Paterson, N. J.	104,845	3,790,956	4,414,147
Brotherhood State Bank, Kansas City, Kans.	21,786	669,998	791,785
Brotherhood Cooperative National Bank of Portland, Ore.	54,583	2,211,478	2,667,409
Brotherhood of Locomotive Engineers Bank & Trust Co., Birmingham, Ala.	67,351	1,261,803	2,114,092
Brotherhood State Bank, Hillyard, Spokane, Wash.	5,875	192,642	224,428
Brotherhood of Locomotive Engineers Title & Trust Co., Philadelphia	257,495	1,247,002	2,051,612
Labor Cooperative National Bank, <sup>2</sup> Newark, N. J.	125,000	2,407,170	2,853,995
Brotherhood Cooperative National Bank, Tacoma, Wash.	43,114	2,603,376	3,252,215
The American Bank, Toledo, Ohio	50,000	629,831	882,952
Brotherhood Bank & Trust Co., Seattle, Wash.	41,411	905,020	1,196,431
Gary Labor Bank, Gary, Ind.	11,346	480,445	577,430
Labor Bank & Trust Co., Houston, Tex.	19,843	338,069	460,111
Hawkins County Bank, <sup>3</sup> Rogersville, Tenn.	62,963	588,651	701,614
Labor National Bank of Jersey City, Jersey City, N. J.	65,807	1,183,637	1,525,652
Brotherhood National Bank of San Francisco	115,288	1,837,289	2,452,879
Total (36 banks)	3,806,143	109,624,781	127,357,178

<sup>1</sup> Statement as of June 30, 1926.<sup>2</sup> Statement as of Dec. 1, 1926.<sup>3</sup> Statement as of Nov. 22, 1926.

## Practicability of Use of Contract in Consumers' Cooperative Societies

AS THOSE who have followed the development of the cooperative movement in this country know, the use of the contract by farmers' marketing organizations has been increasing. Under the contract the member binds himself, for a term of years, to deliver to the association all of his crop, to be marketed by it. This assures the association a certain volume of business, a very essential factor in its success.

One of the problems of the consumers' society is the securing of a sufficient patronage to make efficient and successful operation possible. The patronage dividend that increases as the member's trade with the store increases is an inducement, of course, but not always one of sufficient strength. Some societies try to meet the situation by penalizing a member who fails to trade at the store by withholding his dividend if his annual patronage falls below a certain amount. The Canadian Cooperative (Brantford, Ontario) suggests in its November, 1926, issue, that the consumers' societies may be able to profit by the methods of the farmers' marketing organization.

The writer points out that it is easier for the marketing association than for the consumers' association to be successful. The society assembles the crop of its members—usually one commodity—and markets this to the best advantage.

In the case of the consumers' society, the process is reversed. Purchases are made in large quantities and disposed of retail to a variety of customers whose idiosyncracies have individually to be considered in efforts to command their good will. In marketing, the price is usually determined by world-trade conditions, into which the human element does not enter to any considerable extent. The commodity flows naturally to its destination according to demand. In distribution, there is not one commodity but hundreds as to which the management must gain knowledge and experience. In the effort to unload upon the public in small quantities the bulk purchased, considerable resource has to be exercised, owing to the keenness and intensity of competition by the many private traders unnecessarily struggling with each other to provide exactly the same service. In the case of the marketing institution, a small executive body is responsible for the transmission of a huge volume of produce through recognized channels, and therefore ample funds are available to hire the best procurable talent the interests of the organization suggest to be of advantage in promoting successful operation. As to the consumers' society, not only is there the problem of successfully meeting intensity of competition in providing the distributive service, but a large variety of merchandise to understand, and much more commercial detail to master, and yet, owing to the relatively restricted volume of business done, it is not usually possible, if it were desirable, to provide large emoluments for the most expert managerial and technical service obtainable.

The individual producer runs little risk of loss by thus giving up his right to dispose of his produce as he pleases. This is not true in the consumers' society for there the success of the business depends upon so many factors and contingencies that there is no assurance that the business will be conducted efficiently and economically, especially in the early years of operation when the officials are gaining experience.

It is imperative that the consumers' society, if it is to live, must be able to demonstrate its social value, and in proportion and to the extent to which it does it will grow in success and importance. Instead, therefore, of iron-clad contracts, the consumers' society must depend upon the cultivation in each locality of cooperative knowledge and spirit; and the development and expression, in the

direction of the organization, of the practical business talent which must be innate in many of its members.

The writer thinks, however, that two exceptions may be made to the above: (1) A retail society which is a member of a cooperative wholesale society should not be permitted to buy from private sources any supplies which can be obtained from the cooperative wholesale. "If any of the cooperative wholesale society prices are higher than those of its competitors the retail societies collectively must ascertain the cause and solve the problem, if one should exist."

(2) It might be expedient for the members of a new society to bind themselves by contract to purchase through the society all goods needed which are handled by it, for the first 12 months of the society's existence.

Long experience has taught us that if, say, two hundred members subscribe to the share capital of a new society and promise trade loyalty, only one-half, in many instances, and a considerable proportion in others, will redeem their pledge of support. The remainder will sit on the fence to see if the loyal members can make a success of the undertaking. If the nonpurchasing members should find substantial economies are being effected for consumers, most of them will, after the end of the first term, commence to trade with the view of sharing therein; thereby taking full advantage of the labor and loyalty of others. As the operating expenses have been based upon the gross revenue likely to accrue from the promised trade support, the initial disloyalty makes it difficult to operate with success, and if at the end of the first term a trade loss is shown some of the members who hitherto had been loyal get discouraged. They are liable to increase the difficulties of the institution by transferring their patronage to private traders; notwithstanding the fact that thereby they are jeopardizing their share-capital investment, and gain no financial advantage in prices. If, however, all members were required to enter into a written contract for the first twelve months to purchase such merchandise as the society handles exclusively therefrom, the volume available would enable the organization to justify its existence. It ought subsequently to depend upon its own achievements to merit popular confidence.

### Consumers' Cooperation in Canada

THE Canadian Cooperator (Brantford, Ont.) for December, 1926, contains 1925 data for the United Grain Growers and 16 other cooperative societies affiliated with the Canadian Cooperative Union. The data are as follows:

	Retail societies	United Grain Growers
Membership.....	7, 308	35, 441
Share capital.....	\$354, 971	\$2, 890, 628
Loan capital.....	\$157, 838	-----
Reserves.....	\$151, 791	\$1, 203, 182
Sales.....	\$2, 792, 872	<sup>1</sup> \$2, 701, 943
Net profit.....	\$154, 140	\$418, 574
Patronage dividends.....	\$118, 945	-----
Number of employees.....	208	750

The period the societies have been in operation ranges from 2 to 19½ years, the average being 9 years and 2 months.

The rate of interest paid on capital ranged from 4 to 8 per cent, five societies each paying 5, 6, and 8 per cent. Rate of dividend returned on patronage ranged from 2 to 12 per cent. Five societies paid no patronage rebates.

<sup>1</sup> Distributive departments only; figures for other items apply to all departments.

## Provision for Arbitration of Disputes Between Cooperative Societies and Their Employees

Great Britain

**T**HE necessity for some arrangement for the handling of relations between cooperative societies and their employees was made very evident during the general strike in Great Britain and during the eight months of the lockout in the mining regions. This is pointed out in the January, 1927, issue of the Monthly Circular of the Labor Research Department (London). During the general strike the workers were withdrawn from the cooperative establishments even though many of the strikers were dependent upon the cooperative stores for their supplies, and one union which had called out its cooperative employee members had finally to appeal to the cooperators for financial aid.

One difficulty has been overcome by the setting up of new national machinery to deal with disputes in the cooperative establishments. A joint committee of cooperators and trade-unionists had been in existence since 1882, but this was abolished in 1926.

The new plan agreed to by the Cooperative Union and the trade-unions representing the cooperative employees, provides for a national conciliation board composed of an independent chairman and six representatives each from the workers and cooperative societies. These representatives are to be chosen from a panel composed of four representatives from each of the unions having members in cooperative employment and four representatives from the Cooperative Union and other national cooperative federations. The six representatives of the workers' side are to be chosen in any given dispute by the trade-union or unions party to the dispute, but two representatives must be chosen from the members of the panel nominated by trade-unions other than those directly concerned. The independent chairman is to be chosen by rotation from a panel of six persons to be selected from a list of fifteen. A unanimous decision by the twelve members of the board will constitute a binding decision on both sides if both sides agree to abide by it; and failing other settlement, if both parties agree, recourse can be had to the independent chairman as arbitrator.

In the various sections of the Cooperative Union, the hours and wages boards representing the management committees of the societies still remain in existence, and are being developed by the labor committee of the Cooperative Union. In the Midland Section a sectional conciliation board was set up on the dissolution of the old national joint committee, including four representatives of the Midland sectional wages board and four representatives of the union. This has worked satisfactorily.

Seventeen unions are parties to the agreement for the new national conciliation board, and have appointed their representatives to the panel.

Sweden<sup>1</sup>

WITH a view to preventing a cessation of work in case of disputes of cooperative societies with their employees, negotiations for the drawing up of regulations to govern in the above cases were opened early in 1926 between the Swedish Cooperative Union and the secretariat of the Confederation of Trade-Unions. An agreement was arrived at which has been approved by both parties, as follows:

With a view to promoting the settlement of all differences without a stoppage of work, the undersigned organizations have concluded the following agreement:

(1) In accordance with the principles specified below, the parties shall appoint a conciliation board to which disputes shall be referred in accordance with head (3). The conciliation board shall mediate in disputes and seek to arrive at a settlement between the disputing parties.

(2) The Cooperative Union and the Swedish Confederation of Trade-Unions shall each appoint three members of the conciliation board. If these members are agreed, they may appoint an impartial chairman to preside over the work of the board in cases in which this is considered desirable and necessary by the board. Otherwise the chairman and secretary are appointed from among the members of the board.

(3) It shall be the duty of the conciliation board to take up for consideration all disputes that can not be settled by negotiation between cooperative undertakings and trade-unions. The board shall examine without delay the matters submitted to it, and endeavor by all means in its power to promote an agreement between the parties.

(4) The undersigned organizations are agreed that no kind of stoppage of work may take place before the dispute has been submitted to the conciliation board and the latter has taken all measures it considers possible to settle the dispute.

(5) This agreement shall remain in force until January 1, 1928, subject to three months' notice by either party. If notice is not given, the agreement shall be continued on a yearly basis.

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<sup>1</sup> International Labor Office. Industrial and Labor Information, Geneva, Oct. 4, 1926, pp. 27 and 28.

# WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

## Problem of Old-Age Pensions in Industry

UNDER this title the research director of the Pennsylvania Old Age Pension Commission (Harrisburg) has recently published the results of an extensive study of old-age pension systems maintained by private firms or corporations. Early in 1925 the commission sent out a request to approximately 3,000 of the larger concerns in the United States, asking for information as to provision made for aged employees, and to this request over 1,600 replies were received. Of the concerns answering, 594 stated that they provided pensions, 370 having either a formal pension plan or a definite policy which had been followed for a number of years, while 224 stated that they have no formal system but pay pension allowances from time to time in individual meritorious cases. The extent to which these systems and plans are meeting the needs of the aged workers and providing for the future of those not yet aged is thus summed up:

The total number of persons now in receipt of pensions from all industrial concerns in the United States does not exceed 100,000. There are probably 1,800,000 dependent aged persons 65 years of age and over in the country to-day. From 5 to 6 per cent, therefore, of all needy aged are being provided for through the medium of pensions from firms that have employed them.

The amount of the average industrial pension is estimated to be \$485 per year. The estimated total amount spent during the last fiscal year by all concerns in this country paying pensions of all kinds to approximately 90,000 individuals is about \$43,000,000.

About 16 per cent of all employees engaged in the manufacturing and mechanical industries, transportation, extraction of minerals, and clerical occupations have the expectation of being paid old-age pensions by the concerns for which they have worked.

Private pensions systems are for the most part confined to the industries in the public service—i. e., railways, urban transit, power and light companies, etc. Two-thirds of all wage earners covered by formal pension plans are included in the public service industries. If the employees in the metal industries who are covered by pension plans are added to the number of workers so provided for in the public utilities group, the total number of persons in these two categories who are now covered by pension systems would represent roughly four-fifths of all the workers protected by private pension plans.

As a rule only the largest and more prosperous corporations can now afford the cost of systematically pensioning aged employees.

Seventy-two per cent of all the concerns who notified this commission that they are operating pension plans employ over 1,000 workers each. What this fact really signifies when seeking to determine the extent to which industrial pension plans protect all workers, will only be realized when it is understood that the bulk of wage earners in this country are still employed by comparatively small concerns. Only 6 per cent of all industrial establishments in the United States employ 101 workers and over, it is shown in the United States census figures for 1920.

### Necessity for Pension Systems

THE report stresses the fact that some form of caring for aged employees has become almost a necessity from a business standpoint. In former days it might be held that it was the employee's duty to make such provision himself, and that if he failed to do so, the employer had no responsibility in the matter, but this attitude is hardly tenable to-day, in view of the various studies as to the cost of living and bringing up a family in relation to wage scales and regularity of employment. "All theories about thrift and independence and all objections to paternalism notwithstanding, employers of labor have found that, in practice, the average wages paid in most industrial establishments have proved insufficient to provide for those periods of life when the wage earner is no longer able to participate actively in industry." But the lack of such a provision tends to prevent the employer from managing his business efficiently and economically.

The employers need a comprehensive pension system because, while the presence of the superannuated employees in a business seriously impairs its efficiency the dictates both of humanity and of policy prevent discharge unless their financial necessities are provided for. The demand for a pension system grows more pressing as businesses grow more stable; for in older businesses there is a constant tendency to accumulate superannuated employees. The demand becomes particularly acute when businesses grow large as well as old; for then it becomes difficult to provide for the individual needs of the abnormal employee.

Moreover, the uneasiness which the workers themselves feel as they realize the lack of any safeguards for their future tends to impair their efficiency and to increase labor turnover. Some employers try to meet the situation by finding lighter jobs for the workers who have grown too old for full work, and others simply discharge workers as they become inefficient, but both of these policies have drawbacks.

### Cost of Private Pension Systems

THE study deals at length with the various kinds of pension systems found in operation, describing the character, whether contributory or noncontributory, the requirements for participation in benefits, the method of determining the amount of the pension, the conditions under which it is received, the manner in which the pension fund is financed, the extent to which employees have any legal claim to the pensions promised, and the like. The discussion of the cost of private systems and of the methods of financing them is of special interest. The real cost of a plan, it is pointed out, has rarely been realized at its inception. At the beginning of a system there are but few employees in a position to claim its benefits, and for some years the cost is small as compared with the advantages. But pension liabilities extend over many years, and actuaries point out that the full cost of a system may not become apparent for 50 years or more after its inauguration. "Almost universal satisfaction with their pension plans is expressed by employers of labor in the early years of these experiments. But after 20 or 30 years have gone by and the cost of pension obligations shows a continuous and unexpected tendency to rise, the earlier satisfaction is dissipated and a reaction to pessimism sets in." The table following is presented bearing on this subject.

RELATION OF PENSIONERS TO TOTAL EMPLOYEES AND OF EXPENDITURE FOR PENSIONS TO TOTAL PAY ROLL DURING FIRST YEAR OF OPERATION OF PLAN AND DURING 1925-26

Pension fund in existence—	Pensioners				Expenditure for pensions			
	Number of firms reporting	Per cent of pensioners of total employees		Per cent of increase	Number of firms reporting	Per cent of expenditure for pensions of total pay roll		Per cent of increase
		First year	1925-26			First year	1925-26	
Under 5 years.....	19	0.52	0.92	76	20	0.16	0.37	131
5 and under 10 years.....	41	.48	1.51	214	35	.13	.52	300
10 and under 15 years.....	40	.50	1.71	242	39	.20	.57	*185
15 and under 20 years.....	12	.62	1.61	*159	8	.34	.67	*97
20 years and over.....	12	.30	1.76	488	11	.14	.93	564
Total.....	124	.48	1.50	236	113	.19	.61	255

Concerning the three cases in which the percentages of increase shown above are starred, it is pointed out that these groups include several concerns whose forces have expanded during these years out of all proportion to the average growth of these industries, thereby altering the normal relations of the two factors. Even so, the increase is striking.

Among 124 pension systems, with an average age of about 9 years, the pensioners constituted when the plan was started 0.48 per cent of the total number of employees. On the other hand, during the last fiscal year the percentage of pensioners to the total number of employees had risen to 1.50, or more than three times the number in 9 years. Similarly, while on the whole American concerns still spend less than 1 per cent of the total pay roll on pensions, this is due solely to the enormous increases in the working forces in practically all these establishments and the tremendously increased total pay rolls due to both the larger number of employees and the rise in the wages during the last decade. What is exceedingly significant is that in spite of these prodigious expansions, the total pension expenditures for all concerns reporting increased from 0.19 per cent of the total pay roll the first year to 0.61 per cent the last fiscal year, an increase of over 300 per cent. In the case of those concerns which have been in existence for 20 years and over, the percentage of pensioners to the total number of employees has increased almost 500 per cent at the present time and the proportion of pension expenditure to the total pay rolls in these establishments has risen well over 500 per cent. Indeed, were it not for these additions which inherently give a false picture of the comparisons of pension ratios, the expenditures on pensions would have long ago reached a point beyond the capacity of many of the firms to pay such amounts.

Another table shows the same tendency to increased costs in another manner, as follows:

TOTAL EXPENDITURES ON PENSIONS AND AVERAGE PENSION GRANTED DURING YEAR 1924-25

Fund in existence—	Number of concerns reporting	Total spent on pensions	Total number of pensioners	Average pension
Under 5 years.....	18	\$736,074	1,273	\$578
5 and under 10 years.....	44	1,451,949	2,790	520
10 and under 15 years.....	50	4,915,803	10,329	475
15 and under 20 years.....	14	2,623,263	5,356	489
20 years and over.....	21	8,822,440	23,975	363
Total.....	147	18,549,529	43,723	-----



Here the difference between the expenditures of the various concerns is very striking, the time element being the main factor in this difference, although the pensions provided by the earlier plans are noticeably smaller than those paid under more recent plans. The average pension given by the 21 firms who have had plans in operation for 20 years or more is only \$363 against \$578 and \$520 paid by firms who have had pension systems for not exceeding 10 years, yet the total amount expended by the first group during the year covered is \$8,822,440 against \$2,188,023 of the second group.

#### Tendency to Rising Costs of Pension Plans

THE above figures merely illustrate the inevitable upward tendency of pension costs. When a system is started, there are usually only a small number eligible for retirement, and their pensions form a light burden. But they remain on the list, and each year new pensioners are added, until the accumulated number becomes serious. Some, of course, are removed from the list by death, but for a long while accessions outnumber removals, and the pension expenditures mount rapidly. Moreover, pensions are usually calculated on the basis of the wages the worker receives, either at the time of his retirement or for a specified period before that time. In most industries the wage scale has shown a marked increase in recent years, and this, of course, is reflected in the amount of the individual worker's pension. Again, many of the employers who have installed systems have found their industries have shared in the general prosperity of the country and their working force has largely increased, thus increasing the number for whom pensions must eventually be provided.

To illustrate the process of increase, the report assumes that a typical company employing 1,000 workers in 1925 was organized in 1885, and in 1915 adopted a plan retiring all employees after 30 years' service on a pension which, calculated upon a basis of 1 per cent of the average wages during the 10 years preceding retirement for every year of service, provides a pension of \$30 a month. "If this company is to be typical of American concerns, its force of employees which in 1925 numbered 1,000 was somewhat smaller in 1915 and was probably not more than one-third its present size in 1885 when it started operations." Consequently, the number who in 1915 finish their 30 years of service and retire will be very small, so small that the burden of their pensions may seem absolutely negligible, but each year adds more to the roll.

The total number of pensioners in 1925 will be made up of all the employees retired since 1915 minus those who have already died. Assuming that our typical company's growth has been normal and steady it means that each year, until 30 years after the company had reached its maximum number of employees, the number of new pensioners will continue to grow. The increase in the pension roll will be in direct ratio to the annual increase in the number of employees 30 years before. Assuming further that our typical concern's growth has been steady up to 1925 and became stationary from that year on, it will mean that the company's annual crop of pensioners will continue to increase up to 1955, 30 years after it has reached its peak in the number of employees, and 40 years after the inauguration of the plan.

The actual cost of the pensions in our typical concern will have increased for another reason also. By 1925 the company will have found that although the same basis of computing the pension had been retained, the actual pension allowance will have been doubled or trebled as compared with those granted in 1915.

This, of course, is due to the fact that the average wage upon which the pension is based has either doubled or trebled during this period. In addition, if the pension plan has been at all effective, it means that as the years go by the labor turnover is greatly reduced, resulting in a proportionately larger crop of retired employees as compared to the total number of employees. All of these factors thus tend to make pension costs continuously more burdensome.

### Actual Increases in Costs

TO SHOW that experience conforms to theory in this case, the report presents figures as to the cost of operation of certain pension systems for the first year and for the latest, as follows:

ACTUAL PENSION EXPENDITURES BY SPECIFIED ESTABLISHMENTS

Name of company	Year when plan was established	Total payments during first year	Payments during last fiscal year	Per cent of increase
American Sugar Refining Co.....	<sup>1</sup> 1913	\$37,031	\$199,100	437
Baltimore & Ohio R. R.....	1884	7,354	452,576	6,054
Chicago, Rock Island & Pacific Railway Co.....	1910	24,558	279,304	1,037
Galveston, Harrisburg & San Antonio Railway Co.....	1903	6,056	149,780	2,373
Pennsylvania Railroad Co.....	1900	300,000	4,194,024	1,298
Pittsburgh Plate Glass Co.....	<sup>2</sup> 1909	5,219	34,693	564
U. S. Steel Corporation.....	1911	281,457	2,068,653	635
Average age of pension plans.....	19 years.	Average increase.....		1,771

<sup>1</sup> First full year.

<sup>2</sup> First year for which figures were obtainable.

### Methods of Financing Pension Plans

ATTENTION is called to the fact that in order to be financially sound and adequate, a plan must meet two requirements: (1) It must be entirely free from the commercial vicissitudes of the particular business and the whims of the management then in office; (2) it must at all times be self-sustaining and adequate to meet the needs as they arise." In other words, in order to be financially satisfactory, a plan must from the beginning be adjusted to the future demands it is to meet, provision being made which will insure that as claims mature the means will be present to pay them. There is only one method of making a sure provision of this nature—the building up gradually of an independent or trusted fund based on actuarial calculations.

Such a fund when started sufficiently early should never become too burdensome and the promised payments into the fund of the particular business can automatically be met as they fall due. Whatever liabilities mature during a given year are paid the same year. Where the pension fund is built up on an actuarial basis not only does the accumulated interest ultimately help to reduce the principle cost, but the necessary premiums for the purchase of the pension extend over a long period of years and are therefore easier to meet. How much easier this is for many concerns to carry through such a plan becomes apparent from the fact that to retire a man at 65 on a pension of \$400 a year there is a liability on the part of the company amounting to about \$300 a year at age 55, \$125 a year at age 45, and about \$38 at age 25. A plan based on actuarial calculations is further advantageous inasmuch as it removes all the fear of uncertain contingent liabilities.

Nevertheless, it is rather the exception for pension plans to be thus financed. "Since 1920, out of 98 new pension systems inquired into,

approximately 90 per cent have paid no heed to proper actuarial financing." Out of 256 plans reported on, 165 were financed by annual appropriations without any fixed fund, 28 by contributions from employees and company, 11 by initial endowment funds and annual contributions, 32 by limited annual appropriations, 7 by appropriating each year certain sums until a sufficient fund is reached, 7 by taking out annuities with insurance companies, 3 by paying certain funds into employees' associations, 1 by releasing a certain amount of stock paying 7 per cent, 1 by setting aside a percentage of the pay roll increasing each year up to 1949, and 1 by setting aside annually an amount equal to \$16 per \$1,000 of the aggregate yearly wage of the employees participating in the plan.

Perhaps the most striking feature of this list is the small number—less than a dozen—of plans financed on an actuarially sound basis. On the other hand, 165, or almost two-thirds of the whole number, have no provision whatever except such appropriations as the firm makes from current or operating expenses each year. Sometimes the amount which may be thus appropriated is definitely limited.

Thirty-two concerns limit the amounts of their appropriations to certain specified sums, without apparent regard to the necessities of the fund. A number of these concerns limit their appropriations to 1 per cent of the total pay roll. One limits it to one-fourth of 1 per cent of the operating expense, while several others set their limitations all the way from \$3,000 to \$150,000 per year. Generally, when such limits are fixed it is specified that a new rate of pension allowance shall be established whenever disbursements exceed the total available to meet the needs. Eleven others, although they set aside special endowment funds and make annual contributions, fix these at arbitrary figures without consideration of the actual needs of the pensioners.

### Solvency of Existing Pension Plans

**I**T IS evident that the majority of the plans dealt with in this discussion are on a thoroughly unsound basis. They are meeting present liabilities but making no attempt to provide for the heavy expenses which must eventually be faced. Sometimes the employers disclaim all responsibility for these future needs.

Indeed, not infrequently, when employers of labor are asked about their "accrued pension liability" they complacently answer that "we haven't any liability, accrued or otherwise." In support of this they point to the rules of their pension systems which invariably provide, as has already been pointed out, that the right is reserved to alter, suspend, or entirely abolish the plan, thus giving no legal claim to such pensions on the part of the employees.

Most of the employees undoubtedly have every intention of meeting pension claims honorably and fully, but in this matter intentions are a poor substitute for investments. "As far as the employees are concerned, and from any sound financial and actuarial point of view, these plans are hopelessly insolvent."

Various methods of insuring the solvency of a pension plan are discussed, the most generally satisfactory seeming to be some variant of the single premium deferred annuity plan. Employers, however, show little willingness to adopt such methods. To do so involves facing the full expense of a plan from the first, and it also means putting the administration of the pension more or less into the hands of an outside agency, neither of which is an agreeable feature. Most employers prefer taking a chance upon their ability to meet the responsibilities which their systems entail.

## General Evaluation of Private Pension Plans

THE report discusses fully the usual features of pension plans and ends with a consideration of how far they are fulfilling their purpose. As a means of weeding out employees who have become incompetent, they are not very successful. The pension is usually so small that employees do not retire voluntarily, and kindly employers shrink from enforcing their withdrawal. Then, the age set for retirement is often so advanced that workers become incompetent before reaching it, yet the employer naturally hesitates to dismiss a man too old to get work elsewhere who has only a few years more to go in order to qualify for a pension. As a reward for long service, the pensions are open to the objection that they are obtained only by those who remain in one place for a specified period, while the man who leaves or loses his work a little earlier has no reward for the long time he has served faithfully. As a means of reducing labor turnover, they are most effective with the class whom it is least desirable to retain. The young and vigorous workers feel the pension too remote to be taken into account when considering a change, while the workers who are becoming older and less competent to secure good jobs may regard the pension as an incentive to remain.

As a disciplinary measure, the report admits the pension may have some effect. It may keep the older employees, especially, in line when labor trouble threatens, or may be used to force them back into service as strike breakers after they have left; it may even have some weight in preventing a strike, or discouraging demands for increased wages or better conditions. It is difficult, however, to say how far pensions are effective along these lines, while the social dangers of thus using them are apparent. As a means of freeing the worker from the dread of an unprotected old age, they are manifestly ineffective. Under most systems, the employee has no legal claim to the pension, and he realizes that the protection promised can not be counted upon with any assurance. Pensions may have some value as humanitarian measures, but the mixture of charity and business is hardly desirable.

Finally, as a means of solving the problem of caring for old age, private industrial pension systems are utterly inadequate. They do not cover the field, and they do not insure protection and care. As to the first point:

It has been pointed out that there are probably altogether less than 90,000 men and women now in the receipt of industrial pensions throughout the country. On the other hand, it is estimated that about 1,800,000 of the aged men and women of the United States are in need of some support. This fundamental fact should be sufficient to indicate how little these pension systems are capable of meeting the needs of this body of indigent aged.

As to the second point, most plans specifically declare that the scheme entails no legal responsibility upon the employer, who is free to alter or amend or give up either the whole plan or any part of it at any time when he may choose to do so. The plans in general amount to little more than a promise that "if every thing goes right, and you do nothing wrong all your life and stay with us till you get old, and if when the time comes we can afford to do it and still think you are deserving, we may grant you a pension such as we shall then consider proper."

## Workmen's Compensation Legislation as of July 1, 1926

**N**EARLY 35 years have elapsed since the United States Commissioner of Labor undertook the first official study in this country of the subject of the insurance and compensation of workmen for injuries. At that time, compensation for industrial accidents had been established by law in but two countries—Germany in 1884 and Austria in 1887. Other nations were considering the subject, but in none except those named had the movement passed beyond a stage of investigative commissions and legislative discussion.

Since that date this method of treating industrial accidents, and in many cases industrial diseases also, has girdled the world, supplanting the earlier remedy of suits for damages for proved negligence in the countries following the British common law and closely related systems elsewhere. Now the idea that workmen are exposed to numerous incidental injuries as a result of the occupation, and that they should not be left alone to bear the consequences, even if the negligent acts of a fellow servant or the ordinary risks of the employment are the sole cause, has become all but universal.

The United States Bureau of Labor Statistics in its Bulletin No. 423 presents a complete review of legislative conditions in the United States and Canada up to the end of the legislative sessions of 1926. Historical and analytical matter is given together with the major part of the texts of the laws. The entire Canadian area and all but five of the United States and the District of Columbia are covered by compensation laws. Sporadic investigations began in the United States as early as 1903, but no legislation resulted from them until 1910, following the appointment of commissions in 1909. In all, 40 commissions have been provided for, 8 in 1910 and 12 in 1911, since which date the movement has declined. The greatest number of laws in any one year was 10 in 1911; the year 1915 followed with 9 laws. But one investigative commission has been appointed since 1916 and only 3 States have enacted their first operative laws since 1919. Amendments have constantly been made, extending the scope of the acts, increasing the amount of benefits, reducing waiting time, clarifying administrative methods, etc. In other words, the new system is finally accepted wherever tried, the only purpose of later action being more fully to accomplish its beneficent aims in relieving the consequences of industrial hazard.

Benefits cover fatal as well as nonfatal injuries, except in Oklahoma where a constitutional barrier of compensation for death is held to exist. Medical and surgical benefits are also provided by the laws of every jurisdiction.

In most of the States the benefit is a percentage of the average wages, ranging from 50 per cent in 16 States to 66 $\frac{2}{3}$  per cent in 12. Maximum totals are prescribed in a number of States, ranging from \$3,000 to \$7,800 for death and from \$3,000 to \$10,000 for permanent total disability. Some States establish no limit, so that considerably larger amounts are available according to duration of life and number of dependents. The insurance of the liability incurred under the acts is required in all but 3 jurisdictions, 19 States providing State funds for this purpose, 8 of them being exclusive in their operation.

The volume of nearly 700 pages is, with its tables and charts, a practically complete handbook of legislative provisions for the United States and Canada, so far as workmen's compensation for injuries is concerned.

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### Governor's Recommendations Regarding Alabama Workmen's Compensation Law

**I**N HIS message to the 1927 legislature, the Governor of Alabama recommends a liberalizing of the State compensation law and the creation of a special commission to administer that law, as follows:

The workmen's compensation law should provide a shorter waiting period, higher rates of compensation, and increased medical and hospital benefits.

A workmen's compensation commission would, I believe, many times pay its cost in the added benefits it would bring to those for whom the law was intended.

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### Application of Texas Compensation Law to Cities and Towns

**T**HE workmen's compensation act of Texas makes no direct provision with reference to public employees. Corporations may, of course, become subject to the act and the question of its application to municipal corporations is raised in a case (*City of Tyler v. Texas Employers' Insurance Association*, 288 S. W. 409) in which the Texas Employers' Insurance Association, an insurance carrier created under the provisions of the workmen's compensation act, sought to recover unpaid premiums on a policy of insurance issued to the city. The policy was issued in November, 1919, in consideration of an agreement and payments of premiums, renewal from time to time following, as well as payments of losses and expenses arising on claims against the city on account of injuries to its employees. On March 1, 1924, the city canceled the contract, but with an alleged indebtedness for premiums and penalties owing to the insurance association. On suit by the association in the District Court for Smith County, there was a judgment of dismissal on the ground that an incorporated city or town can not become a subscribing member of an employees' insurance association under the State compensation act. On appeal to the court of civil appeals, this judgment was reversed and the case remanded for trial on the merits (*Texas Employers' Insurance Association v. City of Tyler*, 283 S. W. 929). From this judgment a writ of error was sued out and the case brought to the commission of appeals, where the judgment of the court of civil appeals was reversed and the judgment of the district court affirmed.

In passing upon the question of the possible inclusion of municipal corporations, the court found its principal guidance in a provision of the constitution (sec. 52, art. 3) which denies to the legislature any power to authorize any county, city, town, etc., to lend its credit or grant public money to any association or corporation whatever or to become a stockholder in any such corporation, association, or company. The insurance association was, by the act creating it, declared

to be a body corporate with power to make insurance, constituting, with its subscribing members, a mutual insurance association. The court held that the constitutional prohibition effectively prevented cities and towns from becoming stockholders in this association. Intent so to do was denied, and even if the legislature had decided to include cities and towns in the act, it would have had no authority to do so in view of this provision of the constitution.

Another point made was that compensation provides liability without fault or, as stated in the opinion, "the act contemplates compensation in the absence of any legal liability other than the acceptance of the plan." This would in effect be providing a gratuity or bonus to an injured employee regardless of a legal liability. "The city might as well pay his doctor's fee, his grocer's bill, or grant him a pension."

The court of civil appeals had presented the point that the compensation act deprives employers who reject it of the common-law defenses, saying that it would be unfair to deprive the city of these defenses by this article of the act and deny it the benefits of other provisions. The commission of appeals found no such consequence involved in the act. Employers who for any legal reason could not subscribe to the act would be outside its terms on all questions. "The act simply has no application, one way or another, to any employer except one eligible to its burdens and benefits."<sup>1</sup>

The commission therefore recommended the judgment above indicated, holding that the city could not be required to make the payments sued for. The supreme court therefore adopted the recommendation, and judgment was entered accordingly.

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## Recent Compensation Reports

### California

THE Industrial Accident Commission of the State of California devotes its report for the year ending June 30, 1926, largely to an account of the progress of the law in its interpretation and application to the various phases of the question of compensation. Progressive changes have extended the benefits of the law both as regards their nature and the number of persons affected. As an experimental enactment in the field of sociology and economics, the commission "adopted a very conservative interpretation of the provisions of this statutory legislation and the supreme court and district courts of appeal were even more conservative when their jurisdiction had been invoked to review the awards of the commission." With the passage of years and the development of experience under the act, the broad interpretation enjoined by the act itself has been more freely applied. This is true in two special fields, hernia and lame-back cases. For a number of years the attitude of the medical profession that hernias are not of traumatic origin dominated, but the "constant association between the appearance of a hernia and an industrial strain" led the com-

<sup>1</sup>Special interest attaches to this statement in view of its difference from the position of a lower court in regard to the application of the compensation law to occupational diseases. (See *Labor Review*, February, 1927, pp. 44, 45.)

mission to its present attitude, with the result that, "whereas, a few years ago a compensable hernia was rare, to-day, it is the rule rather than the exception." So also in the second group of cases. "Formerly these lame backs were attributed to rheumatism, lumbago, and like diseases and were not considered either traumatic or industrial." The commission now regards a strain affecting a predisposed workman so as to cause cessation from work "just as much an industrial injury and just as much compensable as is a terrific strain on a workman with a normal back." This policy is said to have resulted in restoring workers to employment in a shorter time and in retaining "a self-respecting and contributing citizen instead of losing one."

Other lines of liberalization have reached so-called independent contractors, the presumption of the law being construed as in favor of the inclusion of this class of workers, "tending to establish them as employees and entitled to the benefits of the act." A reexamination and new interpretation of the provisions of the law as regards municipal employees has been approved by the courts, and extends greatly the inclusion of the act in this field. A mode of caring for maritime workers has also been developed, in line with a decision of the supreme court, with the result that many port and harbor workers of the State are recognized as entitled to the benefits of the act who were formerly regarded as without its scope. Cases involving ordinary risks of the public have also been construed, under recent interpretations, as compensable, on the view that if the employer sends his employees upon the streets and highways, the area of his premises is automatically extended, so that injuries to his workers in those localities to which their duties call them are within the terms of the act.

Other constructions have protected the rights of workers who had been tolled along by advice of the employer or others until the expiration of the time limit when their claims became outlawed, so that in such cases and in cases of a later development of permanent disability, the commission has been able to provide relief.

The commission as a department of the State government has consistently endeavored to carry out the social public policy of the State, as set forth in the laws entrusted to it for enforcement, and has received, it has the pleasure to report, the fine confidence of employees and the friendly and helpful cooperation of employers and insurance companies.

The growth of the fund is noted, the compensation premiums written by it in competition with all other insurance carriers of the State showing a steady growth since 1914 with the exception of a single year. The fund now writes slightly more than 30 per cent of the total premiums written by all carriers in the State. Attention is called to the examination and investigation of the fund made by expert actuaries in 1925, with the finding of solvency and adequate surplus, together with an approval of the method and amount of dividend distributions. The commission is earnest in its recommendation that the existing restriction to a competitive field be removed, "and that it be given a monopoly of the workmen's compensation insurance coverage in this State." With a free field, the commission believes that "the present upward trend of compensation insurance rates in this State" would be turned downward, and that better inspection results and preventive measures would be attained. The arguments are presented only briefly, but with the statement



that a fuller presentation would be made if a serious legislative proposal should follow its suggestion.

During the year covered by the report, 246,083 industrial injuries were reported to the commission. Of these, 710 were fatal, 1,217 caused a permanent impairment of at least 1 per cent, 91,879 caused a temporary disability lasting longer than the day of injury, and 152,277 caused no disability but required medical attention other than ordinary first-aid treatment. The number of claims submitted during the year was 3,862, which, with claims on hand, gave a total before the commission of 4,637. Of these, 3,504 were adjudicated, leaving 1,133 pending on June 30, 1926.

Of 93,806 tabulatable injuries, the largest number was due to building construction (14,060), commercial enterprises coming next with 10,261 cases. The greatest number of fatalities in any group was 84, found in both building construction and public utilities. Engineering construction follows with 79 deaths, lumber and wood manufacturing being responsible for 63 deaths, and railroad operation for 57. Agriculture caused 51 deaths; it may be noted that this frequently excluded industry was also responsible for 58 injuries of a permanent nature and 6,343 tabulatable temporary disabilities, or a total of 6,452 tabulatable injuries, ranging above oil producing (3,692), lumber and wood manufacturing (6,064), and engineering construction (5,323), as well as a number of other so-called hazardous employments.

By causes, the handling of objects, with 26,464 cases, leads. Machinery is next with 12,991, followed closely by falls of persons, 12,449. By nature of injury, cuts and lacerations numbered 27,081, bruises and contusions 20,523, and sprains and strains 18,274. Injuries to upper extremities numbered 38,600 and to lower extremities 26,821, while injuries to trunk numbered 15,507.

The total amount of premiums written during the year by the State insurance fund was \$5,811,317, and the amount paid in compensation and medical aid was \$3,329,601. Dividends in the amount of \$1,664,214 were declared, assets at the end of the year amounting to \$6,779,638. The catastrophe surplus at the end of the year was \$2,140,947.

#### Connecticut

THE eighth report of the Board of Compensation Commissioners of Connecticut covers the two-year period from November 1, 1924, to November 1, 1926. Although the work of the board is purely administrative, a summary of the operations of the law is given, obtained from reports by insurance carriers and self-insurers. The N. Y., N. H. & H. R. R. Co., public employees, and a single large employer, all of whom were more or less fully included in an earlier report, are here omitted, so that some lack of comparability with previous reports exists. The data given, however, are presented as "a very accurate and comprehensive compilation of the matters herein dealt with."

Payments of compensation by insurance companies for the two-year period amounted to \$3,250,019, and for medical, surgical, and hospital services, \$2,420,036, an increase of more than 50 per cent over the preceding biennium. Self-insurers paid \$608,232 in compensation and \$579,104 in medical, etc., aid, a slight decrease as

compared with the previous biennium, "which is due to the change of policy above indicated." The total benefits under the act for the two years amounted to \$6,932,803.

Injuries reported for the period numbered 65,555 as against 72,356 for the preceding biennium, a decrease of 6,801.

A discussion of the development of the law, particularly as affected by court decisions in leading cases, follows. The board hesitated to recommend legislative changes in view of the rather definite meaning that had come to be attached to the various provisions of the law, but holds itself in readiness to appear before the legislature in case its opinion is requested on any measures submitted to it in this field.

The ever-present question of hernia is discussed in a brief paragraph, in which it is said:

It is very probable that many hernias have been compensated in which employment has played but a small part in their production, but it has been recognized by many employers of labor that, from an economic standpoint, industry is well served by compensating a hernia in which employment has played a doubtful part by hospitalizing an employee and curing his condition, and the cost of the medical, surgical, and hospital expenses in the end has been found to be less than the cost which the replacement of the individual would amount to.

The concluding paragraph on this section of the report seems worthy of reproduction:

It can be safely said that since the passage of the compensation act, there has been established a better relation between the employer and the employee and practically no complaint is now being heard that advantage is being taken of the ignorance or inexperience of injured employees. Malingerers are scarce and injured workmen's rights are being respected and protected.

#### Idaho

THE Industrial Accident Board of Idaho renders biennial reports, the fifth covering the period from November 1, 1924, to October 31, 1926. The report is, for the greater part (90 of 131 pages), taken up with rulings, orders, and decisions relative to the construction of the act. However, a quite complete statistical presentation is given.

For the first year, 6,694 claims were received and 6,547 closed. Of these, 56 were fatal, 3 were cases of permanent total disability, 277 of permanent partial disability, 5,957 were temporary, and 254 were rejected. In the second year, 7,424 claims were received, of which 7,392 were closed. Of these, 51 were fatal, 3 were permanent total disability cases, 293 permanent partial, 6,772 temporary, and 273 rejected.

The lumber industry was the most prolific in the number of claims closed during the two years covered, furnishing 3,696 of the 13,939 cases. Mining was second with 2,871 cases, construction following with 2,212, then trade, 1,268.

There is a competitive State fund in Idaho, which is by far the most important insurance carrier in the State. Of 14,118 claims received during the two years, 5,016 were under the fund, the next carrier having but 2,297 cases. These proportions are in evidence also in regard to the compensation paid. Thus, for the fiscal year ending October 31, 1925, compensation amounting to \$587,266 was paid out, of which nearly one-third (\$180,017) was in the State fund. Medical fees for the year aggregated \$107,457, of which \$53,689 was paid by

the State fund. The next highest insurance carrier paid less than one-half the amount of compensation shown, and a negligible amount of medical fees.

In 1926 the ratio was not so high, the total compensation paid being \$608,771, of which the State fund paid \$162,068. The next highest sum was \$87,059, paid by a stock company.

The other tables present data for the two years combined. By cause of injury, rolling, falling, and flying objects were responsible for the largest number, 3,966; stepping on, striking against, and caught between objects is second with 1,971 claims submitted; followed by falls, 1,868; hand tools coming next with 1,789, and handling objects, 1,132.

Injuries to the upper extremities number 5,176; to the lower extremities, 3,563; to the head, 2,150; and to the trunk, 2,091. Lacerations, cuts, and punctures were most numerous, 4,185, followed by bruises and contusions, 3,453.

In the 107 cases of death, 157 dependents survived.

Of the total compensation paid in the two years, \$1,196,037, the lumber industry called for \$461,226 and mining for \$229,725, construction following with \$178,213.

#### Iowa

ONE of the duties of the Industrial Commissioner of Iowa is to administer the compensation law of the State. The seventh biennial report of the Workmen's Compensation Service covers the period July 1, 1924, to June 30, 1926. The report is chiefly text statements of the policy and results of the administration and a reproduction of the opinions and rulings of the commissioner. There is also a statement of each fatal case and of cases reviewed and appealed and cases arbitrated.

In line with other reports, the commissioner recounts the development of administrative policies which his term of appointment has covered, practically throughout the history of the law. The great changes introduced by the adoption of the principles of compensation are said to have been such as to make both employers and employees "skeptical as to satisfactory operation." Neither side has been entirely satisfied with the results, "the lure of the occasional big damage judgment on the one hand and the chance to defeat just claims on the other" having served somewhat to obscure the actual benefits obtained. Compensation does not fully offset loss, nor has the law been so perfected as to distribute with exact justice the same measure of relief to all classes of employees and of injuries. However, progress has been made both in the matter of administration and in the liberalization of benefits. Security of payments is also greatly increased.

The commissioner joins with others in his field in recognition of the difficulty with regard to hernia, but believes that the solution is to be found in a liberal treatment, his advice being, where good faith on the part of a claimant is manifested, to give a prompt operation enabling an early return to usefulness. "The cost is rarely in excess of \$225 in surgical and hospital expense and in compensation required, and this is better than litigation, which usually results in defeat when arbitration discloses evidence of good faith." This

advice is said to be usually accepted, "and it is my impression that first and last insurance or employment is not a loser by this process."

The report stresses the importance of accident prevention, more complete coverage, and prompt service. Legislative changes recommended include a reduction of the waiting period from two weeks to one week; authority to distribute benefits for dependent children where remarriage or other cause leads to their neglect; the inclusion of clerical workers; relief for unusual healing periods; the inclusion of occupational disease; and a termination of awards to children arriving at the age of 16 years. A recent decision of the supreme court of the State construes the law as allowing 300 weeks' benefits to a child under 16 at the time of the award without termination on reaching the age named. A change in this respect is recommended so as to terminate payments at that time. Another change would fix the compensation for peace officers on the basis of actual earnings and not the maximum benefit now provided without regard to such basis.

The number of accidents reported July 1, 1924, to June 30, 1925, was 13,155, of which 147 were fatal; for the next year the total was 12,021, of which 118 were fatal. Compensation paid in reported settlements for the earlier year amounted to \$448,824, and for the second year, \$616,057. Medical and hospital expenses are not included in the above amounts, and reports in respect of these items are said to be "very unreliable in a statistical sense."

#### Pennsylvania

**T**HE Bureau of Workmen's Compensation of the Department of Labor and Industry of Pennsylvania presents annual reports, the latest being for the calendar year 1926. The total number of accidents reported for the year was 180,420, an increase of 2.3 per cent over the preceding year. This increase is said to be due largely to fuller employment in the anthracite mines, which were not in operation for a period of four months in 1925. Of the total number of accidents in 1926, 2,136 were fatal.

By far the greater number of accidents occurred in manufacturing, 70,614 as against 52,796 in coal mining. Of the latter, 28,117 were in anthracite mines and 24,679 in bituminous mines. Construction and contracting reported 20,710 accidents, and transportation and public utilities 14,354, no other group reporting as many as 10,000. Fatalities were most numerous in anthracite mining, 484 in number, manufacturing following with 474 and bituminous mining with 445, these three groups comprising more than one-half the total.

A summary statement is made of the operation of the law, showing impressive numbers as totals, 2,017,088 accidents being reported during the 11 years of the law's operation, and \$121,655,455 liability incurred by employers and their authorized insurance carriers, covering 768,196 cases. It is interesting to note that during the first 10 years there was an average of 183,667 cases reported annually, with which may be compared the total for 1926, 180,420. The average number deaths was 2,469, the number for 1926 again falling below with 2,136 cases; while the average of nonfatal cases, 181,198, was likewise in excess of the 178,284 cases for 1926.

Other summaries show the totals in fatal compensable cases with number and average compensation per case. For the 11 years the

average award for death has been \$3,390, the lowest average being for 1917, \$3,113, and the highest in 1920, \$3,564. In no-dependency cases the average for funeral expenses for the last several years has been the maximum allowance of \$100.

A gruesome total of mutilations and permanent disabilities shows the loss of 6,245 eyes during the 11 years, with an average compensation per case of \$1,422; 4,057 fingers in the past 4 years, with an average compensation of \$444; 2,573 hands in the 11 years, with an average compensation of \$1,840; 821 arms, average compensation, \$2,223; 1,078 legs, average compensation, \$2,250; and 1,505 feet, average compensation, \$1,691.

The average benefit paid in the three-quarter million of temporary disability cases was \$51, the lowest in 1917 when \$29 was the amount, the highest in 1926 with an average of \$62.

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### Amount Paid in Unemployment Benefits in England

ON NOVEMBER 24, 1926, in answer to a question in Parliament, the Minister of Labor (Sir Arthur Ramsay Steel-Maitland) gave the following data:<sup>1</sup>

The total sums paid in the eight years from the date of the armistice to November 13, 1926, by way of out-of-work donation and unemployment benefit are approximately as follows:

Out-of-work donation.....	<sup>2</sup> £62, 448, 000
Unemployment benefit.....	275, 157, 000

The out-of-work donation, it will be remembered, was a special gratuity to demobilized service men and war workers, which had no connection with the unemployment insurance scheme.

At the same session the minister was asked for the number of days for which benefit had been claimed by insured persons under the unemployment insurance acts, for each year, beginning with 1919. In reply he gave out the following statement:

The total number of days for which unemployment benefit under the unemployment insurance acts was paid was approximately as follows:

1921.....	453, 300, 000
1922.....	345, 100, 000
1923.....	287, 700, 000
1924.....	258, 500, 000
1925.....	273, 700, 000

Corresponding figures for 1919 and 1920 are as follows, but it should be noted that they are on a different basis from the figures for later years, owing to the fact that the extended scheme of unemployment insurance did not come into operation until November, 1920:

1919.....	7, 600, 000
1920.....	24, 200, 000

The above totals do not include days of unemployment for which benefit was not paid owing to waiting periods, disqualification for benefit, or other reasons, and during 1919, 1920, and 1921 there were in addition days of unemployment for which out-of-work donation, as distinct from unemployment insurance benefit, was paid. The requisite statistics are not available regarding these additional days of unemployment.

<sup>1</sup>Great Britain, Parliamentary Debates, Nov. 24, 1926, p. 386.  
<sup>2</sup>Pound at par=\$4.87; exchange rate for November, 1926, was \$4.85.

## Japanese Health Insurance Law Becomes Effective <sup>1</sup>

THE evolution of social insurance in Japan is for the most part following the same lines shown in the development of such insurance in the various countries of Europe. At first physical hazards were covered by mutual benefit societies which received contributions from employers and by the ordinary provisions of the Civil Code regarding damages for injuries. Then, in the early laws concerning mines and factories, provision was made for workmen's compensation. The basic principle of these provisions was that "the employer should be individually responsible for the payment of compensation." He was not, however, required to insure his liability. Like the original European legislation the provisions for compensation were applicable "only to mines and to factories which are dangerous or above a certain size."

The Japanese health insurance act of 1922, which went into effect July 1, 1926,<sup>2</sup> shows not only a number of significant developments but also changes of principle as compared with previous legislation. Insurance has been made compulsory, and while the scope of the law is still that of the mines and factory laws its coverage has been considerably broadened. The insured risk has been extended to include "temporary incapacity of whatever origin." Furthermore, both the workers and the State must bear a share of the financial cost of the new legislation.

As regards temporary incapacity, the new act practically replaces previous provisions for workmen's compensation. The practice of charging the compensation of minor industrial accidents to funds for sickness insurance originated in Germany and was later followed by various other European countries.

### Scope

INSURANCE under the new act is compulsory for a large but restricted section of the laboring class, namely, all wage earners employed in mines or in factories which are dangerous or above a certain size, except administrative employees with an annual salary exceeding 1,200<sup>3</sup> yen, and temporary workers.

Practically all mines and those factories employing regularly 10 (previously 15) or more workers or in which the work is dangerous or injurious to health are included under the act. The provisions do not cover "factories to which it seems unnecessary for this act to apply."

It has been estimated by the actuaries that the compulsory provisions of the law will cover 2,160,000 persons—1,810,000 factory workers (of whom slightly more than half are women) and 350,000 mine workers (270,000 men and 80,000 women).

In 1920 there were about 15,970,000 persons gainfully occupied, of which number 9,020,000 were in agriculture, 3,530,000 in industry, and 446,000 in mining. At present there are apparently fewer miners than there were in 1920, so it may be concluded that practi-

<sup>1</sup>International Labor Office. International Labor Review. Geneva, December, 1926, pp. 861-871. (For references to this act, see also LABOR REVIEW, Washington, July, 1922, p. 164, and November, 1926, p. 91.)

<sup>2</sup>Actual grants of benefits should begin Jan. 1, 1927.

<sup>3</sup>Yen at par=49.9 cents, exchange rate is about 48.9 cents.

cally all miners are covered by the act. The population engaged in other industries, however, has been expanding since 1920 so that the insurable proportion thereof constitutes somewhat less than 50 per cent.

The working population which is uninsured comprises the 9,000,000 farmers and agricultural laborers, the independent handicraftsmen, the wage earners in small enterprises, and all workers in commerce and transportation.

The law provides, however, that two classes of persons outside the scope of compulsory insurance may become insured under the following conditions:

In an undertaking not covered by the compulsory provisions of the act but belonging to certain specified categories, including undertakings excluded on account of their smallness, mining (extraction of certain minerals not enumerated in the mining act), and also building and transport undertakings, the employer may, after obtaining the consent of a majority of the workers concerned and the sanction of the Minister for Home Affairs, cause all his workers to be insured. Thus in consequence of a process initiated by the employer, the whole of his workers may be subjected to compulsory insurance, with the consent of the majority of their number and the formal approval of the authorities. All the workers remain so subject until, on the initiative of the employer, the consent of three-quarters of the workers is obtained to the cessation of the obligation to insure.

The other class for which entrance into insurance is permissive, and not compulsory, is that of persons who, having been compulsorily insured, cease to be so. These persons may continue to be insured by making application to their health insurance society to that effect; their application, however, is not accepted unless they have been insured for more than 180 days in the course of the previous 12 months, or for more than 60 days continuously before the day they have ceased to be insurable.

#### Financial Features

**C**ONTRIBUTIONS from employers and wage earners, and a State subsidy provide funds for carrying out the law. The contribution is based on the wages of the insured worker and is the same for both sexes. To facilitate computations, insured persons are classified into 16 wage groups, the basic wage in the lowest wage group being 0.30 yen per day and in the highest, 4 yen per day.

In this the Japanese act conforms to the usual European legislation as contrasted with that of Great Britain in which the contribution rate varies with sex but not with the wage.

Each Japanese health insurance society fixes its own contribution rate. In principle this rate is the same for both the employer and the insured worker, but in particularly dangerous trades employers may be obliged to pay double the rate of the worker. Furthermore, in the case of wage earners who are paid less than 55 sen<sup>4</sup> per day, the employer's contribution is computed on a daily basic wage of 60 sen. The worker's contribution may never be more than 3 per cent of his wages. No minimum is fixed.

The State meets one-tenth of the expenditure for benefits but its liability is limited to 2 yen annually per insured person. This subvention is intended to cover approximately the administration costs.

The total cost of the insurance schemes is estimated at 40,000,000 yen a year, or about 18 yen per person. Of this sum, 4,000,000 yen representing administrative expenditure, central and local, is covered by the State subsidy, while the remainder must be found by the employer and wage earner. The

<sup>4</sup> 100 sen=1 yen.

actuaries reckon on an average a total contribution of about 4 per cent of the basic wage, which would mean about 20 yen a year per person, or 42,000,000 yen a year for the whole insured population. Together with the State subsidy the total revenue amounts to 46,000,000 yen a year. The surplus revenue will no doubt be credited by the institutions to their contingencies reserve funds.

It is not anticipated that the financing of the scheme will cause any economic reactions prejudicial to the country.

### Benefits

**T**HE act provides for sickness, injury, maternity, and funeral benefits.

#### Sickness and Injury Benefits

In cases of sickness or injury medical treatment is granted and also a cash benefit amounting to 60 per cent of the worker's daily wage.

The medical treatment is not restricted to medical advice and medicine, but also includes surgical operations and dental work, together with home nursing and an ambulance when considered necessary. Moreover, the beneficiary may receive hospital treatment, but in such case there is a reduction in the cash benefit.

The health insurance societies are responsible for the organization of the medical service. It is they who appoint the doctors and dentists to whom their members may have recourse. Members are allowed to choose their medical attendants from among those so appointed. The provision of drugs is similarly arranged for by the appointment of chemists.

The grant of medical treatment commences from the day of the occurrence of the injury or sickness and continues for a maximum of 180 days in respect of the same illness, or for a total of 180 days in the course of a year in respect of several illnesses. The period has been limited to 180 days because health insurance is intended to give relief to sickness or injury of short duration, and statistics have confirmed that 98 per cent of cases of incapacity recover within 180 days. Cases of illness which last more than 180 days should be considered as outside the scope of sickness insurance and should be taken care of by a scheme of invalidity insurance. In European countries it is likewise common to set a similar limit of 26 weeks to the duration of medical treatment (Germany, Norway, Serb-Croat-Slovene Kingdom, Switzerland).

The Japanese practice in granting cash benefits follows the continental instead of the British system, that is, such benefit bears a definite relation to the wages of the beneficiary. The benefit is granted after a waiting period of three days.

As has been pointed out already, workmen's compensation is linked up with sickness insurance. The provisions of the health insurance act are modified where the sickness or injury is of industrial origin. For the first 26 weeks the sickness insurance institutions are responsible for caring for such cases and the three days' waiting period is dispensed with. Moreover, days of incapacity of industrial origin are disregarded for the purpose of reckoning the maximum period of 180 days in the course of a year. Thus the person who suffers from a general disease, recovers, and is immediately afterwards injured by an industrial accident, might draw benefit in an extreme case for two periods of as much as 180 days in the course of a year.

#### Maternity Benefits

The factory law as amended in 1923 provides a 4-week suspension of employment preceding confinement for women who wish to avail themselves of this rest period, and makes obligatory an absence of 6 weeks after confinement. The health insurance act provides a cash benefit of 60 per cent of their wages to insured women for the above-



mentioned 10-week period. These provisions come very close to the requirements of the Washington convention on this subject. A lump sum of 20 yen is also paid to meet the expenses of confinement, but this may be reduced to 10 yen if the insurance institution has the beneficiary cared for in a hospital or by a midwife.

There are certain precautionary measures governing both these maternity allowances to prevent women's availing themselves of such benefits before they have been insured a designated length of time—the completion of a probationary period of 180 days for the suspension-of-work benefit and of 90 days for the lump-sum allowance for expenses of confinement.

#### Funeral Benefits

When an insured worker dies a funeral benefit equivalent "to 20 days' wages but not less than 20 yen is payable to the surviving relatives who have incurred the expense of the funeral."

#### Administration

THE administration of Japanese health insurance is, in general, similar to the European procedure. According to the International Labor Review, "it is highly significant that a social institution of the magnitude and complexity of a compulsory sickness insurance scheme, dependent for its working not upon the mere force of imperative edicts, but upon the willing and effective participation of the parties concerned, and therefore upon a popular psychology habituated to democratic methods, should have been, as it were, bodily transplanted from Europe to the novel soil of the Far East."

The two types of institutions designed by the health insurance act to carry risks thereunder are (1) health insurance societies (establishment funds) and (2) health insurance offices (State territorial funds), both of which are supervised by a central department.

It is obligatory for the owners of mines or factories which employ 500 or more workers to form health insurance societies for their labor force. In mines and factories employing under 500 but more than 300, the employer may set up a society if the majority of his workers consent to such a scheme. Factories in which less than 300 persons are employed may unite to organize a society, the minimum membership being 300. Before a society can begin to function, its rules must be approved by the central department.

Persons formerly employed by an establishment who are voluntarily insured are included in the membership of the social insurance society of such establishment.

Employers and workers have equal representation on the board of directors and in the general meeting of each society. It is evidently the purpose of the law that these bodies shall be self-governing in every respect, the central department's functions being restricted to securing compliance with regulations and to paying the State subsidy.

A very substantial percentage of wage earners are employed in factories which are not sufficiently large to have a health insurance society. The formation of such a society is voluntary even in factories employing from 300 to 500 workers. Some 50 health insurance offices (State territorial funds) have, therefore, been set up for insurable persons not belonging to health insurance societies. There is to be

at least one of these offices in each prefecture and each office is made responsible for a definite territory. The administration of these agencies seems to be in the hands of public officials, neither the employers nor the workers being represented in the management of such offices.

The health insurance division of the Social Affairs Bureau is the central Government agency for the supervision of health insurance societies and for the administration of the health insurance offices.

The control of safety and hygiene in mines and factories, of workmen's compensation, and of health insurance is under a single minister—the Minister for Home Affairs. This concentration of control can not but promote prevention work and make for economy and efficiency in administration.

It is proposed ultimately, when sufficient funds are available, to carry on hygiene and safety propaganda, to establish dispensaries, and to provide other facilities in the interest of the health and safety of insured workers.

## LABOR LAWS AND COURT DECISIONS

### Union Rules Discriminating Against Outside Contractors

THIS title is presented for the third time in the Labor Review (see issues of July, 1924, pp. 215, 216; January, 1925, pp. 171-173), all the cases noted arising out of the same rule. The Brotherhood of Painters, Decorators, and Paperhangers of America in 1922 adopted a rule requiring employers from another city engaging in local work to pay the wage of the place of work or of the employer's home city, whichever is higher, and also to work the shorter number of hours prevailing by the rules in force in either locality.

The Supreme Court of the District of Columbia in April, 1924, declared this rule invalid as an interference or attempted interference with employment by the company, the contention that it was unjust, discriminatory, and in violation of public policy receiving such support by the court as an injunction against it would afford. (*Barker Painting Co. v. Brotherhood*, not reported.)

A similar position was adopted by the Court of Chancery of the State of New Jersey in a case involving, as did the above, a New York contractor undertaking work in a different locality. (*New Jersey Painting Co. v. Local No. 26*, 122 Atl. 622.) This case was later taken to the Court of Errors and Appeals of New Jersey, where the rule was sustained as one which an organization of workmen might adopt and enforce if in their judgment it would effect economic advantage (1924; 126 Atl. 399). In line with this position for support are unreported cases from the Superior Court of Rhode Island (*George A. Douglas & Bro. (Inc.) v. Clarence Mallette*), and the Court of Common Pleas of Philadelphia County, Pa. (*H. Newton Marshall Co. v. Brotherhood*). On the other hand, the Federal Court for the District of Connecticut found that the rule inflicted an unjustifiable injury and an injunction would lie against its enforcement. (*Hass v. Local Union No. 17* (1924), 300 Fed. 894.) The same position was adopted by a Federal court for the District of New Jersey. (*Barker Painting Co. v. Local No. 734*, not reported; ruling reversed, same case (1926), 12 Fed. (2d) 945.)

It will be noted that the Federal cases were in every instance before the lower courts. In a similar case before the District Court of the United States for the Eastern District of Pennsylvania an injunction was sought to restrain the Brotherhood from enforcing this rule against the Barker Painting Co. On the refusal of the court to issue this injunction, an appeal was taken to the circuit court of appeals, where the position of the court below was upheld. (*Barker Painting Co. v. Brotherhood of Painters, etc.* (1926), 15 Fed. (2d) 16.) Judge Woolley, who rendered the opinion, Judge Buffington dissenting, regarded the union as within its rights in laying down terms of employment, saying that "workers have a right, individually and collectively, to lay down terms on which they will sell their labor"; and so long as they act for their own interest and not for the purpose

of assailing others, and do it in a manner not in itself unlawful, the courts will not interfere. However, it was said that the decision below would be affirmed, "not because the respondents have shown that the rules are lawful, but, rather, because the complainant has failed to show that they are unlawful."

Judge Buffington, in his dissenting opinion, considered that the practical effect of the rules and their purpose was to stifle competition, with the result that it was not "a square deal between two competitors generally," while costs of construction were undoubtedly raised and public buildings and other improvements "hampered, if not indeed hindered," by reason of the lack of equality of competition.

It may be added that in the decision by the New Jersey Court of Errors and Appeals, three justices and two judges dissented from the majority opinion, one of the dissentors saying that "the place of residence of the contractor is not in any way germane to the wage scale he should be required to pay"; also that "it seems to me a curious condition, which, while denying to the sovereign States themselves this privilege of invalidating the equality rights of the citizens, should accord such right of invasion to the star chamber ex-parte committee" which adopted the rule to govern "all citizens of all the States."

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#### **Injury Arising Out of and in Course of Employment: Construction of Accident Insurance Policy Under Oregon Statute**

**A**N UNUSUAL case was recently decided by the United States Circuit Court of Appeals for the Ninth Circuit, involving a series of important questions. The case was that of a workman, William Brunson, employed by a lumber company in clearing land "on the side of a precipitous mountain." The law of the State of Oregon permits the employer to choose whether or not he will come under the provisions of the compensation law, certain rights of defense being abrogated in case of failure to elect. If election is made, the employer becomes a subscriber to the State compensation insurance fund, which assumes all responsibility for defending claims and paying such compensation as the industrial accident commission may award.

In this case the lumber company had rejected the law, but had taken insurance under a contract by which the insurance company agreed to pay such compensation benefits as the State law provides if the injured employee or his dependents would first give a release from all liability on account of the injury; the injured employee was also authorized to enforce this right. During the term of this contract the employee, while engaged as indicated, together with his fellow workmen, built a fire on the mountain side from brush and limbs, around which they gathered while eating lunch at the noon hour, the day being damp and cold. Brunson was seated on the side of the mountain above the fire, and had occasion to use his pocket knife to cut a small twig or bush which was in his way. While doing so he accidentally cut his leg, which bled quite freely. He took off his boot to examine the wound, and while replacing it, lost his balance, fell into the fire, and before being extricated, was severely burned. "Both hands were practically destroyed and are useless. His face

was deeply burned, leaving his lips, nostrils, and eye permanently distorted." The trial court found, in accordance with the representations of the plaintiff, that he was totally and permanently disabled from following any gainful occupation and that the injury was due to accident arising out of and in the course of the employment. An award in the terms of the compensation law was accordingly made against the company in the form of a judgment. From this it appealed, denying the two main findings of permanent total disability and injury arising out of and in the course of the employment.

The circuit court of appeals, construing the question, announced the status of the company writing insurance in accordance with the terms of the compensation act, saying that such a contract of insurance placed the company "in the same relation to the injured workman as the State, and by the same token [it] assumes the obligations and burdens of the employer." It was recognized that a causal relation must exist between the accident and the employment, and that if the injury was due to some inherent or congenital weakness of the employee, unknown to the employer, liability would not exist. So far as appeared from the evidence, however, there was nothing to indicate a congenital weakness or that the injury was not due to fainting caused by accident arising out of the employment. The question of disability was likewise briefly disposed of, the loss of the hands and the condition of the face as shown by the evidence, and "emphasized by the photo in evidence," being conclusive.

The main point involved was necessarily that of the relationship between the occupation and the injury. The work in which the men were engaged was "felling snags and clearing the land preparatory to it being burned over." The men were necessarily obliged to eat lunch, and apparently to carry it with them. The building of the fire was natural and justifiable, perhaps even necessary, as the day was damp and cold. The court found "no intervening relation or act to interrupt the continuity of conduct of the appellee in his engagement in felling snags and clearing the land. Cutting the shrub or twig with a jackknife was an act in harmony with and in the course of employment, in a very small way. There was no interrupting cause or exposure to new danger, no risk to danger from other agencies. It was at the place of and in line with his work. It is not material that the twig was little and cut with a jackknife, instead of a shrub or snag and cut with an ax. The relation of employer and employee was not suspended."

Citation is then made of a number of cases adduced to support the conclusion reached, some of them at least being fairly characterizable as border-line cases, as the case of a girl playing at lunch time, injured while riding on a truck drawn by a fellow-workman. (*Thomas v. Procter & Gamble Mfg. Co.* (1919), 104 Kans. 432, 179 Pac. 372; see *Bul. No. 290*, p. 417.) The court announced the rule that "legal technicalities and refinements should find no place here; when the purpose and intent to effectuate the beneficent influence occasioned by the provisions of the compensation law of Oregon, and this policy in its stead, is manifest, a broad and liberal construction should be given." (*Zurich General Accident & Liability Ins. Co. v. Brunson*, 15 Fed. (2d) p. 906.)

The judgment was therefore affirmed.

# INDUSTRIAL DISPUTES

## Strikes and Lockouts in the United States, January, 1927

THE strikes and lockouts in the United States beginning in the month of January, 1927, in so far as reports thereof have been received by the bureau, are shown in this article. Disputes involving fewer than six workers and those lasting less than one day have been omitted where information on this point is reported.

In presenting these figures, it is important to note that the bureau has no machinery for the prompt and full reporting of strikes and lockouts, but depends largely upon newspapers, trade journals, and labor periodicals for the preliminary reports of disputes. These preliminary reports are then followed up by correspondence, and any necessary revision is made. For the reasons mentioned, the data here presented do not pretend to be absolutely complete or fully accurate. It is believed, however, that practically all of the more significant strikes and lockouts are recorded, and that the information presented is sufficiently accurate to give a fair picture of the situation in the United States in the matter of strikes and lockouts.

The Bureau of Labor Statistics solicits the cooperation of employers, labor organizations, and other interested parties in making this compilation of industrial disputes as comprehensive and as accurate as possible.

### Strikes and Lockouts Beginning in January, 1927

THE table following shows the number of strikes and lockouts beginning in January, 1927, in comparison with November and December, 1926, and also the number of persons involved, to the extent that reports on this point have been received.

STRIKES AND LOCKOUTS BEGINNING IN NOVEMBER AND DECEMBER, 1926, AND JANUARY, 1927

Month	Number of strikes and lockouts <sup>1</sup>	Disputes in which number of employees directly involved is known <sup>1</sup>		
		Number of strikes and lockouts	Number of employees involved	Average number of employees per dispute
November, 1926.....	51	46	10,435	227
December, 1926.....	33	23	9,712	422
January, 1927 <sup>2</sup> .....	46	35	5,198	149

<sup>1</sup> Excluding those involving fewer than 6 persons.

<sup>2</sup> Data given are subject to revision.

### Classification of Strikes and Lockouts by Industries and by Number of Persons Involved

THE statement below shows the distribution of the reported strikes and lockouts beginning in January, 1927, by industries:

	Number of disputes
Building trades.....	9
Leather workers.....	2
Clothing industry.....	6
Mining, coal.....	8
Chauffeurs and teamsters.....	3
Textile industry.....	5
Miscellaneous.....	13
Total.....	46

So far as information is available, the disputes beginning in January, 1927, classified by number of workers directly involved, are as follows:

	Number of disputes
6 and under 20 workers.....	8
20 and under 100 workers.....	13
100 and under 500 workers.....	10
500 and under 1,000 workers.....	4
Total.....	35

#### Principal Strikes Beginning in January, 1927

**LIVE poultry workers, New York.**—The extensive poultry business of New York City was affected by a strike of about 750 poultry handlers, beginning January 3. Their demands included a wage increase of \$10 per week (from \$40), \$1.50 an hour for overtime, and regulation of the hours of employment so that workers who do little or nothing during the day will not be compelled to report during the night or early morning hours because of the irregularity of unloading trains. This strike was settled on January 10 on the basis of an 8-hour day, a wage of \$45 per week, and \$1 per hour for overtime.

#### Principal Strikes and Lockouts Continuing into January, 1927

**PAPER-BOX makers, New York.**—The strike of paper-box makers in New York City, which began on October 5, for a 44-hour week, wage increase, etc., has been abandoned, as reported in the press of February 11, 1927.

**Textile workers, New Jersey.**—The strike of woolen and worsted textile workers of Passaic and vicinity which began on January 25, 1926, is over, additional settlements having been reached with the Forstmann & Huffman Co. on February 14 and with the New Jersey Worsted Mills and the Gera Mills on February 16. These mills simply agree to reemploy the workers as rapidly as conditions will permit without discrimination on account of membership in legitimate organizations. These settlements were, therefore, less successful than those with the Passaic Worsted Spinning Co., the Botany Worsted Mills, the Garfield Worsted Mills, and the Dundee Textile Co.,

previously alluded to, as those settlements recognized the right of the workers to bargain collectively; that a closed shop would not be demanded; and that in the event of future trouble the workers will remain at work pending arbitration.

The strike against the remaining mill, the United Piece Dye Works, has also been called off, as reported in the press, in accordance with the decision of the strikers at a gathering in Lodi on the night of February 28. The union, it was said, had the verbal assurance of the mill officials that there would be no discrimination against any former workers because of union affiliation.

*Carpenters, California.*—The strike of carpenters in San Francisco and vicinity, which began April 1, 1926, virtually came to an end, according to press reports, on January 14 under conditions prevailing prior to the strike. This strike was against the open shop or so-called American plan, and the union found it impracticable to continue the struggle any longer. The number of strikers is not definitely known but was reported in the press at one time as 1,000.

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### Conciliation Work of the Department of Labor in January, 1927

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 31 labor disputes during January, 1927. These disputes affected a known total of 22,609 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 affected.

On February 1, 1927, there were 48 strikes before the department for settlement, and, in addition, 12 controversies which had not reached the strike stage. The total number of cases pending was 60.



## LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, JANUARY, 1927

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[545]

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Beginning	Ending	Directly	Indirectly
Quimby theaters, Fort Wayne, Ind.	Controversy	Film theaters	Asked increase in wages on institution of vaudeville.	Adjusted. Satisfactory agreement concluded.	1926 Dec. 9	1926 Dec. 31	45	55
School building, Fresno, Calif.	Strike	Building crafts	Nonunion labor	Unclassified. Settled by Builders' Exchange before arrival of commissioner.	Dec. 23	Dec. 27	20	-----
Optical workers, New York City	do	Optical	Asked 44-hour week and union recognition.	Pending	Nov. 15	-----	300	-----
Haddock Mining Co., Hazelton, Pa.	do	Mining	Unsatisfactory work in topping coal cars.	Adjusted. Returned; terms to be fixed by officials.	Dec. 24	Dec. 27	644	6
Granert & Rothchild, Waukeegan, Ill.	do	Clothing industry	Asked union recognition	Pending	Dec. 10	-----	125	-----
Pittsburgh Stove & Range Co., Pittsburgh, Pa.	Lockout	Metal polishing	Nonunion polishers employed.	Unclassified. Mediation not accepted.	July 1	1927 Jan. 27	3	-----
Street-car barns, Mount Vernon, N. Y.	Strike	Building	Jurisdiction of brick and plaster work.	Adjusted. Compromised on distribution of work.	Dec. 30	Jan. 18	52	10
Live-poultry companies, New York City.	do	Poultry handling	Wages and hours of labor	Adjusted. Granted 8-hour day, \$45 per week, and \$1 per hour overtime.	-----	Jan. 10	750	200
Bus drivers, Bayonne, N. J.	Threatened strike	Driving	Asked union recognition	Adjusted. Union recognition granted.	1927 Jan. 4	Jan. 20	50	10
Shamokin & Edgewood Railway Co., Shamokin, Pa.	Strike	Railway	Terms of new agreement; wages.	Adjusted. Drivers allowed increase, and seniority rights granted motor-men and conductors.	Jan. 28	Feb. 1	50	-----
Elm Woolen Mills (Inc.), Tilton, N. H.	do	Woolen textiles	Union dispute caused closing of mill. Open shop announced.	Pending	Jan. 26	-----	160	-----
Porto Rican American Cigar Co., San Juan, Porto Rico.	do	Cigar making	(1)	Adjusted. Terms not reported	Jan. 22	(1)	12,000	-----
Turner Construction Co., Philadelphia, Pa.	Controversy	Building trades	(1)	Pending	(1)	-----	(1)	-----
Ladies' garment workers, Paterson, N. J.	Strike	Garment making	Asked union shop and restoration of wage cuts.	do	Jan. 27	-----	350	250
Castleton Hotel, New Castle, Pa.	do	All building crafts	Jurisdiction of placing iron boilers.	Adjusted. Returned; work distributed as outlined by existing agreement.	Jan. 25	Jan. 31	55	15
Asbestos workers, Baltimore, Md.	do	Asbestos work	Asked 20 cents increase—\$1.25 per hour; 75 cents per hour for helpers.	Adjusted. Journeymen allowed \$1.25, improvers 85 cents, and helpers 50 cents per hour.	Jan. 1	Jan. 14	65	-----

1 Not reported.

CONCILIATION WORK IN JANUARY, 1927

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## LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, JANUARY, 1927—Con.

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Company or industry and location	Nature of controversies	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Begin-ning	Ending	Di-rectly	Indi-rectly
Carbondale Knitting Co., Carbondale, Pa.	Strike	Knitting	Discharge of forelady	Adjusted. Forelady reinstated	1927 Jan. 20	1927 Jan. 22	25	
Louis Abt Co., Chicago, Ill.	do	Sheet-metal work	Organization dispute followed by forced strike.	Adjusted. Returned without change.	Jan. 5	do	15	
Garfinkle & Ritter, Paterson, N. J.	do	Underwear makers	Wage cut	Pending	Jan. 19		150	
South Penn Colliery Co., North Scranton, Pa.	do	Mining	Working conditions	Adjusted. Returned; terms to be fixed later.	Jan. 13	Jan. 20	800	15
Salts Textile Co., Bridgeport, Conn.	do	Weaving	(1)	Adjusted. Returned; joint committee to fix wages.	Jan. 20	Jan. 24	400	
Installation of radio in A. I. U. Building, Columbus, Ohio.	Controversy	Electrical work	Alleged violation of union contract.	Adjusted. All union labor to be employed.	Jan. 7	Jan. 17	1	40
Clinton Pants Co., Boston, Mass.	Strike	Pants making	(1)	Pending	Jan. 15		7	
Kane Bros., contractors, Joliet, Ill.	do	Plumbing	Objection to pipe cutting machine.	Adjusted. Pipe under 2½ inches to be cut by hand.	Jan. 6	Jan. 20	25	10
Duryea Silk Mills, Duryea, Pa.	Threatened strike.	Textile	Alleged violation of contract.	Adjusted. Company agreed to live up to contract.	Jan. 13	Jan. 18	120	
Hebert Knitting Mills, Woonsocket, R. I.	Strike	Knitting	Alleged discrimination for union affiliation.	Unclassified. Mediation not desired; open-shop policy in effect.	Jan. 14	Jan. 14	14	
Gold Mark Knitting Co., Woonsocket, R. I.	Lockout	do	Alleged violation of agreement.	Unclassified. Agreement terminated by company on account of insufficient business.	(1)	Jan. 22	(1)	
Asbestos workers, Philadelphia, Pa.	Strike	Asbestos work	Asked 20 cents per hour increase.	Unclassified. Demands granted before arrival of commissioner.	Jan. 1	Jan. 10	210	
Waist and dress makers, Philadelphia, Pa.	Threatened strike.	Waist and dress making.	Asked 42-hour week, collective bargaining, minimum scale, etc.	Pending	Jan. 12		1,000	4,000
Newark Shoe Co., McSherrystown, Pa.	Strike	Shoe industry	(1)	do	Jan. 3		550	
H. L. Erhlich Co., Chicago, Ill.	do	Leather trade	Change of goods to be made.	do	do		12	
Total							17,998	4,611

1 Not reported.

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MONTHLY LABOR REVIEW

# WAGES AND HOURS OF LABOR

## Wages and Hours of Labor in the Boot and Shoe Industry, 1926

THE Bureau of Labor Statistics has recently completed the 1926 study of wages and hours of labor in the boot and shoe industry in the United States. Summary figures are presented in this article for full-time hours per week, average earnings per hour, and average full-time earnings per week. These averages are shown by occupation and sex in Table 2 for 29,925 males and 22,770 females in comparison with 1924 averages for 27,144 males and 18,316 females. The 1924 averages were taken from Bulletin No. 374. The 1926 data in much greater detail will be published later in bulletin form.

The 1926 survey, like those of former years, covered a representative group of establishments in each State where boot and shoe manufacturing is of material importance. These establishments were limited to those whose principal products were men's, women's, or children's shoes, made by the welt, McKay, or turn process. Data were not included from establishments whose main or entire product was nailed or pegged shoes, or specialties such as slippers, leggings, felt or rubber footwear, etc. Wherever possible the 1926 data were obtained from the same establishments as in 1924. In some instances, however, these plants were not operating, had moved to some other locality, or had ceased to be representative.

The data for 1926 were copied by agents of the bureau directly from the pay rolls or other records of 154 establishments in 14 States, as follows: Six establishments in Illinois, 6 in Maine, 8 in Maryland and Virginia combined, 40 in Massachusetts, 5 in Michigan, 4 in Minnesota, 11 in Missouri, 11 in New Hampshire, 4 in New Jersey, 25 in New York, 7 in Ohio, 15 in Pennsylvania, and 12 in Wisconsin. According to the 1923 United States Census of Manufactures, approximately 97 per cent of the wage earners in the industry were in these 14 States.

The 1926 data were taken from the July pay rolls of 20 establishments, the August pay rolls of 91 establishments, the September pay rolls of 33 establishments, and the October pay rolls of 10 establishments. The information, therefore, is representative of late summer and early autumn. Data for a few large establishments are for only a part of the total number of employees of such establishments, as the inclusion of the total number of wage earners in these establishments would have tended to impair the representative character of the averages for the States in which the establishments are located.

The first table of this summary shows by index numbers the changes in average full-time hours per week, in average earnings per hour, and in average full-time earnings per week for each of the years in which the bureau made studies of the industry from 1910 to 1926, inclusive. The averages for 1913 are used as the base or

100. The full-time hours per week decreased slightly over 11 per cent between 1913 and 1926, average earnings per hour increased 118 per cent, or considerably more than doubled, and average full-time earnings per week increased approximately 94 per cent during the same period. Because of the reduction in the average full-time hours per week, the average full-time earnings per week did not show the same proportion of increase as that for the average earnings per hour.

TABLE 1.—INDEX NUMBERS OF HOURS AND EARNINGS IN THE BOOT AND SHOE INDUSTRY IN SPECIFIED YEARS 1910 TO 1926

[1913=100]

Year	Index numbers of—		
	Full-time hours per week	Earnings per hours	Full-time earnings per week
1910.....	102.7	92.0	94.1
1911.....	102.4	93.9	95.8
1912.....	100.9	92.6	93.2
1913.....	100.0	100.0	100.0
1914.....	99.3	100.8	100.2
1916.....	99.1	107.5	106.6
1918.....	94.9	139.7	132.5
1920.....	88.2	232.0	203.7
1922.....	88.4	207.9	184.7
1924.....	88.9	214.1	190.9
1926.....	88.6	218.3	193.9

Table 2 shows for 1924 and 1926 average full-time hours per week, average earnings per hour, and average full-time earnings per week for each of the principal occupations in the industry and for the industry as a whole.

Referring to the totals at the end of the table, it is seen that the average full-time hours per week of males in all occupations combined increased from 48.9 in 1924 to 49.0 in 1926, those of females decreased from 49.0 to 48.5, and those of males and females combined decreased from 49.0 to 48.8.

The average earnings per hour of males in all occupations combined increased from 60.2 cents in 1924 to 62.2 cents in 1926, those of females from 39.4 to 39.8 cents, and those of males and females combined, or for the industry, from 51.6 to 52.6 cents.

Average full-time earnings per week of males increased from \$29.44 in 1924 to \$30.48 in 1926. Even though their hourly rate in 1926 was slightly higher than in 1924, the weekly earnings of females decreased from \$19.31 to \$19.30, due to a slight reduction in full-time hours. The earnings for the industry as a whole, increased from \$25.28 to \$25.67.

In 1924 the highest occupational average earnings per hour of males was 92.9 cents for Goodyear welters, and the lowest was 30.7 cents per hour for sock liners. For females the highest average was 51.9 cents for vampers, and the lowest was 25.3 cents for channel openers and closers. In 1926 the highest average earnings per hour for males was \$1.223 for binders, and the lowest was 25.1 cents per hour for table workers; the highest for females was 60.6 cents per hour for heel breasters, and the lowest was 29.8 cents for tack pullers.

TABLE 2.—AVERAGE HOURS AND EARNINGS IN THE BOOT AND SHOE INDUSTRY 1924 AND 1926, BY DEPARTMENT, OCCUPATION, AND SEX

Occupation	Sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
<i>Cutting department</i>							
Cutters, vamp and whole shoe, hand.....	Male.....	1924	88	2,009	48.4	\$0.838	\$40.56
	do.....	1926	108	2,129	48.9	.808	39.51
Cutters, vamp and whole shoe, machine.....	Female.....	1926	7	11	51.1	.461	23.56
	Male.....	1924	54	777	49.9	.687	34.28
Cutters, trimmings, hand.....	do.....	1926	54	782	49.4	.658	32.51
	Female.....	1924	4	45	53.2	.310	16.49
Cutters, trimmings, machine.....	do.....	1926	15	58	49.9	.501	25.00
	Male.....	1924	85	736	48.8	.485	23.67
Cutters, trimmings, machine.....	do.....	1926	95	837	49.3	.516	25.44
	Female.....	1924	6	29	52.1	.348	18.13
Cutters, trimmings, machine.....	do.....	1926	9	26	49.2	.404	19.88
	Male.....	1924	42	187	50.3	.400	20.12
Cutters, trimmings, machine.....	do.....	1926	47	173	49.8	.439	21.86
	Female.....	1924	10	47	49.9	.280	13.97
Skivers, uppers.....	do.....	1926	18	74	49.0	.378	18.52
	Male.....	1924	29	100	48.0	.619	29.71
Skivers, uppers.....	do.....	1926	37	96	48.4	.668	32.33
	Female.....	1924	89	474	49.0	.472	23.12
Cutters, linings, hand.....	do.....	1926	113	552	48.9	.486	23.77
	Male.....	1924	73	285	48.4	.585	28.31
Cutters, linings, machine.....	do.....	1926	85	373	49.1	.642	31.52
	Female.....	1926	6	42	48.9	.307	15.01
Cutters, linings, machine.....	Male.....	1924	48	133	49.2	.577	28.39
	do.....	1926	54	197	49.0	.523	25.63
Cutters, linings, machine.....	Female.....	1926	4	6	49.8	.354	17.63
	<i>Sole leather department</i>						
Cutters, outsole.....	Male.....	1924	53	269	48.4	.731	35.38
	do.....	1926	70	273	48.6	.716	34.80
Cutters, insole.....	Male.....	1924	38	298	48.4	.709	34.32
	do.....	1926	43	217	48.8	.640	31.23
Rounders, outsole or insole.....	Male.....	1924	80	153	49.1	.591	29.02
	do.....	1926	103	182	49.1	.629	30.88
Rounders, outsole or insole.....	Female.....	1924	3	5	49.1	.443	21.75
	do.....	1926	2	4	52.5	.592	31.08
Channelers, outsole or insole.....	Male.....	1924	88	207	49.1	.669	32.85
	do.....	1926	100	199	48.9	.709	34.67
Channelers, outsole or insole.....	Female.....	1926	3	4	51.5	.588	30.28
	Male.....	1924	33	265	48.3	.512	24.73
Cutters, top and heel lifts, machine.....	do.....	1926	32	106	48.5	.515	24.98
	Male.....	1924	14	21	50.1	.506	24.35
Heel builders, hand.....	do.....	1926	10	18	49.8	.483	24.05
	Female.....	1924	7	20	48.6	.477	23.18
Heel builders, hand.....	do.....	1926	8	19	50.0	.500	25.00
	Male.....	1924	24	70	48.6	.516	25.08
Heel builders, machine.....	do.....	1926	24	47	48.7	.527	25.66
	Female.....	1924	17	157	48.2	.442	21.30
Heel builders, machine.....	do.....	1926	18	93	48.2	.466	22.46
	<i>Fitting or stitching department</i>						
Stampers, linings or uppers.....	Male.....	1924	15	28	49.6	.407	20.19
	do.....	1926	15	34	49.2	.434	21.35
Stampers, linings or uppers.....	Female.....	1924	92	444	46.6	.380	17.71
	do.....	1926	121	670	48.8	.386	18.84
Cementers and doublers, hand and machine.....	Male.....	1924	12	24	47.8	.585	27.96
	do.....	1926	18	42	50.8	.374	19.00
Cementers and doublers, hand and machine.....	Female.....	1924	95	1,031	49.1	.328	16.10
	do.....	1926	118	1,426	49.3	.340	16.76
Folders, hand and machine.....	Male.....	1924	6	38	47.3	.709	33.54
	do.....	1926	10	61	45.0	.957	43.07
Folders, hand and machine.....	Female.....	1924	93	840	48.7	.420	20.45
	do.....	1926	120	1,002	48.7	.453	22.06
Perforators.....	Male.....	1924	16	42	48.4	.512	24.78
	do.....	1926	12	30	48.2	.614	29.59
Perforators.....	Female.....	1924	90	295	49.4	.430	21.24
	do.....	1926	102	372	49.5	.441	21.83
Tip stitchers.....	Male.....	1926	7	12	47.5	.557	26.46
	Female.....	1924	86	284	48.9	.475	23.23
Tip stitchers.....	do.....	1926	84	327	48.7	.480	23.38
	Male.....	1924	5	11	48.4	.496	24.00
Closers or seamers.....	do.....	1926	7	21	47.9	.633	30.32
	Female.....	1924	98	383	49.3	.397	19.57
Closers or seamers.....	do.....	1926	119	413	49.3	.403	19.87

TABLE 2.—AVERAGE HOURS AND EARNINGS IN THE BOOT AND SHOE INDUSTRY 1924 AND 1926, BY DEPARTMENT, OCCUPATION, AND SEX—Continued

Occupation	Sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
<i>Fitting or stitching department—Continued</i>							
Seam rubbers.....	Male.....	1924	15	20	48.4	\$0.407	\$19.70
	do.....	1926	14	21	48.1	.481	23.14
	Female.....	1924	53	88	47.8	.323	15.44
	do.....	1926	62	100	48.9	.341	16.67
Lining makers.....	Male.....	1926	8	22	46.7	.842	39.32
	Female.....	1924	100	1,012	49.3	.369	18.19
	do.....	1926	124	1,170	49.3	.413	20.36
Closers-on.....	Female.....	1924	22	63	49.5	.415	20.55
	do.....	1926	13	27	50.3	.336	16.90
Top stitchers.....	Male.....	1924	21	78	47.9	.675	32.33
	do.....	1926	27	90	47.1	.773	36.41
	Female.....	1924	97	1,184	49.3	.462	22.77
	do.....	1926	121	1,469	49.3	.486	23.96
Binders.....	Male.....	1926	13	30	45.7	1.223	55.89
	Female.....	1924	65	361	49.1	.478	23.47
	do.....	1926	88	461	49.2	.560	27.55
Button-hole makers.....	Female.....	1924	44	66	49.3	.380	18.73
	do.....	1926	65	110	49.1	.444	21.80
Button fasteners.....	Male.....	1926	2	2	49.0	.352	17.25
	Female.....	1924	38	68	49.4	.332	16.40
	do.....	1926	49	80	50.0	.389	19.45
Eyeleters.....	Male.....	1924	33	68	49.2	.578	28.44
	do.....	1926	39	74	49.0	.557	27.29
	Female.....	1924	69	119	49.1	.444	21.80
	do.....	1926	66	128	48.7	.473	23.04
Vampers.....	Male.....	1924	49	304	48.2	.707	34.08
	do.....	1926	63	294	48.2	.741	35.72
	Female.....	1924	99	1,053	49.4	.519	25.64
	do.....	1926	123	1,170	49.1	.531	26.07
Barrers.....	Male.....	1926	5	11	47.3	.635	30.04
	Female.....	1924	62	106	49.1	.393	19.30
	do.....	1926	57	96	49.5	.389	19.26
Tongue stitchers.....	Male.....	1926	4	8	50.3	.603	30.33
	Female.....	1924	62	159	49.0	.413	20.24
	do.....	1926	68	223	48.8	.401	19.57
Fancy stitchers.....	Male.....	1926	16	46	47.4	.763	36.17
	Female.....	1924	86	1,467	49.1	.451	22.14
	do.....	1926	112	2,398	49.4	.452	22.33
Backstay stitchers.....	Male.....	1926	5	10	48.0	.632	30.34
	Female.....	1924	67	267	49.2	.413	20.32
	do.....	1926	85	337	48.8	.433	21.13
Table workers.....	Male.....	1926	5	11	48.6	.251	12.20
	Female.....	1924	80	700	48.6	.302	14.68
	do.....	1926	98	893	48.4	.303	14.67
Lacers.....	Male.....	1924	7	13	48.0	.430	20.64
	do.....	1926	7	10	48.6	.356	17.30
	Female.....	1924	67	124	49.3	.399	19.67
	do.....	1926	72	112	48.9	.386	18.88
<i>Lasting department</i>							
Last pickers or sorters.....	Male.....	1924	85	262	48.3	.455	21.98
	do.....	1926	106	291	49.2	.491	24.16
Assemblers for pulling-over machine.....	Male.....	1924	81	421	49.3	.554	27.31
	do.....	1926	113	541	49.1	.596	29.26
	Female.....	1924	8	33	50.0	.399	19.95
	do.....	1926	9	36	49.6	.422	20.93
Pullers over, hand.....	Male.....	1924	14	50	49.3	.704	34.71
	do.....	1926	11	47	47.5	.828	39.33
Pullers over, machine.....	Male.....	1924	92	467	49.3	.737	36.34
	do.....	1926	121	576	49.2	.766	37.69
Side lasters, hand.....	Male.....	1924	40	388	48.1	.690	33.19
	do.....	1926	38	287	47.8	.740	35.37
Side lasters, machine.....	Male.....	1924	64	402	49.5	.617	30.54
	do.....	1926	93	616	49.5	.675	33.41
Bed machine operators.....	Male.....	1924	92	1,082	49.1	.692	33.98
	do.....	1926	121	1,279	49.1	.700	34.37
Hand method lasting-machine operators.....	Male.....	1924	12	97	48.5	.694	33.66
	do.....	1926	14	68	48.9	.700	34.23
Turn lasters, hand.....	Male.....	1924	31	496	48.2	.790	38.08
	do.....	1926	35	726	47.7	.870	41.50
Turn lasters, machine.....	Male.....	1924	7	26	48.5	.604	29.29
	do.....	1926	5	86	48.3	.835	40.33
Turn sewers.....	Male.....	1924	30	63	49.3	.810	40.38
	do.....	1926	28	66	48.9	.857	41.91

TABLE 2.—AVERAGE HOURS AND EARNINGS IN THE BOOT AND SHOE INDUSTRY 1924 AND 1926, BY DEPARTMENT, OCCUPATION, AND SEX—Continued

Occupation	Sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
<i>Lasting department—Continued</i>							
Tack pullers	Male	1924	79	331	48.9	\$0.436	\$21.32
	do	1926	98	321	49.3	.462	22.78
	Female	1924	2	7	50.0	.375	18.75
	do	1926	3	8	49.0	.298	14.60
<i>Bottoming department</i>							
Goodyear welters	Male	1924	76	336	48.7	.929	45.24
	do	1926	92	358	48.7	.938	45.68
Welt beaters and slashers	Male	1924	61	107	48.8	.533	25.26
	do	1926	80	147	48.8	.569	27.77
Bottom fillers, hand and machine	Male	1924	66	126	49.1	.511	25.09
	do	1926	82	158	49.2	.507	24.94
Sole cementers, hand and machine	Male	1924	59	110	49.0	.432	21.17
	do	1926	70	145	48.9	.456	22.30
	Female	1924	9	14	50.7	.373	18.91
	do	1926	6	9	48.4	.317	15.34
Sole layers, hand	Male	1924	9	26	51.6	.461	23.79
	do	1926	9	17	49.4	.650	32.11
Sole layers, machine	Male	1924	79	221	48.9	.616	30.12
	do	1926	98	267	49.1	.635	31.18
Rough rounders	Male	1924	76	212	48.7	.846	41.20
	do	1926	91	241	48.8	.825	40.26
Channel openers and channel closers	Male	1924	75	243	48.9	.480	23.47
	do	1926	90	303	49.4	.508	25.10
	Female	1924	4	10	50.8	.253	12.85
	do	1926	20	68	48.9	.444	21.71
Goodyear stitchers	Male	1924	79	505	48.8	.773	37.72
	do	1926	98	517	48.9	.776	37.95
McKay sewers	Male	1924	34	104	50.3	.644	32.39
	do	1926	51	159	50.1	.687	34.42
Stitch separators	Male	1924	48	91	49.1	.558	27.40
	do	1926	55	111	48.8	.528	25.77
Levelers	Male	1924	97	315	49.1	.597	29.31
	do	1926	119	345	49.4	.655	32.36
Heelers, leather	Male	1924	98	290	49.3	.768	37.86
	do	1926	102	319	49.1	.729	35.79
Heelers, wood	Male	1924	38	403	48.1	.690	33.19
	do	1926	73	713	48.8	.823	40.16
Heel trimmers or shavers	Male	1924	96	213	49.1	.793	38.94
	do	1926	103	234	49.2	.736	36.21
Heel breasters	Male	1924	79	131	48.9	.588	28.75
	do	1926	78	124	49.1	.631	30.98
	Female	1926	3	6	48.0	.606	29.09
Edge trimmers	Male	1924	102	686	49.1	.767	37.66
	do	1926	127	808	49.2	.785	38.62
Sluggers	Male	1924	26	32	48.2	.563	27.14
	do	1926	30	58	49.0	.582	28.52
<i>Finishing department</i>							
Buffers	Male	1924	99	361	49.4	.614	30.33
	do	1926	124	434	49.4	.640	31.62
Edge setters	Male	1924	102	681	49.1	.756	37.12
	do	1926	129	765	49.1	.766	37.61
Heel scourers	Male	1924	98	378	49.2	.621	30.55
	do	1926	104	342	49.2	.623	30.65
Heel burnishers	Male	1924	91	265	50.0	.584	29.20
	do	1926	104	275	49.3	.607	29.93
Brushers	Male	1924	80	303	49.2	.498	24.50
	do	1926	88	248	49.2	.450	22.14
	Female	1924	12	38	50.4	.445	22.43
	do	1926	18	46	50.1	.416	20.84
Shoe cleaners	Male	1924	38	115	48.8	.416	20.30
	do	1926	39	116	48.3	.526	25.41
	Female	1924	38	169	48.9	.342	16.72
	do	1926	29	66	48.6	.338	16.43
Last pullers	Male	1924	91	228	49.7	.471	23.41
	do	1926	112	275	49.5	.494	24.45
Treers	Male	1924	93	948	48.8	.624	30.45
	do	1926	114	1,088	49.2	.611	30.06
	Female	1924	31	184	48.8	.431	21.03
	do	1926	43	302	49.0	.419	20.53
Repairers (not cobblers)	Male	1924	48	102	48.9	.511	24.99
	do	1926	53	128	48.2	.594	28.63
	Female	1924	77	624	48.8	.403	19.67
	do	1926	110	925	49.0	.388	19.01

TABLE 2.—AVERAGE HOURS AND EARNINGS IN THE BOOT AND SHOE INDUSTRY  
1924 AND 1926, BY DEPARTMENT, OCCUPATION, AND SEX—Continued

Occupation	Sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
<i>Finishing department—Continued</i>							
Dressers.....	Male.....	1924	18	39	48.8	\$0.413	\$20.15
	do.....	1926	22	49	49.0	.428	20.97
	Female.....	1924	62	225	49.4	.366	18.08
Sock liners.....	do.....	1926	81	317	49.1	.377	18.51
	Male.....	1924	17	37	49.7	.307	15.26
	do.....	1926	17	30	50.1	.380	19.04
Lacers.....	Female.....	1924	84	225	49.0	.390	19.11
	do.....	1926	115	350	48.9	.378	18.48
	Male.....	1924	7	16	48.4	.344	16.65
Packers.....	do.....	1926	10	21	48.7	.351	17.09
	Female.....	1924	71	201	49.1	.368	18.07
	do.....	1926	86	194	48.9	.326	15.94
Other employees.....	Male.....	1924	17	37	48.9	.458	22.40
	do.....	1926	34	110	49.4	.433	21.39
	Female.....	1924	92	332	48.7	.360	17.53
All occupations.....	do.....	1926	112	387	48.7	.377	18.36
	Male.....	1924	105	9,262	48.8	.481	23.47
	do.....	1926	154	9,658	49.0	.497	24.35
All occupations.....	Female.....	1924	103	5,363	49.0	.350	17.15
	do.....	1926	132	6,185	48.6	.355	16.28
	Male.....	1924	106	27,144	48.9	.602	29.44
All occupations.....	do.....	1926	153	29,925	49.0	.622	30.48
	Female.....	1924	106	18,316	49.0	.394	19.31
	do.....	1926	133	22,770	48.5	.398	19.30
All occupations.....	Both.....	1924	106	45,460	49.0	.516	25.28
	do.....	1926	154	52,695	48.8	.526	25.67

Table 3 presents, for each State, average full-time hours per week, average earnings per hour, and average full-time weekly earnings in 15 of the most important occupations for which data are presented in Table 2. Of the 15 occupations shown here, 7 are presented for both sexes. These occupations cover 17 per cent of the males and 31 per cent of the females included in the 1926 study. The purpose of the table is to illustrate variations in hours and wages as between the several States. The full-time hours per week for male cutters, vamp and whole shoe, hand, range from 46.4 in New Jersey to 53.4 in Maine; the average earnings per hour for these employees range from 55.6 cents in Maine to 97.5 cents in Ohio; and the average full-time weekly earnings range from \$27.40 in Minnesota to \$48.65 in Ohio. Averages for other occupations in this table may be read in like manner.



TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 15 SPECIFIED OCCUPATIONS IN THE BOOT AND SHOE INDUSTRY, BY SEX AND STATE, 1926

State	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
	Cutters, vamp and whole shoe, hand, male					Skivers, upper, male				
Illinois.....	2	141	48.0	\$0.925	\$44.40					
Maine.....	6	151	53.4	.556	29.69	3	6	53.3	\$0.406	\$21.64
Maryland and Virginia.....	6	76	48.8	.615	30.01	4	6	49.3	.515	25.39
Massachusetts.....	27	658	48.2	.857	41.31	11	37	48.0	.694	33.31
Michigan.....	3	11	49.5	.657	32.52					
Minnesota.....	4	53	49.2	.557	27.40					
Missouri.....	4	103	48.0	.891	42.77					
New Hampshire.....	9	137	49.8	.676	33.66	3	6	48.7	.518	25.23
New Jersey.....	4	37	46.4	.763	35.40	1	(1)	(1)	(1)	(1)
New York.....	19	351	47.4	.948	44.94	10	29	46.4	.881	40.88
Ohio.....	4	116	49.9	.975	48.65					
Pennsylvania.....	11	180	50.4	.651	32.81	5	10	52.6	.357	18.78
Wisconsin.....	9	115	48.9	.753	36.82					
Total.....	108	2,129	48.9	.808	39.51	37	96	48.4	.668	32.33
	Skivers, upper, female					Cementers, and doublers, hand and machine, male				
Illinois.....	4	38	48.1	\$0.541	\$26.02					
Maine.....	6	23	53.0	.398	21.09	1	(1)	(1)	(1)	(1)
Maryland and Virginia.....	4	14	48.5	.429	20.81	1	(1)	(1)	(1)	(1)
Massachusetts.....	26	123	47.9	.598	28.64	2	6	49.3	\$0.363	\$17.90
Michigan.....	5	11	49.6	.290	14.38					
Minnesota.....	4	8	48.8	.565	27.57					
Missouri.....	7	68	49.6	.422	20.93	1	(1)	(1)	(1)	(1)
New Hampshire.....	8	42	48.8	.387	18.89	1	(1)	(1)	(1)	(1)
New Jersey.....	2	9	46.0	.452	20.79					
New York.....	19	86	48.1	.563	27.08	7	12	48.5	.618	29.97
Ohio.....	7	35	49.9	.453	22.60					
Pennsylvania.....	9	41	51.1	.407	20.80	4	5	51.3	.199	10.21
Wisconsin.....	12	54	48.6	.413	20.07	1	(1)	(1)	(1)	(1)
Total.....	113	552	48.9	.486	23.77	18	42	50.8	.374	19.00
	Cementers, and doublers, hand and machine, female					Lining makers (including lining closers, side and top facing stitchers), female				
Illinois.....	5	67	49.0	\$0.344	\$16.86	5	77	48.5	\$0.448	\$21.73
Maine.....	6	140	53.8	.274	14.74	6	117	53.7	.325	17.45
Maryland and Virginia.....	6	48	48.9	.214	10.46	5	29	49.0	.377	18.47
Massachusetts.....	25	320	48.0	.386	18.53	28	247	47.9	.504	24.14
Michigan.....	4	12	49.8	.245	12.20	4	7	49.7	.294	14.61
Minnesota.....	4	18	50.3	.346	17.40	4	10	49.8	.470	23.41
Missouri.....	7	138	48.9	.363	17.75	7	96	49.4	.342	16.89
New Hampshire.....	10	112	49.5	.331	16.38	10	83	49.4	.384	18.97
New Jersey.....	3	29	44.6	.472	21.05	4	20	46.8	.430	20.12
New York.....	22	237	48.6	.365	17.74	21	229	48.5	.445	21.58
Ohio.....	7	109	49.8	.347	17.28	7	56	49.7	.417	20.72
Pennsylvania.....	10	119	50.1	.265	13.28	11	135	50.8	.332	16.87
Wisconsin.....	9	77	49.2	.313	15.40	12	64	48.6	.423	20.56
Total.....	118	1,426	49.3	.340	16.76	124	1,170	49.3	.413	20.36

1 Data for only one establishment not shown here but included in total.

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 15 SPECIFIED OCCUPATIONS IN THE BOOT AND SHOE INDUSTRY, BY SEX AND STATE, 1926—Continued

State	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
	Top stitchers (including under-trimmers and barber trimmers), male					Top stitchers (including under-trimmers and barber trimmers), female				
Illinois.....	1	(1)	(1)	(1)	(1)	5	85	48.9	\$0.452	\$22.10
Maine.....						6	122	53.5	.379	20.28
Maryland and Virginia.....	5	13	49.5	\$0.473	\$23.41	4	39	48.5	.364	17.65
Massachusetts.....	7	15	48.3	.673	32.51	27	315	47.9	.603	28.88
Michigan.....						5	22	49.5	.357	17.67
Minnesota.....						4	18	49.7	.469	23.31
Missouri.....	1	(1)	(1)	(1)	(1)	7	161	49.4	.438	21.64
New Hampshire.....						10	145	49.8	.416	20.72
New Jersey.....						4	11	46.6	.490	22.83
New York.....	10	38	45.2	1.001	45.25	19	285	48.6	.497	24.15
Ohio.....						7	92	49.8	.596	29.68
Pennsylvania.....	3	20	48.0	.588	28.22	11	97	50.3	.423	21.28
Wisconsin.....						12	77	48.6	.518	25.17
Total.....	27	90	47.1	.773	36.41	121	1,469	49.3	.486	23.96
	Vampers, male					Vampers, female				
Illinois.....	2	6	48.0	\$0.890	\$42.72	5	102	48.5	\$0.556	\$26.97
Maine.....	5	14	53.7	.546	29.32	6	47	53.1	.503	26.71
Maryland and Virginia.....	4	15	49.9	.610	30.44	5	36	48.9	.440	21.52
Massachusetts.....	20	121	48.0	.709	34.03	27	214	47.9	.635	30.42
Michigan.....						5	18	49.9	.348	17.37
Minnesota.....	1	(1)	(1)	(1)	(1)	4	15	50.0	.518	25.90
Missouri.....	2	4	49.0	.545	26.71	7	130	49.4	.482	23.81
New Hampshire.....	7	23	49.8	.586	29.18	10	87	49.2	.505	24.85
New Jersey.....	2	6	45.5	.809	36.81	4	18	47.2	.607	28.65
New York.....	10	63	46.5	.903	41.99	20	240	48.6	.525	25.52
Ohio.....						7	82	49.9	.489	24.40
Pennsylvania.....	4	22	48.3	.917	44.29	11	107	51.3	.465	23.91
Wisconsin.....	6	19	48.8	.626	30.55	12	74	48.8	.570	27.82
Total.....	63	294	48.2	.741	35.72	123	1,170	49.1	.531	26.07
	Assemblers for pulling-over machine, male					Assemblers for pulling-over machine, female				
Illinois.....	4	39	48.3	\$0.687	\$33.18	2	11	50.0	\$0.370	\$18.50
Maine.....	6	26	53.2	.567	30.16	1	(1)	(1)	(1)	(1)
Maryland and Virginia.....	7	32	49.1	.442	21.70					
Massachusetts.....	22	121	48.2	.676	32.58	3	10	47.9	.429	20.55
Michigan.....	4	7	50.0	.420	21.00					
Minnesota.....	4	6	50.0	.614	30.70					
Missouri.....	7	92	49.5	.555	27.47					
New Hampshire.....	9	35	49.6	.560	27.78	1	(1)	(1)	(1)	(1)
New Jersey.....	4	12	45.4	.565	25.65					
New York.....	18	78	48.3	.625	30.19	2	11	50.0	.419	20.95
Ohio.....	7	35	49.9	.672	33.53					
Pennsylvania.....	11	29	51.4	.501	25.75					
Wisconsin.....	10	29	49.2	.541	26.62					
Total.....	113	541	49.1	.596	29.26	9	36	49.6	.422	20.93

<sup>1</sup> Data for only one establishment not shown here but included in total.

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 15 SPECIFIED OCCUPATIONS IN THE BOOT AND SHOE INDUSTRY, BY SEX AND STATE, 1926—Continued

State	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
	Bed machine operators, male					Turn lasters, hand (including first and second lasters), male				
Illinois.....	4	107	48.6	\$0.730	\$35.48	1	(1)	(1)	(1)	(1)
Maine.....	6	68	53.2	.592	31.49	1	(1)	(1)	(1)	(1)
Maryland and Virginia.....	7	46	48.6	.603	29.31	3	12	50.4	\$0.674	\$33.97
Massachusetts.....	26	315	48.2	.737	35.52	7	234	47.8	1.009	48.23
Michigan.....	5	19	49.7	.584	29.02	1	(1)	(1)	(1)	(1)
Minnesota.....	4	15	50.0	.685	34.25					
Missouri.....	7	188	49.5	.680	33.66					
New Hampshire.....	10	99	49.2	.632	31.09					
New Jersey.....	4	16	45.7	.750	34.28	1	(1)	(1)	(1)	(1)
New York.....	20	211	48.2	.715	36.46	12	235	46.8	.940	43.99
Ohio.....	6	63	50.0	.837	41.85	3	15	49.7	.696	34.59
Pennsylvania.....	11	54	51.5	.603	31.05	4	155	48.2	.728	35.09
Wisconsin.....	11	78	49.5	.732	36.23	2	40	46.8	.704	32.95
Total.....	121	1,279	49.1	.700	34.37	35	726	47.7	.870	41.50
	Goodyear stitchers, male					Edge trimmers, male				
Illinois.....	2	38	48.0	\$0.954	\$45.79	5	54	48.6	\$0.844	\$41.02
Maine.....	4	14	52.0	.538	27.98	6	47	53.4	.571	30.49
Maryland.....	7	22	48.6	.693	33.68	7	34	49.1	.672	33.00
Massachusetts.....	20	122	48.1	.825	39.68	28	197	48.1	.877	42.18
Michigan.....	4	7	49.7	.636	31.61	5	6	49.7	.810	40.26
Minnesota.....	3	5	48.0	.720	34.56	4	9	50.0	.598	29.90
Missouri.....	4	46	49.7	.678	33.70	7	87	49.4	.701	34.63
New Hampshire.....	6	41	48.5	.683	33.13	9	58	49.5	.719	35.59
New Jersey.....	3	6	46.0	.857	39.42	4	7	46.4	.886	41.11
New York.....	18	117	48.3	.821	39.65	23	162	48.3	.831	40.14
Ohio.....	6	27	49.9	.910	45.41	7	58	49.9	.807	40.26
Pennsylvania.....	11	36	51.4	.638	32.79	11	47	50.8	.689	35.00
Wisconsin.....	10	36	49.5	.738	36.53	11	42	49.6	.814	40.37
Total.....	98	517	48.9	.776	37.95	127	808	49.2	.785	38.62
	Edge setters, male					Treeers, hand and machine, male				
Illinois.....	5	57	48.5	\$0.772	\$37.44	5	26	49.0	\$0.565	\$27.69
Maine.....	6	46	53.4	.582	31.08	6	74	53.4	.470	25.10
Maryland and Virginia.....	7	29	49.0	.739	36.21	7	43	48.9	.516	25.23
Massachusetts.....	28	196	48.1	.848	40.79	28	346	48.2	.710	34.22
Michigan.....	5	5	49.6	.693	34.37	3	8	50.0	.533	26.65
Minnesota.....	4	9	49.3	.626	30.86	4	13	50.8	.463	23.52
Missouri.....	7	81	49.4	.696	34.38	6	150	49.6	.568	28.17
New Hampshire.....	10	47	49.5	.670	33.17	10	106	49.7	.568	28.23
New Jersey.....	4	10	46.3	.812	37.60	4	12	46.4	.773	35.87
New York.....	23	143	48.2	.806	38.85	18	174	47.9	.632	30.27
Ohio.....	7	55	49.9	.815	40.67	4	43	49.9	.517	25.80
Pennsylvania.....	11	49	50.3	.658	33.10	11	57	50.9	.514	26.16
Wisconsin.....	12	38	48.9	.808	39.51	8	36	48.9	.688	33.64
Total.....	129	765	49.1	.766	37.61	114	1,088	49.2	.611	30.06

\* Data for only one establishment not shown here but included in total.

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 15 SPECIFIED OCCUPATIONS IN THE BOOT AND SHOE INDUSTRY, BY SEX AND STATE, 1926—Continued

State	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
	Treers, hand and machine, female					Repairers (not cobblers) (including tip fixers and scourers), male				
Illinois.....	5	78	48.6	\$0.447	\$21.72	5	9	48.9	\$0.440	\$21.52
Maine.....	1	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)
Maryland and Virginia.....	1	(1)	(1)	(1)	(1)	2	3	50.2	.432	21.69
Massachusetts.....	4	35	48.0	.424	20.35	9	17	48.1	.575	27.66
Michigan.....	2	4	49.5	.331	16.38	2	2	50.0	.542	27.10
Minnesota.....	3	7	50.6	.386	19.53	1	(1)	(1)	(1)	(1)
Missouri.....	4	35	48.1	.395	19.00	2	4	48.5	.362	17.56
New Hampshire.....	1	(1)	(1)	(1)	(1)	1	(1)	(1)	(1)	(1)
New Jersey.....						3	6	46.0	.549	25.25
New York.....	9	43	49.8	.461	22.96	14	49	46.8	.708	33.13
Ohio.....	6	40	49.9	.439	21.91	1	(1)	(1)	(1)	(1)
Pennsylvania.....	2	2	52.0	.522	27.14	8	24	50.4	.543	27.37
Wisconsin.....	5	48	48.8	.345	16.84	4	8	48.6	.577	28.04
Total.....	43	302	49.0	.419	20.53	53	128	48.2	.594	28.63
	Repairers (not cobblers) (including tip fixers and scourers), female									
Illinois.....	5	102	49.0	\$0.350	\$17.15					
Maine.....	6	53	53.6	.362	19.40					
Maryland and Virginia.....	5	41	48.6	.294	14.29					
Massachusetts.....	27	233	47.9	.481	23.04					
Michigan.....	2	4	50.0	.268	13.40					
Minnesota.....	3	26	53.1	.246	13.06					
Missouri.....	7	103	49.0	.311	15.24					
New Hampshire.....	10	94	49.5	.396	19.60					
New Jersey.....	1	(1)	(1)	(1)	(1)					
New York.....	21	136	47.7	.419	19.99					
Ohio.....	7	29	49.9	.392	19.56					
Pennsylvania.....	7	51	49.3	.337	16.26					
Wisconsin.....	9	46	48.8	.345	16.84					
Total.....	110	925	49.0	.388	19.01					

<sup>1</sup> Data for only one establishment not shown here but included in total.

### Entrance Wage Rates for Common Labor, January 1, 1927

THE term common labor has many interpretations among different industries, and even among different localities or plants in the same industry. Many employers make a practice of increasing the rate of pay of a laborer after a stated length of service, provided a sufficient degree of fitness for the job has been developed; otherwise the employee is dropped. Owing to these difficulties in the way of securing comparable data as to wage rates for common labor, the Bureau of Labor Statistics has confined these statistics to entrance rates alone—that is, the data here presented are based on rates of pay per hour given unskilled adult male common laborers when first hired.

This survey is limited to 13 important industries, which require considerable numbers of common laborers. Some establishments have reported two rates—for example, one for the 10-hour day and one for the 8-hour day, or one for white and one for colored or Mexican workers; these distinctions have not been maintained in the tabulated data, although it is apparent that the lowest rates are shown

for those geographic divisions where there are large numbers of colored or Mexican workers, while the highest rates are shown for localities where an 8-hour day is more or less prevalent.

The industries included and the number of common laborers reported in each on January 1, 1927, are as follows:

Automobiles.....	7, 203
Brick, tile, and terra cotta.....	3, 141
Cement.....	1, 790
Electrical machinery, apparatus, and supplies.....	3, 499
Foundry and machine-shop products.....	10, 173
Iron and steel.....	20, 139
Leather.....	2, 579
Lumber (sawmills).....	11, 143
Paper and pulp.....	8, 473
Petroleum refining.....	3, 598
Slaughtering and meat packing.....	5, 927
Public utilities.....	10, 561
General contracting.....	28, 888
Total.....	117, 114

The number of common laborers reported in each geographic division is as follows:

New England.....	7, 121
Middle Atlantic.....	30, 627
East North Central.....	31, 833
West North Central.....	6, 726
South Atlantic.....	12, 825
East South Central.....	6, 552
West South Central.....	7, 146
Mountain.....	3, 901
Pacific.....	10, 383
Total.....	117, 114

The weighted average rate for the several industries combined is 43.2 cents, the lowest and highest rates reported being 15 cents and \$1.125, respectively. The 15 cent rate appears in the East South Central division of the brick, tile, and terra cotta industry, and in the South Atlantic division of the sawmill industry, while the \$1.125 rate is found in the Middle Atlantic division of general contracting.

The highest average rate in any of the industries, 49.8 cents, appears in general contracting, and the lowest average rate, 33.4 cents, appears in the sawmill industry.

The average rate for January 1, 1927, 43.2 cents, is slightly lower than the average rate of October 1, 1926, which was 43.4 cents. The average rate of July 1, 1926, was 42.8 cents.

By omitting the data for general contracting, which was first included in these compilations on July 1, 1926, average entrance rates for the periods studied are as follows:

	Cents
Jan. 1, 1926.....	40. 2
Apr. 1, 1926.....	40. 5
July 1, 1926.....	40. 9
Oct. 1, 1926.....	40. 9
Jan. 1, 1927.....	41. 0

The table following shows for each industry the high, low, and average rates in each geographic division and in the United States as a whole.

## HOURLY WAGE RATES PAID FOR COMMON LABOR, JANUARY 1, 1927

[The rates on which this table is based are entrance rates paid for adult male common labor]

Industry	United States	Geographic divisions								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Automobiles:	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Low .....	33.3	40.0	35.0	33.3	33.3	35.0	33.3	35.0	33.3	50.0
High .....	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	55.0
Average .....	45.6	42.7	46.1	46.1	35.0	46.1	46.1	46.1	46.1	53.2
Brick, tile, and terra cotta:										
Low .....	15.0	40.0	36.0	33.0	27.0	17.5	15.0	25.0	38.5	39.0
High .....	55.6	50.0	55.6	50.0	40.0	40.0	37.0	37.5	40.0	50.0
Average .....	40.2	44.1	49.9	39.1	31.7	29.9	24.9	28.3	39.5	41.1
Cement:										
Low .....	25.0	35.0	35.0	35.0	35.0	26.0	25.0	25.0	34.0	34.0
High .....	60.0	45.0	43.0	35.0	35.0	30.0	28.0	28.0	60.0	60.0
Average .....	39.6	43.9	40.2	35.0	35.0	29.0	27.0	27.0	50.7	50.7
Electrical machinery, apparatus, and supplies:										
Low .....	31.0	31.0	40.0	39.0	35.0	40.0	40.0	40.0	40.0	40.0
High .....	52.0	48.0	51.0	52.0	40.0	40.0	40.0	40.0	40.0	40.0
Average .....	43.0	45.2	41.4	43.9	37.5	40.0	40.0	40.0	40.0	40.0
Foundry and machine-shop products:										
Low .....	17.5	33.0	30.0	34.0	35.0	17.5	22.5	22.5	35.0	44.0
High .....	56.0	45.0	50.0	55.0	55.0	45.0	40.0	31.3	40.0	56.0
Average .....	38.7	39.4	41.8	41.1	40.3	27.3	30.6	27.7	38.3	50.6
Iron and steel:										
Low .....	20.0	35.0	30.0	35.0	35.0	20.0	23.5	41.0	42.5	42.5
High .....	50.0	45.0	50.0	50.0	35.0	44.0	31.0	49.0	50.0	50.0
Average .....	42.7	40.4	42.8	44.3	35.0	37.3	29.4	48.8	47.1	47.1
Leather:										
Low .....	22.5	47.9	33.3	36.0	22.5	27.5	44.0	48.8	48.8	44.0
High .....	54.2	54.2	50.0	50.0	40.0	33.0	48.8	48.8	48.8	48.8
Average .....	43.1	50.3	43.8	45.7	33.6	31.0	48.8	48.8	48.8	48.8
Lumber (sawmills):										
Low .....	15.0	33.3	30.0	30.0	32.5	15.0	16.5	20.0	40.0	34.0
High .....	62.5	34.0	40.0	62.5	35.0	35.0	25.0	33.0	45.0	57.5
Average .....	33.4	33.6	37.6	35.7	34.4	25.7	21.3	24.0	43.3	42.7
Paper and pulp:										
Low .....	22.5	38.0	35.0	35.0	35.0	30.0	22.5	40.0	40.0	40.0
High .....	56.3	50.0	50.0	54.0	40.0	38.3	33.5	56.3	56.3	56.3
Average .....	43.8	46.6	41.7	44.9	38.3	36.2	24.9	42.8	42.8	42.8
Petroleum refining:										
Low .....	30.0	46.0	50.0	50.0	30.0	30.0	55.0	62.0	62.0	62.0
High .....	62.0	53.0	50.0	50.0	50.0	50.0	50.0	55.0	62.0	62.0
Average .....	46.4	48.2	50.0	50.0	50.0	44.2	40.1	55.0	62.0	62.0
Slaughtering and meat packing:										
Low .....	37.5	38.0	40.0	37.5	39.0	40.0	37.5	40.0	40.0	40.0
High .....	50.0	50.0	45.0	45.0	43.0	40.0	37.5	40.0	45.0	45.0
Average .....	41.9	41.8	43.4	41.7	42.3	40.0	37.5	40.0	42.1	42.1
Public utilities: <sup>1</sup>										
Low .....	20.0	40.0	30.0	32.5	30.0	20.0	25.0	27.0	35.0	37.0
High .....	56.3	50.0	56.3	55.0	40.0	45.0	40.0	33.3	35.0	56.3
Average .....	39.4	45.4	43.2	46.3	33.7	34.7	27.9	29.6	35.0	50.1
General contracting: <sup>2</sup>										
Low .....	20.0	40.0	30.0	30.0	32.5	20.0	20.0	20.0	35.0	40.0
High .....	112.5	75.0	112.5	90.0	85.0	62.5	40.0	50.0	62.5	68.8
Average .....	49.8	60.0	57.3	63.3	43.4	34.4	28.8	35.4	46.9	48.6
All industries:										
Low .....	15.0	31.0	30.0	30.0	27.0	15.0	15.0	20.0	35.0	34.0
High .....	112.5	75.0	112.5	90.0	85.0	62.5	40.0	50.0	62.5	68.8
Average .....	43.2	47.4	46.8	47.6	41.0	33.0	27.0	32.4	46.3	46.2

<sup>1</sup> Including street railways, gas works, waterworks, and electric power and light plants.<sup>2</sup> Including building, highway, public works, and railroad construction.

## Wage Rates and Hours Established by Recent Agreements

## Brewery and Soft Drink Workers—Minneapolis and St. Paul

A COMMUNICATION recently received from the joint local executive board of the International Union of United Brewery, Flour, Cereal, and Soft Drink Workers of America, covering Minneapolis and St. Paul, stated that in those cities are 5 breweries, 3 malt houses, and 12 soft-drink plants employing about 400 union members, who are working under an agreement providing for 8 hours a day, 6 days a week, with time and a half overtime, at the following weekly rates: Brewery workers, \$30; brewery and soft-drink plant drivers, \$28; bottlers, \$27; and malt-house workers, \$33.

## Cloakmakers—New York City

THE wages in the agreement of the Industrial Council of Cloak, Suit, and Skirt Manufacturers (Inc.) with the International Ladies' Garment Workers' Union and the Joint Board of the Cloak, Skirt, Dress, and Reefer Makers' Union of the International Ladies' Garment Workers' Union, made November 13, 1926, were increased over the agreement of July 16, 1924, the scale in the two agreements being as follows:

	July 16, 1924	Nov. 13, 1926
Cloak and dress cutters.....	\$44. 00	\$52. 00
Skirt cutters.....	39. 50	-----
Sample makers.....	36. 00	45. 00
Jacket, coat, reefer, and dress operators.....	50. 00	55. 00
Skirt operators.....	48. 00	53. 00
Piece tailors.....	43. 00	48. 00
Reefer, jacket, and coat finishers.....	41. 00	46. 00
Jacket, coat, and reefer finishers' helpers.....	32. 00	38. 00
Jacket, coat, reefers, and dress upper pressers.....	42. 00	50. 00
Jacket, coat, reefer, and dress under pressers.....	37. 50	46. 00
Skirt upper pressers.....	38. 00	46. 00
Skirt under pressers.....	37. 50	46. 00
Skirt basters.....	25. 00	30. 00
Skirt finishers.....	20. 50	26. 00
Drapers.....	27. 50	32. 00
Begraders on skirts.....	32. 00	36. 00
Girls' begraders.....	27. 50	-----
Cloak bushelers.....	25. 00	-----
Bushelmen who also do pinning, marking and general work on garments.....	34. 00	40. 00
Examiners.....	-----	40. 00

Buttonhole makers were increased from \$1.30 to \$1.50 per hundred buttonholes.

## Firemen and Oilers—New York City

THE weekly wages and hours of firemen and oilers of Local No. 56, New York City, according to a letter received from the secretary of the local, September 16, 1926, are as follows:

	Weekly wages				Hours per week
	Firemen	Helpers	Coal passers	Oilers	
Cereal Beverage Co. Association.....	\$40.00	\$39.00	\$36.00	\$38.00	48
Other beverage companies.....	\$40.00-44.00	\$40.00-42.00	38.00	40.00	48
Newspaper Publishers Association.....	39.00			39.00	48
Theaters.....	17.00				
Coal companies.....	39.00				49½
City of New York.....	17.00			17.00	
Milk companies.....	37.00	36.50	36.00	37.00	48
Cold storage plants.....	39.00-\$41.00	37.50-40.50		36.00-38.00	48

<sup>1</sup> Per day.

## Longshoremen

ANNUAL agreements have been made by the United States Shipping Board, deepwater steamship lines, and contracting stevedores with longshoremen's unions at various ports along the Atlantic and gulf coasts. The hourly wages and working hours stated in the agreements so far received are as follows:

*Portland, Me.*—Handling general cargo, 80 cents (overtime, \$1.20); wet hides, 95 cents (overtime, \$1.35); bulk cargo and nitrate, 85 cents (overtime, \$1.25); sulphur in bulk, cement, and refrigerated cargo, 90 cents (overtime, \$1.30); grain in bulk, \$1.00 (overtime, \$1.50); work on wrecked and stranded vessels and fire jobs, \$1.60 (overtime, \$2.40).

*Boston.*—The rates are the same as in Portland, with additional items of 90 cents (overtime, \$1.30) for sugar and molasses and 85 cents (overtime, \$1.25) for coffee.

*New York City.*—For handling general cargo, wet hides, and bulk cargo, the rate is the same as in Portland; oils, \$1.00 (overtime, \$1.50); explosives down the bay, \$1.60 (overtime, \$2.40); cargo repairmen, 90 cents (overtime, \$1.50).

*Philadelphia.*—General cargo, bulk cargo, and bunkering of ships, 80 cents (overtime, \$1.20); wet hides, 95 cents (overtime, \$1.35); barrel oil, 95 cents (overtime, \$1.40); grain, 90 cents (overtime, \$1.30); explosives and damaged cargo, \$1.60 (overtime, \$2.40).

*Baltimore.*—General and bulk cargo (winchmen, deckmen, and leaders), 85 cents (overtime, \$1.25); holdmen and truckers, 80 cents (overtime, \$1.20); handling explosives down the bay, same classes, \$1.65 and \$1.60, respectively (overtime, \$2.45 and \$2.40); handling grain, \$1.00 (overtime, \$1.50).

*Pensacola.*—General cargo, 70 cents (overtime, \$1.05); bunker coal, 50 cents (overtime, 65 cents); creosote products, 80 cents (overtime, \$1.20); fertilizing products, 60 cents (overtime, 90 cents).

*Gulfport, Miss.*—General cargo, 70 cents; creosote products, 80 cents; holders and swingers, \$1.06; hookers on, 93 cents; timber loaders, 81 cents.



At the Texas cities, Houston, Galveston, Texas City, Bolivar, and Corpus Christi, the general rate is 80 cents per hour, \$1.20 for overtime, with 5 cents extra per hour for loading coal, 20 cents extra for loading grain, and 10 cents extra for handling many enumerated commodities.

For tallying and checking in Portland, New York, and Baltimore, the rates are \$6.00 a day and \$1.20 per hour for overtime.

Forty-four hours constitute a week's work in the Atlantic coast cities; 44 hours a week in April, May, June, and July, and 48 hours the rest of the year in the Texas cities; and 48 hours the year around in Pensacola and Gulfport.

The Portland agreement is effective October 20, 1926, to October 1, 1927; the Philadelphia agreement, January 1, 1927, to September 30, 1927; that for Gulfport, August 17, 1926, for one year; all others, October 1, 1926, for one year.

#### Machinists—Washington, D. C.

THE rate of pay for machinists or mechanics in Lodge No. 193, Washington, D. C., according to the agreement in effect January 3, 1927, is \$1 per hour, with double time for overtime, Sundays, and holidays.

#### Plasterers—Steubenville, Ohio

IN A letter received from the business agent of Plasterers' Local No. 375, Steubenville, Ohio, the statement is made that the plasterers in that district receive \$1.62 per hour and cement finishers \$1.37, with time and one-half after eight hours.

#### Plumbers—Jacksonville, Fla.

THE wages of plumbers and steam fitters in Jacksonville, Fla., connected with local No. 234, were, by agreement of October 1, 1926, increased from \$12 to \$13 per day until April 1, 1928, with double time for Sundays, holidays, and nightwork. The hours worked per day are eight.

#### Pressmen

**F**ORT Worth, Tex.—A five-year agreement was made by Pressmen's Local No. 47, Fort Worth, Tex., September 19, 1926, the rates for journeymen being \$7.25 per day or night and for men in charge, \$7.75. The hours are eight per day, with time and a half for overtime.

**M**obile, Ala.—Local No. 100 of the Pressmen's Union made a three-year agreement with the newspapers of Mobile, Ala., September 1, 1926, by which the man in charge is to receive \$7.83 $\frac{1}{3}$  for daywork and \$8 for nightwork; journeymen receive \$1 per day less. For overtime, time and a half is paid. Beginning January 1, 1928, the man in charge is to receive \$8.08 $\frac{1}{3}$  per day, \$8.25 per night; journeymen, \$1 per day less.

**O**akland, Calif.—The newspaper scale in the agreement of Pressmen's Local No. 125, made October 25, 1926, is: Foremen, day,

\$53.50; night, \$57.50; pressman in charge, \$8.25 per day or night; journeymen, \$7.91 $\frac{2}{3}$ . The hours are seven and one-half day and seven night.

#### Quarry Workers—Graniteville, Mo.

THE bill of prices agreed upon by Graniteville, Mo., quarry workers and quarry owners July 1, 1926, calls for eight hours, with overtime at the rate of time and a half. Derrickmen, hoisting engineers, steam drillers, air drillers, crusher feeders, grout breakers, wedgemen, compressors, firemen, carpenters, hand drillers, and powder handlers receive 50 cents per hour; steam drill helpers and unskilled labor, 37 $\frac{1}{2}$  cents; blacksmiths, 65 $\frac{1}{8}$  cents.

#### Ship Carpenters—Portland, Me.

SHIP Carpenter's Local No. 1506, of Portland, Me., made an agreement effective from November 23, 1926, to October 31, 1927, providing for 80 cents per hour, \$1.20 for overtime, and a 44-hour week.

#### Steamfitters—Providence, R. I.

THE rate for steam fitters employed by the master steam fitters of Providence, according to the agreement made between Local No. 476 and the employers, August 18, 1926, is \$1.25 per hour for journeymen and 75 cents per hour for helpers, double time after eight hours. The agreement is for three years and calls for a 44-hour week.

#### Stereotypers

CANTON, Ohio.—An agreement, effective from October 1, 1926, to January 1, 1930, was made by the Stereotypers' Local No. 130 at Canton, Ohio, whereby journeymen receive \$48 per week for the day shift and \$52.50 for the night shift. One dollar is to be added to each scale January 1, 1928, and another dollar January 1, 1929. Forty-eight hours constitute a week's work and time and a half is paid for overtime.

Knoxville, Tenn.—A three-year agreement, effective July 1, 1926, made by the Stereotypers' Local No. 128 with the newspapers of Knoxville, Tenn., provides for an 8-hour day and an overtime rate of time and a half. Journeymen receive \$6.50 per day and \$6.75 per night. Foremen receive \$7.58 $\frac{1}{3}$  per day on a six-day paper, \$8.33 per night on a seven-night paper, and \$7.98 $\frac{2}{3}$  per day on a six day and Saturday night paper.

#### Typographical Unions

ASHLAND, Ky.—A three-year book and job agreement, effective October 1, 1926, was made by the Ashland Typographical Union, Local No. 787, providing for a 44-hour week, with time and a half for overtime and a scale as follows:

Date of change	Day scale	Night scale
Oct. 1, 1926.....	\$42. 00	\$45. 00
Jan. 1, 1927.....	43. 00	46. 00
Apr. 1, 1927.....	43. 50	46. 50
Oct. 1, 1927.....	44. 00	47. 00
Apr. 1, 1928.....	44. 50	47. 50
Oct. 1, 1928.....	45. 00	48. 00

*Auburn, N. Y.*—A three-year agreement of the Auburn Typographical Union, No. 536, made August 1, 1926, contains the following scale of wages, with time and a half for overtime: Job, daywork, \$35.20; nightwork, \$38.20, both for a 44-hour week. Newspaper, daywork, \$38 for a 48-hour week; nightwork, \$41 for a 45-hour week. On August 1, 1927, all scales are to be advanced \$1.

*Bay City, Mich.*—The Bay City Typographical Union, Local No. 81, on October 10, 1926, made a two-year book and job agreement for a 44-hour week at 85 cents per hour for daywork and 90 cents for nightwork, with overtime at time and a half.

*Charleston, S. C.*—An agreement of Typographical Union, Local No. 43, made on June 5, 1926, with the newspapers of Charleston, contains the following scale:

	Night	Day
Foremen.....	\$54. 40	\$51. 50
Assistant foremen.....	49. 50	46. 50
Machinists.....	48. 50	45. 50
Printers.....	46. 50	43. 50

This scale is for a 48-hour week, with time and a half for overtime.

*Columbus, Ga.*—The newspaper scale of Typographical Union No. 220, in Columbus, Ga., for the year beginning November 1, 1926, is \$42 per week for daywork and \$44.40 for nightwork for hand compositors and machine operators, and \$44.40 for daywork and \$46.80 for nightwork for foremen and machinist-operators. This scale is for a 48-hour week, with time and a half for overtime.

*Dubuque, Iowa.*—According to the agreement of Typographical Union No. 22, of Dubuque, in effect October 1, 1926, day hands receive 85 cents per hour for 44 hours, book and job, and 48 hours, newspaper, and the night shift \$3 per week additional.

*New York City.*—According to a letter received from the secretary of Typographia No. 7 (German-American typographical union), of New York City, the three-year agreement made July 1, 1926, contains the following scale:

Job compositors, daywork, \$55; nightwork, \$58; newspaper compositors, daywork, \$53 after July 1, 1926, \$54 after July 1, 1927, \$55 after July 1, 1928; nightwork, \$55.50 after July 1, 1926, \$56.50 after July 1, 1927, \$57.50 after July 1, 1928. The day jobmen work 44 hours, night jobmen 40 hours, and newspaper men 37½ hours (5 days or nights of 7½ hours each). The overtime rate is time and a half, with double time for Sundays and holidays. A bonus of from one to three dollars a week is paid those who do translating from English into German.

*Norwich, N. Y.*—The agreement of Local Union No. 453, of Norwich, N. Y., effective for one year from September 12, 1926, provides

for a 44-hour week and time and a half for overtime, the daywork rates for hand men, job printers, and linotype operators being \$32 per week and for foremen, \$39. For nightwork \$2 per week additional is paid.

*Oklahoma City, Okla.*—The mailers' scale in a three-year agreement between the Oklahoma Publishing Co. and Mailers' Union No. 30, Oklahoma City, provides for a 48-hour week and time and a half for overtime, the scale being \$6.33 $\frac{1}{3}$  per day for daywork and \$6.58 $\frac{1}{3}$  for nightwork.

*Pittsburgh, Pa.*—A book and job agreement made between the Union Employing Printers' Association and Typographical Union, Local No. 7, at Pittsburgh, effective September 1, 1926, to March 31, 1928, calls for a 44-hour week, time and a half for overtime to midnight and double time thereafter and for work performed on Saturday after 4.30 p. m. and on holidays, and triple price for over 8 hours on holidays. The scale of wages is as follows:

	Day	Night
Book and job men-----	\$46.00	\$49.00
Proofreaders-----	46.00	49.00
Machine operators (linotype)-----	49.00	52.00
Monotype keyboard operators-----	47.00	50.00
Monotype casters-----	46.00	49.00
Linotype machine tenders-----	49.00	52.00

*Saginaw, Mich.*—The newspaper scale in the agreement of Local Union No. 50, Saginaw, effective March 1, 1926, provides for a 48-hour week, with overtime at the rate of time and a half. The scale is \$42 per week for daywork and \$44.40 for nightwork.

#### Upholsterers—Boston, Mass.

**A**N AGREEMENT of upholsterers in Boston was made September 1, 1926, requiring a minimum wage of \$1 per hour, \$35 per week for cushion fillers and sewing machine operators, and \$40 per week for hardwood finishers, overtime at the rate of time and a half to January 1, 1927, and double time thereafter.

#### Window Washers—Chicago

**T**HE agreement made between Window Washers Union No. 34 and the Mutual Window Cleaning Contractors Association of Chicago, October 20, 1926, calls for a 44-hour week, with a guaranty of 40 hours each week at \$1 per hour, with overtime at the rate of time and a half and double time for Sundays and holidays.

### Average Weekly Earnings in New York State Factories, 1914 to 1926

**T**HE following table, giving the average weekly earnings in New York State factories, 1914 to 1926, is taken from the January, 1927, issue of the Industrial Bulletin, Albany, N. Y. (p. 116):

AVERAGE WEEKLY EARNINGS IN REPRESENTATIVE NEW YORK STATE  
FACTORIES, 1914 TO 1926

[Includes all employees in both office and shop]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
January		\$12.44	\$13.53	\$15.28	\$16.81	\$23.03	\$26.52	\$27.61	\$24.43	\$26.21	\$27.81	\$28.30	\$29.05
February		12.41	13.77	15.31	17.66	22.07	26.47	26.77	24.17	25.87	27.73	27.96	28.61
March		12.65	13.96	15.79	18.71	22.20	27.87	26.97	24.57	26.92	28.16	28.45	29.04
April		12.54	14.15	15.50	19.25	22.11	27.80	26.20	24.15	27.00	27.70	27.67	28.85
May		12.74	14.24	16.08	19.91	22.23	28.45	25.86	24.59	27.63	27.56	28.07	28.69
June	\$12.70	12.81	14.41	16.20	20.44	22.51	28.77	25.71	24.91	27.87	27.21	27.94	28.99
July	12.54	12.66	14.11	16.17	20.78	23.10	28.49	25.26	24.77	27.54	27.06	27.98	28.81
August	12.53	12.89	14.44	16.44	21.23	23.85	28.71	25.43	25.10	27.12	27.40	28.16	28.86
September	12.48	12.86	14.87	16.97	22.31	24.83	28.73	25.07	25.71	27.41	28.05	28.33	29.31
October	12.26	13.30	14.95	17.33	22.34	24.41	28.93	24.53	25.61	27.72	27.53	28.57	29.35
November	12.32	13.45	15.16	17.69	21.60	25.37	28.70	24.32	26.04	27.64	27.66	28.67	29.15
December	12.56	13.49	15.51	17.71	23.18	26.32	28.35	24.91	26.39	27.98	28.25	29.05	29.47
Average	12.48	12.85	14.43	16.37	20.35	23.50	28.15	25.72	25.04	27.24	27.68	28.26	29.02

Prohibition of Night Work in Argentine Bakeries <sup>1</sup>

ON NOVEMBER 29, 1926, the President of Argentina signed a decree making effective a law (No. 11,338) which prohibits night work (i. e., work between 9. p. m. and 5 a. m.) in bakeries, confectioners' establishments, and similar undertakings throughout the territory of the Republic. The prohibition covers all work directly or indirectly involved in this industry.

The executive may authorize work during these hours, provided it is necessary to the public interest, under the following conditions: (1) When it is agreeable to both the employers' and workers' organizations; (2) when the workers are not employed for more than 8 hours a day and 48 hours a week; (3) when the sanitary conditions of the shops are entirely satisfactory.

A copy of this law must be posted in a conspicuous place on the premises of the establishments covered by this law.

Employers who violate its provisions are to be punished by a fine of 100 pesos <sup>2</sup> for each person unlawfully employed.

The regulative decree <sup>3</sup> of the above-mentioned law, which was drafted by the Minister of the Interior and signed by the President, confers on the National Labor Department of Buenos Aires the right to grant under specified circumstances exemptions from this law to establishments manufacturing bread by machinery. These may be granted exemption: (1) When, by reason of force majeure, a decrease in production occurs which hinders the regular working of the industry; (2) in emergencies in order to meet national needs; (3) in order to satisfy urgent requirements for public institutions such as almshouses, hospitals, or schools; (4) when, by reason of an accident, the working of the machinery is interrupted during the daytime.

Exemptions will be granted only on applications to the authorities, accompanied by a statement of the ground on which exemption is asked.

<sup>1</sup> Argentina. Museo Social Argentino, Boletin, Buenos Aires, November, 1926, p. 431, and report from the American Ambassador, Peter Jay, at Buenos Aires, dated Dec. 11, 1926.

<sup>2</sup> Peso at par=96.48 cents; average exchange rate in 1925=91.38 cents.

<sup>3</sup> Asociacion del Trabajo. Boletin de Servicios, Buenos Aires, Dec. 20, 1926, pp. 566, 567.

## Wages in Parahyba, Brazil, 1925 and 1926

THE following table showing the daily wage rates prevailing in various occupations in the State of Parahyba, Brazil, in 1925 and 1926, is taken from a report of United States consul, Digby Willson, dated December 12, 1926:

## DAILY WAGES IN SPECIFIED OCCUPATIONS IN PARAHYBA, BRAZIL, 1925 AND 1926

[Average exchange rate of milreis in 1925=12.2 cents and in 1926=14.44 cents]

Occupation	Dry-land work				Marsh work			
	1925		1926		1925		1926	
	Milreis	U. S. currency	Milreis	U. S. currency	Milreis	U. S. currency	Milreis	U. S. currency
Locksmiths.....	10 -15	\$1.22-1.83	10 -15	\$1.44-2.17	12 -15	\$1.46-1.83	12 -15	\$1.73-2.17
Sugar experts....	10 -12	1.22-1.46	10 -12	1.44-1.73	4 -5	.49-.61	4 -4.5	.58-.65
Molasses experts..	3.5-4	.43-.49	3 -3.5	.43-.51	3.5-4	.43-.49	3 -3.5	.43-.51
Joiners.....	9 -10	1.10-1.22	8 -10	1.16-1.44	8 -9	.98-1.10	7 -8	1.01-1.16
Carpenters.....	8 -12	.98-1.46	6 -10	.87-1.44	5 -9	.61-1.10	4 -8	.58-1.16
Engineers.....	5	.61	4	.58	5	.61	4	.58
Chauffeurs.....	5 -7	.61-.85	4 -6	.58-.87	5 -7	.61-.85	4 -6	.58-.87
Quarrymen.....	4 -6	.49-.73	3.5-4.5	.51-.65	4 -6	.49-.73	3.5-4.5	.51-.65
Plowmen.....	4 -5	.49-.61	4 -5	.58-.72	4 -5	.49-.61	4 -5	.58-.72
Distillers.....	3.5-4.5	.43-.55	3 -4	.43-.58	3.5-4.5	.43-.55	3 -4	.43-.58
Common laborers	3 -3.5	.37-.43	2.5-3	.36-.43	3.5-4	.43-.49	1.5-2.5	.22-.36

## TREND OF EMPLOYMENT

### Employment in Selected Manufacturing Industries in January, 1927

**E**MPLOYMENT in manufacturing industries decreased 1.7 per cent in January, 1927, as compared with December, 1926, and pay-roll totals decreased 4.9 per cent. Inventory taking and repairs customarily slow down factory operations in January and are accountable for a major part of the decreases in this instance.

Both employment and pay-roll totals were a little more than 3 per cent lower in January, 1927, than in January, 1926.

The Bureau of Labor Statistics' weighted index of employment for January, 1927, is 89.4, as compared with 90.9 for December, 1926, and 92.3 for January, 1926; the weighted index for pay-roll totals for January, 1927, is 90.9, as compared with 95.6 for December, 1926, and 93.9 for January, 1926.

This report is based upon returns from 10,318 establishments in 54 manufacturing industries, having in January 2,930,842 employees whose combined earnings in one week were \$74,489,880.

#### Comparison of Employment and Pay-Roll Totals in December, 1926, and January, 1927

**S**EVENTEEN of the fifty-four separate industries reported gains in employment in January, the increases being largely seasonal and for the most part small. The decreases in employment likewise were largely of a seasonal character. The changes in pay-roll totals in the main followed changes in employment, although they were mostly of considerably greater volume, as shown in the following statement relating to the largest industries included in this report:

Industry	Per cent of change, January, 1927, as compared with De- cember, 1926, in—	
	Employ- ment	Pay-roll totals
Iron and steel.....	-1.8	-6.3
Foundry and machine-shop products.....	-1.3	-4.4
Steam-railroad car building and repairing.....	-3.0	-7.9
Electrical machinery, apparatus, and supplies.....	-2.7	-4.1
Automobiles.....	+0.2	-15.7
Cotton goods.....	+0.7	-0.8
Lumber, sawmills.....	-5.2	-9.7
Boots and shoes.....	+1.7	+2.1

The leather group of industries in January, 1927, increased 1½ per cent both in employment and pay-roll totals, while the chemical and textile groups made smaller gains in employment and fell off somewhat in pay-roll totals. The remaining 9 groups show decreases in

both items, the outstanding losses being in the tobacco, the stone, clay, and glass, and the lumber groups.

Each of the nine geographic divisions showed decreases in employment and in pay-roll totals in January, 1927. The Pacific States reported a drop of 3.7 per cent in employment and a drop of 7.1 per cent in amount of pay roll. The New England States reported decreases of only 0.8 per cent and 1.6 per cent in the two items. The South Atlantic States showed the smallest loss in employment—0.7 per cent—and the East North Central States showed the greatest decrease in pay-roll totals—8.1 per cent.

For convenient reference the latest figures available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are given at the foot of Table 1 and Table 3.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN DECEMBER, 1926, AND JANUARY, 1927

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		Decem-ber, 1926	January, 1927		December, 1926	January, 1927	
<b>Food and kindred products</b> .....	<b>1,463</b>	<b>202,638</b>	<b>193,874</b>	( <sup>1</sup> )	<b>\$5,203,967</b>	<b>\$5,062,210</b>	( <sup>1</sup> )
Slaughtering and meat pack- ing.....	194	84,125	84,118	-( <sup>2</sup> )	2,202,017	2,172,699	-1.3
Confectionery.....	256	34,084	31,271	-8.3	648,880	580,936	-10.5
Ice cream.....	192	7,966	7,759	-2.6	261,646	256,148	-2.1
Flour.....	343	15,638	15,314	-2.1	404,789	398,678	-1.5
Baking.....	483	51,424	50,722	-1.4	1,396,991	1,368,436	-2.0
Sugar refining, cane.....	15	9,401	9,690	+3.1	289,644	285,313	-1.5
<b>Textiles and their products</b> .....	<b>1,836</b>	<b>606,202</b>	<b>609,331</b>	( <sup>1</sup> )	<b>12,095,352</b>	<b>11,834,114</b>	( <sup>1</sup> )
Cotton goods.....	461	230,849	232,386	+0.7	3,809,583	3,779,263	-0.8
Hosiery and knit goods.....	244	82,220	81,238	-1.2	1,583,644	1,524,715	-3.7
Silk goods.....	193	56,462	55,834	-1.1	1,198,541	1,149,385	-4.1
Woolen and worsted goods.....	199	66,474	66,147	-0.5	1,528,643	1,492,027	-2.4
Carpets and rugs.....	29	24,300	24,535	+1.0	676,155	656,666	-2.9
Dyeing and finishing textiles.....	95	30,562	30,409	-0.5	750,308	740,305	-1.3
Clothing, men's.....	283	60,779	60,088	-1.1	1,461,684	1,462,177	+( <sup>3</sup> )
Shirts and collars.....	88	20,864	20,679	-0.9	336,515	326,922	-2.9
Clothing, women's.....	176	17,294	18,241	+5.5	421,212	452,158	+7.3
Millinery and lace goods.....	68	10,398	10,774	+3.6	239,067	250,496	+4.8
<b>Iron and steel and their prod- ucts</b> .....	<b>1,793</b>	<b>681,273</b>	<b>669,717</b>	( <sup>1</sup> )	<b>20,508,067</b>	<b>19,400,541</b>	( <sup>1</sup> )
Iron and steel.....	212	277,937	272,958	-1.8	8,636,965	8,089,946	-6.3
Cast-iron pipe.....	48	14,366	14,112	-1.8	338,317	317,363	-6.2
Structural ironwork.....	155	23,439	22,391	-4.5	699,334	625,921	-10.5
Foundry and machine-shop products.....	961	246,677	243,535	-1.3	7,426,626	7,101,381	-4.4
Hardware.....	68	33,284	33,418	+0.4	856,953	842,577	-1.7
Machine tools.....	149	31,359	31,053	-1.0	989,842	948,573	-4.2
Steam fittings and steam and hot-water heating appara- tus.....	114	38,385	38,552	+0.4	1,111,892	1,106,619	-0.5
Stoves.....	86	15,826	13,698	-13.4	448,078	368,161	-17.8
<b>Lumber and its products</b> .....	<b>1,071</b>	<b>213,695</b>	<b>203,489</b>	( <sup>1</sup> )	<b>4,750,669</b>	<b>4,290,398</b>	( <sup>1</sup> )
Lumber, sawmills.....	453	121,801	115,525	-5.2	2,482,360	2,241,829	-9.7
Lumber, millwork.....	238	30,440	29,621	-2.7	759,768	696,302	-8.4
Furniture.....	380	61,454	58,343	-5.1	1,508,541	1,352,267	-10.4
<b>Leather and its products</b> .....	<b>349</b>	<b>120,645</b>	<b>123,390</b>	( <sup>1</sup> )	<b>2,723,179</b>	<b>2,766,741</b>	( <sup>1</sup> )
Leather.....	133	28,590	28,756	+0.6	728,240	730,294	+0.3
Boots and shoes.....	216	92,055	93,634	+1.7	1,994,939	2,036,447	+2.1
<b>Paper and printing</b> .....	<b>910</b>	<b>175,510</b>	<b>172,839</b>	( <sup>1</sup> )	<b>5,758,852</b>	<b>5,583,023</b>	( <sup>1</sup> )
Paper and pulp.....	213	56,103	56,084	-( <sup>2</sup> )	1,526,546	1,485,361	-2.7
Paper boxes.....	182	20,781	19,757	-4.9	467,365	433,271	-7.3
Printing, book and job.....	299	47,724	46,542	-2.5	1,678,150	1,642,990	-2.1
Printing, newspapers.....	216	50,902	50,456	-0.9	2,086,791	2,021,401	-3.1

Footnotes at end of table.



TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN DECEMBER, 1926, AND JANUARY, 1927—Continued

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		Decem-ber, 1926	January, 1927		December, 1926	January, 1927	
<b>Chemicals and allied products</b> .....	<b>290</b>	<b>91,358</b>	<b>92,336</b>	( <sup>1</sup> )	<b>2,711,253</b>	<b>2,655,614</b>	( <sup>1</sup> )
Chemicals.....	120	30,629	30,529	-0.3	834,095	818,130	-1.9
Fertilizers.....	109	7,831	8,493	+8.5	160,259	165,483	+3.3
Petroleum refining.....	61	52,898	53,314	+0.8	1,716,899	1,672,001	-2.6
<b>Stone, clay, and glass prod-ucts</b> .....	<b>685</b>	<b>109,743</b>	<b>101,639</b>	( <sup>1</sup> )	<b>2,919,361</b>	<b>2,559,488</b>	( <sup>1</sup> )
Cement.....	100	25,447	23,683	-6.9	732,637	643,763	-12.1
Brick, tile, and terra cotta.....	408	30,773	28,555	-7.2	795,758	699,924	-12.0
Pottery.....	55	12,291	11,902	-3.2	329,738	284,909	-13.6
Glass.....	122	41,232	37,499	-9.1	1,061,228	930,892	-12.3
<b>Metal products, other than iron and steel</b> .....	<b>217</b>	<b>51,816</b>	<b>51,019</b>	( <sup>1</sup> )	<b>1,404,579</b>	<b>1,342,353</b>	( <sup>1</sup> )
Stamped and enameled ware.....	66	18,345	17,754	-3.2	451,445	413,394	-8.4
Brass, bronze, and copper products.....	151	33,471	33,265	-0.6	953,134	928,959	-2.5
<b>Tobacco products</b> .....	<b>183</b>	<b>43,688</b>	<b>39,715</b>	( <sup>1</sup> )	<b>787,014</b>	<b>691,140</b>	( <sup>1</sup> )
Chewing and smoking tobacco and snuff.....	29	8,475	8,526	+0.6	130,129	141,113	+8.4
Cigars and cigarettes.....	154	35,213	31,189	-11.4	656,885	550,027	-16.3
<b>Vehicles for land transporta-tion</b> .....	<b>1,105</b>	<b>427,148</b>	<b>423,078</b>	( <sup>1</sup> )	<b>12,486,227</b>	<b>10,949,847</b>	( <sup>1</sup> )
Automobiles.....	192	262,268	262,662	+0.2	7,497,198	6,317,645	-15.7
Carriages and wagons.....	66	1,593	1,438	-9.7	36,150	33,072	-8.5
Car building and repairing, electric-railroad.....	386	26,244	26,033	-0.8	824,445	797,886	-3.2
Car building and repairing, steam-railroad.....	461	137,043	132,945	-3.0	4,128,434	3,801,244	-7.9
<b>Miscellaneous industries</b> .....	<b>396</b>	<b>258,195</b>	<b>255,415</b>	( <sup>1</sup> )	<b>7,592,689</b>	<b>7,354,411</b>	( <sup>1</sup> )
Agricultural implements.....	92	26,298	26,334	+0.1	764,448	735,196	-3.8
Electrical machinery, appa-ratus, and supplies.....	157	122,690	119,360	-2.7	3,594,725	3,446,642	-4.1
Pianos and organs.....	36	7,511	7,216	-3.9	237,740	204,481	-14.0
Rubber boots and shoes.....	10	17,931	18,177	+1.4	464,798	462,368	-0.5
Automobile tires.....	63	52,424	52,707	+0.5	1,594,828	1,581,315	-0.8
Shipbuilding, steel.....	38	31,341	31,621	+0.9	936,150	924,409	-1.3
<b>All industries</b> .....	<b>10,318</b>	<b>2,975,911</b>	<b>2,930,842</b>	( <sup>1</sup> )	<b>78,851,149</b>	<b>74,489,880</b>	( <sup>1</sup> )

*Recapitulation by Geographic Divisions*

GEOGRAPHIC DIVISION							
New England.....	1,359	425,942	422,632	-0.8	\$10,418,989	\$10,251,782	-1.6
Middle Atlantic.....	2,438	846,569	828,791	-2.1	24,311,261	23,218,328	-4.5
East North Central.....	2,716	931,804	921,982	-1.1	26,877,405	24,693,168	-8.1
West North Central.....	1,004	155,269	152,218	-2.0	3,869,825	3,700,624	-4.4
South Atlantic.....	1,078	278,768	276,856	-0.7	5,492,786	5,127,351	-5.1
East South Central.....	472	109,287	106,733	-2.3	2,179,222	2,056,022	-5.7
West South Central.....	467	89,870	88,135	-1.9	1,942,873	1,851,051	-4.7
Mountain.....	168	27,306	26,555	-2.8	762,828	723,207	-5.2
Pacific.....	616	111,096	106,940	-3.7	3,085,960	2,868,347	-7.1
<b>All divisions</b> .....	<b>10,318</b>	<b>2,975,911</b>	<b>2,930,842</b>	( <sup>1</sup> )	<b>78,851,149</b>	<b>74,489,880</b>	( <sup>1</sup> )

*Employment on Class I Railroads*

Nov. 15, 1926.....	1,811,016			<sup>3</sup> \$244,936,930
Dec. 15, 1926.....	1,756,933	-3.0		<sup>3</sup> 245,350,107

<sup>1</sup>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.

<sup>2</sup>Less than one-tenth of 1 per cent.

<sup>3</sup>Amount of pay roll for 1 month.

TABLE 2.—PER CENTS OF CHANGE, DECEMBER, 1926, TO JANUARY, 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, December, 1926, to January, 1927		Group	Per cent of change, December, 1926, to January, 1927	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products.....	-2.1	-2.6	Metal products, other than iron and steel.....	-1.3	-3.9
Textiles and their products.....	+0.5	-0.4	Tobacco products.....	-9.8	-13.6
Iron and steel and their products.....	-1.9	-5.6	Vehicles for land transportation.....	-1.7	-10.6
Lumber and its products.....	-4.8	-9.6	Miscellaneous industries.....	-0.3	-2.3
Leather and its products.....	+1.6	+1.5			
Paper and printing.....	-1.7	-3.1	All industries.....	-1.7	-4.9
Chemicals and allied products.....	+1.3	-1.5			
Stone, clay, and glass products.....	-7.3	-12.4			

#### Comparison of Employment and Pay-Roll Totals in January, 1927, and January, 1926

THE volume of employment in manufacturing establishments was 3.1 per cent smaller in January, 1927, than in January, 1926, and employees' total earnings in one week were 3.2 per cent less. The one outstanding improvement in conditions, over the year's interval, was in the steel shipbuilding industry, which reported a gain of 18.5 per cent in employment and a gain of 21.2 per cent in employees' earnings. Other industries showing improvement in both items were: Baking, cotton goods, women's clothing, structural ironwork, leather, printing, chemicals, petroleum refining, and chewing and smoking tobacco.

The most noticeable decreases in January, 1927, as compared with January, 1926, were in two vehicle industries—carriages and wagons and automobiles—the first having dropped one-third of its employees and the second one-fifth of its employees. Other large decreases were in agricultural implements, stamped and enameled ware, millwork, steam fittings, hardware, shirts, and silk goods.

The leather, paper, and chemical groups and the group of miscellaneous industries show marked improvement in this comparison, but all other groups show a condition less satisfactory than a year ago, especially the vehicle and tobacco groups.

The South Atlantic States show improved conditions both in employment and employees' earnings in January, 1927, as compared with the same month of 1926, and the West South Central, Mountain, and Pacific States all show greater pay-roll totals, but both items show decreases in all other instances of the geographical-division comparison, the East Central States, both North and South, showing the greatest declines.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS—JANUARY, 1927, WITH JANUARY, 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 January, 1927, compared with January, 1926		Industry	Per cent of change January, 1927, compared with January, 1926	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
<b>Food and kindred products.</b>	-2.0	-1.5	<b>Paper and printing—Contd.</b>		
Slaughtering and meat packing.....	-2.7	-2.7	Printing, book and job.....	+0.4	+4.5
Confectionery.....	-3.9	-0.5	Printing, newspapers.....	+4.8	+5.2
Ice cream.....	-4.2	-5.0	<b>Chemicals and allied products.</b>		
Flour.....	-3.1	-3.6	Chemicals.....	+0.3	+1.7
Baking.....	+1.1	+1.5	Chemicals.....	+0.8	+4.7
Sugar refining, cane.....	-9.6	-7.9	Fertilizers.....	-9.7	-6.9
<b>Textiles and their products.</b>	-1.9	-2.2	Petroleum refining.....	+4.4	+0.8
Cotton goods.....	+0.7	+0.6	<b>Stone, clay, and glass products.</b>		
Hosiery and knit goods.....	-2.9	+1.1	Stone.....	-4.4	-6.0
Silk goods.....	-8.4	-11.3	Cement.....	-5.1	-3.5
Woolen and worsted goods.....	-1.3	+0.4	Brick, tile, and terra cotta.....	-5.0	-6.4
Carpets and rugs.....	-4.9	-3.9	Pottery.....	+0.9	-3.8
Dyeing and finishing textiles.....	-3.2	-2.9	Glass.....	-5.7	-7.4
Clothing, men's.....	-3.2	-4.4	<b>Metal products, other than iron and steel.</b>		
Shirts and collars.....	-9.4	-13.6	Stamped and enameled ware.....	-7.8	-9.3
Clothing, women's.....	+4.7	+1.0	Brass, bronze, and copper products.....	-4.1	-5.6
Millinery and lace goods.....	-8.6	-8.4	<b>Tobacco products.</b>		
<b>Iron and steel and their products.</b>	-2.7	-4.1	Chewing and smoking tobacco and snuff.....	+2.2	+7.8
Iron and steel.....	-5.5	-7.5	Cigars and cigarettes.....	-10.0	-13.9
Cast-iron pipe.....	-4.3	-12.5	<b>Vehicles for land transportation.</b>		
Structural ironwork.....	+2.5	+4.7	Automobiles.....	-12.4	-14.4
Foundry and machine-shop products.....	+0.2	-0.5	Carriages and wagons.....	-19.9	-30.9
Hardware.....	-9.9	-9.0	Car building and repairing, electric-railroad.....	-32.8	-25.5
Machine tools.....	+0.7	-0.4	Car building and repairing, steam-railroad.....	-1.3	+0.8
Steam fittings and steam and hot-water heating apparatus.....	-11.8	-12.9	<b>Miscellaneous industries.</b>		
Stoves.....	-4.8	-6.1	Agricultural implements.....	+3.8	+6.8
<b>Lumber and its products.</b>	-5.8	-4.2	Electrical machinery, apparatus, and supplies.....	-11.6	-13.3
Lumber, sawmills.....	-5.7	-4.0	Pianos and organs.....	-3.2	-1.9
Lumber, millwork.....	-10.7	-10.8	Rubber boots and shoes.....	-5.3	-5.2
Furniture.....	-3.5	-0.7	Rubber boots and shoes.....	-3.5	-1.7
<b>Leather and its products.</b>	+0.7	+0.5	Automobile tires.....	-9.1	-8.9
Leather.....	+0.4	+1.9	Shipbuilding, steel.....	+18.5	+21.2
Boots and shoes.....	+0.7	-0.1	<b>All industries</b> .....	-3.1	-3.2
<b>Paper and printing.</b>	+1.1	+2.5			
Paper and pulp.....	-0.7	-1.9			
Paper boxes.....	-2.4	-2.1			

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION		GEOGRAPHIC DIVISION—contd.			
New England.....	-3.7	-5.0	West South Central.....	-0.5	+1.5
Middle Atlantic.....	-4.9	-4.3	Mountain.....	-2.3	+0.3
East North Central.....	-8.0	-11.0	Pacific.....	-1.1	+1.1
West North Central.....	-3.2	-4.3	<b>All divisions</b> .....	-3.1	-3.2
South Atlantic.....	+0.7	+0.1			
East South Central.....	-7.7	-7.7			

Employment on Class I Railroads

Month and year	Number on pay roll	Per cent of change	Amount of pay roll	Per cent of change
Dec. 15, 1925.....	1,736,548		<sup>1</sup> \$237,405,384	
Dec. 15, 1926.....	1,756,933	+1.2	<sup>1</sup> 245,350,107	+3.3

<sup>1</sup> Amount of pay roll for one month.

## Per Capita Earnings

PER CAPITA earnings in the 54 manufacturing industries combined were 3 per cent lower in January, 1927, than in December, 1926. The 9 increases, among the separate industries, were all small, except one of 7.8 per cent in chewing and smoking tobacco. Among the 45 decreases 3 were of noticeable size—15.9 per cent, in the automobile industry; 10.8 per cent, in the pottery industry; and 10.5 per cent, in the piano and organ industry.

Per capita earnings in January, 1927, were unchanged as compared with January, 1926, the increases and decreases being almost equal. There was no change in the automobile-tire industry, while there was a decrease of 14.1 per cent in the automobile industry, and an increase of 11.1 per cent in the carriage and wagon industry. All other increases and decreases were considerably smaller.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS, JANUARY, 1927, WITH DECEMBER, 1926, AND JANUARY, 1926

Industry	Per cent of change January, 1927, compared with—		Industry	Per cent of change January, 1927, compared with—	
	December, 1926	January, 1926		December, 1926	January, 1926
Chewing and smoking tobacco and snuff.....	+7.8	+5.5	Confectionery.....	-2.4	+3.4
Clothing, women's.....	+1.8	-3.5	Hosiery and knit goods.....	-2.5	+4.3
Carriages and wagons.....	+1.4	+11.1	Paper boxes.....	-2.5	+0.3
Clothing, men's.....	+1.2	-0.7	Paper and pulp.....	-2.7	-1.1
Millinery and lace goods.....	+1.1	+0.4	Silk goods.....	-3.0	-3.1
Flour.....	+0.6	-0.3	Foundry and machine-shop products.....	-3.2	-0.8
Ice cream.....	+0.5	-1.0	Machine tools.....	-3.2	-0.7
Boots and shoes.....	+0.4	-1.0	Petroleum refining.....	-3.4	-3.5
Printing, book and job.....	+0.4	+4.3	Glass.....	-3.6	-2.1
Leather.....	-0.3	+1.3	Carpets and rugs.....	-3.8	-0.1
Baking.....	-0.7	+0.2	Agricultural implements.....	-4.0	-2.1
Dyeing and finishing textiles.....	-0.9	+0.1	Sugar refining, cane.....	-4.4	+2.0
Steam fittings and steam and hot-water heating apparatus.....	-0.9	-1.3	Cast-iron pipe.....	-4.5	-8.2
Slaughtering and meat packing.....	-1.3	+0.4	Iron and steel.....	-4.6	-2.2
Automobile tires.....	-1.4	( <sup>1</sup> )	Fertilizers.....	-4.8	+2.9
Electrical machinery, apparatus, and supplies.....	-1.4	+1.5	Lumber, sawmills.....	-4.8	+1.9
Cotton goods.....	-1.5	-0.2	Car building and repairing, steam-railroad.....	-5.1	+4.5
Chemicals.....	-1.6	+3.8	Stoves.....	-5.1	-1.2
Brass, bronze, and copper products.....	-1.9	-1.5	Brick, tile, and terra cotta.....	-5.2	-1.3
Rubber boots and shoes.....	-1.9	+1.8	Cigars and cigarettes.....	-5.4	-4.7
Woolen and worsted goods.....	-1.9	+1.9	Stamped and enameled ware.....	-5.4	-4.9
Shirts and collars.....	-2.0	-5.1	Cement.....	-5.6	+1.6
Hardware.....	-2.1	+0.8	Furniture.....	-5.6	+0.6
Shipbuilding, steel.....	-2.1	+2.3	Lumber, millwork.....	-5.8	-0.1
Printing, newspapers.....	-2.3	+0.7	Structural ironwork.....	-6.3	+2.0
Car building and repairing, electric-railroad.....	-2.4	+2.3	Pianos and organs.....	-10.5	-0.1
			Pottery.....	-10.8	-4.8
			Automobiles.....	-15.9	-14.1

<sup>1</sup>No change.

## Wage Changes

WAGE-RATE increases were reported for the month ending January 15 by 77 establishments, in 26 industries, as giving an average increase of 5.2 per cent to 4,787 employees; wage-rate decreases were reported by 12 establishments, in 7 industries, averaging 5.5 per cent to 2,214 employees.

TABLE 5.—WAGE ADJUSTMENT OCCURRING BETWEEN DECEMBER 15, 1926, AND JANUARY 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							
Slaughtering and meat packing.....	194	2	5 - 6	6.0	166	9	(1)
Ice cream.....	192	2	10	10.0	6	22	(1)
Baking.....	483	1	11	11.0	16	13	(1)
Hosiery and knit goods.....	244	2	4 - 11	6.1	37	5	(1)
Silk goods.....	193	2	4 - 10	9.2	169	23	(1)
Woolen and worsted goods.....	199	2	10	10.0	280	52	(1)
Shirts and collars.....	88	1	10	10.0	10	5	(1)
Clothing, women's.....	176	3	6 - 12	11.1	144	58	1
Millinery and lace goods.....	68	1	7	7.0	10	11	(1)
Structural ironwork.....	155	1	12.5	12.5	9	38	(1)
Foundry and machine-shop products.....	961	12	4 - 10	7.4	198	11	(1)
Hardware.....	65	1	1	1.0	399	100	1
Machine tools.....	149	1	7	7.0	4	10	(1)
Steam fittings and steam and hot-water heating apparatus.....	114	3	10	10.0	22	9	(1)
Lumber millwork.....	238	4	5 - 12	6.0	275	41	1
Furniture.....	380	3	6.2 - 7.5	6.6	36	9	(1)
Leather.....	133	4	3.5 - 10	5.0	278	41	1
Paper boxes.....	182	2	9 - 10	9.8	11	14	(1)
Printing, book and job.....	299	9	3 - 11	5.6	321	24	1
Printing, newspapers.....	216	6	2 - 8	3.7	562	24	1
Chemicals.....	120	1	10	10.0	77	100	(1)
Stamps and enameled ware.....	66	1	8.8	8.8	5	23	(1)
Cigars and cigarettes.....	154	1	1.5	1.5	21	91	(1)
Automobiles.....	192	2	5 - 7	6.4	90	6	(1)
Car building and repairing, electric-railroad.....	386	4	2 - 9	5.0	264	82	1
Car building and repairing, steam-railroad.....	461	6	2 - 4.6	3.8	1,377	36	1
Decreases							
Cotton goods.....	461	3	3 - 10	3.2	1,361	76	1
Hosiery and knit goods.....	244	1	7	7.0	15	43	(1)
Lumber, sawmills.....	453	4	5 - 16	8.7	436	75	(1)
Furniture.....	380	2	8	8.0	231	75	(1)
Fertilizers.....	109	1	5	5.0	45	80	1
Brick, tile, and terra-cotta.....	408	2	10 - 12.5	12.4	91	89	(1)
Automobile tires.....	63	1	15	15.0	35	69	(1)

<sup>1</sup> Less than one-half of 1 per cent.

## Indexes of Employment and Pay-Roll Totals in Manufacturing Industries

INDEX numbers for January, 1927, and for December and January 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 January, 1927, is 89.4, this number being 1.7 per cent lower than the index for December, 1926, and 3.1 per cent lower than the index for January, 1926. The general index of pay-roll totals for January, 1927, is 90.9, this number being 4.9 per cent lower than the index for December, 1926, and 3.2 per cent lower than the index for January, 1926.

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY AND DECEMBER, 1926, AND JANUARY, 1927

[Monthly average, 1923=100]

Industry	Employment			Pay-roll totals		
	January, 1926	December, 1926	January, 1927	January, 1926	December, 1926	January, 1927
<b>General index</b> .....	<b>92.3</b>	<b>90.9</b>	<b>89.4</b>	<b>93.9</b>	<b>95.6</b>	<b>99.9</b>
<b>Food and kindred products</b> .....	<b>90.3</b>	<b>90.4</b>	<b>88.5</b>	<b>94.1</b>	<b>95.2</b>	<b>92.7</b>
Slaughtering and meat packing.....	86.7	84.4	84.4	90.1	88.9	87.7
Confectionery.....	86.4	90.5	83.0	92.0	102.2	91.5
Ice cream.....	83.8	82.4	80.3	90.6	87.9	86.1
Flour.....	88.9	87.9	86.1	91.2	89.2	87.9
Baking.....	97.6	100.1	98.7	102.0	105.6	103.5
Sugar refining, cane.....	91.9	80.6	83.1	90.8	84.9	83.6
<b>Textiles and their products</b> .....	<b>89.8</b>	<b>87.7</b>	<b>88.1</b>	<b>90.8</b>	<b>89.2</b>	<b>88.8</b>
Cotton goods.....	85.6	85.6	86.2	85.4	86.6	85.9
Hosiery and knit goods.....	100.6	93.8	97.7	108.2	113.6	109.4
Silk goods.....	108.0	99.9	98.9	114.9	106.2	101.9
Woolen and worsted goods.....	86.1	85.4	85.0	84.7	87.1	85.0
Carpets and rugs.....	95.8	90.2	91.1	94.4	93.4	90.7
Dyeing and finishing textiles.....	101.4	98.7	98.2	104.6	102.9	101.6
Clothing, men's.....	86.6	84.7	83.8	82.5	78.9	78.9
Shirts and collars.....	89.8	82.2	81.4	93.6	83.3	80.9
Clothing, women's.....	81.5	80.8	85.3	86.9	81.8	87.8
Millinery and lace goods.....	78.8	69.5	72.0	82.4	72.0	75.5
<b>Iron and steel and their products</b> .....	<b>90.5</b>	<b>89.8</b>	<b>88.1</b>	<b>94.8</b>	<b>96.3</b>	<b>90.9</b>
Iron and steel.....	98.4	94.7	93.0	102.6	101.3	94.9
Cast-iron pipe.....	101.6	99.0	97.2	104.0	97.0	91.0
Structural ironwork.....	91.8	98.5	94.1	93.7	109.6	98.1
Foundry and machine-shop products.....	84.0	85.3	84.2	86.4	89.9	86.0
Hardware.....	93.1	83.5	83.9	101.9	94.3	92.7
Machine tools.....	102.1	103.8	102.8	113.6	118.2	113.2
Steam fittings and steam and hot-water heating apparatus.....	99.7	87.6	87.9	104.4	91.4	90.9
Stoves.....	78.6	86.4	74.8	78.6	89.8	73.8
<b>Lumber and its products</b> .....	<b>89.2</b>	<b>88.2</b>	<b>84.0</b>	<b>90.9</b>	<b>96.4</b>	<b>87.1</b>
Lumber, sawmills.....	83.9	83.4	79.1	85.3	90.6	81.9
Lumber, millwork.....	100.9	92.6	90.1	102.6	99.9	91.5
Furniture.....	100.5	102.2	97.0	102.8	114.0	102.1
<b>Leather and its products</b> .....	<b>91.9</b>	<b>90.9</b>	<b>91.6</b>	<b>86.9</b>	<b>86.0</b>	<b>87.3</b>
Leather.....	92.6	92.4	93.0	93.6	95.1	95.4
Boots and shoes.....	90.5	89.5	91.1	84.2	82.4	84.1
<b>Paper and printing</b> .....	<b>103.2</b>	<b>106.1</b>	<b>104.3</b>	<b>110.0</b>	<b>116.3</b>	<b>112.7</b>
Paper and pulp.....	95.1	94.4	94.4	101.9	102.8	100.0
Paper boxes.....	101.3	104.0	98.9	108.1	114.1	105.8
Printing, book and job.....	105.1	108.2	105.5	113.4	121.1	118.5
Printing, newspapers.....	109.8	116.1	115.1	115.0	124.9	121.0
<b>Chemicals and allied products</b> .....	<b>98.0</b>	<b>97.0</b>	<b>98.3</b>	<b>100.2</b>	<b>103.5</b>	<b>101.9</b>
Chemicals.....	95.3	96.4	96.1	101.2	108.0	106.0
Fertilizers.....	107.4	89.4	97.0	111.0	100.0	103.3
Petroleum.....	97.6	101.1	101.9	96.2	99.6	97.0

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY AND DECEMBER, 1926, AND JANUARY, 1927—Contd.

Industry	Employment			Pay-roll totals		
	January, 1926	December, 1926	January, 1927	January, 1926	December, 1926	January, 1927
<b>Stone, clay, and glass products</b> .....	<b>93.5</b>	<b>96.4</b>	<b>89.4</b>	<b>97.7</b>	<b>104.8</b>	<b>91.8</b>
Cement.....	86.4	88.1	82.0	83.3	91.5	80.4
Brick, tile, and terra cotta.....	90.9	93.1	86.4	92.6	98.5	86.7
Pottery.....	102.9	107.2	103.8	108.4	120.7	104.3
Glass.....	95.1	98.6	89.7	104.1	109.9	96.4
<b>Metal products, other than iron and steel</b> .....	<b>100.2</b>	<b>93.6</b>	<b>92.4</b>	<b>101.3</b>	<b>95.6</b>	<b>91.9</b>
Stamped and enameled ware.....	99.4	86.4	83.7	95.9	83.7	76.6
Brass, bronze, and copper products.....	100.5	96.9	96.4	103.3	100.0	97.5
<b>Tobacco products</b> .....	<b>85.0</b>	<b>86.3</b>	<b>77.8</b>	<b>87.7</b>	<b>89.8</b>	<b>77.6</b>
Chewing and smoking tobacco and snuff.....	90.3	91.7	92.3	95.1	94.6	102.5
Cigars and cigarettes.....	84.3	85.6	75.9	86.8	89.2	74.7
<b>Vehicles for land transportation</b> .....	<b>92.7</b>	<b>82.6</b>	<b>81.2</b>	<b>86.0</b>	<b>82.3</b>	<b>73.6</b>
Automobiles.....	112.8	90.1	90.3	99.9	81.8	69.0
Carriages and wagons.....	93.2	69.3	62.6	89.1	72.6	66.4
Car building and repairing, electric-railroad.....	89.3	88.8	88.1	88.9	92.6	89.6
Car building and repairing, steam-railroad.....	80.0	77.9	75.5	76.9	82.3	75.8
<b>Miscellaneous industries</b> .....	<b>97.0</b>	<b>101.0</b>	<b>100.7</b>	<b>100.4</b>	<b>100.7</b>	<b>107.2</b>
Agricultural implements.....	106.1	93.7	93.8	120.1	108.2	104.1
Electrical machinery, apparatus, and supplies.....	99.5	99.0	96.3	103.1	105.4	101.1
Pianos and organs.....	98.5	97.1	93.3	103.4	113.9	98.0
Rubber boots and shoes.....	92.7	88.2	89.5	104.7	103.5	102.9
Automobile tires.....	112.6	101.9	102.4	114.0	104.6	103.8
Shipbuilding, steel.....	89.0	104.5	105.5	92.4	113.5	112.0

The following table shows the general index of employment in manufacturing industries and the general index of pay-roll totals from January, 1923, to January, 1927.

TABLE 7.—GENERAL INDEX OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY, 1923, TO JANUARY, 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	-----	95.2	99.4	95.1	97.9	-----
March.....	101.8	96.4	92.3	93.7	-----	100.3	99.0	96.6	99.1	-----
April.....	101.8	94.5	92.1	92.8	-----	101.3	96.9	94.2	97.2	-----
May.....	101.8	90.8	90.9	91.7	-----	104.8	92.4	94.4	95.6	-----
June.....	101.9	87.9	90.1	91.3	-----	104.7	87.0	91.7	95.5	-----
July.....	100.4	84.8	89.3	89.8	-----	99.9	80.8	89.6	91.2	-----
August.....	99.7	85.0	89.9	90.7	-----	99.3	83.5	91.4	94.6	-----
September.....	99.8	86.7	90.9	92.2	-----	100.0	86.0	90.4	95.1	-----
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	-----
<b>Average.....</b>	<b>100.0</b>	<b>90.3</b>	<b>91.2</b>	<b>91.9</b>	-----	<b>100.0</b>	<b>90.6</b>	<b>93.6</b>	<b>95.8</b>	-----

**Proportion of Time Worked and Force Employed in Manufacturing Industries in January, 1927**

REPORTS from 7,921 establishments in January show that 1 per cent were idle, 81 per cent were operating on a full-time schedule, and 18 per cent were operating on a part-time schedule; 36 per cent had a full normal force of employees and 62 per cent were operating with a reduced force.

The establishments in operation were employing an average of 86 per cent of a full normal force of employees, who were working an average of 96 per cent of full time.

These averages are 1 per cent less, in each case, than were reported for December.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN JANUARY, 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 by establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
<b>Food and kindred products</b> .....	<b>1,200</b>	( <sup>1</sup> )	84	15	97	40	59	85
Slaughtering and meat packing.....	152	-----	90	10	99	57	43	94
Confectionery.....	191	1	73	27	95	10	89	71
Ice cream.....	165	1	90	8	98	2	96	61
Flour.....	296	1	75	25	94	56	43	91
Baking.....	386	-----	92	8	99	53	47	94
Sugar refining, cane.....	10	-----	80	20	94	-----	100	81
<b>Textiles and their products</b> .....	<b>1,287</b>	<b>1</b>	<b>84</b>	<b>15</b>	<b>97</b>	<b>49</b>	<b>53</b>	<b>89</b>
Cotton goods.....	385	1	92	8	99	58	41	93
Hosiery and knit goods.....	148	1	81	18	96	43	55	87
Silk goods.....	152	-----	80	20	96	47	53	93
Woolen and worsted goods.....	165	1	80	19	99	38	61	87
Carpets and rugs.....	21	-----	86	14	95	38	62	87
Dyeing and finishing textiles.....	83	-----	67	33	94	31	69	87
Clothing, men's.....	159	6	79	15	96	42	53	86
Shirts and collars.....	47	2	96	2	100	40	57	90
Clothing, women's.....	84	-----	86	14	98	48	52	87
Millinery and lace goods.....	43	-----	81	19	95	21	79	72
<b>Iron and steel and their products</b> .....	<b>1,450</b>	<b>1</b>	<b>76</b>	<b>23</b>	<b>95</b>	<b>28</b>	<b>71</b>	<b>84</b>
Iron and steel.....	171	1	75	23	94	20	79	82
Cast-iron pipe.....	44	5	52	43	86	30	66	87
Structural ironwork.....	124	-----	81	19	96	23	77	82
Foundry and machine-shop products.....	805	( <sup>1</sup> )	74	26	96	30	70	84
Hardware.....	63	-----	77	23	98	23	77	85
Machine tools.....	128	-----	95	5	100	30	70	86
Steam fittings and steam and hot-water heating apparatus.....	85	-----	82	18	97	39	61	93
Stoves.....	70	4	60	36	92	26	70	78
<b>Lumber and its products</b> .....	<b>857</b>	<b>3</b>	<b>77</b>	<b>21</b>	<b>96</b>	<b>32</b>	<b>65</b>	<b>85</b>
Lumber, sawmills.....	382	5	85	10	98	31	64	81
Lumber, millwork.....	182	2	61	37	93	23	75	82
Furniture.....	293	( <sup>1</sup> )	76	24	96	40	59	90
<b>Leather and its products</b> .....	<b>252</b>	<b>(<sup>1</sup>)</b>	<b>81</b>	<b>19</b>	<b>96</b>	<b>29</b>	<b>71</b>	<b>88</b>
Leather.....	99	1	92	7	99	34	65	88
Boots and shoes.....	153	-----	74	26	94	25	75	88
<b>Paper and printing</b> .....	<b>588</b>	<b>1</b>	<b>91</b>	<b>9</b>	<b>99</b>	<b>55</b>	<b>45</b>	<b>95</b>
Paper and pulp.....	124	2	81	16	96	48	49	95
Paper boxes.....	123	-----	86	14	98	32	68	90
Printing, book and job.....	221	-----	94	6	99	46	54	95
Printing, newspapers.....	120	-----	100	-----	100	100	-----	100

<sup>1</sup> Less than one-half of 1 per cent.



TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN JANUARY, 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 by establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
<b>Chemicals and allied products</b> .....	<b>236</b>	( <sup>1</sup> )	<b>81</b>	<b>19</b>	<b>98</b>	<b>35</b>	<b>65</b>	<b>77</b>
Chemicals.....	92	-----	96	4	99	51	49	91
Fertilizers.....	100	1	59	40	96	9	90	58
Petroleum refining.....	44	-----	100	-----	100	59	41	92
<b>Stone, clay, and glass products</b> .....	<b>515</b>	<b>6</b>	<b>72</b>	<b>21</b>	<b>92</b>	<b>20</b>	<b>74</b>	<b>78</b>
Cement.....	72	1	83	15	97	19	79	82
Brick, tile, and terra cotta.....	305	8	65	27	89	14	77	73
Pottery.....	45	4	78	18	95	29	67	95
Glass.....	93	5	85	10	97	33	61	84
<b>Metal products, other than iron and steel</b> .....	<b>179</b>	-----	<b>77</b>	<b>23</b>	<b>96</b>	<b>26</b>	<b>74</b>	<b>82</b>
Stamped and enameled ware.....	47	-----	79	21	97	17	83	83
Brass, bronze, and copper products.....	132	-----	76	24	96	30	70	82
<b>Tobacco products</b> .....	<b>116</b>	<b>6</b>	<b>67</b>	<b>27</b>	<b>97</b>	<b>27</b>	<b>67</b>	<b>84</b>
Chewing and smoking tobacco and snuff.....	20	-----	70	30	94	35	65	90
Cigars and cigarettes.....	96	7	67	26	97	25	68	82
<b>Vehicles for land transportation</b> .....	<b>906</b>	( <sup>1</sup> )	<b>86</b>	<b>14</b>	<b>98</b>	<b>39</b>	<b>61</b>	<b>86</b>
Automobiles.....	144	-----	52	48	92	10	90	70
Carriages and wagons.....	55	2	82	16	98	22	76	72
Car building and repairing, electric-railroad.....	340	-----	97	3	100	54	46	96
Car building and repairing, steam-railroad.....	367	-----	89	11	99	38	62	85
<b>Miscellaneous industries</b> .....	<b>305</b>	<b>1</b>	<b>74</b>	<b>25</b>	<b>96</b>	<b>30</b>	<b>69</b>	<b>84</b>
Agricultural implements.....	75	1	64	35	91	11	88	79
Electrical machinery, apparatus, and supplies.....	120	-----	82	18	97	48	52	89
Pianos and organs.....	24	-----	75	25	94	42	58	91
Rubber boots and shoes.....	8	-----	88	13	99	50	50	90
Automobile tires.....	51	2	57	41	91	8	90	72
Shipbuilding, steel.....	27	-----	100	-----	100	30	70	91
<b>Total</b> .....	<b>7,921</b>	<b>1</b>	<b>81</b>	<b>18</b>	<b>96</b>	<b>36</b>	<b>62</b>	<b>86</b>

<sup>1</sup> Less than one-half of 1 per cent.

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## Employment and Pay-Roll Totals on Class I Railroads, December, 1925, and November and December, 1926

THE following tables show the number of employees and their total earnings in various occupations among railroad employees in December, 1926, and in December, 1925, and November, 1926.

The figures are for Class I roads—that is, all roads having operating revenues of \$1,000,000 a year and over.

### EMPLOYMENT AND PAY-ROLL TOTALS OF CLASS I RAILROADS, DECEMBER, 1925, AND NOVEMBER AND DECEMBER, 1926

[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; the grand totals will be found on pp. 99 and 101]

Occupation	Number of employees at middle of month			Total earnings		
	December, 1925	November, 1926	December, 1926	December, 1925	November, 1926	December, 1926
<b>Professional, clerical, and general...</b>	<b>283,331</b>	<b>287,625</b>	<b>286,120</b>	<b>\$38,914,554</b>	<b>\$39,388,763</b>	<b>39,765,868</b>
Clerks.....	167,108	169,049	167,711	21,788,895	21,876,885	22,100,032
Stenographers and typists.....	25,222	25,598	25,533	3,105,166	3,143,369	3,184,572
<b>Maintenance of way and structures</b>	<b>362,224</b>	<b>423,616</b>	<b>377,689</b>	<b>33,262,018</b>	<b>38,698,293</b>	<b>35,631,397</b>
Laborers, extra gang and train	49,178	69,099	54,611	3,545,001	5,190,889	4,025,073
Laborers, track and roadway section.....	182,310	213,913	188,295	13,121,680	15,295,232	14,010,784
<b>Maintenance of equipment and stores</b>	<b>524,652</b>	<b>519,706</b>	<b>516,850</b>	<b>67,771,963</b>	<b>67,808,900</b>	<b>68,802,306</b>
Carmen.....	116,554	113,718	111,430	16,749,921	16,696,328	16,752,916
Machinists.....	60,933	60,880	60,742	9,570,899	9,650,738	9,840,376
Skilled trades' helpers.....	115,229	115,277	114,664	12,580,191	12,768,700	13,012,435
Laborers (shops, engine houses, power plants, and stores).....	43,820	42,926	43,594	4,207,664	4,067,626	4,233,086
Common laborers (shops, engine houses, power plants, and stores).....	59,334	60,210	59,712	4,789,890	4,797,725	4,880,441
<b>Transportation, other than train, engine, and yard</b>	<b>209,068</b>	<b>212,743</b>	<b>209,641</b>	<b>25,750,794</b>	<b>25,735,546</b>	<b>26,038,149</b>
Station agents.....	30,736	30,599	30,587	4,826,910	4,707,685	4,837,392
Telegraphers, telephoners, and towermen.....	25,898	25,628	25,514	3,937,439	3,817,870	3,945,152
Truckers (stations, warehouses, and platforms).....	40,260	41,040	39,745	3,745,798	3,732,087	3,656,013
Crossing and bridge flagmen and gatemen.....	22,321	22,085	22,016	1,684,240	1,659,501	1,678,199
<b>Transportation (yardmasters, switch tenders, and hostlers)</b>	<b>24,140</b>	<b>24,409</b>	<b>24,393</b>	<b>4,538,716</b>	<b>4,498,063</b>	<b>4,637,598</b>
<b>Transportation, train and engine</b>	<b>333,133</b>	<b>342,917</b>	<b>342,240</b>	<b>67,167,339</b>	<b>68,897,365</b>	<b>70,471,789</b>
Road conductors.....	37,275	38,288	38,066	8,911,662	9,081,271	9,395,519
Road brakemen and flagmen.....	75,600	78,052	77,607	13,193,912	13,621,386	13,919,652
Yard brakemen and yard helpers.....	55,787	57,800	57,852	9,742,827	10,099,113	10,458,639
Road engineers and motormen.....	44,447	45,841	45,790	12,055,589	12,376,226	12,548,555
Road firemen and helpers.....	46,095	47,124	47,341	8,984,722	9,200,904	9,342,635

## State Reports on Employment

## California

THE January, 1927, Labor Market Bulletin, issued by the Bureau of Labor Statistics of California, shows the changes in volume of employment and pay roll from December, 1925, to December, 1926, in 682 establishments in that State.

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 682 CALIFORNIA ESTABLISHMENTS, DECEMBER, 1926, COMPARED WITH DECEMBER, 1925

Industry	Number of establishments reporting	Employees		Weekly pay roll	
		Number in December, 1926	Per cent of change, as compared with December, 1925	Amount in December, 1926	Per cent of change, as compared with December, 1925
<b>Stone, clay, and glass products:</b>					
Miscellaneous stone and mineral products.....	12	1,585	+1.0	\$48,373	-1.4
Lime, cement, plaster.....	8	1,908	-9.8	58,144	-11.7
Brick, tile, pottery.....	22	2,838	-8.4	67,859	-12.7
Glass.....	8	746	+9.7	25,413	+7.0
Total.....	50	7,077	-5.2	199,819	-7.7
<b>Metals, machinery, and conveyances:</b>					
Agricultural implements.....	7	1,386	+49.7	38,084	+41.3
Automobiles, including bodies and parts.....	13	2,148	-56.2	72,699	-52.7
Brass, bronze, and copper products.....	9	1,061	-10.2	30,462	-7.4
Engines, pumps, boilers, and tanks.....	7	739	+1.5	24,150	+4.7
Iron and steel forgings, bolts, nuts, etc.....	8	3,048	+17.0	101,179	+19.2
Structural and ornamental steel.....	21	4,432	-13.1	138,408	-14.7
Ship and boat building and naval repairs.....	6	6,599	+50.1	216,103	+40.5
Tin cans.....	6	2,335	+14.7	62,885	+19.6
Other iron foundry and machine-shop products.....	55	5,744	-2	176,100	+2.1
Other sheet metal products.....	22	1,651	-1.7	51,167	+1.5
Cars, locomotives, and railway repair shops.....	16	7,447	+6.2	226,651	+4.0
Total.....	170	36,590	+7.7	1,137,888	+6
<b>Wood manufactures:</b>					
Sawmills and logging.....	20	10,054	-6.8	277,512	-2.0
Planing mills, sash and door factories, etc.....	53	8,480	-7.3	236,522	-10.6
Other wood manufactures.....	34	3,516	-5.7	97,669	-3.0
Total.....	107	22,050	-6.8	611,703	-5.7
<b>Leather and rubber goods:</b>					
Tanning.....	7	689	-12.6	19,104	-7.9
Finished leather products.....	6	555	-8.6	11,091	-13.2
Rubber products.....	7	2,790	+6.4	80,164	+2.5
Total.....	20	4,034	+4	110,359	-1.2
<b>Chemicals, oils, paints, etc.:</b>					
Explosives.....	4	512	+7.8	15,649	+10.0
Mineral oil refining.....	6	11,819	+8.6	449,882	+9.5
Paints, dyes, and colors.....	6	662	+1.8	17,144	+7.3
Miscellaneous chemical products.....	14	2,172	+25.3	60,735	+32.3
Total.....	30	15,165	+10.3	543,410	+11.6
<b>Printing and paper goods:</b>					
Paper boxes, bags, cartons, etc.....	14	2,141	-11.4	54,457	-10.0
Printing.....	37	2,146	+1.7	75,737	-5
Publishing.....	15	3,642	-7.1	143,585	+3
Other paper products.....	7	968	+22.2	23,885	+23.4
Total.....	73	8,897	-3.7	297,664	-5

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 682 CALIFORNIA ESTABLISHMENTS, DECEMBER, 1926, COMPARED WITH DECEMBER, 1925—Continued

Industry	Number of establishments reporting	Employees		Weekly pay roll	
		Number in December, 1926	Per cent of change, as compared with December, 1925	Amount in December, 1926	Per cent of change, as compared with December, 1925
<b>Textiles:</b>					
Knit goods.....	7	706	-5.4	\$15,200	-3.7
Other textile products.....	6	1,599	-5.2	36,226	-4.2
Total.....	13	2,305	-5.2	51,426	-4.0
<b>Clothing, millinery, and laundering:</b>					
Men's clothing.....	20	2,770	+1.5	60,054	+1.8
Women's clothing.....	9	819	+9.5	15,504	+15.3
Millinery.....	5	557	-2.3	10,368	-13.1
Laundering, cleaning, and dyeing.....	19	3,010	+4.2	70,541	+4.4
Total.....	53	7,156	+3.2	156,467	+2.6
<b>Foods, beverages, and tobacco:</b>					
Canning, preserving of fruits and vegetables.....	31	5,080	+7.0	102,287	+11.2
Canning, packing of fish.....	6	663	-9	6,456	-24.6
Confectionery and ice cream.....	24	1,767	+2.2	42,501	+3.0
Groceries, not elsewhere specified.....	4	471	-11.1	11,156	-9.0
Bread and bakery products.....	19	3,028	+2.6	86,883	+1.2
Sugar.....	5	2,476	-13.1	71,720	-13.7
Slaughtering and meat products.....	15	2,703	-8.1	80,599	-5.2
Cigars and other tobacco products.....	4	1,044	+4.7	19,551	+4.4
Beverages.....	3	436	-6.6	9,276	-12.6
Dairy products.....	11	2,670	+14.9	90,884	+17.3
Flour and grist mills.....	12	1,300	-6.2	35,543	-8
Ice manufactures.....	4	572	-4.0	18,341	-1.2
Other food products.....	10	781	+6.3	18,244	+3.7
Total.....	148	22,991	+3	593,441	+1.1
Water, light, and power.....	5	8,119	-12.2	245,251	-16.4
Miscellaneous.....	13	2,467	+24.0	64,214	+19.0
Grand total, all industries.....	682	136,851	-8	4,011,642	-6

## Illinois

THE January, 1927, issue of the Labor Bulletin, published by the Illinois Department of Labor, contains the following statistics showing the changes in employment and earnings in Illinois factories in December, 1926, as compared with November, 1926:

## CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FACTORIES FROM NOVEMBER TO DECEMBER, 1926

Industry	Per cent of change from November to December, 1926			
	Employment			Total earnings
	Male	Female	Total employees	
<b>Stone, clay, and glass products:</b>				
Miscellaneous stone and mineral products.....	-9.4	+4.6	-9.0	-11.7
Lime, cement, and plaster.....	-5.5	-9.1	-5.6	-6.4
Brick, tile, and pottery.....	-6.4	-2.3	-5.6	-6.5
Glass.....	-4.3	-7.4	-5.1	-5.0
<b>Total.....</b>	<b>-6.1</b>	<b>-5.7</b>	<b>-6.0</b>	<b>-6.8</b>
<b>Metals, machinery, conveyances:</b>				
Iron and steel.....	+1	+5	-2	-2
Sheet metal work and hardware.....	-2.5	-11.7	-2.3	-2.2
Tools and cutlery.....	-3	-8.8	-2.0	-4.8
Cooking, heating, ventilating apparatus.....	-6	-6.4	-8	-3.1
Brass, copper, zinc, babbitt metal.....	-1.8	-0	-1.8	-4.4
Cars and locomotives.....	-4.5	-3.4	-4.4	-4.1
Automobiles and accessories.....	-11.0	-25.7	-12.2	-14.7
Machinery.....	+2	-2.9	-3	-5
Electrical apparatus.....	-2.5	-2.8	-1.7	-1.2
Agricultural implements.....	-1.9	+4.3	-1.9	+1.0
Instruments and appliances.....	+3.5	-1.6	+2.7	+5.0
Watches, watch cases, clocks, and jewelry.....	+4	-9	-2	-6.2
<b>Total.....</b>	<b>-1.7</b>	<b>-5.6</b>	<b>-1.8</b>	<b>-2.4</b>
<b>Wood products:</b>				
Sawmill and planing-mill products.....	-2.1	+29.7	-1.6	-8.7
Furniture and cabinet work.....	-3.0	-6.2	-3.3	-3.4
Pianos, organs, and other musical instruments.....	-3.3	-5.7	-4.5	-4.8
Miscellaneous wood products.....	-6.7	-5	-6.2	-14.4
Household furnishings.....	-13.2	-10.8	-12.4	-11.7
<b>Total.....</b>	<b>-3.9</b>	<b>-5.3</b>	<b>-4.2</b>	<b>-6.3</b>
<b>Furs and leather goods:</b>				
Leather.....	-3.0	-5.3	-3.4	-5.8
Furs and fur goods.....	-19.7	-21.7	-20.5	-36.8
Boots and shoes.....	-2	+2.3	+1.6	+6.0
Miscellaneous leather goods.....	+2.0	+2.4	+2.2	+2.3
<b>Total.....</b>	<b>-1.2</b>	<b>+1.4</b>	<b>+1.7</b>	<b>+2.3</b>
<b>Chemicals, oils, paints, etc.:</b>				
Drugs and chemicals.....	+4	-6.6	-3.0	-1
Paints, dyes, and colors.....	-3	-4.7	+8	+8
Mineral and vegetable oil.....	-2.4	-12.3	-3.0	+2.7
Miscellaneous chemical products.....	-2.0	-15.0	-3.5	-1.0
<b>Total.....</b>	<b>-1.7</b>	<b>-9.5</b>	<b>-2.5</b>	<b>+1.8</b>
<b>Printing and paper goods:</b>				
Paper boxes, bags, and tubes.....	+7	-7.1	-1.9	-5.2
Miscellaneous paper goods.....	+2	+6.5	+2.8	+3
Job printing.....	+4.9	-1.4	+3.3	+6.5
Newspapers and periodicals.....	+1.8	+6.6	+1.5	+3.2
Edition bookbinding.....	-7.4	-5.9	-7.0	+3
<b>Total.....</b>	<b>+2.1</b>	<b>-2.5</b>	<b>+1.8</b>	<b>+2.8</b>

CHANGES IN EMPLOYMENT AND EARNINGS IN ILLINOIS FACTORIES FROM  
NOVEMBER TO DECEMBER, 1926—Continued

Industry	Per cent of change from November to December, 1926			
	Employment			Total earnings
	Male	Female	Total em- ployees	
<b>Textiles:</b>				
Cotton and woolen goods.....	+4	-1.2	0.0	+0.7
Knit goods, cotton and woolen hosiery.....	-1.2	-23.5	-4.7	-2.2
Thread and twine.....	-6.7	-7.4	-5.9	+6.8
Total.....	-1.0	-14.6	-3.7	+1
<b>Clothing, millinery, laundering:</b>				
Men's clothing.....	+7.7	+12.2	+7.5	+39.0
Men's shirts and furnishings.....	.0	-7.9	-7.4	-10.4
Overalls and work clothing.....	-4.5	-1.7	-2.0	+1.1
Men's hats and caps.....	+5.6	.0	+3.2	+19.4
Women's clothing.....	+13.5	+5.1	+7.0	+11.9
Women's underwear.....	.0	+2	+1	-10.1
Women's hats.....	+20.1	+15.5	+16.7	+22.0
Laundering, cleaning, and dyeing.....	-1.2	+3.4	+1.9	+2.0
Total.....	+6.8	+7.7	+5.0	+24.6
<b>Food, beverages, and tobacco:</b>				
Flour, feed, and other cereal products.....	-10.5	-16.9	-11.0	-13.0
Fruit and vegetable canning and preserving.....	-19.8	-36.7	-23.4	-26.5
Miscellaneous groceries.....	.7	-2.0	-5.6	-1.9
Slaughtering and meat packing.....	+2.7	-4.8	+1.7	-3
Dairy products.....	-2	+4	-2	+4
Bread and other bakery products.....	-7	-3.8	-1.7	-3.8
Confectionery.....	-3.3	-11.0	-4.3	-3.5
Beverages.....	-5.1	-11.2	-1.1	-1.4
Cigars and other tobacco products.....	+1.0	-3.5	-1.5	+4.6
Manufactured ice.....	-10.2		-10.2	-20.2
Ice cream.....	+5.2	-2.0	+4.7	-1.2
Total.....	+8	-6.1	-8	-1.4
Total, all manufacturing industries.....	-1.2	-2.6	-1.4	-7
<b>Trade—wholesale and retail:</b>				
Department stores.....	+5.2	+20.3	+14.3	+5.4
Wholesale dry goods.....	-3.2	-8.6	-6.1	-5.6
Wholesale groceries.....	-1.2	-15.1	-5.2	+1.3
Mail-order houses.....	+11.3	+10.5	+9.7	+8.0
Total.....	+8.5	+11.8	+9.5	+6.6
<b>Public utilities:</b>				
Water, light, and power.....	+1	+6.8	+1.0	-1.0
Telephone.....	+8	+5	+6	-1.1
Street railways.....	-1.4	-1.9	-1.0	+9
Railway car repair shops.....	+1.1	-11.8	+9	+7
Total.....	-2	+5	+2	-2
<b>Coal mining.....</b>	+9.2		+9.2	+7.0
<b>Building and contracting:</b>				
Building construction.....	-10.2		-10.2	-14.7
Road construction.....	-53.5		-53.5	-58.0
Miscellaneous contracting.....	-6.4		-6.4	+2
Total.....	-11.2		+11.2	-14.2
<b>Grand total, all industries.....</b>	-5	-1	-5	-4

## Iowa

THE Bureau of Labor of Iowa, in its publication, the Iowa Employment Survey, for January, 1927, gives the following statistics showing the per cent of change in the number of employees in specified industries in that State in January, 1927, as compared with the previous month:

## CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, DECEMBER, 1926, TO JANUARY, 1927

Industry	Number of firms reporting	Employees on pay roll January, 1927	
		Number	Per cent of change, as compared with December, 1926
<b>Food and kindred products:</b>			
Meat packing.....	8	7,701	+4.9
Cereals.....			
Flour.....	3	98	.0
Bakery products.....	8	800	-1.4
Confectionery.....	5	305	-15.5
Poultry, produce, butter, etc.....	8	916	-24.7
Sugar, starch, sirup, glucose, etc.....	5	1,514	-23.6
Other food products, coffee, etc.....	8	269	-4.3
Total.....	45	11,603	-4.0
<b>Textiles:</b>			
Clothing, men's.....	9	803	-15.8
Millinery.....	2	137	+4.6
Clothing, women's, and woolen goods.....	3	486	+6
Hosiery, awnings, etc.....	5	670	-1.2
Buttons, pearl.....	7	554	-19.5
Total.....	26	2,650	-7.3
<b>Iron and steel works:</b>			
Foundry and machine shops.....	25	1,645	-5.1
Brass, bronze products, plumbers' supplies.....	5	283	-8.1
Autos, tractors, and engines.....	7	2,398	+2.1
Furnaces.....	5	265	+1.5
Pumps.....	4	374	-1.3
Agricultural implements.....	9	864	+1.6
Washing machines.....	6	2,238	+3.8
Total.....	61	8,067	+4
<b>Lumber products:</b>			
Millwork, interiors, etc.....	18	2,940	-11.8
Furniture, desks, etc.....	7	754	-3.3
Refrigerators.....	3	174	+17.6
Coffins, undertakers' supplies.....	3	100	+2.0
Carriages, wagons, truck bodies.....	6	106	-4.5
Total.....	37	4,074	-9.2
<b>Leather products:</b>			
Shoes.....	3	360	+3.2
Saddlery and harness.....	5	249	+9.2
Fur goods and tanning.....	5	122	-4.7
Gloves and mittens.....	3	306	-2.6
Total.....	16	1,037	+1.8
<b>Paper products, printing and publishing:</b>			
Paper products.....	5	344	-.9
Printing and publishing.....	15	2,320	+1.7
Total.....	20	2,664	+1.8
Patent medicines, chemicals, and compounds.....	7	367	-11.0
<b>Stone and clay products:</b>			
Cement, plaster, gypsum.....	8	1,354	-14.4
Brick and tile.....	13	567	-36.6
Marble and granite, crushed rock, and stone.....	3	68	-26.9
Total.....	24	1,989	+22.6
Tobacco and cigars.....	3	281	-3.4
Railway car shops.....	6	7,661	-6.9

## CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, DECEMBER, 1926, TO JANUARY, 1927—Continued

Industry	Number of firms reporting	Employees on pay roll January, 1927	
		Number	Per cent of change, as compared with December, 1926
Various industries:			
Auto tires and tubes	5	158	+1.9
Brooms and brushes	5	230	.0
Laundries	6	2,129	-13.7
Mercantile	3	3,812	-1.1
Public service	3	521	+11.8
Seeds	21	1,129	-3.8
Wholesale houses	7	169	.0
Commission houses	12	2,546	-3.9
Other industries			
Total	62	18,694	-22.1
Grand total	307	149,087	-8.7

<sup>1</sup>Is not the exact sum of the items, but is as printed in the report.

## Maryland

THE commissioner of labor and statistics of Maryland furnished the following report on volume of employment in Maryland from December, 1926, to January, 1927, covering 37,882 employees and a pay roll totaling \$879,868:

## CHANGES IN EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARYLAND IN JANUARY, 1927

Industry	Establishments reporting both months	Employment		Pay roll	
		Number of employees in January, 1927	Per cent of change as compared with December, 1926	Amount, January, 1927	Per cent of change as compared with December, 1926
Bakery	3	177	+1.7	4,756	+0.3
Beverages and soft drinks	3	131	-.8	3,396	-3.2
Boots and shoes	8	1,314	-.2	24,395	+8.4
Boxes, paper and fancy	8	375	-4.9	4,784	-13.6
Boxes, wooden	4	204	-3.8	3,828	+2.1
Brass and bronze	4	2,407	-4.0	58,973	-6.5
Brick, tile, etc	4	523	-3.7	14,964	-5.3
Brushes	5	607	-2.5	11,938	-12.0
Chemicals	5	763	-11.7	18,167	-10.4
Clothing, men's outer garments	6	3,486	+3.5	74,737	+10.5
Clothing, women's outer garments	5	798	+5.2	10,625	+10.3
Confectionery	5	717	-10.0	10,258	-12.6
Cotton goods	5	2,210	-.6	37,381	-.1
Fertilizer	5	494	-6.1	11,114	-7.4
Food preparation	4	147	-2.0	3,540	-5.5
Foundry	9	1,088	+3.6	27,400	+5.4
Furnishing goods, men's	5	743	-5.0	9,525	-17.3
Furniture	10	965	-7.1	20,325	-13.9
Glass manufacture	4	1,188	-6.7	26,263	-10.0
Ice cream	3	154	-3.2	4,900	-2.6
Leather goods	5	651	-1.6	12,533	+2.7
Lithographing	4	538	+1.1	15,793	+1.6
Lumber and planing	3	515	-5.6	11,982	-9.7
Mattresses and spring beds	2	72	-13.3	1,902	-11.3
Pianos	3	969	+7.7	28,888	-5.1
Plumbers' supplies	4	1,375	-9.4	39,911	-4.2
Printing	8	1,081	-1.1	39,162	-6.3
Rubber-tire manufacture	1	2,546	-5.9	100,212	-20.3
Shipbuilding	3	560	-18.5	17,284	-25.0
Shirt manufacture	4	595	+1.8	7,900	-2.4
Stamping and enameling ware	5	1,103	-9.4	21,876	-13.3
Tinware	4	913	+8.8	59,264	+1.9
Tobacco	7	2,741		15,176	-3.0
Umbrellas	3	328	-32.6	5,041	-35.3
Miscellaneous	20	4,995	-3.0	112,613	-4.8



## Massachusetts

THE following changes in volume of employment in various industries in Massachusetts from November to December, 1926, are taken from a press release issued by the department of labor and industries of that State:

NUMBER OF EMPLOYEES IN 1,060 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK ENDING NEAREST TO NOVEMBER 15 AND DECEMBER 15, 1926

Industry	Number of establishments reporting	Number of wage earners employed			
		November, 1926	December, 1926		
			Full time	Part time	Total
Automobiles, including bodies and parts.....	17	2,562	1,029	1,030	2,059
Bookbinding.....	15	966	618	343	961
Boot and shoe cut stock and findings.....	45	2,460	1,407	933	2,340
Boots and shoes.....	91	26,192	8,359	15,871	24,230
Boxes, paper.....	27	2,404	1,375	938	2,313
Boxes, wooden packing.....	13	1,099	809	221	1,030
Bread and other bakery products.....	51	4,336	3,786	466	4,252
Carpets and rugs.....	5	3,516	1,739	1,829	3,568
Cars and general shop construction and repairs, steam railroads.....	4	2,927	2,266	663	2,929
Clothing, men's.....	30	4,094	3,373	837	4,210
Clothing, women's.....	34	1,660	1,110	415	1,525
Confectionery.....	18	4,361	3,534	410	3,944
Copper, tin, sheet iron, etc.....	16	540	514	-----	514
Cotton goods.....	56	40,933	28,354	14,131	42,485
Cutlery and tools.....	20	2,081	1,773	324	2,097
Dyeing and finishing textiles.....	10	6,670	1,480	5,183	6,663
Electrical machinery, apparatus, and supplies.....	16	11,387	10,704	65	10,769
Foundry products.....	27	2,932	1,894	1,035	2,929
Furniture.....	38	4,226	3,890	244	4,134
Gas and by-products.....	13	1,244	1,270	-----	1,270
Hosiery and knit goods.....	12	5,138	3,337	1,745	5,082
Jewelry.....	35	2,503	1,726	726	2,452
Leather, tanned, curried, and finished.....	33	6,682	4,870	1,682	6,552
Machine-shop products.....	45	7,992	7,180	687	7,867
Machine and other tools.....	26	2,740	1,935	784	2,719
Musical instruments.....	13	1,323	1,111	199	1,310
Paper and wood pulp.....	26	6,629	4,554	2,081	6,635
Printing and publishing, book and job.....	51	3,932	2,905	1,085	3,990
Printing and publishing, newspaper.....	18	2,453	2,451	9	2,460
Rubber footwear.....	3	9,403	9,458	-----	9,458
Rubber goods.....	7	3,127	3,124	-----	3,124
Silk goods.....	10	4,113	1,499	2,683	4,182
Slaughtering and meat packing.....	5	1,536	319	1,337	1,656
Stationery goods.....	12	2,068	2,002	-----	2,002
Steam fittings and steam and hot-water heating apparatus.....	9	1,764	1,730	49	1,779
Stoves and stove linings.....	5	1,756	80	1,615	1,695
Textile machinery and parts.....	13	4,282	594	3,745	4,339
Tobacco.....	5	868	832	14	846
Woolen and worsted goods.....	60	21,014	8,324	12,322	20,646
All other industries.....	126	29,951	18,336	11,402	29,738
Total, all industries.....	1,060	245,864	155,651	87,103	242,754

## New York

THE New York State Department of Labor has furnished the following tabulation of changes in employment and pay rolls in New York State factories in December, 1926. The table is based on returns from a fixed list of approximately 1,650 factories, whose weekly pay roll for the middle week of December was \$14,583,781.

CHANGES IN EMPLOYMENT AND PAY ROLLS IN NEW YORK STATE FACTORIES FROM DECEMBER, 1925, AND NOVEMBER, 1926, TO DECEMBER, 1926

Industry	Per cent of change			
	November to December, 1926		December, 1925, to December, 1926	
	Employment	Pay roll	Employment	Pay roll
<b>Stone, clay, and glass:</b>				
Miscellaneous stone and minerals.....	-2.1	-2.7	-3.2	-0.9
Lime, cement, and plaster.....	-8.0	-11.8	-2.1	-5.1
Cement.....	-8.3	-10.9	-5.0	-5.6
Brick, tile, and pottery.....	-5.6	-3.9	-4.2	-2.1
Brick.....	-14.7	-14.4	-7.2	-5.7
Pottery.....	+3.6	+6.3	+4.4	+3.8
Glass.....	+2.8	+4.2	-2.1	-1.0
<b>Total.....</b>	<b>-3.6</b>	<b>-4.1</b>	<b>-2.9</b>	<b>-2.3</b>
<b>Metals and machinery:</b>				
Silver and jewelry.....	-2.3	-3.3	-6.3	-9.0
Brass, copper, and aluminum.....	+6	+1.6	-6.1	-6.2
Iron and steel.....	-6.7	-8.1	-9.2	-11.9
Structural and architectural iron.....	-1.6	-2.9	-5.6	-2.9
Sheet metal and hardware.....	-2.6	+4	-3.2	-3.1
Hardware.....	+3.6	+12.4	-13.0	-11.7
Stamped and enameled ware.....	-6.4	-4.1	-16.8	-16.2
Firearms, tools, and cutlery.....	+2.3	+1.8	+22.1	+21.0
Cutlery and tools.....	+5.0	+2.4	+6.2	+4.9
Cooking, heating, and ventilating apparatus.....	-3.7	-20.1	-27.6	-34.1
Steam and hot water heating.....	-9.6	-20.8	-28.6	-35.6
Stoves.....	-12.3	-12.6	-10.6	-11.6
Machinery, including electrical apparatus.....	-2.3	-8	-6.6	-8.4
Agricultural implements.....	+6.1	+9.1	-6.9	-6.3
Electrical machinery and apparatus.....	-4.8	-1.7	-10.6	-11.0
Foundries and machine shops.....	-7	-1.3	-8	-4.9
Automobiles, carriages, and airplanes.....	-3.1	-1.8	-15.3	-15.6
Automobiles and parts.....	-3.0	-1.9	-16.3	-16.6
Railroad equipment and repair.....	+6.4	+6.8	+4.8	+7.4
Locomotives and equipment.....	+20.1	+23.0	+15.0	+17.6
Railway repair shops.....	-6	-1.0	(1)	+2.1
Boat and ship building.....	+8.6	+29.3	+12.0	+39.4
Instruments and appliances.....	+2.4	+3.7	+5.2	+9.2
<b>Total.....</b>	<b>-6</b>	<b>+3</b>	<b>-4.6</b>	<b>-4.7</b>
<b>Wood manufactures:</b>				
Saw and planing mills.....	-1.6	-1.4	-3.1	+4.6
Millwork.....	-2.4	-9	-4.9	+6.4
Sawmills.....	+3.6	+3.8	+2.4	+3.4
Furniture and cabinet work.....	+1	+1.3	-2.6	-4.0
Furniture.....	+4	+1.6	-1.4	-4.6
Pianos and other musical instruments.....	-6	-1.7	-6	-2.4
Miscellaneous wood, etc.....	-1	+1.0	-9	-2
<b>Total.....</b>	<b>-4</b>	<b>-1</b>	<b>-1.8</b>	<b>-1.3</b>
<b>Furs, leather, and rubber goods:</b>				
Leather.....	+7.2	+16.8	+8.8	+19.3
Furs and fur goods.....	-8.0	-16.2	-9	-2.0
Shoes.....	+4	+3.3	-4.6	-8
Other leather and canvas goods.....	-2.0	-6.7	-3.4	+3.7
Rubber and gutta percha.....	-3.5	-7.3	-10.8	-7.2
Pearl, horn, bone, etc.....	-5.6	-6.3	-11.8	-13.6
<b>Total.....</b>	<b>-6</b>	<b>-3</b>	<b>-4.6</b>	<b>-8</b>

CHANGES IN EMPLOYMENT AND PAY ROLLS IN NEW YORK STATE FACTORIES  
FROM DECEMBER, 1925, AND NOVEMBER, 1926, TO DECEMBER, 1926—Continued

Industry	Per cent of change			
	November to December, 1926		December, 1925, to December, 1926	
	Employment	Pay roll	Employment	Payroll
Chemicals, oils, paints, etc.:				
Drugs and chemicals.....	+0.4	+1.3	+8.7	+14.6
Paints and colors.....	-.5	+1.6	-5.9	-3.1
Oil products.....	-1.6	+1.2	+9.0	+2.5
Petroleum refining.....	-2.6	-.4	-4.9	-3.8
Miscellaneous chemicals.....	+9.9	+1.8	+9.2	+11.4
Total.....	-.3	+1.4	+4.4	+7.3
Paper.....	-7.7	-1.6	-2.0	-2.3
Printing and paper goods:				
Paper boxes and tubes.....	-.6	-1.2	+2.3	+2.0
Miscellaneous paper goods.....	(1)	+4.2	-1.1	-2.2
Printing and bookmaking.....	-.2	+2.2	+1.5	+3.8
Printing, newspapers.....	-1.3	+2.9	-5.6	+1.2
Printing, book and job.....	-1.1	+1.9	-3.0	+4.3
Total.....	-.2	+2.2	+1.2	+3.0
Textiles:				
Silk and silk goods.....	+4.4	-.1	-20.5	-19.6
Wool manufactures.....	+5.5	+4.4	+9.9	+8.4
Carpets and rugs.....	+2.2	+5.5	+1.9	+11.4
Woolens and worsteds.....	+3.0	+1.5	-11.4	-6.0
Cotton goods.....	-.5	-.9	+1.4	+6.7
Knit goods (except silk).....	-4.3	-9.7	-15.6	-18.5
Other textiles.....	-.5	(1)	-5.1	-2.8
Dyeing and finishing.....	+1.1	+2.7	-3.9	-1.9
Total.....	-1.0	-1.9	-7.8	-4.0
Clothing and millinery:				
Men's clothing.....	-1.1	+8.6	-1.8	+4.4
Mens' furnishings.....	-3.2	-7.1	-15.3	-19.1
Shirts and collars.....	-2.2	-6.1	-15.8	-23.5
Women's clothing.....	+12.9	+17.7	-3.3	-1.2
Women's underwear.....	-2.7	-7.4	-1.1	-5.2
Women's headwear.....	-5.6	-8.3	-.7	+8.9
Miscellaneous sewing.....	-2.6	-2.1	-5.7	-5.9
Laundering and cleaning.....	+1.1	+7.7	+3.6	+4.4
Total.....	+6.6	+4.5	-5.0	-3.6
Food and tobacco:				
Flour, feed, and cereals.....	-3.3	-3.1	-5.8	-6.8
Flour.....	-5.4	-4.1	-12.6	-11.8
Canning and preserving.....	-47.7	-35.8	-14.8	-12.3
Other groceries.....	-6.2	-8.3	-13.7	-13.7
Sugar refining.....	-8.7	-10.7	-21.3	-20.7
Meat and dairy products.....	+4.4	+6.6	-4.4	-4.8
Meat packing.....	+7.7	+6.6	-5.6	-5.3
Bakery products.....	-1.2	-2.4	-2.2	-1.0
Candy.....	-6.6	-.2	+6.6	+1.7
Beverages.....	-5.7	-6.2	-2.9	+2.6
Tobacco.....	-3.1	-3.7	-28.3	-28.2
Total.....	-5.7	-4.7	-8.8	-7.6
Water, light, and power.....	+1.8	+2.0	+4.4	+6.2
Grand total.....	-1.0	+2.2	-4.1	-2.7

1 Not reported.

## Oklahoma

THE January 15, 1927, issue of the Oklahoma Labor Market, published by the Bureau of Labor Statistics of Oklahoma, shows the changes in employment and pay rolls in 710 establishments in that State from November to December, 1926, as follows:

CHANGES IN EMPLOYMENT AND PAY ROLLS IN 710 INDUSTRIAL ESTABLISHMENTS IN OKLAHOMA, NOVEMBER TO DECEMBER, 1926

Industry	Number of plants reporting	December, 1926			
		Employment		Pay roll	
		Number of employees	Per cent of change as compared with November, 1926	Amount	Per cent of change as compared with November, 1926
Cottonseed-oil mills.....	13	407	-1.0	\$8,158.59	+1.3
Food production:					
Bakeries.....	35	579	+5	15,004.50	+4
Confections.....	7	89	-7.3	1,218.70	-13.3
Creameries and dairies.....	11	145	-14.2	2,689.35	-15.1
Flour mills.....	44	377	-4.3	9,033.49	+1.1
Ice and ice cream.....	33	327	-11.1	8,989.93	-8.8
Meat and poultry.....	14	1,530	-1.3	36,401.31	-4.6
Lead and zinc:					
Mines and mills.....	46	3,372	-3.0	98,942.56	-2.1
Smelters.....	17	2,274	+6.1	64,696.46	+5.8
Metals and machinery:					
Auto repairs, etc.....	29	1,157	+3.2	39,523.67	+8.7
Machine shops and foundries.....	38	1,115	-3	32,783.72	+10.3
Tank construction and erection.....	16	778	-9.3	20,002.43	-10.4
Oil industry:					
Producing and gasoline manufacturing.....	123	4,283	+1.4	131,135.00	+1.0
Refineries.....	66	6,072	+7	204,883.85	+1.6
Printing: Job work.....	24	264	-1.9	8,058.34	+2.3
Public utilities:					
Steam-railroad shops.....	11	1,803	+3	52,317.84	+4
Street railways.....	6	676	-9	17,319.89	-2.8
Water, light, and power.....	50	1,196	-6.0	32,973.90	-4.1
Stone, clay, and glass:					
Brick and tile.....	11	292	-14.1	6,125.99	-11.5
Cement and plaster.....	6	891	-11.9	24,538.49	-6.1
Crushed stone.....	6	241	+11.1	3,908.35	-4.5
Glass manufacture.....	9	980	-6.8	26,322.29	-3.5
Textiles and cleaning:					
Textile manufacture.....	9	324	-21.4	3,980.85	-28.1
Laundries and cleaning.....	52	1,359	-1.1	24,460.24	-3
Woodwork:					
Sawmills.....	14	405	-12.1	4,855.97	-12.2
Millwork, etc.....	20	328	-6	8,802.51	-4
Total, all industries.....	710	31,264	-1.5	887,128.22	-0.0

## Wisconsin

THE Wisconsin Labor Market for January, 1927, issued by the State industrial commission, contains the following data on volume of employment in Wisconsin industries in December, 1926:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN IDENTICAL ESTABLISHMENTS IN WISCONSIN INDUSTRIES FROM DECEMBER, 1925, AND NOVEMBER, 1926, TO DECEMBER, 1926

Industry	Per cent of change—			
	November to December, 1926		December, 1925, to December, 1926	
	Employment	Pay roll	Employment	Pay roll
<i>Manual</i>				
Agriculture.....			+26.6	
Logging.....	+4.0		-13.5	
Mining.....	-3.8	-2.6	-4.8	-0.2
Lead and zinc.....	-3.7	-9	-11.8	-5.0
Iron.....	-4.1	-6.1	+17.5	+12.3
Stone crushing and quarrying.....	-10.7	-8.0	-1.1	-16.3
Manufacturing.....	-2.3	-3.2	-5.9	-10.3
Stone and allied industries.....	-8.6	-16.5	+10.0	-1.8
Brick, tile, and cement blocks.....	-24.6	-38.5	+1.4	-19.4
Stone finishing.....	-1.0	-8.8	+13.6	+3.5
Metal.....	-3.8	-7.0	-10.1	-19.4
Pig-iron and rolling-mill products.....	-20.3	-24.0	-39.1	-39.8
Structural-iron work.....	-3	-8	+3	+1.8
Foundries and machine shops.....	+8	+2.3	-10.9	-15.9
Railroad repair shops.....	-9	-3.3	-2	+1.1
Stoves.....	-3.9	-15.6	-13.6	-26.7
Aluminum and enamel ware.....	-5	-2.1	-2.9	-6.8
Machinery.....	+3.8	+11.9	-20.5	-20.5
Automobiles.....	-19.7	-49.9	-7.9	-51.3
Other metal products.....	-1.7	-8.0	+4.8	-14.0
Wood.....	-3.3	-1.7	-6.4	-5.9
Sawmills and planing mills.....	-2.1	-4.2	-14.2	-13.2
Box factories.....	-9.3	-12.1	+11.7	+8.9
Panel and veneer mills.....	-2.5	+3.4	-1.9	-1.9
Furniture.....	+1.8	+2.9	-3.4	-3.6
Sash, door, and interior finish.....	-4.0	-7	-6.5	-3.3
Other wood products.....	-9.5	-6.9	-5	-5.0
Rubber.....	+1.3	+10.6	-4.3	-13.1
Leather.....	-1	-1.4	-6.3	-12.0
Tanning.....	0	+3	-28.4	-33.0
Boots and shoes.....	-7	-2.6	+10.5	+9.6
Other leather products.....	+6	-1.6	+7.0	-1.2
Paper.....	-3.6	-2.7	+2.9	-1.7
Paper and pulp mills.....	-3.3	-1.8	+5.8	-4
Paper boxes.....	-7.2	-8.0	-3.1	-1.0
Other paper products.....	-1.7	-3.2	-4.1	-8.4
Textiles.....	+4.3	+5.4	-1.4	+4.5
Hosiery and other knit goods.....	+1.0	-2.5	-2.7	+4.4
Clothing.....	+10.3	+19.2	+4	+7.2
Other textile products.....	+4.8	+8.7	-6	-1.1
Foods.....	-2.7	-3.5	-8.9	-7.6
Meat packing.....	+7	-5.2	-27.3	-21.0
Baking and confectionery.....	-3.8	-2.9	-2.1	-8
Milk products.....	+4.8	+15.0	+2.2	+3
Canning and preserving.....	-26.7	-21.3	-34.2	-38.7
Flour mills.....	-25.0	+4.6	-38.0	-32.1
Tobacco manufacturing.....	+21.9	+9.4	+28.7	+5.3
Other food products.....	-2.5	-12.8	+2.1	+3.4
Light and power.....	-6	-1.8	+11.7	+14.6
Printing and publishing.....	-1.0	+6	+1.7	-2.1
Laundering, cleaning, and dyeing.....	-9	-2.8	-8	+7
Chemical (including scap, glue, and explosives).....	-2.0	-7.7	-12.9	-11.3
Construction:				
Building.....	-20.8	-13.8	-22.2	-20.5
Highway.....			-25.4	
Railroad.....	-19.3	-17.3	-5	+5.5
Marine, dredging, sewer digging.....	-31.6	-21.8	-63.1	-56.0
Communication:				
Steam railways.....	-7.9	-9.7	+5.7	-10.1
Electric railways.....	+5.5	-7	+10.9	+3.6
Express, telephone, and telegraph.....	+1.8	-7	-1.5	-2.6
Wholesale trade.....	-3.7	-10.6	+10.9	+11.9
Hotels and restaurants.....	-2.9		+10.9	
<i>Nonmanual</i>				
Manufacturing, mines, and quarries.....	+5	-3	+6.4	+4.7
Construction.....	-1.4	-3.5	-2.7	+4
Communication.....	-2.7	-4.3	+3	+4.8
Wholesale trade.....	-4.2	-4.8	-14.7	-22.6
Retail trade (sales force only).....	+20.1	+17.0	+8.6	+5
Miscellaneous professional services.....	+2.3	-4.9	+5.3	+25.1
Hotels and restaurants.....	-2.1		-4.4	

### Activity of Employment Offices in Uruguay, 1920 to 1924

**T**ABLES showing the requests for work in Uruguay and the number of placements reported by the employment section of the national labor office and the special employment agencies in Montevideo are included in the 1924 Statistical Yearbook of Uruguay.<sup>1</sup> The figures for the five years, 1920 to 1924, have been combined and are presented in the following table:

ACTIVITY OF EMPLOYMENT OFFICES IN URUGUAY, 1920 TO 1924

Year	Applicants					Placements				
	Sex		Age		Total	Sex		Age		Total
	Males	Females	15 years	16 years and over		Males	Females	15 years	16 years and over	
1920 .....	3,648	1,004	66	4,586	4,652	1,644	615	25	2,234	2,259
1921 .....	3,626	1,789	185	5,230	5,415	2,414	1,258	108	3,564	3,672
1922 .....	2,389	2,964	62	5,291	5,353	1,839	1,529	46	3,312	3,358
1923 .....	2,611	3,202	71	5,742	5,813	1,165	1,333	29	2,469	2,498
1924 .....	3,328	3,426	61	6,693	6,754	1,622	1,222	43	2,801	2,844

\* Not the exact sum of the items, by sex, but as given in the report.

<sup>1</sup> Uruguay. Dirección General de Estadística. Tomo XXXII, Parte 6. Anuario Estadístico, 1924. Montevideo, 1926, p. 508.

# WHOLESALE AND RETAIL PRICES

## Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices<sup>1</sup> received by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food January 15, and December 15, 1926, and January 15, 1927, as well as the percentage changes in the year and in the month. For example, the retail price per pound of lard was 22.3 cents in January, 1926; 20.4 cents in December, 1926; and 20.0 cents in January, 1927. These figures show decreases of 10.0 per cent in the year and 2.0 per cent in the month.

The cost of the various articles of food combined shows a decrease of 3.0 per cent January 15, 1927, as compared with January 15, 1926, and a decrease of 1.5 per cent January 15, 1927, as compared with December 15, 1926.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JANUARY 15, 1927, COMPARED WITH DECEMBER 15, 1926, AND JANUARY 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 (—) Jan. 15, 1927, compared with—	
		Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15, 1926	Dec. 15, 1926
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak.....	Pound.....	40.8	40.7	40.8	0	+0.2
Round steak.....	do.....	35.0	35.3	35.3	+1	0
Rib roast.....	do.....	30.0	30.2	30.3	+1	+0.3
Chuck roast.....	do.....	22.1	22.7	22.7	+3	0
Plate beef.....	do.....	14.5	14.9	15.0	+3	+1
Pork chops.....	do.....	36.5	37.2	36.6	+0.3	-2
Bacon.....	do.....	48.2	49.6	48.9	+1	-1
Ham.....	do.....	53.3	57.1	56.8	+7	-1
Lamb, leg of.....	do.....	39.1	37.7	37.4	-4	-1
Hens.....	do.....	38.6	37.2	38.5	-0.3	+3
Salmon, canned, red.....	do.....	37.3	34.1	33.6	-10	-1
Milk, fresh.....	Quart.....	14.2	14.2	14.1	-1	-1
Milk, evaporated.....	15-16 oz. can.....	11.6	11.4	11.4	-2	0
Butter.....	Pound.....	55.4	59.3	58.4	+5	-2
Oleomargarine (all butter substitutes).....	do.....	31.3	29.6	29.1	-7	-2
Cheese.....	do.....	37.6	37.4	37.6	0	+1
Lard.....	do.....	22.3	20.4	20.0	-10	-2
Vegetable lard substitute.....	do.....	25.6	25.4	25.3	-1	-0.4
Eggs, strictly fresh.....	Dozen.....	53.9	65.2	55.9	+4	-14
Eggs, storage.....	do.....	42.2	46.9	45.0	+7	-4

<sup>1</sup>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 JANUARY 15, 1927, COMPARED WITH DECEMBER 15, 1926, AND JANUARY 15, 1926—Continued

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (-) Jan. 15, 1927, compared with—	
		Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15, 1926	Dec. 15, 1926
		Cents				
Bread.....	Pound.....	9.4	9.4	9.4	0	0
Flour.....	do.....	6.2	5.6	5.6	-10	0
Corn meal.....	do.....	5.2	5.1	5.1	-2	0
Rolled oats.....	do.....	9.1	9.1	9.1	0	0
Corn flakes.....	8-oz. pkg.....	11.0	10.9	10.9	-1	0
Wheat cereal.....	28-oz. pkg.....	25.3	25.4	25.5	+1	+0.4
Macaroni.....	Pound.....	20.3	20.2	20.1	-1	-0.4
Rice.....	do.....	11.6	11.2	11.0	-5	-2
Beans, navy.....	do.....	9.8	9.3	9.2	-6	-1
Potatoes.....	do.....	5.8	4.0	4.0	-31	0
Onions.....	do.....	5.9	5.0	5.5	-7	+10
Cabbage.....	do.....	5.6	4.2	4.7	-16	+12
Beans, baked.....	No. 2 can.....	12.3	11.7	11.7	-5	0
Corn, canned.....	do.....	16.8	16.2	16.1	-4	-1
Peas, canned.....	do.....	17.8	17.3	17.2	-3	-1
Tomatoes, canned.....	do.....	12.6	12.2	12.2	-3	0
Sugar, granulated.....	Pound.....	6.7	7.3	7.5	+12	+3
Tea.....	do.....	76.1	77.0	77.4	+2	+1
Coffee.....	do.....	51.3	50.7	50.2	-2	-1
Prunes.....	do.....	17.2	16.2	16.0	-7	-1
Raisins.....	do.....	14.5	14.4	14.4	-1	0
Bananas.....	Dozen.....	35.8	34.9	34.5	-4	-1
Oranges.....	do.....	46.9	49.3	46.9	0	-5
Weighted food index.....					-3.0	-1.5

Table 2 shows for the United States average retail prices of specified food articles on January 15, 1913, and on January 15 of each year from 1921 to 1927, together with percentage changes in January of each of these specified years, compared with January, 1913. For example, the retail price per pound of butter was 40.9 cents in January, 1913; 61 cents in January, 1921; 45.3 cents in January, 1922; 59.1 cents in January, 1923; 61.3 cents in January, 1924; 52.3 cents in January, 1925; 55.4 cents in January, 1926; and 58.4 cents in January, 1927.

As compared with January, 1913, these figures show increases of 49 per cent in January, 1921; 11 per cent in January, 1922; 44 per cent in January, 1923; 50 per cent in January, 1924; 28 per cent in January, 1925; 35 per cent in January, 1926, and 43 per cent in January, 1927.

The cost of the various articles of food combined shows an increase of 62.1 per cent in January, 1927, as compared with January, 1913.



TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JANUARY 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH JANUARY 15, 1913

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail price on Jan. 15—								Per cent of increase Nov. 15 of each specified year compared with Jan. 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	23.8	40.5	35.3	37.2	39.1	38.7	40.8	40.8	70	48	56	64	63	71	71
Round steak	do.	20.5	36.3	30.4	31.6	33.3	33.2	35.0	35.3	77	48	54	62	60	71	72
Rib roast	do.	18.8	31.0	26.7	27.5	28.6	28.5	30.0	30.3	65	42	46	52	52	60	61
Chuck roast	do.	14.9	23.6	19.0	19.6	20.7	20.5	22.1	22.7	58	28	32	39	38	48	52
Plate beef	do.	11.1	16.9	12.8	12.9	13.3	13.3	14.5	15.0	52	15	16	20	20	31	35
Pork chops	do.	18.7	35.9	28.9	29.3	27.4	30.7	36.5	36.6	92	55	57	47	64	95	96
Bacon	do.	25.4	45.7	37.6	39.8	37.2	40.3	48.2	48.9	80	48	57	46	59	90	93
Ham	do.	25.1	48.4	44.2	45.1	44.7	47.6	53.3	55.8	93	76	80	78	90	112	126
Lamb, leg of	do.	18.0	36.7	33.9	36.3	35.9	38.8	39.1	37.4	104	88	102	99	116	117	108
Hens	do.	20.2	42.7	36.9	34.5	34.5	35.8	38.6	38.5	111	83	71	71	77	91	91
Salmon, canned, red	do.	30.5	33.3	31.3	31.2	31.7	37.3	33.6								
Milk, fresh	Quart	8.9	16.3	13.6	13.7	14.2	13.9	14.2	14.1	83	53	54	60	56	60	58
Milk, evaporated	(1)	14.8	12.4	12.1	12.2	11.1	11.6	11.4								
Butter	Pound	40.9	61.0	45.3	59.1	61.3	52.3	55.4	58.4	49	11	44	50	28	35	43
Oleomargarino (all butter substitutes)	do.	35.3	28.7	27.8	29.7	30.1	31.3	29.1								
Cheese	do.	22.2	38.6	32.9	37.3	37.4	35.9	37.6	37.6	74	48	68	68	62	69	69
Lard	do.	15.4	22.3	15.4	17.4	18.7	22.8	22.3	20.0	45	00	13	21	48	45	30
Vegetable lard substitute	do.	27.2	21.6	22.3	24.3	25.3	25.6	25.3								
Eggs, strictly fresh	Dozen	37.3	79.1	49.9	55.7	54.6	70.5	53.9	55.9	112	34	49	46	89	45	50
Eggs, storage	do.	25.7	68.7	39.3	40.0	38.6	53.7	42.2	45.0	167	53	56	50	109	64	75
Bread	Pound	5.6	10.8	8.8	8.7	8.7	9.2	9.4	9.4	93	57	55	55	64	68	68
Flour	do.	3.3	6.7	4.9	4.9	4.5	6.0	6.2	5.6	103	48	48	36	82	88	70
Corn meal	do.	3.0	5.2	3.9	4.0	4.4	5.4	5.2	5.1	73	30	33	47	80	73	70
Rollod oats	do.	10.7	9.2	8.8	8.8	9.0	9.1	9.1								
Corn flakes	(2)	14.1	10.7	9.7	9.7	9.7	10.9	11.0	10.9							
Wheat cereal	(3)	30.1	26.6	25.0	24.3	24.5	25.3	25.5								
Macaroni	Pound	21.6	20.3	19.8	19.6	20.0	20.3	20.1								
Rice	do.	8.6	11.9	9.3	9.5	9.8	10.7	11.6	11.0	38	8	10	14	24	35	28
Beans, navy	do.	8.9	8.2	10.9	10.1	10.2	9.8	9.2								
Potatoes	do.	1.6	3.0	3.3	2.1	2.8	2.5	5.8	4.0	88	106	31	75	56	263	150
Onions	do.	4.1	9.1	5.1	6.1	5.9	5.9	5.5								
Cabbage	do.	3.7	5.6	4.0	4.9	4.6	5.6	4.7								
Beans, baked	(4)	15.8	13.5	13.1	12.9	12.5	12.3	11.7								
Corn, canned	(4)	17.4	16.0	15.3	15.7	17.5	16.8	16.1								
Peas, canned	(4)	18.5	17.7	17.5	17.9	18.5	17.8	17.2								
Tomatoes, canned	(4)	12.4	13.2	12.7	12.9	13.8	12.6	12.2								
Sugar, granulated	Pound	5.8	9.7	6.2	8.3	10.2	8.1	6.7	7.5	67	7	43	76	40	16	29
Tea	do.	54.3	72.1	68.3	68.7	71.0	74.2	76.1	77.4	33	26	27	31	37	40	43
Coffee	do.	29.9	38.5	35.7	37.0	38.2	51.6	51.3	50.2	29	19	24	28	73	72	68
Prunes	do.	24.2	18.8	20.0	17.9	17.4	17.2	16.0								
Raisins	do.	32.1	25.0	18.9	15.9	14.6	14.5	14.4								
Bananas	Dozen	41.9	36.6	37.1	38.8	33.2	35.8	34.5								
Oranges	do.	46.9	46.2	46.8	40.0	44.8	46.9	46.9								
Weighted food index <sup>5</sup>										75.4	44.5	46.9	51.7	57.1	67.2	62.1

1 15-16 ounce can.  
 2 8-ounce package.  
 3 28-ounce package.  
 4 No. 2 can.

<sup>5</sup> 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, potato 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 one dollar in specified years, 1913 to 1926, and in December 1926, and January, 1927.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1 IN EACH YEAR, 1913 TO 1926, AND IN DECEMBER, 1926, AND JANUARY, 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
December..	40.7	2.5	35.3	2.8	30.2	3.3	22.7	4.4	14.9	6.7	37.2	2.7
1927: January..	40.8	2.5	35.3	2.8	30.3	3.3	22.7	4.4	15.0	6.7	36.6	2.7
	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
December..	49.6	2.0	57.1	1.8	37.2	2.7	14.2	7.0	59.3	1.7	37.4	2.7
1927: January..	48.9	2.0	56.8	1.8	38.5	2.6	14.1	7.1	58.4	1.7	37.6	2.7
	Lard		Eggs		Bread		Flour		Corn meal		Rice	
	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.....	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
December..	20.4	4.9	65.2	1.5	9.4	10.6	5.6	17.9	5.1	19.6	11.2	8.9
1927: January..	20.0	5.0	55.9	1.8	9.4	10.6	5.6	17.9	5.1	19.6	11.0	9.1
	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				
December..	4.0	25.0	7.3	13.7	77.0	1.3	50.7	2.0				
1927: January..	4.0	25.0	7.5	13.3	77.4	1.3	50.2	2.0				

## 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,<sup>2</sup> and by months for 1926, and for January, 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 rib roast for the year 1923 was 143.4, which means that the average money price for the year 1923 was 43.4 per cent higher than the average money price for the year 1913. The relative price of rib roast for the year 1922 was 139.4, which figures show an increase of four points, but an increase of slightly less than 3 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 100.0 are 161.8 for December, 1926, and 159.3 for January, 1927.

The curve shown in the chart on page 127 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

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, 1927

[Average for year 1913=100.0]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Ba- con	Ham	Hens	Milk	But- ter	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	144.3	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	160.8	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

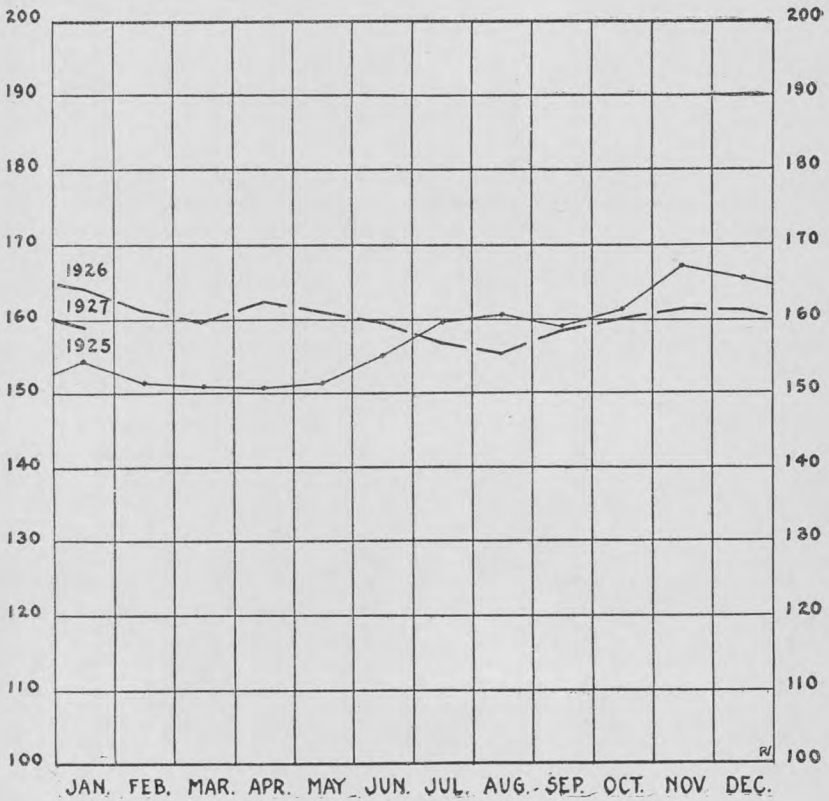
<sup>2</sup> For index numbers of each month, January, 1913, to December, 1920, see February, 1921, issue, pp. 19-21; for each month of 1921 and 1922, see February, 1923, issue, p. 69; and for each month of 1923 and 1924, see February, 1925, issue, p. 21.

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, 1927—Continued.

Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Potatoes	Sugar	Tea	Coffee	All articles <sup>1</sup>
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	142.3	168.5	159.3

<sup>1</sup>30 articles in 1907; 15 articles in 1908-1912; 22 articles in 1913-1920; 43 articles in 1921-1926.

## TREND OF RETAIL PRICES OF FOOD (1913 = 100)



## Retail Prices of Food in

AVERAGE retail food prices are shown in Table 5 for 39 cities January 15, 1927. For 11 other cities prices are shown for the 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 arti

Article	Unit	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927
		1913	1926			1913	1926			1913	1926		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	23.0	38.6	40.8	40.9	20.7	38.3	37.8	37.1	25.0	39.7	41.1	41.6
Round steak.....	do.....	20.5	34.6	36.8	36.1	19.0	34.6	34.7	34.6	19.6	34.7	35.8	35.5
Rib roast.....	do.....	17.5	29.6	32.9	32.4	17.0	29.9	29.6	29.2	19.9	28.4	28.8	28.7
Chuck roast.....	do.....	13.5	21.5	25.4	24.5	15.0	21.6	21.5	21.2	15.1	22.7	22.9	22.6
Plate beef.....	do.....	9.8	13.2	13.3	13.9	10.8	14.7	15.0	14.6	10.0	13.8	14.0	14.7
Pork chops.....	do.....	21.0	36.1	35.8	36.1	18.0	36.0	35.8	35.6	19.4	36.3	36.9	36.6
Bacon, sliced.....	do.....	32.0	47.4	46.9	46.6	21.3	42.5	43.7	43.1	31.3	48.8	47.7	48.7
Ham, sliced.....	do.....	28.5	54.3	58.8	58.5	29.0	56.5	58.3	58.3	30.0	53.3	58.0	56.3
Lamb, leg of.....	do.....	20.0	37.1	40.0	41.3	17.3	39.6	37.1	36.6	20.0	38.6	38.6	39.3
Hens.....	do.....	19.5	38.1	36.8	37.0	20.0	39.8	37.8	39.8	18.7	35.8	36.8	37.0
Salmon, canned, red.....	do.....	39.8	33.8	34.0	34.0	36.3	31.2	30.3	30.3	41.1	35.4	35.4	35.4
Milk, fresh.....	Quart.....	10.0	19.3	19.0	19.0	8.8	13.0	14.0	14.0	10.3	19.0	18.0	18.0
Milk, evaporated.....	15-16 oz. can.....	13.5	13.2	13.4	13.4	11.3	11.2	11.3	11.3	12.6	12.5	12.5	12.5
Butter.....	Pound.....	42.4	58.1	58.6	60.5	42.8	60.4	63.8	63.9	44.0	60.8	60.6	61.7
Oleomargarine (all butter substitutes).....	do.....	32.8	26.9	27.9	27.9	30.6	30.0	29.9	29.9	36.8	36.5	34.1	34.1
Cheese.....	do.....	25.0	36.4	36.4	37.3	23.3	36.4	35.5	36.2	23.0	38.1	37.3	37.6
Lard.....	do.....	14.8	21.4	19.7	20.2	14.0	20.3	18.3	18.1	15.3	22.9	21.3	21.1
Vegetable lard substitute.....	do.....	23.3	21.9	21.4	21.4	24.3	23.9	23.0	23.0	22.0	21.7	22.2	22.5
Eggs, strictly fresh.....	Dozen.....	30.6	55.6	61.1	52.2	33.8	54.0	65.2	58.8	33.8	57.6	60.9	54.3
Eggs, storage.....	do.....	25.0	42.8	45.2	39.0	25.0	41.4	45.5	42.9	25.0	46.9	47.8	43.3
Bread.....	Pound.....	6.0	10.3	10.7	10.8	5.4	9.4	9.8	9.8	6.4	10.3	10.3	10.4
Flour.....	do.....	3.6	7.1	6.5	6.6	3.2	5.9	5.3	5.2	3.8	7.1	6.8	6.8
Corn meal.....	do.....	2.4	4.0	4.0	3.9	2.6	4.0	3.9	4.0	2.1	4.3	4.1	4.1
Rolled oats.....	do.....	9.5	9.7	9.6	9.6	8.4	8.3	8.1	8.1	10.1	10.0	10.2	10.2
Corn flakes.....	8-oz. pkg.....	11.6	11.5	11.9	11.9	10.1	10.1	10.0	10.0	12.2	12.2	12.4	12.4
Wheat cereal.....	28-oz. pkg.....	26.4	25.9	26.4	26.4	24.1	24.3	24.2	24.2	26.3	26.9	27.0	27.0
Macaroni.....	Pound.....	22.0	21.9	21.9	21.9	19.4	18.6	18.8	18.8	19.0	18.7	18.9	18.9
Rice.....	do.....	8.6	11.5	11.3	10.5	9.0	10.8	10.3	9.8	8.2	12.1	11.2	11.1
Beans, navy.....	do.....	11.0	10.4	10.2	10.2	8.7	8.3	8.1	8.1	11.5	10.5	10.8	10.8
Potatoes.....	do.....	2.0	7.3	4.8	4.8	1.7	6.1	4.3	4.3	1.9	6.7	5.3	5.2
Onions.....	do.....	8.1	7.2	7.8	7.8	5.7	5.0	5.4	5.4	7.9	6.9	7.3	7.3
Cabbage.....	do.....	7.9	4.8	5.8	5.8	6.4	4.3	5.2	5.2	6.7	5.6	6.0	6.0
Beans, baked.....	No. 2 can.....	12.3	11.5	12.0	12.0	10.8	10.5	10.6	10.6	12.7	11.9	11.6	11.6
Corn, canned.....	do.....	17.7	17.5	17.5	17.5	15.5	14.7	14.6	14.6	18.1	18.4	18.1	18.1
Peas, canned.....	do.....	19.8	20.0	19.7	19.7	15.8	15.0	14.8	14.8	21.8	21.4	20.5	20.5
Tomatoes, canned.....	do.....	11.9	11.0	11.3	11.3	10.6	10.7	10.9	10.9	11.9	11.2	11.4	11.4
Sugar, granulated.....	Pound.....	6.1	7.2	7.5	8.0	5.1	6.0	6.5	6.6	5.7	7.3	7.7	7.9
Tea.....	do.....	60.0	103.5	105.9	105.9	56.0	73.0	73.5	73.0	61.3	92.4	96.4	96.4
Coffee.....	do.....	32.0	51.0	51.5	51.5	25.2	48.4	47.5	46.2	28.8	54.1	53.9	53.8
Prunes.....	do.....	17.4	17.8	17.5	17.5	15.0	14.0	13.7	13.7	19.3	18.7	18.3	18.3
Raisins.....	do.....	15.7	16.5	16.4	16.4	13.5	13.0	12.9	12.9	15.4	15.4	15.3	15.3
Bananas.....	Dozen.....	28.6	27.3	27.3	27.3	25.1	26.3	26.4	26.4	39.7	37.3	37.7	37.7
Oranges.....	do.....	38.2	34.5	35.8	35.8	46.2	44.2	41.6	41.6	44.0	44.5	41.1	41.1

<sup>1</sup>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 January 15, 1913 and 1926, and for December 15, 1926, and same dates, with the exception of November, 1913, as these cities were

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

cles, particularly meats and vegetables, owing to differences in trade practices]

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Jan. 15—		Dec.	Jan.	Jan.	Dec.	Jan.	Jan. 15—		Dec.	Jan.	Jan.	Dec.	Jan.	Jan. 15—		Dec.	Jan.
1913	1926	1926	1927	1926	1926	1927	1913	1926	1926	1927	1926	1926	1927	1913	1926	1926	1927
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
135.2	165.1	164.3	164.4	49.0	49.2	49.2	20.3	40.5	39.6	40.4	30.4	29.6	29.8	21.2	32.5	32.7	32.3
32.0	52.4	49.5	50.0	41.5	41.9	42.1	18.3	35.0	34.2	34.0	25.8	26.4	27.3	20.0	30.5	30.0	30.0
23.4	39.8	37.8	37.9	36.9	36.1	36.4	17.0	29.6	30.5	31.0	26.2	26.5	26.0	19.4	27.0	25.0	26.0
16.3	28.0	28.5	28.9	27.5	27.5	27.1	14.7	22.9	23.9	24.1	18.3	19.0	19.3	14.5	20.2	19.4	20.1
---	20.2	19.0	19.4	12.0	11.9	11.7	10.7	14.0	14.7	14.2	12.3	12.5	12.5	11.4	14.7	14.2	14.5
20.0	39.2	39.8	38.4	37.8	39.9	37.7	18.0	40.0	39.3	38.5	34.8	36.5	36.3	22.8	34.8	35.6	35.6
24.4	47.4	49.1	48.9	52.4	54.3	53.9	20.3	45.1	45.9	45.6	56.4	56.9	56.3	23.3	43.5	44.0	44.0
28.3	57.7	61.8	62.8	57.3	61.9	60.7	24.0	51.5	56.3	56.3	58.8	61.3	60.5	26.0	48.2	51.7	52.9
21.3	40.8	38.9	38.6	40.1	38.3	37.1	17.5	36.1	32.6	33.1	35.4	36.3	36.0	20.0	42.5	40.0	40.6
22.0	41.8	40.6	41.0	41.6	41.1	40.6	19.0	41.9	38.4	40.6	34.9	32.4	34.4	21.2	36.4	38.4	38.2
---	36.8	33.0	32.8	34.0	32.8	33.0	---	38.6	32.5	32.6	29.9	31.9	30.7	---	38.3	29.6	29.6
8.9	14.9	15.3	14.3	16.0	16.0	16.0	8.0	13.2	13.0	13.0	14.3	14.3	14.0	11.7	18.0	19.0	19.0
---	12.3	12.2	12.2	11.6	11.6	11.5	---	11.4	11.2	11.3	11.3	11.1	11.0	---	11.8	11.9	11.9
38.5	57.6	57.8	59.2	57.7	57.4	59.0	40.2	56.4	62.8	59.3	53.2	53.0	54.6	40.2	56.5	56.5	58.4
---	31.3	29.2	29.7	30.1	29.4	29.6	---	30.4	29.8	29.7	---	---	---	---	31.8	31.7	30.8
23.1	39.8	38.3	38.5	40.1	39.3	39.3	21.5	38.0	37.6	38.0	36.7	35.7	35.7	20.5	35.0	35.0	36.1
15.4	22.4	20.2	20.8	21.3	19.7	18.7	14.1	21.1	19.8	18.8	25.2	24.7	23.6	13.9	22.6	20.9	21.6
---	25.3	24.5	24.4	25.5	25.9	25.8	---	26.5	26.2	25.8	29.3	29.3	28.3	---	24.0	23.5	22.8
41.0	65.8	85.0	70.5	70.7	87.3	75.0	37.7	57.2	69.3	59.4	59.1	66.3	58.0	32.5	57.6	66.7	53.8
26.4	47.3	54.3	51.7	46.5	51.4	51.2	23.3	43.6	45.5	43.6	35.8	45.5	43.3	24.8	43.7	44.3	44.0
5.9	9.1	9.1	9.0	9.0	8.8	8.8	5.6	9.0	8.8	8.9	9.8	9.8	9.8	6.0	10.8	10.2	11.2
3.7	6.9	6.0	6.1	6.2	5.8	5.7	2.9	5.8	5.1	5.1	6.1	5.4	5.6	3.7	7.5	7.1	7.0
3.5	6.6	6.2	6.4	7.9	7.7	7.9	2.5	5.3	5.1	5.1	6.0	5.9	5.9	2.3	4.0	3.9	3.8
---	9.1	9.3	9.1	8.8	8.6	8.5	---	8.7	8.7	8.7	7.2	7.3	7.5	---	9.5	9.6	9.5
---	11.0	10.7	10.9	10.5	10.4	10.4	---	10.5	10.2	10.2	12.4	12.2	12.1	---	11.7	12.0	12.0
---	25.1	24.7	25.4	24.6	24.7	24.7	---	24.5	24.6	24.7	28.1	28.3	28.5	---	26.6	26.2	26.5
---	23.2	22.5	23.0	22.9	22.7	22.7	---	21.7	21.5	21.4	19.5	19.6	20.0	---	19.0	18.6	18.4
9.2	12.6	11.5	12.3	11.5	10.9	11.1	9.3	11.5	11.2	10.7	12.2	11.7	11.6	5.5	9.5	8.4	7.9
---	10.8	9.9	9.9	10.1	9.7	9.7	---	9.9	9.2	8.8	10.6	10.4	10.2	---	10.5	9.8	10.0
1.7	6.1	4.0	4.0	5.9	3.8	3.8	1.4	5.7	4.1	4.0	3.7	3.0	3.1	2.0	6.8	4.4	4.5
---	6.4	5.1	6.0	5.9	5.0	5.3	---	6.8	5.9	6.1	4.6	4.5	5.1	---	6.6	5.5	6.1
---	6.2	5.2	5.3	5.7	4.5	5.4	---	4.7	3.0	3.7	4.2	4.8	5.5	---	6.6	4.2	4.3
---	13.9	12.9	13.1	11.5	11.3	11.3	---	10.3	10.0	9.9	14.8	14.1	14.5	---	10.2	9.8	9.8
---	19.3	18.8	19.6	20.0	19.1	19.6	---	16.1	16.3	16.0	16.4	16.0	15.2	---	16.0	15.0	15.0
---	21.0	20.3	20.6	21.7	21.5	21.2	---	16.3	16.2	16.4	15.8	15.2	15.2	---	17.9	17.5	16.8
---	12.7	12.4	12.7	12.7	13.1	12.7	---	13.9	13.9	13.5	14.7	13.3	13.7	---	10.4	10.2	10.5
5.8	6.6	7.3	7.5	6.2	7.0	7.1	5.5	6.4	7.1	7.3	7.7	8.5	8.8	5.3	6.5	6.9	7.1
58.6	77.4	74.9	76.6	61.3	59.5	60.6	45.0	69.2	69.8	69.8	83.8	83.3	81.4	50.0	75.3	73.9	76.9
33.0	56.0	55.3	55.9	48.6	48.6	48.4	29.3	49.9	48.7	48.1	56.8	56.6	56.5	26.0	46.1	46.5	46.9
---	17.6	15.0	15.8	16.5	15.8	15.9	---	16.7	15.9	15.8	18.0	18.4	17.6	---	16.6	14.7	14.5
---	14.0	13.0	13.6	13.9	14.8	14.0	---	14.1	13.8	13.6	14.9	15.2	15.0	---	14.3	14.1	14.1
---	45.0	46.3	48.9	36.7	34.2	35.7	---	45.0	42.6	43.2	48.5	48.5	44.5	---	34.3	30.7	27.9
---	52.2	49.9	52.2	52.5	50.7	55.1	---	51.1	55.7	55.0	55.0	54.5	54.5	---	31.0	29.4	30.0

<sup>2</sup> Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

Article	Unit	Chicago, Ill.				Cincinnati, Ohio				Cleveland, Ohio			
		Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927
		1913	1926			1913	1926			1913	1926		
Sirloin steak	Pound	Cts. 21.0	Cts. 44.1	Cts. 45.2	Cts. 45.1	Cts. 21.0	Cts. 36.9	Cts. 36.4	Cts. 36.5	Cts. 22.3	Cts. 37.0	Cts. 37.3	Cts. 38.2
Round steak	do	18.2	34.7	36.8	36.4	18.8	33.2	33.4	33.2	18.8	31.0	31.3	32.4
Rib roast	do	18.2	34.7	36.3	35.9	18.3	29.7	30.2	29.1	17.8	26.9	27.1	27.7
Chuck roast	do	14.3	24.8	25.9	26.0	13.6	20.7	21.6	22.4	14.7	22.2	23.1	22.9
Plate beef	do	10.9	14.5	15.1	15.2	10.0	15.1	15.2	16.1	10.4	13.5	13.4	14.0
Pork chops	do	16.0	33.8	36.5	35.4	18.6	34.7	32.2	33.7	17.5	36.8	35.6	35.8
Bacon, sliced	do	31.3	51.9	55.0	53.1	22.4	41.7	44.4	43.3	23.9	49.3	50.3	49.3
Ham, sliced	do	30.8	52.5	58.7	58.6	25.3	52.5	56.8	57.9	32.0	55.8	58.3	57.8
Lamb, leg of	do	18.7	39.0	38.4	37.7	16.2	36.4	35.1	35.0	17.3	37.4	34.9	35.3
Hens	do	17.4	39.0	37.6	38.6	21.6	39.3	36.1	38.5	19.3	43.0	36.5	39.7
Salmon, canned, red	do		38.2	37.4	37.0		36.1	30.9	31.2		37.8	33.8	33.3
Milk, fresh	Quart	8.0	14.0	14.0	14.0	8.0	12.0	14.0	13.3	8.8	14.7	14.3	14.3
Milk, evaporated	15-16 oz. can		10.9	11.2	11.2		10.9	10.8	10.8		11.3	11.3	11.3
Butter	Pound	39.9	51.3	60.6	57.8	41.4	53.5	59.2	58.3	41.8	55.9	64.7	60.6
Oleomargarine (all butter substitutes)	do		28.8	27.6	27.5		31.8	28.6	28.2		33.0	31.9	30.3
Cheese	do	25.0	41.5	42.4	42.3	21.6	36.0	36.8	37.4	23.0	38.5	38.1	38.2
Lard	do	14.8	22.2	20.9	20.1	13.3	20.0	18.5	17.7	15.8	22.9	21.8	21.4
Vegetable lard substitute	do		26.7	26.7	26.7		25.9	25.6	25.7		27.3	27.8	27.2
Eggs, strictly fresh	Dozen	32.7	52.8	66.8	58.3	30.3	49.0	63.8	53.1	35.0	55.5	70.1	59.1
Eggs, storage	do	23.8	40.2	50.3	47.3	23.3	38.1	43.1	41.8	24.5	40.8	48.8	47.6
Bread	Pound	6.1	9.8	9.8	9.9	4.8	9.2	9.0	9.0	5.5	8.1	7.9	7.9
Flour	do	2.8	5.9	5.3	5.3	3.4	6.2	5.8	5.9	3.2	6.0	5.7	5.5
Corn meal	do	2.9	6.2	6.6	6.7	2.6	4.2	3.9	4.1	2.8	5.5	5.3	5.4
Rolled oats	do		8.4	8.6	8.6		8.6	8.6	8.6		9.4	9.4	9.4
Corn flakes	8-oz. pkg		10.0	10.1	10.1		10.2	10.4	10.4		11.3	11.2	11.2
Wheat cereal	28-oz. pkg		24.4	25.4	25.3		24.4	24.4	24.4		25.5	25.3	25.3
Macaroni	Pound		19.0	19.7	19.6		18.2	18.8	18.4		21.8	21.9	21.9
Rice	do	9.0	11.5	11.8	11.6	8.8	10.8	10.8	10.5	8.5	11.8	11.9	11.6
Beans, navy	do		9.6	9.6	9.6		8.3	8.0	8.0		8.8	8.5	8.4
Potatoes	do	1.3	5.8	3.9	3.9	1.4	6.0	4.1	4.2	1.4	5.5	4.3	4.4
Onions	do		5.7	5.4	5.7		5.8	4.4	4.9		5.3	4.7	5.1
Cabbage	do		5.3	4.8	5.8		6.3	4.2	4.1		5.7	4.3	5.3
Beans, baked	No. 2 can		12.8	12.9	12.7		11.5	10.9	10.6		13.1	12.8	12.6
Corn, canned	do		17.1	17.3	17.2		15.9	14.7	15.0		18.0	17.0	17.3
Peas, canned	do		17.5	17.5	17.5		17.4	16.8	16.7		18.3	17.6	18.5
Tomatoes, canned	do		14.1	14.2	14.1		12.6	11.9	12.1		14.2	14.0	13.8
Sugar, granulated	Pound	5.3	6.5	7.0	7.2	5.7	6.8	7.4	7.6	5.6	6.9	7.6	7.8
Tea	do	53.3	72.2	74.3	73.8	60.0	77.3	76.4	77.5	50.0	78.8	79.4	79.6
Coffee	do	30.0	51.6	50.9	51.1	25.6	46.5	45.4	45.4	26.5	54.1	54.5	54.4
Prunes	do		18.1	18.9	18.5		17.3	16.7	16.2		17.2	16.2	15.8
Raisins	do		15.3	15.4	15.3		14.3	14.7	14.5		14.3	14.5	14.6
Bananas	Dozen		43.1	40.8	39.3		37.3	37.5	36.0		<sup>2</sup> 10.0	<sup>2</sup> 10.8	<sup>2</sup> 10.7
Oranges	do		51.3	58.9	53.6		41.3	40.2	36.9		48.9	53.5	49.5

<sup>1</sup>The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this table it would be known as "porterhouse" steak.



RETAIL PRICES OF FOOD

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Columbus, Ohio			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.				
Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15		Dec. 15, 1926	Jan. 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.	Cts.
37.2	39.7	39.4	19.6	33.8	36.2	35.6	22.0	31.3	32.3	32.5	22.8	41.0	41.4	41.1	30.0	60.9	160.5	160.5	60.5
32.8	34.9	34.6	18.8	30.7	32.9	32.8	19.0	27.6	29.6	29.2	18.0	33.5	33.6	33.8	24.0	46.1	46.0	46.0	45.4
29.6	30.8	30.5	17.6	26.6	27.6	28.3	15.9	23.2	23.9	24.0	18.0	30.1	30.9	30.0	22.6	31.6	31.2	31.2	31.0
23.5	24.7	24.7	15.4	21.4	22.9	22.8	14.0	18.2	18.7	18.9	14.5	22.5	22.9	22.7	16.7	22.9	22.6	22.9	22.9
15.4	16.0	15.7	11.8	15.0	17.8	16.9	9.1	11.1	11.0	11.4	10.6	14.2	14.7	14.7	---	13.3	13.6	13.3	13.3
34.1	35.6	35.4	20.0	34.7	35.2	35.6	17.5	33.4	34.0	33.7	16.5	39.4	38.3	38.2	18.3	36.7	38.5	36.7	36.7
47.6	51.2	50.5	36.0	46.1	44.2	44.6	26.3	49.3	50.6	50.0	21.0	50.7	51.8	51.0	24.8	45.4	45.7	45.3	45.3
52.2	58.7	58.5	28.8	56.4	59.3	58.3	27.0	54.5	58.4	57.4	23.5	57.7	61.5	61.0	28.7	51.8	56.9	56.7	56.7
43.3	43.7	41.3	20.5	43.0	43.4	44.2	15.0	36.2	35.6	35.2	16.0	42.0	38.9	38.0	18.5	41.3	41.8	41.2	41.2
40.4	37.4	38.7	17.9	32.5	32.7	33.5	20.4	31.8	31.3	32.1	18.8	42.0	37.6	39.6	23.7	42.8	43.6	43.2	43.2
39.4	37.1	35.4	---	41.2	36.5	36.2	---	37.8	33.5	33.5	---	39.6	35.3	34.1	---	38.0	36.8	36.2	36.2
12.0	12.0	12.0	10.0	15.0	13.0	13.0	8.4	12.0	12.0	12.0	9.0	14.0	14.0	14.2	9.0	14.0	14.9	14.0	14.0
11.5	11.5	11.5	---	13.4	13.0	13.0	---	11.2	10.4	10.4	---	11.2	11.3	11.2	---	12.6	12.7	12.5	12.5
52.6	60.9	57.1	40.0	55.7	57.8	57.0	40.0	50.6	52.8	53.5	39.7	54.8	60.9	59.2	38.1	55.7	54.9	56.4	56.4
31.2	29.7	28.8	---	34.1	33.0	31.7	---	29.8	26.5	25.2	---	30.3	28.6	29.4	---	30.4	30.0	30.0	30.0
38.3	37.0	37.4	20.0	37.5	37.0	37.6	26.1	39.3	37.6	37.7	21.3	37.5	39.0	39.1	23.6	39.1	38.5	38.8	38.8
19.3	18.5	17.8	16.2	26.9	24.6	23.6	15.6	23.7	20.8	20.4	15.6	23.0	20.6	19.7	15.0	21.7	19.3	18.6	18.6
26.1	26.5	26.0	---	23.1	22.2	22.3	---	23.4	23.4	22.8	---	27.2	27.2	27.2	---	27.0	26.9	26.9	26.9
48.6	62.7	64.0	34.0	53.9	56.0	47.1	37.0	49.4	64.6	62.4	35.0	57.1	66.5	58.4	42.8	70.9	88.9	73.8	73.8
42.2	47.3	42.5	30.0	41.0	44.0	39.0	25.0	33.9	45.8	41.9	25.2	42.3	44.9	43.4	27.2	47.3	50.0	50.7	50.7
8.1	8.1	8.0	5.5	8.6	9.5	9.5	5.4	8.4	8.3	8.1	5.6	8.7	8.4	8.4	6.2	9.3	9.2	9.2	9.2
6.2	5.5	5.4	3.3	6.0	5.5	5.5	2.6	5.4	4.5	4.4	3.1	6.0	5.5	5.4	3.3	6.4	6.0	5.9	5.9
3.8	3.7	3.7	2.7	4.7	4.2	4.2	2.5	4.3	4.1	4.4	2.8	5.6	5.8	5.9	3.6	7.6	6.7	6.5	6.5
9.4	9.3	9.4	---	10.1	10.2	10.0	---	8.9	8.1	7.9	---	9.4	9.4	9.4	---	9.7	9.4	9.5	9.5
10.8	10.9	10.9	---	11.1	11.4	11.6	---	11.8	11.0	10.9	---	10.7	10.6	10.6	---	11.6	11.3	11.3	11.3
24.8	25.2	25.8	---	27.3	27.6	27.3	---	26.0	24.5	25.0	---	25.8	26.0	25.8	---	26.1	25.3	25.3	25.3
23.3	20.4	20.4	---	21.2	21.4	21.5	---	19.1	19.8	19.8	---	21.9	21.9	22.0	---	24.4	23.7	24.5	24.5
13.3	12.7	12.6	9.3	13.1	12.5	11.9	8.6	11.6	10.1	10.5	8.4	12.0	12.8	12.3	10.0	12.2	11.5	11.8	11.8
8.7	8.3	8.2	---	11.4	10.8	11.0	---	10.2	9.6	9.7	---	8.9	8.5	8.3	---	10.6	10.2	9.9	9.9
5.8	3.9	3.9	2.0	6.3	5.1	5.1	1.2	4.8	3.7	3.8	1.3	5.7	3.3	3.3	1.8	6.3	3.9	3.9	3.9
6.3	5.1	5.4	---	7.4	6.5	7.0	---	4.7	3.5	3.9	---	5.4	4.5	4.8	---	6.1	5.1	5.3	5.3
5.6	4.3	4.4	---	7.7	5.4	5.6	---	4.3	3.0	3.7	---	6.3	4.1	4.1	---	5.9	4.4	5.9	5.9
12.5	12.0	12.5	---	14.3	13.4	13.5	---	13.3	11.2	11.1	---	11.9	11.6	11.2	---	12.0	12.2	12.0	12.0
15.8	14.4	14.2	---	18.4	17.9	18.3	---	15.6	14.3	14.3	---	15.9	16.2	16.0	---	17.1	17.1	16.5	16.5
15.4	15.1	15.5	---	21.4	21.7	21.8	---	16.1	15.5	15.5	---	16.6	17.0	16.5	---	18.4	18.5	18.6	18.6
14.2	12.5	13.2	---	12.6	12.5	12.8	---	13.9	12.5	12.7	---	13.2	12.6	12.6	---	12.5	12.1	13.2	13.2
6.9	7.7	7.9	6.5	7.6	8.1	8.1	5.8	6.7	8.0	8.0	5.2	7.0	7.5	7.5	5.5	6.7	7.4	7.5	7.5
88.4	89.5	89.3	66.7	106.1	105.8	106.2	52.8	67.7	68.5	68.5	43.3	71.6	73.4	74.0	44.2	62.8	60.4	61.2	61.2
51.3	51.3	51.1	36.7	59.6	59.8	60.3	29.4	52.3	51.5	51.2	29.3	52.0	51.6	51.1	33.0	53.2	52.3	52.0	52.0
18.0	17.1	17.4	---	21.1	20.9	20.5	---	18.4	17.5	16.4	---	18.5	17.9	18.5	---	15.6	15.6	15.4	15.4
14.7	14.6	14.6	---	16.7	16.5	16.1	---	14.3	14.5	14.5	---	15.5	14.8	14.8	---	14.4	14.6	14.1	14.1
38.3	39.4	37.5	---	38.3	33.8	33.8	---	12.1	12.1	9.4	---	35.0	36.9	36.3	10.0	10.2	10.5	10.5	10.5
49.3	52.3	50.8	---	57.0	53.5	54.1	---	43.9	51.0	45.3	---	49.9	55.2	53.6	---	49.6	45.9	46.5	46.5

<sup>2</sup> Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

Article	Unit	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15		Dec. 15, 1926	Jan. 15, 1927	Jan. 15		Dec. 15, 1926	Jan. 15, 1927
					1913	1926			1913	1926		
Sirloin steak	Pound	31.7	34.9	35.2	23.5	36.4	38.3	37.7	26.0	37.8	36.7	35.8
Round steak	do	30.0	33.1	33.1	20.3	35.1	36.6	36.1	20.3	32.2	32.0	31.3
Rib roast	do	25.0	27.5	26.8	16.3	28.8	29.1	28.9	23.3	27.6	27.5	27.5
Chuck roast	do	19.0	20.2	21.0	14.3	24.4	24.3	24.7	14.0	19.8	20.3	20.4
Plate beef	do	16.2	17.9	18.7	10.6	15.3	15.7	15.8	11.2	11.8	12.8	12.8
Pork chops	do	34.6	36.4	36.1	18.0	34.6	33.9	33.7	22.3	36.1	36.5	35.2
Bacon, sliced	do	48.9	51.1	50.7	27.7	44.6	46.8	44.6	26.8	48.7	47.9	46.0
Ham, sliced	do	50.8	56.8	55.4	28.8	55.2	57.1	57.5	25.7	52.2	56.1	52.7
Lamb, leg of	do	36.0	35.0	35.0	17.7	42.5	40.0	39.2	20.3	41.7	38.3	37.2
Hens	do	37.4	35.6	35.9	20.0	38.7	37.8	40.0	22.0	39.9	38.9	39.6
Salmon, canned, red	do	35.1	32.5	31.1		35.6	34.1	33.6		38.4	34.0	34.3
Milk, fresh	Quart	17.3	15.8	15.8	8.0	12.0	12.0	12.0	12.4	22.0	22.3	22.3
Milk, evaporated	15-16 oz. can	11.5	11.5	11.4		10.8	10.8	10.8		12.5	11.9	11.7
Butter	Pound	54.9	58.1	57.0	40.7	53.9	61.4	59.4	43.4	58.6	58.9	58.9
Oleomargarine (all butter substitutes)	do	31.5	29.9	29.3		32.2	31.6	31.0		32.2	31.4	30.9
Cheese	do	34.5	34.1	34.6	21.0	37.1	37.2	38.4	22.5	35.3	35.2	36.2
Lard	do	24.7	21.5	20.5	15.0	19.8	18.2	17.5	15.0	23.8	22.6	22.6
Vegetable lard substitutes	do	17.4	17.1	16.5		26.4	27.1	27.1		24.4	23.1	22.8
Eggs, strictly fresh	Dozen	49.4	52.3	43.3	34.2	50.6	60.5	50.5	38.3	66.4	65.4	56.1
Eggs, storage	do	40.5	42.4	35.0	23.7	42.7	46.0	42.5	30.0	45.3	44.7	41.7
Bread	Pound	9.0	8.8	8.8	5.1	8.1	8.1	8.1	6.5	11.0	11.0	10.9
Flour	do	6.0	5.6	5.4	3.2	5.9	5.5	5.6	3.7	6.9	6.6	6.6
Corn meal	do	4.2	4.2	4.1	2.6	4.2	4.2	4.2	2.8	4.2	4.2	4.2
Rolled oats	do	9.1	9.0	8.9		8.1	8.3	8.3		9.6	9.5	9.3
Corn flakes	8-oz. pkg	11.8	11.6	11.5		10.1	10.2	10.1		11.3	11.1	10.9
Wheat cereal	28-oz. pkg	25.7	25.4	25.8		24.6	25.1	25.1		24.7	24.8	24.4
Macaroni	Pound	18.9	18.7	18.1		18.9	19.2	19.2		20.4	19.8	19.6
Rice	do	9.8	9.0	8.9	9.2	11.3	11.5	11.4	6.6	11.2	10.4	9.5
Beans, navy	do	10.0	9.3	9.2		8.9	8.5	8.7		11.2	9.8	9.6
Potatoes	do	6.3	5.0	4.9	1.3	5.9	3.8	3.7	2.3	7.7	5.0	5.0
Onions	do	6.3	5.6	6.0		6.2	5.0	5.5		8.3	6.9	7.1
Cabbage	do	7.0	5.2	4.9		5.5	4.4	4.5		7.2	5.3	5.3
Beans, baked	No. 2 can	12.4	11.2	11.3		11.2	10.3	9.9		11.3	11.0	10.8
Corn, canned	do	15.8	14.1	14.1		15.2	14.4	14.1		19.2	18.8	17.5
Peas, canned	do	14.6	14.0	13.4		15.6	14.4	14.1		19.9	18.6	18.1
Tomatoes, canned	do	10.8	11.5	11.5		13.5	12.7	12.9		11.2	11.1	10.7
Sugar, granulated	Pound	6.8	7.0	7.3	6.3	7.0	7.7	7.9	6.4	7.2	7.6	7.8
Tea	do	83.0	82.7	83.1	60.0	82.9	84.0	87.9	60.0	96.7	98.5	97.9
Coffee	do	45.5	44.6	44.9	31.3	50.8	51.5	50.7	34.5	51.6	50.3	50.0
Prunes	do	16.7	15.7	16.0		20.0	19.6	19.2		18.4	16.9	16.4
Raisins	do	14.6	14.1	14.3		16.4	15.4	15.5		16.5	15.9	15.2
Bananas	Dozen	29.0	29.2	27.1		30.9	31.4	29.5		32.0	25.0	22.5
Oranges	do	44.4	50.2	44.4		44.4	43.6	45.6		35.0	28.0	25.8

<sup>1</sup> 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.

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.				
Jan. 15		Dec. 15, 1926	Jan. 15, 1927	Jan. 15		Dec. 15, 1926	Jan. 15, 1927	Jan. 15		Dec. 15, 1926	Jan. 15, 1927	Jan. 15		Dec. 15, 1926	Jan. 15, 1927	Jan. 15		Dec. 15, 1926	Jan. 15, 1927	
1913	1926		1913	1926		1913	1926	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.	Cts.
21.8	37.7	37.7	37.2	23.3	33.8	35.2	35.0	22.0	36.4	36.5	37.5	20.6	33.2	35.4	35.4	33.6	56.8	54.9	55.2	55.2
19.5	31.1	33.0	32.7	19.2	30.4	31.9	31.5	20.0	29.6	30.2	30.6	17.5	28.8	31.5	31.5	27.0	45.2	43.9	45.7	45.7
16.7	26.4	26.4	26.8	17.7	26.5	27.0	28.0	17.4	28.8	30.2	30.5	18.1	24.7	26.8	26.3	18.4	28.3	27.2	27.1	27.1
14.0	19.5	19.6	19.6	15.0	18.2	21.8	22.3	14.7	20.3	20.5	20.8	13.0	18.3	20.3	20.3	16.4	22.9	22.9	22.7	22.7
10.3	12.9	13.3	13.5	12.5	14.8	16.8	16.6	11.8	14.7	15.1	15.2	10.6	15.2	16.8	16.5	---	16.2	16.3	16.0	16.0
18.0	34.1	33.1	33.0	19.3	34.2	34.8	33.9	24.4	41.9	45.2	45.2	18.0	32.8	32.2	32.8	17.6	35.9	38.4	35.9	35.9
28.2	49.0	48.4	47.0	33.8	48.2	51.7	50.0	33.8	57.0	57.3	57.4	27.5	46.1	50.0	48.8	22.2	42.0	41.6	41.3	41.3
26.4	54.3	55.9	55.9	28.3	50.0	56.5	55.4	35.0	67.1	63.4	69.5	27.0	47.9	54.2	53.1	25.4	44.0	45.0	45.9	45.9
16.1	33.9	33.8	34.5	19.2	40.0	40.6	40.0	17.4	37.7	36.6	36.8	16.9	39.0	38.8	39.7	17.0	38.3	36.9	37.6	37.6
16.0	34.4	32.2	35.1	17.2	30.5	29.4	31.5	26.8	42.9	44.9	44.6	20.6	38.8	36.4	38.4	23.2	42.1	43.1	44.6	44.6
---	37.5	36.4	35.9	---	38.0	35.1	33.4	---	34.8	32.2	32.1	---	36.1	34.6	32.6	---	39.1	33.9	33.4	33.4
8.7	13.0	13.0	13.0	10.0	15.0	15.0	15.0	10.0	15.0	15.0	15.0	8.8	13.8	13.0	13.0	8.0	14.0	14.0	14.0	14.0
40.0	11.8	11.7	11.6	45.0	12.4	11.8	11.8	---	10.2	10.2	10.2	---	11.9	11.7	11.7	---	13.1	12.7	12.9	12.9
---	54.0	56.5	56.4	---	56.1	57.5	58.3	44.5	54.3	56.7	56.6	41.3	55.6	62.3	60.9	41.2	57.2	57.6	59.1	59.1
---	28.0	27.0	26.9	---	31.1	30.2	28.8	---	34.0	30.7	30.6	---	34.5	27.3	26.9	---	27.5	25.5	25.8	25.8
21.5	36.4	37.9	37.9	21.7	37.2	37.6	38.6	19.5	40.0	39.5	38.3	20.8	38.1	37.5	37.4	21.3	36.9	36.4	36.4	36.4
15.9	21.9	19.9	19.4	14.8	23.4	22.7	22.6	18.0	24.4	22.4	21.7	15.5	21.7	18.6	18.0	16.0	21.3	19.8	18.6	18.6
---	27.2	27.0	27.7	---	23.6	22.8	22.5	---	25.7	26.0	26.2	---	28.2	29.5	28.7	---	26.3	25.4	25.8	25.8
31.3	47.4	59.7	50.0	33.3	49.1	57.0	50.6	41.0	42.9	52.6	46.9	30.0	50.7	62.4	51.8	37.2	58.5	77.7	65.1	65.1
25.0	37.7	43.4	39.8	25.0	42.3	48.3	41.3	30.0	36.5	44.5	43.0	24.2	43.7	50.0	41.5	25.0	44.6	50.0	49.3	49.3
5.9	9.9	9.7	9.6	6.0	8.7	9.5	9.6	6.2	8.6	8.5	8.5	5.7	9.3	9.3	9.3	5.9	8.7	8.7	8.7	8.7
3.1	6.2	5.3	5.3	3.6	6.8	6.4	6.4	3.4	5.9	5.4	5.4	3.5	7.1	6.2	6.0	3.4	6.5	5.7	5.8	5.8
2.5	5.1	4.7	4.8	2.4	4.2	4.0	3.9	3.3	5.2	5.4	5.4	2.2	4.1	3.8	3.7	3.8	5.2	5.3	5.2	5.2
---	9.2	9.1	9.2	---	10.2	10.6	10.8	---	9.7	10.2	10.1	---	8.6	8.4	8.4	---	9.0	8.9	9.0	9.0
---	12.2	11.1	11.0	---	12.5	11.9	12.0	---	10.2	10.1	10.1	---	10.7	10.7	10.6	---	11.4	11.1	11.1	11.1
---	26.9	26.0	26.3	---	24.8	25.8	26.0	---	24.7	25.0	25.0	---	24.3	26.2	25.8	---	25.2	23.7	25.5	25.5
---	20.1	20.1	20.1	---	20.8	20.8	21.7	---	17.5	18.2	18.2	---	19.5	18.1	18.3	---	24.5	23.8	23.8	23.8
8.7	11.0	9.5	9.8	8.3	10.0	9.5	9.3	7.7	11.1	10.8	10.6	8.1	11.2	11.0	11.5	8.5	11.1	9.8	10.0	10.0
---	9.7	9.0	9.1	---	9.9	9.2	9.5	---	9.8	9.1	9.2	---	8.4	8.0	8.0	---	9.3	9.0	9.1	9.1
1.5	5.6	5.3	3.9	1.7	6.3	4.7	4.7	1.1	5.5	4.4	4.4	1.6	6.0	3.9	3.8	1.5	5.9	3.6	3.6	3.6
---	6.8	6.8	6.2	---	7.2	5.4	6.2	---	6.3	4.8	5.5	---	5.8	5.2	5.2	---	5.3	4.6	5.1	5.1
---	6.4	3.9	4.3	---	6.9	4.8	5.1	---	4.9	3.8	4.2	---	6.4	4.7	4.7	---	4.6	4.0	4.2	4.2
---	13.5	12.5	12.5	---	11.9	11.5	11.0	---	11.6	11.7	11.5	---	11.0	9.9	10.0	---	14.1	13.9	13.5	13.5
---	15.4	15.0	14.5	---	16.9	16.5	17.6	---	16.2	16.2	16.0	---	17.5	15.1	15.1	---	18.1	17.2	16.9	16.9
---	15.7	14.9	15.1	---	18.7	17.5	18.8	---	18.0	17.5	17.2	---	16.1	16.0	15.3	---	19.4	18.9	18.5	18.5
---	12.4	11.6	11.7	---	12.2	11.3	11.7	---	15.6	15.4	15.6	---	12.0	10.5	10.7	---	13.5	12.2	12.6	12.6
5.9	6.9	7.5	7.8	5.9	7.5	7.9	8.3	5.9	6.6	7.1	7.4	5.5	7.1	7.6	7.9	5.8	6.7	7.6	7.8	7.8
54.0	79.4	88.3	89.4	50.0	103.9	106.6	106.1	54.5	73.9	76.0	74.5	60.0	80.4	89.4	90.3	45.0	63.7	62.9	62.9	62.9
27.8	53.2	52.8	50.8	---	56.2	55.3	53.5	36.3	54.6	53.4	53.3	27.5	50.7	50.1	48.2	32.0	52.5	52.6	52.3	52.3
---	17.8	16.8	17.0	---	18.5	17.1	17.5	---	16.6	15.3	15.0	---	16.9	15.5	16.4	---	15.7	15.2	15.2	15.2
---	15.4	14.8	14.8	---	15.7	15.7	15.4	---	12.5	12.9	12.8	---	14.8	14.4	14.7	---	14.5	13.9	14.0	14.0
---	11.5	11.2	10.9	---	8.9	9.5	8.6	---	9.8	10.4	9.3	---	10.6	10.2	10.7	---	9.9	9.6	9.8	9.8
47.8	53.7	49.6	---	45.1	45.3	48.0	---	43.1	44.6	47.3	---	40.3	39.5	36.8	---	45.7	49.6	49.4	49.4	49.4

<sup>2</sup>No. 2½ can.

<sup>3</sup>Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Jan. 15—		Dec.	Jan.	Jan. 15—		Dec.	Jan.	Jan. 15—		Dec.	Jan.
		1913	1926	15, 1926	15, 1927	1913	1926	15, 1926	15, 1927	1913	1926	15, 1926	15, 1927
Sirloin steak	Pound	Cts. 20.0	Cts. 35.3	Cts. 35.9	Cts. 36.0	Cts. 20.5	Cts. 37.3	Cts. 37.8	Cts. 37.6	Cts. 20.0	Cts. 30.9	Cts. 31.1	Cts. 31.9
Round steak	do	16.8	31.7	32.7	33.8	18.5	33.5	33.2	33.6	17.7	27.8	27.9	28.9
Rib roast	do	18.2	26.4	25.9	25.3	17.3	28.2	28.0	28.4	16.5	24.7	24.4	26.6
Chuck roast	do	13.9	19.2	19.4	19.4	15.0	23.5	24.5	24.8	14.1	19.4	20.4	20.6
Plate beef	do	10.1	14.6	15.2	16.5	10.5	14.1	14.5	14.7	9.0	11.2	12.4	12.8
Pork chops	do	18.6	31.1	33.2	32.8	15.3	33.9	33.0	33.7	16.3	33.2	32.4	33.1
Bacon, sliced	do	29.1	42.8	42.7	41.5	25.5	46.7	48.8	48.6	25.0	48.4	48.8	47.4
Ham, sliced	do	26.4	49.6	55.0	54.0	26.0	49.8	51.3	52.8	27.5	50.4	52.5	52.9
Lamb, leg of	do	20.1	39.6	37.9	38.0	18.5	40.5	36.5	37.7	13.6	36.0	34.4	34.4
Hens	do	19.4	33.5	31.0	32.1	17.8	36.6	32.1	35.4	17.3	35.9	32.9	35.1
Salmon, canned, red	do	33.8	34.3	35.0			32.2	33.6	34.0		39.2	39.0	38.7
Milk, fresh	Quart	10.0	15.0	15.0	15.0	7.0	10.0	11.0	11.0	7.5	11.7	11.0	11.0
Milk, evaporated	15-16 oz. can		11.6	11.2	11.2		11.3	11.0	11.1		12.1	11.4	11.5
Butter	Pound	42.1	55.1	56.8	56.9	38.0	50.5	60.1	56.1	39.6	50.0	60.0	54.6
Oleomargarine (all butter substitutes)	do		27.2	27.4	27.9		29.2	27.2	27.1		29.0	25.8	25.5
Cheese	do	20.0	34.4	33.8	36.0	22.3	35.3	35.4	36.0	20.3	35.4	35.4	36.1
Lard	do	15.2	20.1	17.6	17.0	15.0	22.3	20.4	19.7	15.0	20.9	18.9	18.9
Vegetable lard substitute	do		23.7	21.2	20.6		26.9	26.7	26.8		27.4	27.4	27.1
Eggs, strictly fresh	Dozen	31.4	48.9	52.2	48.5	34.6	48.4	63.3	51.8	31.5	46.1	54.8	50.3
Eggs, storage	do	25.0	38.3	43.3	39.5	25.3	38.7	43.1	42.2	23.0	38.3	39.6	40.0
Bread	Pound	6.0	9.7	9.5	9.5	5.6	9.0	9.0	9.0	5.7	9.9	8.9	8.9
Flour	do	3.6	7.1	6.1	6.1	3.1	5.7	5.2	5.1	2.8	5.8	5.4	5.3
Corn meal	do	2.1	3.7	3.7	3.4	3.3	5.6	5.7	5.5	2.4	5.4	5.2	5.2
Rolled oats	do		9.4	9.1	9.1		8.7	8.5	8.4		8.4	8.2	8.3
Corn flakes	8-oz. pkg		11.0	10.9	10.8		10.5	10.2	10.3		10.9	10.8	10.8
Wheat cereal	28-oz. pkg		25.9	25.1	25.2		24.5	24.6	24.5		25.8	25.3	25.3
Macaroni	Pound		19.5	19.2	19.3		18.1	18.0	17.3		19.4	18.9	19.1
Rice	do	8.0	10.3	9.4	9.2	9.0	11.8	11.3	10.8	8.6	11.9	11.0	10.7
Beans, navy	do		9.6	9.4	9.0		8.8	8.5	8.5		9.3	9.5	9.6
Potatoes	do	1.6	6.2	4.5	4.6	1.2	4.9	3.5	3.5	1.0	5.1	3.2	3.3
Onions	do		5.4	5.1	5.3		5.1	4.6	5.0		5.4	5.0	5.4
Cabbage	do		5.8	3.9	4.7		5.1	4.0	5.1		4.9	3.7	4.0
Beans, baked	No. 2 can		12.1	11.6	11.5		11.3	11.1	11.2		13.4	12.4	12.2
Corn, canned	do		16.6	15.6	15.5		16.5	15.5	15.6		16.0	14.3	14.2
Peas, canned	do		17.7	16.9	16.0		17.1	16.3	15.8		16.2	14.7	14.4
Tomatoes, canned	do		11.5	10.4	10.2		14.0	13.4	13.6		14.5	13.7	13.8
Sugar, granulated	Pound	5.8	6.9	7.1	7.3	5.5	6.3	6.9	7.2	5.6	6.8	7.3	7.5
Tea	do	63.8	94.4	99.0	99.5	50.0	71.3	71.0	71.6	45.0	61.8	60.6	61.7
Coffee	do	27.5	51.7	49.6	49.5	27.5	47.0	46.8	45.9	30.8	54.3	53.9	53.8
Prunes	do		17.7	15.9	15.5		17.4	16.5	15.7		17.2	16.8	16.0
Raisins	do		15.3	14.6	14.6		14.8	14.6	14.7		15.3	14.4	14.5
Bananas	Dozen		<sup>2</sup> 9.1	<sup>2</sup> 8.1	<sup>2</sup> 8.7		<sup>2</sup> 9.8	<sup>2</sup> 9.9	<sup>2</sup> 9.9		<sup>2</sup> 11.3	<sup>2</sup> 11.8	<sup>2</sup> 11.9
Oranges	do		41.7	37.3	33.4		47.1	52.9	46.0		49.8	57.6	50.3

1 Whole.

RETAIL PRICES OF FOOD

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.				
Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 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.	Cts.
33.3	34.5	34.5	25.2	44.8	44.5	43.9	30.0	54.1	53.5	53.7	19.6	34.6	34.9	34.9	24.4	45.6	44.1	44.3	
32.1	33.6	33.6	24.8	42.7	42.7	42.3	26.2	43.9	43.7	44.0	17.1	30.1	31.2	23.1	43.4	43.0	42.7		
27.3	28.2	28.6	19.6	36.0	35.4	34.2	22.6	37.0	35.9	35.6	18.3	29.0	29.6	30.0	21.0	38.9	38.8	38.6	
21.7	22.3	23.9	16.8	24.8	24.8	24.4	17.6	27.5	26.8	26.3	12.1	20.4	20.9	20.7	14.9	24.9	24.6	24.6	
17.2	17.3	17.8	11.6	14.0	13.0	12.8	-----	15.2	15.5	15.6	10.9	18.3	18.2	18.5	13.7	21.0	20.2	19.5	
38.3	39.1	38.6	20.0	36.1	37.2	37.1	19.2	36.6	38.2	37.1	20.0	35.2	36.9	36.0	19.5	39.1	41.5	39.2	
48.4	51.2	48.8	22.4	44.6	48.4	47.6	25.8	49.9	49.7	50.1	29.8	45.2	51.4	50.5	23.0	49.8	50.1	49.3	
50.0	54.3	52.7	18.4	57.6	56.2	55.3	30.0	57.7	62.9	61.5	26.3	49.3	54.0	50.3	27.8	59.0	61.3	62.0	
41.3	40.7	40.0	21.2	39.4	37.3	36.2	19.0	39.9	38.8	38.0	19.8	39.5	38.6	38.5	15.9	37.5	36.9	35.3	
37.6	36.8	38.0	21.2	39.6	38.3	37.3	21.8	42.4	42.0	42.0	20.8	39.8	37.3	37.6	19.8	39.7	40.3	39.5	
39.0	34.0	32.8	-----	35.7	32.4	31.9	-----	34.1	32.8	32.1	-----	37.7	37.4	37.6	-----	35.8	31.9	30.5	
17.8	17.8	18.5	9.0	15.0	15.0	15.0	9.0	16.0	16.0	16.0	10.0	14.0	14.0	14.0	9.0	15.0	15.0	15.0	
11.7	11.8	11.8	-----	11.3	11.2	11.2	-----	12.3	12.1	12.1	-----	11.1	11.1	11.2	-----	11.1	11.1	11.1	
58.8	60.2	59.9	43.2	55.8	63.6	60.1	38.3	56.3	57.7	57.7	41.1	56.6	58.5	59.0	40.8	54.4	63.3	58.8	
31.3	30.9	29.1	-----	31.1	30.5	30.7	-----	33.1	31.7	31.1	-----	32.1	29.9	29.4	-----	31.0	31.3	30.2	
38.0	37.5	37.8	24.5	39.5	39.8	39.7	22.0	39.4	38.3	39.1	22.0	35.4	36.7	37.5	20.0	38.5	37.7	38.1	
22.3	20.3	19.2	16.3	22.6	20.8	20.1	15.2	22.3	20.4	19.4	14.4	22.1	20.1	19.8	15.9	23.2	20.5	20.5	
21.5	20.6	20.4	-----	26.3	25.8	25.7	-----	25.8	26.0	25.7	-----	22.6	19.7	19.0	-----	25.9	26.2	26.2	
50.6	64.6	50.3	48.8	63.2	73.8	63.9	45.9	70.2	89.1	75.1	35.6	53.2	56.1	51.1	42.6	61.6	76.8	64.7	
44.1	48.2	42.6	29.4	43.6	48.1	48.2	28.2	46.4	52.2	50.7	25.0	40.7	41.5	40.8	27.4	46.3	48.0	47.4	
9.6	9.8	10.1	5.7	9.3	9.6	9.6	5.7	9.0	9.2	9.2	5.1	8.9	8.8	8.8	6.0	9.6	9.6	9.6	
6.8	6.4	6.4	3.8	6.0	5.5	5.4	3.2	6.3	5.7	5.6	3.7	7.6	7.0	6.8	3.3	6.3	6.4	5.5	
4.1	4.0	3.8	3.6	6.8	6.7	6.7	3.2	7.0	6.7	6.8	2.6	4.0	4.0	4.1	3.5	6.4	6.5	6.5	
8.8	8.6	8.6	-----	8.4	8.5	8.2	-----	9.4	9.3	9.3	-----	9.1	9.0	9.0	-----	8.7	8.6	8.7	
11.2	11.1	11.1	-----	10.1	10.0	10.0	-----	10.9	10.8	10.7	-----	10.7	10.3	10.4	-----	10.0	10.0	10.0	
24.8	25.4	25.3	-----	24.1	24.3	24.5	-----	25.1	24.9	24.8	-----	24.8	24.3	24.5	-----	24.0	24.1	23.9	
20.6	20.9	20.5	-----	21.1	21.0	20.9	-----	22.9	22.4	22.3	-----	9.3	10.0	10.5	-----	20.8	21.1	20.8	
11.2	10.4	10.3	9.0	11.2	10.9	10.8	9.3	12.1	11.6	11.1	7.4	10.5	9.9	9.8	8.0	10.7	10.1	10.1	
10.1	8.9	9.1	-----	10.0	9.5	9.7	-----	9.8	9.7	9.6	-----	9.1	8.5	8.4	-----	11.0	10.2	9.9	
6.4	5.0	4.9	2.5	6.3	4.4	4.4	1.7	6.1	3.9	4.0	2.0	6.1	4.7	4.7	2.5	6.4	4.3	4.3	
5.5	5.1	4.8	-----	6.2	5.0	5.6	-----	6.2	5.5	6.0	-----	5.1	4.3	4.5	-----	5.9	5.0	5.9	
5.7	4.9	5.3	-----	5.4	4.1	4.3	-----	5.7	4.5	4.9	-----	5.2	4.1	4.1	-----	5.4	4.2	5.0	
11.0	10.9	10.7	-----	11.6	10.6	10.7	-----	11.6	11.2	11.4	-----	11.4	10.7	11.0	-----	11.2	10.6	10.5	
16.8	17.5	18.1	-----	17.5	16.4	16.2	-----	18.6	18.9	18.6	-----	15.3	15.4	15.6	-----	14.5	14.5	14.7	
16.3	16.6	16.3	-----	17.2	17.0	16.2	-----	19.9	20.3	19.3	-----	16.4	17.5	17.4	-----	15.7	15.3	14.8	
11.4	10.8	10.9	-----	11.2	10.3	11.6	-----	12.4	12.6	12.6	-----	11.2	11.8	11.8	-----	11.0	10.8	11.4	
6.7	7.4	7.5	5.7	6.0	6.6	6.7	5.7	6.5	7.2	7.4	5.7	6.1	6.9	7.1	5.1	5.8	6.5	6.8	
80.0	80.7	78.9	53.8	64.2	62.9	63.2	55.0	59.5	60.4	60.0	62.1	82.4	82.6	80.4	43.3	64.7	65.7	65.9	
49.0	50.1	50.0	29.3	49.7	49.1	48.8	33.8	53.3	52.2	52.3	27.1	37.6	35.5	35.6	27.5	48.0	47.4	46.7	
16.9	15.4	15.8	-----	16.3	14.8	14.9	-----	16.2	15.9	15.9	-----	18.1	17.8	17.3	-----	16.1	14.6	13.9	
14.5	14.4	14.5	-----	14.0	14.8	14.6	-----	14.1	14.0	13.9	-----	14.2	14.2	13.9	-----	14.5	14.3	14.3	
24.0	23.0	23.9	-----	38.9	38.1	38.6	-----	34.1	34.5	35.0	-----	17.9	14.6	15.7	-----	37.1	40.3	37.7	
40.9	38.7	36.8	-----	51.1	50.7	49.2	-----	50.8	53.2	50.7	-----	41.5	40.0	40.5	-----	54.9	58.5	49.8	

<sup>2</sup> Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927
					1913	1926					
Sirloin steak	Pound	40.1	40.6	40.6	23.6	36.6	37.1	36.8	33.6	34.8	35.0
Round steak	do.	34.1	33.8	34.5	19.2	32.8	34.5	34.0	32.1	34.1	34.1
Rib roast	do.	31.3	31.6	31.6	16.7	26.1	26.3	26.3	23.7	25.1	25.5
Chuck roast	do.	22.3	22.7	22.5	13.8	21.7	22.0	21.7	20.4	22.2	21.5
Plate beef	do.	14.9	16.3	15.5	9.2	12.1	12.8	13.2	13.8	15.0	14.3
Pork chops	do.	34.9	34.8	35.6	16.7	35.7	36.2	34.7	33.3	34.7	33.7
Bacon, sliced	do.	44.5	43.0	46.8	25.4	51.1	53.0	51.2	50.0	50.4	50.4
Ham, sliced	do.	46.8	49.5	49.8	27.0	54.7	58.7	57.8	52.1	56.8	56.8
Lamb, leg of	do.	41.3	38.6	39.3	15.0	37.7	36.2	36.3	36.2	40.0	39.3
Hens	do.	38.4	37.1	40.2	16.3	33.4	31.2	32.6	34.8	33.3	35.0
Salmon, canned, red	do.	36.7	34.0	33.1	—	38.1	36.0	35.1	38.4	35.6	35.2
Milk, fresh	Quart	17.5	17.5	17.5	8.2	11.6	11.3	11.3	11.7	12.0	13.0
Milk, evaporated	15-16 oz. can.	11.4	11.2	11.2	—	11.9	11.6	11.8	11.6	11.4	11.3
Butter	Pound	58.6	59.6	60.8	39.2	51.4	53.9	54.7	51.7	57.8	56.1
Oleomargarine (all butter substitutes)	do.	28.9	27.2	27.7	—	31.3	28.0	26.2	31.2	29.4	28.9
Cheese	do.	34.5	34.7	35.4	22.9	37.5	36.3	37.0	35.9	37.0	37.6
Lard	do.	26.9	19.1	19.0	16.4	24.9	23.4	22.8	22.5	20.4	20.0
Vegetable lard substitutes	do.	21.6	21.9	22.1	—	27.0	27.3	26.7	27.2	27.1	27.1
Eggs, strictly fresh	Dozen	55.5	64.7	55.0	29.5	47.1	52.1	45.1	48.3	64.7	52.5
Eggs, storage	do.	44.5	48.0	48.8	—	39.8	43.2	38.8	40.4	45.4	42.4
Bread	Pound	9.5	9.9	9.9	—	5.2	10.1	10.2	10.0	10.1	10.0
Flour	do.	6.3	5.8	5.9	2.9	5.7	4.7	4.7	6.1	5.6	5.5
Corn meal	do.	4.7	4.5	4.5	2.3	5.0	4.9	4.8	4.9	5.0	4.9
Rolled oats	do.	8.5	8.7	9.0	—	10.3	10.4	10.2	9.0	9.1	8.8
Corn flakes	8-oz. pkg.	10.4	10.3	10.4	—	12.0	12.8	12.4	12.0	11.9	11.8
Wheat cereal	28-oz. pkg.	23.9	23.8	24.8	—	28.3	28.0	28.0	25.4	25.2	26.3
Macaroni	Pound	19.3	19.0	19.1	—	21.3	21.2	20.7	20.8	19.4	18.7
Rice	do.	11.6	12.3	12.1	8.5	11.4	11.4	11.0	11.8	11.7	11.8
Beans, navy	do.	9.1	8.6	8.8	—	10.3	9.9	9.8	9.0	9.0	8.8
Potatoes	do.	6.4	4.6	4.6	1.3	5.7	4.0	3.9	5.6	3.8	3.7
Onions	do.	6.6	6.0	6.6	—	5.9	5.3	5.9	6.1	5.8	5.7
Cabbage	do.	5.1	4.7	4.6	—	5.7	4.3	4.4	5.9	3.7	4.5
Beans, baked	No. 2 can	10.1	9.8	9.8	—	14.6	13.7	12.8	11.7	11.7	11.3
Corn, canned	do.	15.6	15.4	15.8	—	16.5	15.6	15.8	15.9	16.2	16.0
Peas, canned	do.	20.3	19.8	19.5	—	17.4	16.1	15.5	18.0	18.1	17.5
Tomatoes, canned	do.	10.2	9.9	9.9	—	14.3	13.6	13.3	14.5	13.3	12.7
Sugar, granulated	Pound	6.2	7.0	7.2	5.9	6.9	7.6	7.8	7.3	7.7	8.5
Tea	do.	89.5	89.4	94.0	56.0	78.5	78.8	80.3	64.8	70.1	72.1
Coffee	do.	50.4	51.3	50.9	30.0	57.4	55.0	54.4	52.1	51.3	50.9
Prunes	do.	17.0	15.0	15.4	—	17.3	16.4	16.5	20.5	18.6	18.8
Raisins	do.	14.1	14.5	14.6	—	15.3	15.3	15.5	14.8	15.1	14.5
Bananas	Dozen	33.5	33.3	32.8	—	31.8	31.7	32.0	30.9	30.7	31.5
Oranges	do.	49.2	43.9	43.9	—	43.9	55.1	47.7	41.2	52.1	51.7

<sup>1</sup>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.			
Jan. 15—		Dec. 15,	Jan. 15,	Jan. 15—		Dec. 15,	Jan. 15,	Jan. 15,	Dec. 15,	Jan. 15,	Jan. 15—		Dec. 15,	Jan. 15,	Jan. 15—		Dec. 15,	Jan. 15,	
1913	1926	1926	1927	1913	1926	1926	1927	1926	1926	1927	1913	1926	1926	1927	1913	1926	1926	1927	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
28.3	55.6	54.4	55.0	24.8	45.6	45.3	45.5	60.9	60.1	53.6	21.0	28.9	29.4	29.4	39.6	72.3	70.2	70.2	
23.1	41.7	41.2	41.5	21.4	38.3	38.8	38.1	45.9	46.0	45.1	19.0	25.7	26.1	26.3	29.4	50.6	49.4	49.2	
21.4	37.2	36.3	36.5	20.4	35.0	34.1	33.2	29.6	29.7	29.3	18.7	24.9	24.6	25.0	24.6	39.2	38.3	37.2	
16.5	23.8	26.0	26.0	15.4	24.8	25.0	25.0	20.8	21.6	20.8	15.8	18.0	18.6	18.8	18.4	29.2	29.0	27.9	
10.5	12.3	12.8	12.8	10.8	12.6	13.6	13.3	16.2	16.6	17.7	12.6	13.2	13.5	13.9	---	19.8	18.0	17.9	
19.8	40.1	40.9	40.0	19.4	38.1	37.6	37.3	38.5	39.5	37.0	20.2	36.3	38.1	38.4	18.0	39.4	40.0	38.8	
23.6	46.2	47.5	46.9	27.2	51.2	53.5	54.0	45.2	45.5	45.4	28.8	52.1	55.0	54.7	21.8	45.9	45.9	45.6	
29.1	55.8	59.7	59.7	29.0	59.8	62.4	60.8	52.4	57.9	56.8	28.8	52.8	57.4	57.4	28.5	56.5	60.4	60.0	
17.7	41.0	40.2	39.1	21.3	41.1	40.0	40.1	38.3	37.5	37.3	17.7	38.0	35.8	35.9	18.7	42.5	40.2	38.8	
20.8	41.4	40.9	41.1	24.3	44.6	44.1	44.1	40.9	41.3	41.8	20.9	35.9	35.0	36.9	23.2	43.1	42.5	42.5	
---	38.0	29.9	29.6	---	37.7	32.9	31.6	39.1	33.1	31.3	---	37.2	36.2	34.8	---	37.2	35.3	33.5	
8.0	12.0	13.0	13.0	8.8	14.7	14.7	15.0	13.5	13.8	13.8	9.7	12.7	12.0	12.0	9.0	14.7	15.2	14.3	
---	11.6	11.5	11.6	---	11.6	11.4	11.3	12.5	12.4	12.4	---	10.4	10.7	10.8	---	12.2	12.2	12.1	
46.4	58.2	65.3	62.9	41.9	56.4	64.0	60.7	58.4	58.9	60.3	44.5	54.7	55.6	56.7	40.0	56.2	56.6	57.2	
---	32.4	30.8	30.8	---	32.1	32.0	31.9	29.7	28.0	28.0	---	31.0	30.3	30.2	---	29.7	28.9	28.8	
25.0	41.0	39.3	39.8	24.5	39.8	39.7	39.6	38.7	37.9	37.7	21.3	39.3	38.2	38.3	22.7	36.6	36.8	36.7	
14.4	22.0	19.2	19.3	15.6	22.3	20.9	20.5	21.1	19.1	18.5	17.9	24.8	22.8	22.6	14.7	21.7	18.9	18.6	
---	25.6	25.1	25.6	---	26.9	27.5	27.7	24.1	25.8	25.7	---	28.3	28.9	28.8	---	27.2	26.6	26.7	
38.4	56.7	74.0	62.4	37.6	57.5	70.6	61.5	59.3	80.3	64.1	41.7	39.2	53.5	40.7	42.5	67.7	76.5	67.3	
25.2	41.5	49.3	47.6	25.0	43.2	49.1	45.9	46.5	52.4	51.3	25.0	32.0	44.0	---	26.8	43.9	50.4	48.9	
4.8	9.4	9.5	9.5	5.3	9.1	9.2	9.2	10.0	9.9	10.1	5.7	9.4	9.5	9.5	6.0	9.2	9.2	9.2	
3.2	6.1	5.4	5.4	3.0	6.0	5.3	5.3	6.3	5.6	5.5	2.8	5.5	5.2	5.2	3.4	6.8	5.9	5.9	
2.8	4.8	4.7	4.9	2.7	5.8	5.9	5.9	5.2	5.1	5.1	3.1	5.5	5.5	5.3	2.9	5.1	5.0	5.0	
---	8.6	8.5	8.6	---	9.4	9.4	9.3	7.5	8.1	7.9	---	10.5	10.3	10.4	---	9.3	9.2	9.1	
---	10.0	10.1	10.1	---	10.6	10.5	10.5	11.6	11.6	11.6	---	11.3	11.4	11.6	---	10.8	10.8	10.9	
---	24.4	24.4	24.8	---	25.2	25.0	25.3	25.9	25.8	25.9	---	26.4	26.8	26.7	---	25.1	25.4	25.2	
---	21.5	20.8	20.7	---	22.6	23.7	23.6	25.1	24.9	24.7	---	18.5	18.0	18.4	---	23.7	23.7	23.3	
9.8	12.0	11.8	11.4	9.2	12.5	12.5	12.2	12.9	13.5	12.8	8.6	11.4	10.4	10.3	9.3	11.6	11.8	11.9	
---	9.3	9.0	9.2	---	8.9	8.8	8.8	9.9	9.5	9.3	---	9.8	9.8	9.7	---	9.8	9.9	9.7	
2.1	6.6	4.7	4.6	1.5	6.0	4.0	4.0	5.7	3.6	3.6	7.0	3.8	2.6	2.4	1.7	5.9	3.7	3.7	
---	5.8	4.8	5.3	---	6.5	5.4	5.7	5.5	4.6	5.3	---	4.4	3.7	4.2	---	5.6	5.0	5.3	
---	7.4	4.6	4.9	---	6.3	5.0	5.3	4.2	3.4	3.4	---	3.1	3.6	4.0	---	4.9	3.9	4.4	
---	10.9	10.5	10.7	---	12.9	12.6	12.4	15.2	15.4	15.3	---	14.4	12.8	13.2	---	11.8	11.4	11.4	
---	15.2	14.8	14.5	---	17.8	16.8	16.1	16.9	16.9	16.0	---	19.7	18.1	19.2	---	18.0	18.1	17.7	
---	15.3	15.3	15.3	---	18.2	17.1	17.3	18.8	18.4	18.4	---	19.3	19.0	19.6	---	19.7	19.5	19.0	
---	11.3	12.1	12.5	---	12.4	12.5	12.3	12.6	12.5	12.6	---	17.3	16.1	16.3	---	13.7	13.4	13.2	
5.2	6.1	6.7	6.9	6.0	6.7	7.4	7.7	6.7	7.5	7.6	6.6	6.8	7.3	7.5	5.3	6.5	7.1	7.3	
54.0	71.1	69.4	69.4	58.0	84.0	85.1	85.1	60.9	61.9	61.4	55.0	76.1	76.6	77.6	48.3	61.2	60.8	60.4	
25.0	46.0	45.9	44.8	30.0	51.2	51.3	50.7	54.1	53.7	52.4	35.0	52.6	51.9	53.1	30.0	54.3	53.6	53.7	
---	16.2	14.4	13.8	---	18.1	17.1	17.2	15.8	15.1	15.0	---	14.3	10.1	9.8	---	16.7	15.2	14.7	
---	13.5	13.6	13.5	---	14.7	14.6	14.3	13.1	13.8	13.5	---	13.8	13.5	13.5	---	14.1	14.3	14.3	
---	32.8	30.7	31.3	---	40.0	40.3	39.7	10.3	10.9	10.9	---	13.7	12.9	13.1	---	33.8	32.5	32.5	
---	50.1	45.7	46.3	---	48.5	47.6	48.8	47.1	52.7	54.2	---	46.4	51.1	48.7	---	51.4	53.0	53.1	

<sup>2</sup> No. 2½ can.

<sup>3</sup> Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

Article	Unit	Richmond, Va.				Rochester, N.Y.			St. Louis, Mo.			
		Jan. 15—		Dec.	Jan.	Jan.	Dec.	Jan.	Jan. 15—		Dec.	Jan.
		15,	15,	1926	1927	15,	15,	15,	1913	1926	1926	1927
		1926	1926			1926	1926	1927				
Sirloin steak	Pound	21.8	38.8	40.1	39.9	40.1	41.0	40.5	22.7	36.9	36.7	36.4
Round steak	do	19.5	34.4	35.1	35.0	34.1	34.5	34.0	19.8	34.7	35.2	34.9
Rib roast	do	18.3	31.5	31.5	31.2	30.6	30.0	30.6	16.8	30.6	30.4	30.4
Chuck roast	do	14.3	22.7	23.3	23.2	24.7	24.8	24.7	13.3	21.1	21.7	21.8
Plate beef	do	11.3	15.9	16.1	16.5	12.9	14.0	14.2	9.2	14.4	16.0	15.9
Pork chops	do	18.1	36.4	37.9	36.8	39.5	39.2	39.2	17.7	32.3	33.0	32.5
Bacon, sliced	do	23.2	44.1	45.3	44.9	43.5	44.8	44.4	23.0	46.2	46.2	45.0
Ham, sliced	do	22.5	44.6	47.1	46.3	52.1	56.3	55.8	25.0	49.6	53.9	52.0
Lamb, leg of	do	18.7	45.5	44.1	44.2	39.5	36.8	37.2	17.7	37.8	37.8	36.8
Round steak	do	19.8	39.9	35.8	38.7	42.2	39.9	41.7	17.8	35.6	33.9	35.5
Salmon, canned, red	do	36.5	34.4	34.2	37.5	32.3	32.6	32.6	39.0	35.5	34.8	34.8
Milk, fresh	Quart	10.0	14.0	14.0	14.0	12.5	12.5	12.5	8.0	13.0	13.0	13.0
Milk, evaporated	15-16 oz. can	12.8	12.4	12.4	11.6	11.9	11.9	11.5	10.6	10.3	10.4	10.4
Butter	Pound	43.6	62.4	62.9	63.6	56.5	57.5	58.4	40.7	56.3	63.6	60.6
Oleomargarine (all butter substitutes)	do	31.9	31.9	31.9	31.9	32.4	30.1	30.4	28.7	27.6	27.0	27.0
Cheese	do	22.3	36.7	36.6	36.9	38.5	36.3	37.6	20.2	36.1	36.3	37.4
Lard	do	15.0	22.1	19.5	19.2	21.3	19.2	18.6	13.1	17.9	16.4	16.1
Vegetable lard substitute	do	26.2	26.2	25.4	25.9	23.4	24.5	23.5	26.6	25.7	25.6	25.6
Eggs, strictly fresh	Dozen	29.7	55.7	60.6	52.7	60.0	72.7	59.5	29.3	47.7	57.6	50.2
Eggs, storage	do	23.7	46.4	45.6	42.0	44.1	47.4	45.0	25.0	36.4	41.7	40.0
Bread	Pound	5.4	9.5	9.3	9.4	8.9	9.0	9.0	5.6	9.9	9.8	9.8
Flour	do	3.3	6.3	5.8	5.7	6.1	5.6	5.5	3.1	5.8	5.3	5.2
Corn meal	do	2.0	5.0	4.5	4.7	6.4	5.5	5.5	2.3	4.7	4.3	4.2
Rolled oats	do	9.2	8.9	8.9	8.9	9.5	9.2	9.2	8.8	8.4	8.5	8.5
Corn flakes	8-oz. pkg	11.2	10.9	10.9	10.5	10.6	10.3	10.3	10.1	10.0	10.1	10.1
Wheat cereal	28-oz. pkg	25.4	25.4	25.6	25.7	25.4	24.9	24.9	24.7	24.5	24.4	24.4
Macaroni	Pound	20.6	20.2	20.2	23.2	20.7	19.6	19.6	21.2	20.9	20.7	20.7
Rice	do	9.8	12.7	12.7	12.1	11.1	10.2	11.1	8.6	10.7	10.7	10.3
Beans, navy	do	10.0	9.3	9.2	9.7	9.1	9.1	9.1	8.4	8.1	8.0	8.0
Potatoes	do	1.8	7.0	4.5	4.5	5.6	3.3	3.2	1.7	5.7	4.3	4.3
Onions	do	6.9	6.8	6.9	4.9	4.8	4.6	4.6	6.1	5.0	5.4	5.4
Cabbage	do	6.5	4.6	4.6	3.9	3.0	2.4	2.4	5.4	3.8	4.3	4.3
Beans, baked	No. 2 can	10.7	9.9	9.7	10.9	10.4	10.4	10.4	10.9	10.6	10.6	10.6
Corn, canned	do	16.0	15.4	15.5	16.5	16.8	15.5	15.5	16.2	15.8	15.7	15.7
Peas, canned	do	20.7	20.0	20.3	18.9	18.4	18.7	18.7	16.9	15.6	15.3	15.3
Tomatoes, canned	do	11.0	10.3	10.2	14.3	13.8	13.5	13.5	12.2	11.5	11.4	11.4
Sugar, granulated	Pound	5.8	6.6	7.1	7.4	6.2	6.9	7.0	5.8	6.7	7.4	7.6
Tea	do	56.0	91.8	88.9	90.9	67.4	68.7	68.7	55.0	73.6	73.8	74.4
Coffee	do	27.4	49.9	48.7	48.0	48.9	47.7	47.2	24.3	48.0	48.2	48.0
Prunes	do	18.2	16.7	16.3	18.3	15.8	16.1	16.1	18.9	17.9	18.3	18.3
Raisins	do	14.4	13.9	14.1	14.1	13.9	14.1	14.1	14.8	14.5	14.3	14.3
Bananas	Dozen	35.8	37.7	37.7	38.6	37.7	38.6	38.6	32.3	32.3	31.4	31.4
Oranges	do	45.3	45.4	42.2	48.4	52.4	44.7	44.7	46.4	48.7	48.8	48.8

<sup>1</sup> No. 2½ can.



ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.			Salt Lake City, Utah			San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.					
Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	
			1913	1926			1913	1926						1913	1926			
<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	
34.4	35.1	35.2	23.1	29.0	30.4	30.8	20.3	32.5	32.0	32.7	31.0	33.6	34.5	21.8	50.9	50.5	51.2	
28.9	30.2	29.9	19.5	25.7	27.7	28.0	18.7	29.9	29.4	29.8	26.0	26.8	27.5	17.5	42.7	42.5	42.3	
28.3	28.3	29.1	19.2	22.3	23.9	23.5	20.3	30.3	30.0	30.5	25.0	27.3	27.5	18.4	37.4	37.6	38.0	
22.2	22.9	22.9	14.8	17.5	18.5	18.8	15.0	19.2	19.1	19.7	16.3	18.2	18.1	14.3	28.5	28.1	28.0	
12.7	13.3	13.4	11.5	12.4	13.2	13.4	12.5	15.5	15.7	15.6	13.6	13.7	15.0	9.8	13.0	13.3	13.2	
32.5	32.7	32.7	21.4	35.5	38.0	38.5	21.8	43.2	45.0	44.1	33.7	34.5	33.8	18.0	41.0	42.7	40.6	
47.6	47.6	45.9	32.0	47.3	50.8	49.7	32.8	62.3	61.8	61.5	43.7	46.9	46.1	24.6	50.3	52.1	49.9	
48.9	49.7	49.3	29.0	51.7	60.0	60.0	30.0	63.3	66.2	65.7	45.0	48.8	47.7	25.5	57.7	60.6	60.9	
33.7	31.8	31.7	17.2	35.5	34.6	33.9	17.2	38.6	37.0	36.6	39.0	39.0	38.0	18.7	45.7	44.3	44.0	
34.7	30.6	33.0	23.6	32.6	33.3	33.2	24.2	43.6	45.1	45.4	35.8	35.7	34.6	21.5	45.3	43.9	45.0	
37.7	37.7	36.3	-----	34.5	36.8	36.1	-----	34.5	31.5	31.3	39.1	35.6	33.3	-----	36.1	34.2	33.3	
11.7	11.0	11.0	8.3	11.5	11.3	10.8	10.0	14.0	14.0	14.0	17.3	17.0	17.3	8.8	12.0	12.0	12.0	
12.0	11.7	11.7	-----	10.6	10.6	10.6	-----	10.3	10.1	10.1	11.3	11.0	11.1	-----	12.1	11.8	11.8	
48.7	57.3	53.9	40.0	51.9	52.4	52.6	41.4	55.4	55.8	57.2	59.8	59.2	60.7	39.0	56.4	56.4	57.8	
28.2	26.4	25.9	-----	31.0	29.2	29.2	-----	32.1	30.8	30.8	36.7	34.9	34.9	-----	32.0	29.2	29.0	
35.4	35.5	36.0	24.2	32.7	30.2	30.7	21.0	39.9	38.9	39.4	36.1	35.6	36.3	18.8	35.6	35.9	35.8	
21.2	19.8	19.0	18.4	24.2	23.2	23.2	17.6	25.1	24.5	24.3	22.0	19.3	19.2	15.6	23.2	21.2	20.8	
27.4	27.6	28.5	-----	29.7	29.4	29.4	-----	27.8	28.4	28.4	19.0	16.6	16.3	-----	26.4	26.8	26.1	
47.0	55.4	49.2	40.0	38.5	50.1	42.1	31.4	44.8	53.3	44.0	54.3	62.9	52.0	37.5	57.8	72.7	65.6	
38.0	42.4	41.6	27.5	25.0	-----	-----	-----	22.5	42.5	44.8	42.0	46.7	46.8	41.0	26.3	41.6	50.2	48.2
10.2	10.0	10.0	5.9	10.0	9.9	9.9	5.9	9.8	9.8	9.7	10.4	10.5	10.8	5.5	10.3	10.4	10.4	
6.1	5.5	5.4	2.4	4.9	4.2	4.2	3.3	6.3	5.9	5.9	7.1	6.7	6.6	3.6	6.5	6.1	6.0	
5.4	5.0	5.1	3.4	5.4	5.4	5.8	3.4	6.4	6.3	6.3	3.6	3.6	3.4	-----	7.6	7.7	8.0	
10.1	10.0	10.0	-----	8.9	8.9	8.8	-----	9.5	9.7	10.0	9.1	8.9	8.8	-----	10.2	9.9	9.9	
12.0	12.0	11.8	-----	12.5	12.4	12.1	-----	10.5	10.5	10.6	10.5	10.3	10.3	-----	11.1	11.0	11.1	
25.7	26.8	26.8	-----	25.4	25.3	25.6	-----	25.2	25.3	25.3	24.5	24.3	24.2	-----	25.6	25.5	25.4	
19.0	18.7	18.7	-----	20.0	20.2	20.4	-----	14.8	16.0	15.3	18.0	18.3	18.2	-----	23.7	23.0	23.0	
11.3	11.9	10.7	8.2	11.2	10.4	9.7	8.5	11.7	11.9	11.7	10.8	9.9	9.7	8.5	11.5	11.7	11.5	
9.5	9.6	9.5	-----	10.4	9.1	9.1	-----	10.1	9.5	9.2	11.1	10.2	9.5	-----	12.3	11.3	10.8	
4.7	3.2	3.2	1.1	3.4	2.6	2.6	1.6	5.2	3.9	4.0	6.8	4.6	4.7	1.7	5.7	4.1	3.9	
6.5	4.7	4.8	-----	3.0	2.7	3.2	-----	4.5	4.0	4.6	6.8	6.2	6.2	-----	5.8	5.4	5.6	
5.0	3.7	4.0	-----	3.1	3.2	3.4	-----	-----	-----	-----	6.2	4.8	4.8	-----	5.2	3.6	4.8	
13.9	13.9	14.1	-----	14.5	14.1	14.0	-----	13.5	13.4	13.2	11.6	12.3	12.5	-----	11.5	11.0	11.2	
15.3	15.0	14.6	-----	16.4	14.9	14.8	-----	18.5	18.3	18.4	16.5	15.1	15.1	-----	17.5	17.5	16.8	
16.3	15.6	15.9	-----	16.5	16.1	15.8	-----	18.7	18.4	18.2	17.2	16.5	17.6	-----	18.4	17.1	17.7	
14.2	14.3	14.3	-----	15.7	14.0	14.0	-----	15.5	14.6	14.9	10.3	10.2	10.2	-----	12.8	12.6	12.6	
7.1	7.5	7.6	6.8	7.4	8.2	8.3	5.7	6.4	7.1	7.3	6.6	7.3	7.4	6.2	6.7	7.2	7.3	
69.6	68.7	66.9	65.7	85.3	87.7	87.9	50.0	68.8	69.3	71.8	77.1	81.3	82.9	52.5	65.9	67.9	70.4	
52.0	52.8	51.9	35.8	57.4	56.0	55.4	32.0	52.8	53.4	53.5	49.1	47.7	47.3	31.3	52.8	52.8	52.7	
17.1	16.4	15.4	-----	16.3	15.6	14.8	-----	15.0	14.0	13.9	15.4	14.9	14.4	-----	18.6	16.9	16.6	
15.6	15.4	15.2	-----	13.9	13.6	13.4	-----	12.5	12.8	13.1	13.5	14.4	14.6	-----	14.4	14.7	14.6	
11.9	12.0	11.5	-----	15.5	14.2	14.0	-----	35.6	30.5	31.1	30.9	31.0	28.2	-----	34.0	33.0	33.0	
51.6	58.1	49.2	-----	42.6	45.2	42.1	-----	47.5	50.3	48.4	39.1	32.3	36.3	-----	51.8	56.3	51.1	

<sup>2</sup> 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.			
		Jan. 15—		Dec. 15, 1926	Jan. 15, 1927	Jan. 15, 1926	Dec. 15, 1926	Jan. 15, 1927	Jan. 15—		Dec. 15, 1926	Jan. 15, 1927
		1913	1926						1913	1926		
Sirloin steak	Pound	Cts. 22.0	Cts. 33.1	Cts. 32.7	Cts. 32.9	Cts. 33.6	Cts. 35.4	Cts. 35.8	Cts. 25.0	Cts. 45.6	Cts. 46.4	Cts. 46.6
Round steak	do	20.0	28.6	29.0	29.3	32.9	35.0	35.4	21.4	38.9	39.3	39.2
Rib roast	do	18.0	25.9	27.2	27.3	23.7	23.8	23.8	20.3	34.2	34.5	34.4
Chuck roast	do	15.2	18.6	19.5	20.0	21.2	21.9	21.4	15.6	24.0	25.4	24.6
Plate beef	do	11.7	14.5	14.7	15.3	13.8	14.0	15.0	10.7	13.4	14.1	14.5
Pork chops	do	23.4	38.3	39.5	40.1	33.1	33.8	33.3	20.3	39.5	39.8	39.2
Bacon, sliced	do	30.0	55.6	56.9	57.3	46.5	48.1	48.5	23.0	46.2	48.6	46.9
Ham, sliced	do	28.3	57.5	61.5	61.7	51.3	55.4	53.8	28.2	58.3	60.3	59.1
Lamb, leg of	do	18.6	37.3	36.3	36.9	39.1	37.5	38.3	19.3	43.4	40.3	39.2
Hens	do	24.3	35.5	35.1	36.8	35.1	31.7	36.8	20.6	41.0	39.3	40.4
Salmon, canned, red	do		37.2	34.8	34.4	40.5	37.9	36.6		37.6	31.9	31.3
Milk, fresh	Quart	9.1	12.7	12.0	12.0	12.5	14.4	14.4	9.0	15.0	15.0	15.0
Milk, evaporated	15-16 oz. can		10.8	10.7	10.6	11.9	11.8	11.8		12.0	12.1	12.0
Butter	Pound	44.6	54.7	56.4	56.6	51.7	61.5	57.9	43.4	59.2	63.7	62.4
Oleomargarine (all butter substitutes)	do		32.1	28.7	28.3	32.8	30.3	29.3		31.3	30.6	30.5
Cheese	do	21.6	37.0	35.0	35.5	37.3	38.0	38.5	22.8	39.0	40.2	40.8
Lard	do	17.8	24.2	22.2	21.6	21.9	20.8	19.5	14.2	20.5	19.4	18.7
Vegetable lard substitute	do		28.6	28.2	27.7	28.3	28.0	28.0		24.7	25.1	24.6
Eggs, strictly fresh	Dozen	39.0	41.1	51.8	44.1	52.1	65.8	55.2	33.1	59.1	72.8	61.4
Eggs, storage	do	32.5		37.5	32.5	42.5	48.3	40.7	25.0	44.6	49.8	45.0
Bread	Pound	6.0	9.7	9.8	9.8	10.1	10.1	10.1	5.7	8.2	8.9	9.0
Flour	do	2.8	5.5	5.0	5.0	6.4	5.9	5.7	3.8	6.7	6.3	6.0
Corn meal	do	3.1	5.3	5.1	5.5	5.0	4.9	4.9	2.6	5.3	5.0	5.1
Rolled oats	do		9.1	9.0	9.1	10.2	10.1	10.1		9.3	9.2	9.2
Corn flakes	8-oz. pkg		12.0	11.4	11.5	11.6	11.8	11.6		10.6	10.8	10.7
Wheat cereal	28-oz. pkg		26.8	27.6	27.6	27.2	27.3	27.1		24.6	24.5	24.6
Macaroni	Pound		18.4	18.4	18.7	19.2	19.3	19.0		23.7	23.9	23.2
Rice	do	7.7	12.8	12.2	12.1	11.2	11.2	10.9	9.2	12.2	12.4	12.3
Beans, navy	do		10.5	9.8	9.9	9.3	9.4	9.0		9.1	8.7	8.8
Potatoes	do	1.0	4.4	2.9	3.1	6.1	4.0	4.1	1.6	6.6	4.4	4.4
Onions	do		4.6	3.8	4.4	5.9	4.6	5.4		6.6	5.5	5.5
Cabbage	do		3.3	4.0	4.7	6.1	4.2	4.7		7.3	4.7	4.8
Beans, baked	No. 2 can		14.2	12.9	12.6	11.9	10.9	10.8		11.1	10.5	10.2
Corn, canned	do		19.3	18.2	18.0	16.3	15.2	15.0		15.6	15.7	15.9
Peas, canned	do		20.6	20.1	19.7	17.5	17.1	16.8		16.9	16.6	17.1
Tomatoes, canned	do		<sup>1</sup> 18.2	17.4	17.0	13.7	13.8	14.0		11.3	11.3	11.0
Sugar, granulated	Pound	6.1	7.0	7.4	7.6	7.2	8.2	8.2	5.5	6.5	7.0	7.2
Tea	do	50.0	78.0	78.1	78.1	78.7	82.1	83.2	57.5	87.7	80.5	90.6
Coffee	do	28.0	52.0	51.5	51.8	53.2	54.0	52.3	28.8	48.7	48.5	47.5
Prunes	do		15.2	14.0	14.2	17.0	15.9	15.2		17.4	17.8	16.9
Raisins	do		14.1	14.1	13.8	15.2	15.9	15.3		14.2	14.2	14.4
Bananas	Dozen		<sup>2</sup> 13.3	<sup>2</sup> 13.9	<sup>2</sup> 13.7	<sup>2</sup> 10.6	<sup>2</sup> 11.2	<sup>2</sup> 9.8		34.7	35.0	35.7
Oranges	do		45.0	50.4	47.5	49.5	60.8	49.5		49.3	50.0	47.3

<sup>1</sup> No. 2½ can.<sup>2</sup> 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<sup>3</sup> in January, 1927, compared with the average cost in the year 1913, in January, 1926, and in December, 1926. For 12 other cities comparisons are given for the one-year

<sup>3</sup> For list of articles see note 5, p. 123.

and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These 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.<sup>4</sup>

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN JANUARY, 1927, COMPARED WITH THE COST IN DECEMBER, 1926, JANUARY, 1926, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase, January, 1927, compared with 1913	Percentage decrease, January, 1927, compared with—		City	Percentage increase, January, 1927, compared with 1913	Percentage decrease, January, 1927, compared with—	
		January, 1926	December, 1926			January, 1926	December, 1926
Atlanta.....	63.9	2.9	0.5	Minneapolis.....	55.7	5.2	0.6
Baltimore.....	66.8	2.0	1.2	Mobile.....	.....	1.4	1.8
Birmingham.....	66.7	2.9	0.7	Newark.....	52.4	3.1	2.4
Boston.....	60.3	3.7	2.1	New Haven.....	61.1	2.8	2.0
Bridgeport.....	.....	3.1	1.6	New Orleans.....	55.8	3.0	1.0
Buffalo.....	65.7	3.2	2.0	New York.....	61.6	3.1	2.7
Butte.....	.....	0.9	0.9	Norfolk.....	.....	1.2	0.6
Charleston, S. C.....	63.5	3.3	0.2	Omaha.....	55.9	5.2	1.6
Chicago.....	71.5	1.5	1.4	Peoria.....	.....	1.5	1.1
Cincinnati.....	60.1	2.8	1.7	Philadelphia.....	64.9	1.7	2.1
Cleveland.....	59.5	2.5	1.9	Pittsburgh.....	63.7	2.3	1.8
Columbus.....	.....	3.1	2.1	Portland, Me.....	.....	2.6	2.4
Dallas.....	55.4	3.0	1.3	Portland, Ore.....	39.4	1.9	1.9
Denver.....	44.3	2.0	2.4	Providence.....	58.4	4.9	2.3
Detroit.....	66.6	5.3	1.3	Richmond.....	67.2	4.8	1.2
Fall River.....	57.6	3.9	2.7	Rochester.....	.....	4.8	2.4
Houston.....	.....	3.8	2.2	St. Louis.....	62.7	2.9	1.5
Indianapolis.....	54.7	4.1	1.9	St. Paul.....	.....	4.3	1.7
Jacksonville.....	55.6	6.9	2.4	Salt Lake City.....	34.9	1.0	1.9
Kansas City.....	55.4	4.4	1.0	San Francisco.....	53.4	1.7	0.9
Little Rock.....	53.3	0.9	0.7	Savannah.....	.....	3.0	1.1
Los Angeles.....	46.8	0.6	0.6	Scranton.....	66.0	1.9	1.1
Louisville.....	54.9	3.8	2.4	Seattle.....	46.7	1.6	0.4
Manchester.....	55.8	3.2	1.4	Springfield, Ill.....	.....	1.6	2.1
Memphis.....	49.3	4.3	0.7	Washington, D. C.....	68.4	2.3	2.4
Milwaukee.....	61.4	1.5	1.8				

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 January 98.0 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 35 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, Boston, Bridgeport, Buffalo, Charleston, Cincinnati, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Little Rock, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New York, Omaha, Portland, Me., Richmond, Rochester, St. Louis, St. Paul, Scranton, Springfield, Ill., Washington, D. C.

<sup>4</sup>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.

The following summary shows the promptness with which the merchants responded in January, 1927:

## RETAIL PRICE REPORTS RECEIVED FOR JANUARY, 1927

Item	United States	Geographic division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received.....	98.0	99.0	99.0	99.2	98.0	93.0
Number of cities in each section from which every report was received.....	35	11	6	11	6	1

Retail Prices of Coal in the United States <sup>a</sup>

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, January 15 and December 15, 1926, and January 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.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JANUARY 15 AND DECEMBER 15, 1926, AND JANUARY 15, 1927

City, and kind of coal	1913		1926		1927
	Jan. 15	July 15	Jan. 15	Dec. 15	Jan. 15
<b>United States:</b>					
<b>Pennsylvania anthracite—</b>					
<b>Stove—</b>					
Average price.....	\$7.99	\$7.46	( <sup>1</sup> )	\$15.66	\$15.66
Index (1913=100.0).....	103.4	96.6	( <sup>1</sup> )	202.7	202.7
<b>Chestnut—</b>					
Average price.....	\$8.15	\$7.68	( <sup>1</sup> )	\$15.44	\$15.42
Index (1913=100.0).....	103.0	97.0	( <sup>1</sup> )	195.0	194.8
<b>Bituminous—</b>					
Average price.....	\$5.48	\$5.39	\$9.74	\$10.15	\$9.97
Index (1913=100.0).....	100.8	99.2	179.3	186.8	183.4
<b>Atlanta, Ga.:</b>					
Bituminous.....	\$5.88	\$4.83	\$8.47	\$9.10	\$8.67
<b>Baltimore, Md.:</b>					
<b>Pennsylvania anthracite—</b>					
Stove.....	<sup>2</sup> 7.70	<sup>2</sup> 7.24	( <sup>1</sup> )	<sup>2</sup> 16.00	<sup>2</sup> 16.00
Chestnut.....	<sup>2</sup> 7.93	<sup>2</sup> 7.49	( <sup>1</sup> )	<sup>2</sup> 15.50	<sup>2</sup> 15.50
Bituminous.....			8.00	8.38	8.32
<b>Birmingham, Ala.:</b>					
Bituminous.....	4.22	4.01	7.62	8.09	8.09

<sup>a</sup> Prices of coal were formerly secured semiannually and published in the March and September issues. Since June, 1920, these prices have been secured and published monthly.

<sup>1</sup> Insufficient data.

<sup>2</sup> Per ton of 2,240 pounds.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JANUARY 15 AND DECEMBER 15, 1926, AND JANUARY 15, 1927—Continued

City, and kind of coal	1913		1926		1927
	Jan. 15	July 15	Jan. 15	Dec. 15	Jan. 15
Boston, Mass.:					
Pennsylvania anthracite—					
Stove.....	\$8.25	\$7.50	(1)	\$16.50	\$16.50
Chestnut.....	8.25	7.75	(1)	16.25	16.25
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove.....			(1)	16.00	16.00
Chestnut.....			(1)	16.00	16.00
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove.....	6.75	6.54	(1)	13.76	13.75
Chestnut.....	6.99	6.80	(1)	13.39	13.37
Butte, Mont.:					
Bituminous.....			11.04	11.04	11.02
Charleston, S. C.:					
Bituminous.....	<sup>2</sup> 6.75	<sup>2</sup> 6.75	11.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.80	(1)	17.00	17.00
Chestnut.....	8.25	8.05	(1)	16.80	16.80
Bituminous.....	4.97	4.65	9.48	10.34	9.85
Cincinnati, Ohio:					
Bituminous.....	3.50	3.38	7.77	8.90	7.89
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove.....	7.50	7.25	(1)	15.40	15.40
Chestnut.....	7.75	7.50	(1)	15.00	15.05
Bituminous.....	4.14	4.14	9.47	10.38	9.73
Columbus, Ohio:					
Bituminous.....			7.69	8.29	7.75
Dallas, Tex.:					
Arkansas anthracite—					
Egg.....			(1)	16.00	16.00
Bituminous.....	8.25	7.21	13.83	13.22	13.22
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	8.88	9.00	(1)	16.00	16.00
Stove, 3 and 5 mixed.....	8.50	8.50	(1)	16.50	16.50
Bituminous.....	5.25	4.88	10.68	10.71	10.73
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.45	(1)	16.17	16.17
Chestnut.....	8.25	7.65	(1)	15.83	15.75
Bituminous.....	5.20	5.20	10.59	11.05	10.34
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove.....	8.25	7.43	(1)	16.75	16.75
Chestnut.....	8.25	7.61	(1)	16.25	16.25
Houston, Tex.:					
Bituminous.....			12.75	13.50	13.50
Indianapolis, Ind.:					
Bituminous.....	3.81	3.70	7.53	7.94	7.67
Jacksonville, Fla.:					
Bituminous.....	7.50	7.00	14.00	14.00	14.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace.....			(1)	14.50	14.50
Stove No. 4.....			(1)	15.83	15.83
Bituminous.....	4.39	3.94	7.98	7.93	7.81
Little Rock, Ark.:					
Arkansas anthracite—					
Egg.....			(1)	14.00	14.00
Bituminous.....	6.00	5.33	11.27	10.83	10.80
Los Angeles, Calif.:					
Bituminous.....	13.52	12.50	15.94	16.50	16.50
Louisville, Ky.:					
Bituminous.....	4.20	4.00	7.43	8.40	8.42
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove.....	10.00	8.50	(1)	17.50	17.50
Chestnut.....	10.00	8.50	(1)	17.50	17.50
Memphis, Tenn.:					
Bituminous.....	<sup>3</sup> 4.34	<sup>3</sup> 4.22	7.84	8.78	8.80

<sup>1</sup> Insufficient data.<sup>2</sup> Per ton of 2,240 pounds.<sup>3</sup> Per 10-barrel lot (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JANUARY 15 AND DECEMBER 15, 1926, AND JANUARY 15, 1927—Continued

City, and kind of coal	1913		1926		1927
	Jan. 15	July 15	Jan. 15	Dec. 15	Jan. 15
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove.....	\$8.00	\$7.85	(1)	\$16.80	\$16.80
Chestnut.....	8.25	8.10	(1)	16.65	16.65
Bituminous.....	6.25	5.71	11.42	11.40	11.32
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.25	9.05	(1)	18.10	18.10
Chestnut.....	9.50	9.30	(1)	17.95	17.75
Bituminous.....	5.89	5.79	11.35	11.83	11.75
Mobile, Ala.:					
Bituminous.....			9.62	10.12	10.12
Newark, N. J.:					
Pennsylvania anthracite—					
Stove.....	6.50	6.25	(1)	14.00	14.00
Chestnut.....	6.75	6.50	(1)	13.50	13.50
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove.....	7.50	6.25	(1)	15.30	15.40
Chestnut.....	7.50	6.25	(1)	15.30	15.40
New Orleans, La.:					
Bituminous.....	3 6.06	3 6.06	11.14	11.21	11.23
New York, N. Y.:					
Pennsylvania anthracite—					
Stove.....	7.07	6.66	(1)	14.75	14.75
Chestnut.....	7.14	6.80	(1)	14.50	14.50
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove.....			(1)	16.00	16.00
Chestnut.....			(1)	16.00	16.00
Bituminous.....			10.52	10.25	9.68
Omaha, Nebr.:					
Bituminous.....	6.63	6.13	10.33	10.32	10.19
Peoria, Ill.:					
Bituminous.....			7.11	7.45	7.29
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove.....	2 7.16	2 6.89	(1)	2 15.79	2 15.79
Chestnut.....	2 7.33	2 7.14	(1)	2 15.61	2 15.54
Pittsburgh, Pa.:					
Pennsylvania anthracite—					
Chestnut.....	2 8.00	2 7.44	(1)	15.50	15.88
Bituminous.....	4 3.16	4 3.18	6.13	6.49	6.24
Portland, Me.:					
Pennsylvania anthracite—					
Stove.....			(1)	16.80	16.80
Chestnut.....			(1)	16.80	16.80
Portland, Oreg.:					
Bituminous.....	9.79	9.66	13.24	13.46	13.34
Providence, R. I.:					
Pennsylvania anthracite—					
Stove.....	5 8.25	5 7.50	(1)	5 16.50	5 16.50
Chestnut.....	5 8.25	5 7.75	(1)	5 16.50	5 16.50
Richmond, Va.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.25	(1)	16.50	16.50
Chestnut.....	8.00	7.25	(1)	16.50	16.50
Bituminous.....	5.50	4.94	11.39	11.84	11.66
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove.....			(1)	14.60	14.60
Chestnut.....			(1)	14.15	14.15
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove.....	8.44	7.74	(1)	17.45	17.45
Chestnut.....	8.63	7.99	(1)	17.20	17.20
Bituminous.....	3.36	3.04	6.62	7.50	7.50

<sup>1</sup> Insufficient data.

<sup>2</sup> Per ton of 2,240 pounds.

<sup>3</sup> Per 10-barrel lot (1,800 pounds).

<sup>4</sup> Per 25-bushel lot (1,900 pounds).

<sup>5</sup> 50 cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, JANUARY 15 AND DECEMBER 15, 1926, AND JANUARY 15, 1927—Continued

City, and kind of coal	1913		1926		1927
	Jan. 15	July 15	Jan. 15	Dec. 15	Jan. 15
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.20	9.05	(1)	18.10	18.10
Chestnut.....	9.45	9.30	(1)	17.95	17.75
Bituminous.....	6.07	6.04	11.66	12.16	12.16
Salt Lake City, Utah:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	11.00	11.50	(1)	18.00	18.00
Stove, 3 and 5 mixed.....	11.00	11.50	(1)	18.00	18.00
Bituminous.....	5.64	5.46	8.43	8.46	8.47
San Francisco, Calif.:					
New Mexico anthracite—					
Cerillos egg.....	17.00	17.00	(1)	26.50	26.50
Colorado anthracite—					
Egg.....	17.00	17.00	(1)	25.75	25.75
Bituminous.....	12.00	12.00	17.06	17.11	17.11
Savannah, Ga.:					
Bituminous.....			6 12.75	6 13.50	6 13.25
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove.....	4.25	4.31	(1)	11.00	11.00
Chestnut.....	4.50	4.55	(1)	10.67	10.67
Seattle, Wash.:					
Bituminous.....	7.63	7.70	9.96	10.44	10.47
Springfield, Ill.:					
Bituminous.....			4.38	4.38	4.38
Washington, D. C.:					
Pennsylvania anthracite—					
Stove.....	2 7.50	2 7.38	(1)	2 15.91	2 15.86
Chestnut.....	2 7.65	2 7.53	(1)	2 15.59	2 15.54
Bituminous—					
Prepared sizes, low volatile.....			2 13.83	2 12.00	2 12.00
Prepared sizes, high volatile.....			2 9.88	2 9.75	2 9.75
Run of mine, mixed.....			2 8.19	2 8.94	2 8.31

<sup>1</sup> Insufficient data.

<sup>2</sup> Per ton of 2,240 pounds.

<sup>6</sup> 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 prices.

### Index Numbers of Wholesale Prices in January, 1927

A SLIGHT decline in the general level of wholesale prices in January as compared with the preceding month is shown by information collected in representative markets by the Bureau of Labor Statistics of the U. S. Department of Labor. The bureau's weighted index number, which includes 404 commodities or price series, registered 146.9 for January, compared with 147.2 for December, a decline of two-tenths of 1 per cent. Compared with January, 1926, with an index number of 156, there was a decrease of more than 5¾ per cent.

In all groups of commodities included in the comparison, except farm products and miscellaneous commodities, there were decreases in the price level from December to January, ranging from three-fourths of 1 per cent in the case of clothing materials to 4¾ per cent in the case of chemicals and drugs. Farm products, owing chiefly to small increases in the prices of cattle, hogs, sheep, and poultry, also cotton, hides, and potatoes, showed a general increase of approximately 1¾ per cent over prices in December, 1926. Practically no change in the general price level was shown for the group designated as miscellaneous.

Of the 404 commodities or price series for which comparable information for December and January was collected, increases were shown in 97 instances and decreases in 153 instances. In 154 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES

[1913=100.0]

Commodity group	1926		January, 1927
	January	December	
Farm products.....	151.8	134.9	137.2
Foods.....	156.2	151.0	149.6
Clothing materials.....	185.5	168.6	167.3
Fuels.....	176.5	182.9	179.8
Metals and metal products.....	128.9	125.7	124.4
Building materials.....	177.9	172.7	169.7
Chemicals and drugs.....	133.2	128.2	122.1
House-furnishing goods.....	164.9	159.4	157.4
Miscellaneous.....	135.3	117.8	117.9
All commodities.....	156.0	147.2	146.9
Raw materials <sup>1</sup> .....	160.0	148.6	149.6
Producers' goods <sup>1</sup> .....	132.1	125.9	124.5
Consumers' goods <sup>1</sup> .....	165.6	158.2	156.9

<sup>1</sup> Federal Reserve Board grouping.

Comparing prices in January with those of a year ago, as measured by changes in the index numbers, it is seen that large decreases took place in farm products, clothing materials, chemicals and drugs, and miscellaneous commodities, with smaller decreases in foods, metals, building materials, and house-furnishing goods. Fuels, on the contrary, averaged  $1\frac{3}{4}$  per cent higher than in the corresponding month of 1926.

**Agricultural and Nonagricultural Commodities**

THE figures in the following table furnish a comparison of wholesale price trends of agricultural and nonagricultural commodities during the period from January, 1925, to January, 1927, inclusive. These index numbers have been made by combining into two groups the weighted prices of all commodities included in the bureau's regular series of index numbers. Roughly speaking, all articles originating on American farms have been placed in the first group, while all remaining articles have been put in the second. The five-year period 1910-1914, instead of the year 1913, forms the base in this presentation.



## INDEX NUMBERS OF WHOLESALE PRICES OF AGRICULTURAL AND NONAGRICULTURAL COMMODITIES, BY MONTHS, JANUARY, 1925, TO JANUARY, 1927

[1910-1914=100]

Year and month	1925		1926		1927	
	Agricultural	Nonagricultural	Agricultural	Nonagricultural	Agricultural	Nonagricultural
Average for year.....	158.4	165.3	146.5	160.8		
January.....	160.8	164.7	152.7	164.7	142.5	156.3
February.....	159.4	167.3	150.9	164.5		
March.....	162.0	165.4	146.7	161.6		
April.....	155.4	162.3	147.8	159.5		
May.....	154.3	161.3	148.5	160.2		
June.....	156.9	163.2	149.9	159.9		
July.....	160.9	164.3	147.3	159.2		
August.....	162.5	163.7	143.6	160.1		
September.....	161.5	163.3	145.6	160.6		
October.....	156.0	164.5	144.5	160.0		
November.....	154.9	165.9	140.5	161.0		
December.....	152.8	165.0	141.3	158.3		

### Wholesale Prices in the United States and in Foreign Countries, 1913 to 1926

IN THE following table the more important index numbers of wholesale prices in foreign countries and those of the United States Bureau of Labor Statistics have been brought together in order that the trend of prices in the several countries may be directly compared. In some instances the results here shown have been obtained by merely shifting the base to the year 1913—i. e., by dividing the index number for each year or month on the original base by the index number for 1913 on that base as published. In such cases, therefore, these results are to be regarded only as approximations of the correct index numbers. It should be understood, also, that the validity of the comparisons here made is affected by the wide difference in the number of commodities included in the different series of index numbers. For the United States and several other countries the index numbers are published to the fourth significant figure in order to show minor price variations.

## INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN CERTAIN FOREIGN COUNTRIES

[Index numbers expressed as percentages of the index number for 1913. See text explanation]

Country	United States	Canada	Belgium	Bulgaria	Czecho-slovakia	Denmark	Finland	France	Germany	Italy
Computing agency	Bureau of Labor Statistics	Dominion Bureau of Statistics	Ministry of Industry and Labor	Director General of Statistics	Central Bureau of Statistics (revised index)	Finans-tidende	Central Bureau of Statistics	General Statistical Bureau	Federal Statistical Bureau	Riccardo Bachi
Commodities	404	<sup>1</sup> 238	128	38	135	33	135	45	38	<sup>2</sup> 107
Year and month										
1913	100.0	100.0		100			100	100	100.0	100
1914	98.1	102.3		121	<sup>4</sup> 100	<sup>5</sup> 100	102	102		95
1915	100.8	109.9		185			138	140		133
1916	126.8	131.6	<sup>3</sup> 100	268			164	188		202
1917	177.2	178.5		667			228	262		299
1918	194.3	199.0		831			293	339		409
1919	206.4	209.2		1166			294	356		364
1920	226.2	243.5		2392			1183	509		631
1921	146.9	171.8		2006			250	1263		577
1922	148.8	152.0	367	2472	1334	179	1219	327		562
1923	153.7	153.0	497	2525	977	201	1095	419	95.1	575
1924	149.7	155.2	573	2823	977	226	1100	489	122.5	585
1925	158.7	160.3	558		1001	200	1129	551	130.4	690
1923										
January	155.8	151.4	434	2657	991	181	1134	387	65.0	575
April	153.7	156.9	480	2757	1012	200	1096	415	89.5	588
July	150.6	153.5	504	2408	949	207	1080	407	88.8	566
October	153.1	153.1	515	2263	960	205	1077	421	117.9	593
1924										
January	151.2	156.9	580	2711	974	210	1071	494	117.3	571
February	151.7	156.8	642	2658	999	223	1078	544	116.2	573
March	149.9	154.4	625	2612	1021	227	1094	499	120.7	579
April	148.4	151.1	555	2798	1008	228	1095	450	124.1	579
May	146.9	150.6	557	2551	1001	225	1090	458	122.5	571
June	144.6	152.3	565	2811	968	219	1088	465	115.9	566
July	147.0	153.9	566	2737	953	220	1085	481	115.0	567
August	149.7	156.8	547	2853	986	233	1111	477	120.4	572
September	148.8	153.9	550	2848	982	231	1117	486	126.9	580
October	151.9	157.0	555	2988	999	234	1114	497	131.2	602
November	152.7	157.7	569	3132	1013	231	1120	504	128.5	621
December	157.0	160.9	566	3181	1024	232	1139	507	131.3	640
1925										
January	160.0	165.5	559	3275	1045	234	1137	514	138.2	658
February	160.6	164.7	551	3309	1048	234	1141	515	136.5	660
March	161.0	161.6	546	3272	1034	230	1131	514	134.4	659
April	156.2	156.6	538	3244	1020	220	1133	513	131.0	658
May	155.2	158.8	537	3177	1005	216	1122	520	131.9	660
June	157.4	158.6	552	3225	998	216	1129	543	133.8	683
July	159.9	158.1	559	3041	1009	206	1118	557	134.8	707
August	160.4	158.9	567	2870	992	189	1142	557	131.7	731
September	159.7	156.2	577	2834	996	168	1133	556	125.9	721
October	157.6	156.0	575	2823	989	163	1121	572	123.7	715
November	157.7	161.2	569	2822	977	158	1118	605	131.1	712
December	156.2	163.5	565	2913	977	160	1120	633	121.5	715
1926										
January	156.0	163.8	560	2901	966	157	1094	634	120.0	708
February	155.0	162.2	556	2899	950	151	1091	636	118.4	704
March	151.5	160.1	583	2844	933	145	1081	632	118.3	693
April	151.1	160.6	621	2774	923	141	1081	650	122.7	692
May	151.7	157.0	692	2938	928	141	1070	688	123.2	698
June	152.3	155.7	761	2842	926	140	1079	738	124.6	709
July	150.7	156.2	876	2838	948	141	1079	836	127.4	724
August	149.2	153.9	836	2759	963	143	1092	769	127.0	741
September	150.5	152.5	859	2723	973	141	1093	787	126.8	731
October	149.7	151.1	856	2716	972	145	1095	751	130.2	712
November	148.1	151.5	865		978	150	1097	683	131.6	709
December	147.2	150.5	860		978	145	1101	627	131.1	681

<sup>1</sup> 236 commodities since April, 1924.<sup>2</sup> 36 commodities prior to 1920; 76 commodities in 1920 and 1921; 100 commodities in 1922.<sup>3</sup> April.<sup>4</sup> July.<sup>5</sup> July 1, 1912-June 30, 1914.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN CERTAIN FOREIGN COUNTRIES—Continued

Country	Netherlands	Norway	Spain	Sweden	Switzerland	United Kingdom	Australia	New Zealand	South Africa	Japan	China	India
Computing agency	Central Bureau of Statistics	Central Bureau of Statistics	Institute of Geography and Statistics	Chamber of Commerce	Dr. J. Lorenz	Board of Trade	Bureau of Census and Statistics	Census and Statistics Office (revised)	Office of Census and Statistics	Bank of Japan, Tokyo	Bureau of Markets, Treasury Department, Shanghai	Labor Office, Bombay
Commodities	48	174	74	160	71	150	92	180	187	50	117	42
Year and month												
1913	100	100	100	100		100.0		100	100	100	100.0	
1914	109		101		100.0		100	104	97	95		100
1915	146		119				141	117	107	97		
1916	226		141				152	126	123	117		
1917	276		166				146	143	141	147		
1918	373		207				170	169	153	193		236
1919	304		204				180	176	165	236		222
1920	292		221	359		307.3	218	207	223	259	152.0	216
1921	182		190	222	196.5	197.2	167	192	161	200	150.2	199
1922	160		176	173	167.7	158.8	154	165	129	196	145.5	187
1923	151	232	172	163	179.9	159.1	170	158	127	199	156.4	181
1924	156	267	183	162	175.7	166.2	165	165	129	206	153.9	182
1925	155	253	188	161	162.9	159.7	162	161	128	202	159.4	163
1923												
January	157	223	170	163	174.7	157.0	163		131	184	152.7	181
April	156	229	174	168	185.9	162.0	167		126	196	157.7	180
July	145	231	170	162	179.8	156.5	180		124	192	155.4	178
October	148	235	171	161	181.1	158.1	171		125	212	156.1	181
1924												
January	156	251	178	161	183.2	165.4	174		131	211	155.8	183
February	158	261	180	162	183.4	167.0	170			208	159.5	188
March	155	264	180	162	180.1	165.4	167			206	157.5	181
April	154	263	184	161	181.4	164.7	166		126	207	153.7	184
May	153	261	179	160	180.4	163.7	165			205	154.3	181
June	151	262	179	158	178.3	162.6	163			199	151.8	185
July	151	265	182	157	173.3	162.6	163		125	195	151.5	184
August	151	271	182	160	170.6	165.2	162			200	148.8	184
September	158	272	184	163	169.9	166.9	162			206	149.3	181
October	161	273	186	167	169.0	170.0	163		133	213	152.8	181
November	161	276	181	167	168.5	169.8	163			214	154.9	176
December	160	279	198	168	169.8	170.1	165			213	157.4	176
1925												
January	160	279	191	169	170.8	171.1	163	166	130	214	159.9	173
February	158	281	192	169	170.8	168.9	162	162		210	159.2	173
March	155	279	193	168	169.9	166.3	160	162		204	160.3	171
April	151	273	190	163	165.9	161.9	158	162	130	202	159.3	165
May	151	262	191	162	163.0	158.6	159	162		199	157.8	164
June	153	260	187	161	161.9	157.2	162	162		200	157.3	160
July	155	254	188	161	160.6	156.9	162	161	127	198	162.8	158
August	155	249	184	159	159.6	156.2	162	161		200	160.3	160
September	155	237	185	157	159.4	155.1	162	160		201	160.2	157
October	154	223	187	154	159.2	153.9	163	162	124	200	159.0	158
November	154	220	186	155	157.0	152.7	165	161		198	158.4	160
December	155	220	187	156	156.7	152.1	160	160		194	158.1	154
1926												
January	153	214	186	153	155.5	151.3	161	159	124	192	164.0	154
February	149	211	186	152	154.5	148.8	160	159		188	163.0	151
March	145	205	183	149	150.8	144.4	163	157		184	164.4	150
April	143	199	179	150	148.4	143.6	168	156	120	181	162.8	151
May	143	197	179	151	146.6	144.9	167	156		177	159.7	151
June	144	194	177	150	145.1	146.4	163	155		177	155.8	150
July	141	192	178	148	145.0	148.7	162	156	122	179	156.9	149
August	139	193	180	147	145.5	149.1	162	154		177	160.5	148
September	140	193	178	146	146.0	150.9	158	153		176	164.2	149
October	143	198	179	148	145.3	152.1	154	153	127	174	171.1	147
November	147	199	185	148	146.9	152.4	155	151		171	174.4	146
December	146	184	186	150	148.3	146.1	155	153		170	172.0	

\* July. <sup>6</sup> 52 commodities in 1920; 53 commodities from August, 1920, to December, 1921. <sup>7</sup> 147 items.

## Retail Prices in Mexico City, 1923 to 1926

THE following table, taken from the October 31, 1926, issue of Estadística Nacional, published by the Mexican Statistical Department, shows the average retail prices of specified food and miscellaneous articles in Mexico City in October, 1924, 1925, and 1926, compared with the average for the year 1923, and the corresponding index numbers:

AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES AND INDEX NUMBERS THERE-  
OF IN MEXICO CITY, OCTOBER, 1924, 1925, AND 1926, COMPARED WITH AVERAGE FOR  
1923

[Peso at par=49.85 cents; average exchange rates for 1924, 1925, and 1926=48.51, 49.39, and 48.30 cents.  
1 kilogram=2.2 pounds; 1 litro=1.06 quarts]

Artículo	Unit	Average retail prices				Index numbers (av- erage for 1923=100)		
		Year 1923	Octo- ber, 1924	Octo- ber, 1925	Octo- ber, 1926	Octo- ber, 1924	Octo- ber, 1925	Octo- ber, 1926
Rice, extra.....	Kilogram	<i>Pesos</i> 0.51	0.34	0.28	0.28	67	55	55
Rice, first class.....	do	.48	.29	.25	.22	60	52	46
Rice, second class.....	do	.39	.24	.19	.18	62	49	46
Sugar, cube.....	do	.43	.46	.44	.38	107	102	88
Sugar, granulated, first class.....	do	.34	.30	.29	.30	88	85	88
Sugar, granulated, second class.....	do	.31	.28	.27	.28	90	87	90
Sugar, loaf.....	do	.31	.31	.28	.30	100	90	97
Fish, fresh.....	do	.75			1.25			167
Cocoa, Ceylon and Java.....	do	1.83	2.20	2.29	2.20	120	125	120
Cocoa, Sanchez.....	do	1.34	1.50	1.75	1.65	112	131	123
Cocoa, tobasco.....	do	1.90	2.37	2.44	3.95	125	128	208
Coffee, Caracolillo.....	do	.91	1.32	1.36	1.40	145	149	154
Coffee, Planchuela, first class.....	do	.80	1.30	1.19	1.20	162	149	150
Coffee, Planchuela, second class.....	do	.75	1.22	1.06	1.10	163	141	147
Beef, first class.....	do	.53	.54	1.12	1.00	102	211	189
Beef, second class.....	do	.46	.46	.88	.60	100	191	130
Beef, third class.....	do	.40	.34	.72	.60	85	180	125
Mutton, first class.....	do	.83	.91	1.08	1.10	110	130	133
Mutton, second class.....	do	.75	.83	.93	1.00	111	124	133
Pork, first class.....	do	.71	.74	1.36	1.20	104	192	169
Pork, second class.....	do	.69	.71	1.10	1.10	103	159	159
Chile peppers, ancho.....	do	1.75	1.21	.90	1.25	69	51	71
Chile peppers, cascabel.....	do	.72	1.43	.90	.90	199	125	125
Chile peppers, chilpotle.....	do	.83	.88	.93	2.00	106	112	241
Chile peppers, mulato.....	do	2.08	1.44	2.87	2.20	69	138	106
Chile peppers, pasilla.....	do	1.89	1.70	1.22	1.00	90	65	53
Beans, black.....	do	.17	.32	.26	.16	188	153	94
Beans, colored.....	do	.16	.22	.36	.16	138	225	100
Chick peas, first class.....	do	.60	.50	.47	.70	83	78	117
Chick peas, second class.....	do	.35	.28	.30	.32	80	86	91
Chick peas, small.....	do	.22	.15	.19	.18	68	86	82
Flour, American.....	do	.28	.36	.34	.40	129	121	143
Flour, Mexican, first class.....	do	.25	.30	.31	.30	120	124	120
Flour, Mexican, second class.....	do	.23	.22		.28	96		122
Eggs.....	Each	.07			.09			129
Milk.....	Litro	.19	.26	.28	.26	137	147	137
Lentils.....	Kilogram	.31	.50	.53	.44	161	171	142
Corn, inland.....	do	.09	.08	.10	.10	89	111	111
Corn, coastal.....	do	.08	.08	.11	.12	100	138	150
Butter, Sancocho.....	do	.79	1.07	1.13	1.00	135	143	127
Butter, American.....	do	.76	1.05	1.04	.95	138	137	125
Potatoes, yellow.....	do	.15	.24	.26	.23	160	173	153
Potatoes, white.....	do	.08	.08	.14	.12	100	175	150
Potatoes, spotted.....	do	.09	.15	.19	.16	167	211	178
Paste for soup.....	do	.40			.38			107
Cheese, fresh.....	do	.77			1.15			103
Cheese, old.....	do	1.39			1.30			101
Salt, grain.....	do	.07	.09	.08	.10	129	114	143
Salt, ground.....	do	.08	.09	.08	.10	113	100	125
Charcoal, vegetable.....	do	.07	.07	.08	.08	100	114	114
Firewood.....	Cord	36.00			43.00			108
Petroleum.....	Litro	.19			.22			106
Candles, stearine.....	Kilogram	1.39			1.50			100
Candles, paraffin.....	do	.48			.53			104
Candles, tallow.....	do	.49			1.00			104

# LABOR AGREEMENTS, AWARDS, AND DECISIONS

## Labor Agreements

### Bus Operators—Bayonne, N. J.

**A**N AGREEMENT was made between the Broadway Bus Owners' Association of Bayonne, N. J., and the Bus Operators Local No. 461 of Hudson County, January 14, 1927, whereby the association agreed to recognize the union and the union agreed to admit to membership the chauffeurs of the association except any who have "ever engaged in scab employment," and no strike was to be called on the line except on an affirmative vote of two-thirds of the members of the organization. The only reference to wages is the following:

It is further agreed by and between the parties above referred to that the conditions regarding wages, working hours, etc., are to remain the same as before the strike. At the expiration of one year from date a representative of the chauffeurs' union of the Broadway line may investigate the financial condition of the bus owners' association and report his finding to the said Broadway line union and provided two-thirds of the members of the chauffeurs of the Broadway line vote an increase in pay of \$2 per week, notice shall be served on the bus owners within 30 days to that effect.

### Cloak Makers—New York City

**T**HE Industrial Council of Cloak, Suit, and Skirt Manufacturers (Inc.), representing the inside manufacturers, made an agreement with the International Ladies' Garment Workers' Union and the Joint Board of the Cloak, Skirt, Dress, and Reefer Makers' Union of the International Ladies' Garment Workers' Union, November 13, 1926, thus bringing to an end the strike that started last summer at the expiration of the preceding agreement. It was the making of this agreement that led later to the appointment of the arbitration board by the American Cloak and Suit Manufacturers' Association and the International Ladies' Garment Workers' Union, whose opinion in part was printed in the Labor Review for February, 1927, pages 201 to 203.

The agreement of November 13, 1926, which is to remain in effect until June 1, 1929, is very similar to that of July 16, 1924. The council agreed to continue to maintain union shops or deal only with such manufacturers as conduct union shops, purchase no garments from manufacturers whose employees are on strike, send no cut goods to contractors not operating an inside shop, maintain an unemployment insurance fund made up of contributions equal to 2 per cent of the weekly pay roll and 1 per cent deducted from the weekly wages

of the workers, use the "Pro-Sanis" label, continue the existing machinery for settling disputes, continue the research bureau, furnish workers with sewing machines driven by electric power, and with all materials, and with the requisites of work.

Several new clauses were added. An accountant was appointed to see "whether the contracts between the parties are being carried out." The research bureau was directed to make investigations "and build up a body of information about the industry which will enable problems of unemployment, productivity, and wages to be dealt with intelligently."

The appointment of examiners was authorized. Foremen who supervise and superintend are not required to be members of the union. Additional reorganization rights were granted by the union. Employers who have a force of 35 or more employees, or 40 after June 1, 1928, and have given them at least 32 weeks of employment during the preceding year are given the right to reorganize their shops, provided the reorganization does not cause a total displacement of more than 10 per cent of the workers in the shop at any reorganization period, and that such workers are replaced through an employment bureau established in accordance with this agreement. Such reorganization rights are to be exercised only during the months of June, 1927, June, 1928, and December, 1928.

Manufacturers and union shops are thus defined in the second section of the agreement.

The term "manufacturer" within the meaning of this agreement comprises all types of employers producing garments on their own premises, including manufacturers who produce garments from their own material, "submanufacturers" who cut and make up garments from goods delivered or sold to them by the merchant or "jobber," and "contractors" who make up garments from goods delivered to them in cut form.

A "union shop" within the meaning of this agreement is one that employs at least 14 machine operators and a corresponding number of employees in other branches of the work, and is operated under a contract with the union. With respect to establishments conducted directly by members of the council a "union shop" is one that employs none but members in good standing of the union to perform all operations in connection with the production of the garments, observes the union standards hereinafter enumerated, and complies with the other requirements above set forth.

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### Machinists

THE machinists' union has recently made two jurisdictional agreements with other unions. The first was made October 7, 1926, with the teamsters' union to the effect that in garages where automobiles are housed and repaired, the machinists' union is to have jurisdiction over assembling, dismantling, adjusting, and repairing mechanical parts and chassis of automobiles, trucks, and busses, while the teamsters' union is to have jurisdiction over washing, polishing, oiling, greasing, changing of tires, and cleaning up of garages.

On October 12 the machinists agreed with the steam and operating engineers that the former were to have jurisdiction over the building, assembling, erecting, dismantling, and repairing of engines and

machinery of all description, while the latter are to have charge of the engines and operate them, regardless of their motive power, and to make temporary emergency running repairs when necessary to keep the plant in operation. Disputes between the parties that can not be adjusted by the business representatives are to be referred to the international presidents of the two organizations.

Both agreements contain clauses to the effect that the agreements are not intended to abridge or trespass on the recognized jurisdiction of other organizations affiliated with the American Federation of Labor.

#### Shirt Workers—New York City

ON DECEMBER 6, 1926, the following clauses were added to the agreement existing between the Joint Board of the Shirt, Boys' Waist, and Collar Workers' Union, affiliated to the Amalgamated Clothing Workers of America, and the United Shirt Manufacturers' Association (Inc.), of New York.

First. It is understood that the union will not request any security in any form from any member of the United Shirt Manufacturers' Association (Inc.), and that with respect to those members who have deposited security with the association, such security is to be returned to the members.

Second. It is further understood and agreed that should any members of the United Shirt Manufacturers' Association (Inc.) turn their plants into nonunion shops or open nonunion shops, in or out of town, during the life of the present agreement which expires February 15, 1928, that upon a complaint filed by the union against such member for such a violation, the same will be determined by a board composed of duly appointed members of the union and the association and headed by the impartial chairman. If this board finds the member guilty, then upon request of the union, this member should be penalized by the executive board of the United Shirt Manufacturers' Association (Inc.) in accordance with article 18 of our labor agreement.

Third. In the event that the member so penalized fails to pay any fine which the executive board of the United Shirt Manufacturers' Association (Inc.) imposes upon him, the association agrees to bring legal action through its counsel to enforce payment thereof, and it is further agreed that the union may have associate counsel in the prosecution of such suit—it being further understood, however, that the union is to provide and pay for the associate counsel and that the association is to be put to no expense whatsoever for this associate counsel.

Fourth. Any moneys collected by the association because of violation of this understanding should be turned over to the union.

#### Upholsterers—Boston

AN AGREEMENT made by Upholsterers' Local No. 37 with the individual employers of Boston, effective September 1, 1926, calls for a closed shop, a 44-hour week, and cash payment of wages. The article in relation to springers is as follows:

ARTICLE III, SECTION A. One springer shall be allowed to every ten journeymen. Every shop may have one springer. More can be hired with permission of the union, providing the employer can guarantee the union enough work for all upholsterers employed. They shall be members of the union.

SEC. B. Springers shall be allowed to spring up seats and arms only.

SEC. C. Springers shall work the same hours as the journeymen and shall not work when the journeymen in the shop are not working. When the journeymen work short time the work shall be divided equally among the springers.

SEC. D. Future apprentices shall be taken from the springers.

NOTE.—Wages of springers to be decided at time of signing this agreement.

## Awards and Decisions

### American Railway Express Co.

A DECISION affecting 65,000 employees of the American Railway Express Co. was rendered January 13, 1927, by arbitrators appointed under an agreement signed by the company and its employees December 1, 1926.

Negotiations had begun January 21, 1926, when the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees asked the express company for an increase in wages of  $11\frac{1}{2}$  to 12 cents per hour. The company definitely refused the brotherhood's request, and on March 27 the dispute was laid before the Railroad Labor Board. On the dissolution of the latter board without action in the case a new demand for increase was made on the express company and when this demand was refused the matter was brought before the newly created United States Board of Mediation.

The company finally agreed to arbitrate the question, the Order of Railway Expressmen and the American Federation of Express Workers, representing other employees of the company, joining the brotherhood for this purpose. The arbitration board consisted of Hon. William B. Wilson, formerly Secretary of Labor, Emory A. Stedman, of Chicago, a vice president of the express company, and John H. Clarke, formerly justice of the United States Supreme Court, the last named being selected by the other two, who had been appointed by the employees and company, respectively.

The board, after hearing both sides, rendered the following unanimous decision:

Upon full hearing and consideration of the questions submitted, the following award is made:

1. An increase in the rates of pay of  $2\frac{1}{2}$  cents per hour shall be paid to all employees comprehended within the terms of the agreement of submission.
2. The same relative increase in the rates of pay shall be applied to all employees comprehended within the terms of the agreement of submission and rated upon daily, weekly, or monthly bases.
3. Rates of pay in effect upon December 31, 1926, shall be the bases upon which the increased rates of pay prescribed herein shall be computed.
4. The increases in the rates of pay hereinbefore provided for shall be effective as of January 1, 1927.
5. Messengers in train service required to handle baggage shall be paid  $4\frac{1}{4}$  cents per hour in addition to the general rates hereinbefore established by this award.
6. Messengers in train service required to handle United States mail shall be paid  $4\frac{1}{4}$  cents per hour in addition to the general rates hereinbefore established by this award.
7. Messengers in train service required to handle both baggage and United States mail shall be paid  $8\frac{1}{2}$  cents per hour in addition to the general rates hereinbefore established by this award.

The extra allowance to messengers in train service handling United States mail will not apply when the amount of such mail handled does not exceed in volume, between any two points, that provided for the minimum space that can be authorized by the Post Office Department; viz, 3 feet or its equivalent, 54 sacks or pieces. Loading United States mail into car, storing it in car, sorting it en route or unloading it at intermediate or terminal points will constitute "handling" under this award.

The extra allowance for handling United States mail will not apply when "storage" mail is in charge of the messenger, provided he is not required to "handle" it.



The extra allowance for handling baggage and/or United States mail by messengers will apply to other train service employees who may be assigned regularly or temporarily to that work.

The extra allowances herein provided for handling baggage and/or United States mail by messengers shall become effective as of January 16, 1927.

#### Ladies' Garment Workers—Cleveland

**I**N RESPONSE to a complaint of the union that the workers in a certain shop had had more than 12 weeks' lay off and were therefore entitled to be compensated from the unemployment fund, the impartial chairman in case No. 3085, on December 11, 1926, stated his position in regard to that fund as follows:

In a series of earlier decisions, the impartial chairman has sought to establish the claim of the workers to the protection of the unemployment fund. This title has been maintained in repeated instances in the case of firms liquidating their businesses, either deliberately or in consequence of mishap. Only under extraordinary circumstances of the clearest and most certain quality has the claim of the workers to the benefits of the fund been denied.

In all such instances one element has been present. This is, that the firm involved has not offered the chance for further employment to the workers.

In the present case the firm notified its workers—ordinarily in writing, occasionally in responsible verbal manner—to return to work on a specified date. The firm acknowledges its liability for unemployment pay up to such specified date, but denies such liability thereafter in the case of workers not returning upon the date set forth.

The appellants contend that such notices were not given in good faith, and that no work of any consequence would have been provided. The firm vigorously denies such allegations and insists with considerable supporting evidence that its procedure was in entire good faith.

In the absence of any unmistakable evidence of bad faith on the part of the firm, the impartial chairman is compelled to base his decision upon the formal provisions of the agreement. Any worker who, upon formal notification fails to return to work disassociates himself from the benefits of the unemployment fund. Had a single one of the workers so notified returned to work, and found that the notification was merely a ruse, there would have been a strong presumption in favor of the appellants' claim. There was no such instance. The firm acted within its formal rights. The appellants, whether through misapprehension or neglect or deliberate choice, pursued a course which must be regarded as a waiver of claim.

The appeal of the appellants is accordingly dismissed.

#### Railroads—Decisions of Train Service Boards of Adjustment

##### Eastern

**I**N DOCKET No. 366, the Train Service Board of Adjustment (Eastern), on January 6, 1927, considered the claim for hostlers' rate of pay for men located at Thurston, Ohio, on the line of the New York Central Railroad. These men received pay for two hours at hostler rates and six hours at engine watchman's rate and overtime rate when worked. The position of the committee and the decision of the board are as follows:

We contend that the management has no right to pay split rates in any class of service, and as they have admitted that two hours of the service is hostler service, by paying the hostler rates for the two hours, that they should pay the highest

rate for the entire day. There are no provisions, in our schedule for the payment of less than a day in any service.

*Decision.*—The evidence before the board shows that at least a part of the time of the employees in question is consumed in performing hostler work, which is admitted by the payment of two hours per day at hostlers' rates to each of the men employed at Thurston, Ohio. On October 7, 1914, the referee decided that in the case of split service the hostler rate should apply for the entire day irrespective of how short was the period during which hostler service was performed. Article 69 of the current agreement provides that decisions of the referee in connection with the 1913 firemen's and hostlers' award shall be applicable. The board therefore decides that the claim of the committee is sustained.

### Western

#### Expenses

**A** CONDUCTOR of the Arizona division of the Atchison, Topeka & Santa Fe Railway was sent by the company as a witness in a court at El Paso, Tex. His Pullman fare was \$12.50, of which the company allowed only half. The conductor claimed the total amount under article 30 of the agreement, a part of which reads as follows:

Trainmen attending court at the request of the company will be paid the same rates as they would have earned had they remained on their runs; and if away from home station, in addition thereto, their legitimate expenses.

The position of the company and the decision of the board (No. 2156) on September 24, 1926, were as follows:

*Position of management.*—Schedule provides that trainmen will be allowed their "legitimate expenses." The expense in this case was increased because of conductor's wife accompanying him. The extra expense which the railway was put to in this case on account of Mrs. J. should be borne by the employee, not the carrier.

*Decision.*—In view of the provisions of article 30 for legitimate expenses, the evidence in this case indicates that the amount of Pullman expense was the same amount as if Conductor J. were alone on the trip. Therefore, claim is sustained.

#### Deadhead Mileage

In Decision No. 2163, September 28, 1926, a fireman on the Colorado & Southern Railway working south from Trinidad deadheaded by direction of the company from Trinidad to Denver and return on trains operated by the Colorado & Southern Railway, though over a part of the distance (between Pueblo and Denver) the tracks belong to the Atchison, Topeka & Santa Fe Railway, but are operated by the two companies as a joint line.

In settling with the fireman, the company allowed deadhead mileage between Trinidad and Pueblo only, taking the position that inasmuch as the presence of the fireman had been directed at the request of the joint agency operating between Pueblo and Denver, the expenses of the fireman between those points should be borne by the joint agency. The position of the parties and the decision were as follows:

*Position of committee.*—We contend that the deadheading performed by fireman was "company business" within the meaning of Rule 21, as the deadheading was performed under instructions of the company. Rule 21 provides for payment of actual miles deadheaded and specifies no route that must be taken; neither does it require the deadheading to be confined to the line operated by the company ordering the man to deadhead. The rates of pay or rules applicable to the fireman actually firing the locomotive of the train on which the man is deadheading have no bearing upon the compensation for deadheading, as is contended by the company in this case.

The company has the right to order a fireman to deadhead from any point to any other point within reason where their business requires his presence, but, after having done so, and the orders having been complied with, Rule 21 of the schedule provides for the payment of the actual miles deadheaded to be made by the Colorado & Southern Railway Co., who orders the man to perform the service, and does not permit the company to compel the fireman to look to some other company or concern for his compensation.

*Position of management.*—The Colorado & Southern has allowed deadhead mileage, Trinidad to Pueblo and return, under Colorado & Southern schedule, but has declined to allow the deadhead mileage Pueblo to Denver and return for the reason that all payments for service of any kind performed between Pueblo and Denver is paid under the Santa Fe schedule and not under the Colorado & Southern schedule, such payments not being carried on Colorado & Southern pay rolls.

The passenger runs between Denver and Trinidad are what is known as lap runs and men coming to these lap runs from the Colorado & Southern accept service with full knowledge of the fact that they are to work under the Santa Fe agreement on the joint line, and the case at hand presents rather a peculiar situation in that fireman is requesting payment under a Colorado & Southern schedule rule for service performed on the Santa Fe joint line, where Santa Fe schedule governs for all service performed of whatever kind. It is our contention that fireman's claim should be handled with the Santa Fe Company as we have not, and do not apply Colorado & Southern rules to joint line service or Santa Fe rules to Colorado & Southern service. The payment for services performed should, in every case, be under the agreement in effect and the Colorado & Southern schedule is not in effect on the Santa Fe joint line.

*Decision.*—Claim sustained.

# IMMIGRATION AND EMIGRATION

## Statistics of Immigration for December, 1926

By J. J. KUNNA, CHIEF STATISTICIAN UNITED STATES BUREAU OF IMMIGRATION

THE alien population of the United States in December, 1926, was increased by 9,252, a total of 35,608 aliens arriving this month and 26,356 departing. Of the arrivals, 23,805 were immigrants and 11,803 nonimmigrants, while the departures included 9,481 emigrants and 16,875 nonemigrants. The above net increase was less than that for any month since July, 1925, when 6,268 more aliens were admitted than departed.

Aliens debarred during December numbered 1,915, making the total debarments for the last half of the year 10,358. The principal races among the debarred for the half year were the English (1,945), French (1,080), Scotch (1,033), Irish (979), Mexican (788), Hebrew (584), German (561), and Scandinavian (515). By far, the main cause for debarment was "without proper immigration visa," 7,367 aliens having been denied admission during the six months for this reason.

Of the 23,805 immigrant aliens admitted in December last 13,053 came from Europe, and over one-third of these gave Germany as their last permanent residence. Great Britain contributed 1,689 immigrants during the same month; the Irish Free State sent 1,396; Italy, 1,206; Poland, 1,121; and the other countries of Europe less than 1,000 each. Canada sent 5,825 and Mexico 3,666.

During the six months ended December 31, 1926, Canada and Mexico provided by far the greater part of the total net immigration to the United States, 79,277 immigrants coming from these countries against only 2,254 departed. Canadian immigration increased 5.2 per cent and Mexican immigration 144.4 per cent as compared to the same months of the preceding year. Immigration from Europe increased 12.4 per cent over the same period of last year, principally from northwestern Europe, with Germany furnishing the greatest number and the Irish Free State second.

There is a continuous large exodus of aliens to Europe, particularly to the southern and eastern sections. During the six months—July to December last—38 emigrant aliens returned to Europe for every 100 immigrants admitted from that continent, but considering as a separate group Greece, Italy, Portugal, Rumania, Spain, and Yugoslavia the emigration was greater by 7,000 than the immigration from these countries. In the case of Mexico, only 5 emigrants were recorded as leaving here to make their future homes in that country for every 100 immigrants admitted therefrom. For every 100 immigrant aliens entering the United States from Canada, less than 2 emigrant aliens went in the opposite direction.

In the same six months of 1926 there were 6,248 aliens arrested and deported from the United States for various causes under the immigration laws. Of this number 2,651 were returned to Europe, 1,618 to Canada, 1,381 to Mexico, and 309 to other countries in the Western Hemisphere. China received 93 of the 245 deportees sent to Asia, and 44 went to Africa, Australia, and the Pacific Islands. Over half of the total deportees entered the country over the international land boundaries, 2,296 coming from Canada and 1,627 from Mexico. Of the remainder, 1,644 came in at Atlantic seaports, principally New York; 399 at Gulf of Mexico ports, mainly New Orleans; 270 at Pacific seaports; and 12 to Alaska, Hawaii, and Porto Rico. Mexicans outnumbered all the others among the deportees, 1,343 aliens of this race having been deported during the half year in question. Other races with over 300 deportees during the same period were the English (939), German (468), Italian (383), Irish (353), and Scandinavian (308).

Alien stowaways found on board of vessels arriving at United States ports during the six months ended December 31, 1926, numbered 1,003, and deserting alien seamen 14,354. This is an increase of both classes over the same months of the preceding year, when 816 stowaways and 8,704 deserting seamen were reported.

While the men outnumbered the women among the 175,955 immigrant aliens from all countries admitted from July 1 to December 31, 1926, the opposite was true of the immigration from several of the European countries. Conspicuous among the latter was Greece with 301 males and 785 females. Other countries sending more women than men were Belgium, Estonia, Finland, France, England, Scotland, Hungary, Latvia, Lithuania, Luxemburg, Poland, Rumania, Russia, Turkey, and Yugoslavia. The excess of females over males from these European countries were admitted largely as wives of United States citizens under the immigration act of 1924.

In the amount of money per capita shown to the immigration officers on arriving, which is taken as a rough indication of the economic welfare of immigrants, the Welsh stood first, followed closely by the Spanish, Dutch and Flemish, Scotch, Slovak, English, French, and Spanish American. Immigrants of these races were recorded as bringing an average amount of over \$80 each during the half year ended December 31, 1926.

A total of 9,495 aliens "ineligible to citizenship" were admitted from July to December last, the Chinese comprising 5,427, East Indian 124, Japanese 3,889, Korean 45, and the Pacific Islander 10. They were admitted mainly as returning residents, visitors, or transits.

The number of aliens admitted at Canadian borderland ports during the same six months was 56,737. Only 45,248, or 79.8 per cent, of these were born in Canada and the greater part of them came in under the act of 1924 as natives of that country. Of the remainder, 10,278 were born in Europe, being mostly quota immigrants; 187 were born in Asia; 209 in Australia and New Zealand; and 815 in other countries. Over 95 per cent of the number of aliens admitted at Mexican borderland ports were natives of Mexico.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1 TO DECEMBER 31, 1926

Period	Inward					Aliens de- barred from entering <sup>1</sup>	Outward					Aliens de- ported after land- ing <sup>2</sup>
	Aliens admitted			United States citizens ar- rived	Total		Aliens departed			United States citizens de- parted	Total	
	Immi- grant	Non- immi- grant	Total				Emi- grant	Non- em- grant	Total			
1926												
July.....	22,283	16,096	38,379	25,981	64,360	1,746	7,052	17,970	25,022	60,223	85,245	816
August.....	29,286	20,467	49,753	52,683	102,436	1,601	7,376	15,410	22,786	42,248	65,034	1,121
September.....	35,297	25,680	60,977	71,268	132,245	1,817	6,634	16,392	23,026	26,268	49,294	885
October.....	34,528	22,059	56,587	34,176	90,763	1,566	5,377	13,803	19,180	18,150	37,330	1,100
November.....	30,756	16,185	46,941	21,844	68,785	1,713	6,859	13,078	19,937	17,992	37,929	1,085
December.....	23,805	11,803	35,608	16,777	52,385	1,915	9,481	16,875	26,356	19,608	45,964	1,241
Total.....	175,955	112,290	288,245	222,729	510,974	10,358	42,779	93,528	136,307	184,489	320,796	6,248

<sup>1</sup> These aliens are not included among arrivals, as they were not permitted to enter the United States.

<sup>2</sup> These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

TABLE 2.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING THE FISCAL YEAR ENDED JUNE 30, 1926, THE SIX MONTHS ENDED DECEMBER 31, 1926, AND THE MONTH OF DECEMBER, 1926, BY RACE OR PEOPLE, SEX, AND AGE GROUP

Race or people	Immigrant			Emigrant		
	Fiscal year 1926	July to Decem- ber, 1926	Decem- ber, 1926	Fiscal year 1926	July to Decem- ber, 1926	Decem- ber, 1926
African (black).....	894	517	63	865	450	147
Armenian.....	741	538	82	90	34	6
Bohemian and Moravian (Czech).....	2,494	1,618	251	1,468	838	161
Bulgarian, Serbian, and Montenegrin.....	532	367	60	1,681	932	162
Chinese.....	1,375	777	61	2,873	2,404	447
Croatian and Slovenian.....	1,692	394	71	592	180	32
Cuban.....	1,476	1,177	62	1,287	469	163
Dalmatian, Bosnian, and Herzegovinian.....	75	36	10	545	246	49
Dutch and Flemish.....	3,156	1,673	273	903	464	74
East Indian.....	50	35	5	69	67	16
English.....	44,206	23,430	2,665	6,935	3,801	593
Finnish.....	674	369	64	560	255	67
French.....	22,237	11,304	1,447	1,277	890	165
German.....	58,675	28,988	5,087	4,509	2,232	502
Greek.....	1,385	1,284	182	5,188	1,884	205
Hebrew.....	10,267	5,614	1,227	341	133	20
Irish.....	42,475	25,065	2,605	1,225	956	93
Italian (north).....	1,486	1,331	232	3,036	1,591	349
Italian (south).....	7,888	8,329	1,100	16,968	10,903	3,625
Japanese.....	598	399	62	1,201	581	84
Korean.....	52	32	3	27	33	4
Lithuanian.....	393	262	31	439	205	15
Magyar.....	1,076	612	95	1,063	504	78
Mexican.....	42,638	29,457	3,585	3,158	1,409	285
Pacific Islander.....	2	5	1	1	6	159
Polish.....	3,175	2,422	474	2,823	1,565	250
Portuguese.....	793	442	49	2,989	1,769	106
Rumanian.....	319	174	27	1,302	720	36
Russian.....	938	682	139	581	289	10
Ruthenian (Russniak).....	505	219	35	65	10	671
Scandinavian (Norwegians, Danes, and Swedes).....	19,418	9,619	1,372	4,188	1,880	155
Scotch.....	27,298	14,729	1,819	1,912	1,373	40
Slovak.....	534	183	34	850	421	392
Spanish.....	699	559	97	2,972	1,624	169
Spanish American.....	2,519	1,625	160	1,404	840	2
Syrian.....	488	457	109	260	102	8
Turkish.....	197	58	8	201	100	7
Welsh.....	1,314	707	105	76	38	136
West Indian (except Cuban).....	373	225	26	660	463	8
Other peoples.....	381	241	28	318	128	8
Total.....	304,488	175,955	23,805	76,992	42,779	9,481
Male.....	170,567	98,538	13,224	54,989	30,899	7,837
Female.....	133,921	77,417	10,581	22,003	11,880	1,644
Under 16 years.....	47,347	28,480	4,098	3,347	1,637	240
16 to 44 years.....	228,527	131,342	17,416	57,986	31,432	7,372
45 years and over.....	28,614	16,133	2,291	15,659	9,710	1,869

TABLE 3.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING THE FISCAL YEAR ENDED JUNE 30, 1926, THE SIX MONTHS ENDED DECEMBER 31, 1926, AND THE MONTH OF DECEMBER, 1926, BY COUNTRY

[Residence for a year or more is regarded as permanent residence]

Country	Immigrant			Emigrant		
	Fiscal year 1926	July to December, 1926	December, 1926	Fiscal year 1926	July to December, 1926	December, 1926
Albania.....	158	124	20	314	154	14
Austria.....	1,102	531	122	487	242	47
Belgium.....	718	415	75	491	236	28
Bulgaria.....	175	166	20	88	76	1
Czechoslovakia.....	2,953	1,879	298	2,301	1,134	205
Danzig, Free City of.....	210	163	22	1	2	-----
Denmark.....	2,549	1,281	98	691	321	108
Estonia.....	132	106	11	15	9	-----
Finland.....	491	245	41	519	232	68
France, including Corsica.....	4,181	2,341	399	1,011	742	112
Germany.....	50,421	24,545	4,391	3,908	1,963	465
Great Britain and Northern Ireland:						
England.....	10,599	5,023	685	4,921	2,704	369
Northern Ireland.....	419	128	20	208	144	23
Scotland.....	13,661	6,456	897	1,332	1,097	125
Wales.....	1,268	598	87	37	24	3
Greece.....	1,121	1,086	142	5,164	1,886	200
Hungary.....	906	460	67	871	433	67
Irish Free State.....	24,478	15,188	1,396	851	663	60
Italy, including Sicily and Sardinia.....	8,253	8,964	1,206	19,980	12,467	3,966
Latvia.....	298	246	43	58	8	-----
Lithuania.....	636	325	44	408	198	15
Luxemburg.....	127	45	11	7	4	-----
Netherlands.....	1,753	863	134	379	196	37
Norway.....	5,756	2,766	250	2,087	984	423
Poland.....	7,126	4,760	1,121	2,881	1,544	157
Portugal, including Azores, Cape Verde, and Madeira Islands.....	666	315	36	2,926	1,763	253
Rumania.....	1,211	605	137	1,404	735	112
Russia.....	1,766	651	149	181	138	13
Spain, including Canary and Balearic Islands.....	326	258	28	2,465	1,364	341
Sweden.....	8,513	4,325	809	1,150	473	127
Switzerland.....	1,994	1,110	120	486	310	60
Turkey in Europe.....	210	119	29	30	15	-----
Yugoslavia.....	1,059	623	109	2,342	1,201	196
Other Europe.....	326	240	36	46	4	-----
Total, Europe.....	155,562	86,960	13,053	60,400	33,466	7,595
Armenia.....	16	6	1	43	15	1
China.....	1,751	971	98	2,989	2,454	449
India.....	93	59	4	113	83	17
Japan.....	654	441	68	1,208	609	88
Palestine.....	250	269	72	173	98	2
Persia.....	56	21	7	27	18	1
Syria.....	429	379	102	208	87	2
Turkey in Asia.....	21	27	3	126	46	6
Other Asia.....	143	132	26	44	28	2
Total, Asia.....	3,413	2,305	381	4,931	3,438	568
Canada.....	91,019	49,335	5,825	2,173	840	91
Newfoundland.....	2,349	1,622	231	283	222	72
Mexico.....	43,316	29,942	3,666	3,198	1,414	290
Cuba.....	2,281	1,756	138	1,922	740	238
Other West Indies.....	941	503	65	1,917	1,207	382
British Honduras.....	39	81	1	45	9	1
Other Central America.....	1,335	840	131	521	326	54
Brazil.....	877	521	32	210	119	23
Other South America.....	2,230	1,405	218	1,215	637	131
Other America.....	6	-----	-----	1	-----	-----
Total, America.....	144,393	86,005	10,307	11,485	5,514	1,282
Egypt.....	214	122	5	38	14	1
Other Africa.....	315	159	16	88	52	10
Australia.....	376	232	25	257	200	21
New Zealand.....	180	149	17	134	77	3
Other Pacific Islands.....	35	23	1	19	18	1
Total, others.....	1,120	685	64	536	361	36
Grand total, all countries.....	304,488	175,955	23,805	76,992	42,779	9,481

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING DECEMBER, 1926, AND FROM JULY 1 TO DECEMBER 31, 1926, BY COUNTRY OR AREA OF BIRTH

[Quota immigrant aliens are charged to the quota; nonimmigrant and nonquota immigrant aliens are not charged to the quota]

Country or area of birth	Annual quota	Admitted					Total during December, 1926	Total July to December, 1926
		Quota immigrant		Nonimmigrant and nonquota immigrant				
		July to December, 1926	December, 1926	July to December, 1926	December, 1926			
Albania.....	100	49	3	394	48	51	443	
Andorra.....	100	3	3	3	3	3	6	
Austria.....	785	438	87	948	116	203	1,386	
Belgium.....	1 512	285	53	994	95	148	1,279	
Bulgaria.....	100	103	19	137	18	37	240	
Czechoslovakia.....	3,073	1,705	281	2,383	269	550	4,088	
Danzig, Free City of.....	228	162	24	35	4	28	197	
Denmark.....	1 2,789	1,346	116	1,227	96	212	2,573	
Estonia.....	124	104	10	74	9	19	178	
Finland.....	471	239	41	1,120	82	123	1,359	
France.....	1 3,954	1,885	341	3,815	419	760	5,700	
Germany.....	51,227	25,048	4,487	8,645	793	5,280	33,693	
Great Britain and Northern Ireland:								
England.....		6,130	867	15,024	1,293	2,160	21,154	
Northern Ireland.....		357	68	303	24	92	660	
Scotland.....	1 34,007	7,083	1,008	6,171	455	1,463	13,254	
Wales.....		649	92	649	52	144	1,298	
Greece.....	100	110	12	2,296	333	345	2,406	
Hungary.....	473	265	47	1,132	131	178	1,397	
Iceland.....	100	41	5	12	1	6	53	
Irish Free State.....	28,567	17,051	1,694	3,625	197	1,891	20,651	
Italy.....	1 3,845	2,216	321	18,135	2,109	2,430	20,376	
Latvia.....	142	118	18	174	18	36	292	
Liechtenstein.....	100	15	1	1	1	1	15	
Lithuania.....	344	164	24	514	79	103	678	
Luxemburg.....	100	46	11	84	8	19	130	
Monaco.....	100	5	1	5	1	2	278	
Netherlands.....	1 1,648	781	137	1,497	187	324	2,278	
Norway.....	6,453	2,882	286	2,471	163	449	5,353	
Poland.....	5,982	3,209	716	3,900	746	1,462	7,109	
Portugal.....	1 503	237	27	1,338	112	139	1,575	
Rumania.....	603	367	67	1,097	137	204	1,464	
Russia.....	1 2,248	1,070	265	1,722	313	578	2,792	
San Marino.....	100	72	1	1	1	1	73	
Spain.....	1 131	106	11	2,702	315	326	2,808	
Sweden.....	9,561	4,690	853	2,543	193	1,046	7,143	
Switzerland.....	2,081	1,033	115	1,615	130	245	2,648	
Turkey in Europe.....	1 100	61	14	838	162	176	899	
Yugoslavia.....	671	359	46	1,492	231	277	1,851	
Other Europe.....	(1)	147	36	99	15	51	246	
Total, Europe.....	1 161,422	80,541	12,205	89,214	9,354	21,559	169,755	
Afghanistan.....	100	1	1	1	1	1	2	
Arabia.....	100	7	3	1	1	3	8	
Armenia.....	124	30	2	62	11	13	92	
Bhutan.....	100	1	1	1	1	1	1	
China.....	100	85	10	5,500	537	547	5,585	
India.....	100	58	4	308	24	28	366	
Iraq (Mesopotamia).....	100	56	9	22	3	12	78	
Japan.....	100	20	2	3,968	572	574	3,988	
Muscat.....	100	1	1	1	1	1	2	
Nepal.....	100	1	1	1	1	1	1	
Palestine.....	100	114	14	210	34	48	324	
Persia.....	100	64	21	60	6	27	124	
Siam.....	100	1	1	18	1	1	19	
Syria.....	100	99	12	532	136	148	631	
Turkey in Asia.....	(1)	33	1	274	17	17	307	
Other Asia.....	(1)	110	21	100	8	29	210	
Total, Asia.....	1,424	679	98	11,058	1,348	1,446	11,737	

<sup>1</sup> Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.



TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924 DURING DECEMBER, 1926, AND FROM JULY 1 TO DECEMBER 31, 1926, BY COUNTRY OR AREA OF BIRTH—Continued

Country or area of birth	Annual quota	Admitted					Total during December, 1926	Total July to December, 1926
		Quota immigrant		Nonimmigrant and nonquota immigrant				
		July to December, 1926	December, 1926	July to December, 1926	December, 1926			
Cameroon (British).....	100	1	1	1	-----	1	2	
Cameroon (French).....	100	-----	-----	-----	-----	-----	-----	
Egypt.....	100	68	1	68	6	7	136	
Ethiopia.....	100	-----	-----	1	-----	-----	1	
Liberia.....	100	2	-----	3	1	1	5	
Morocco.....	100	12	2	11	1	3	23	
Ruanda and Urundi.....	100	-----	-----	-----	-----	-----	-----	
South Africa, Union of.....	100	88	9	212	24	33	300	
South West Africa.....	100	-----	-----	-----	-----	-----	-----	
Tanganyika.....	100	-----	-----	-----	-----	-----	-----	
Togoland (British).....	100	-----	-----	-----	-----	-----	-----	
Togoland (French).....	100	-----	-----	-----	-----	-----	-----	
Other Africa.....	(1)	35	3	63	5	8	98	
Total, Africa.....	1,200	206	16	359	37	53	565	
Australia.....	121	97	13	2,066	226	239	2,163	
Nauru.....	100	-----	-----	-----	-----	-----	-----	
New Zealand.....	100	77	6	585	60	66	662	
New Guinea.....	100	-----	-----	-----	-----	-----	-----	
Samoa.....	100	3	-----	6	-----	-----	9	
Yap.....	100	-----	-----	3	-----	-----	3	
Other Pacific.....	(1)	6	2	89	7	9	95	
Total, Pacific.....	621	183	21	2,749	293	314	2,932	
Canada.....	-----	-----	-----	48,135	5,509	5,509	48,135	
Newfoundland.....	-----	-----	-----	2,704	332	332	2,704	
Mexico.....	-----	-----	-----	37,986	4,997	4,997	37,986	
Cuba.....	-----	-----	-----	5,174	385	385	5,174	
Dominican Republic.....	-----	-----	-----	514	53	53	514	
Haiti.....	-----	-----	-----	127	15	15	127	
British West Indies.....	(1)	328	44	2,484	217	261	2,812	
Dutch West Indies.....	(1)	15	1	82	12	13	97	
French West Indies.....	(1)	22	6	31	3	9	53	
British Honduras.....	(1)	36	1	51	6	7	87	
Canal Zone.....	-----	-----	-----	7	1	1	7	
Other Central America.....	-----	-----	-----	1,840	166	166	1,840	
Brazil.....	-----	-----	-----	778	106	106	778	
British Guiana.....	(1)	30	4	78	9	13	108	
Dutch Guiana.....	(1)	2	-----	10	6	6	12	
French Guiana.....	(1)	-----	-----	-----	-----	-----	-----	
Other South America.....	-----	-----	-----	2,787	353	353	2,787	
Greenland.....	(1)	-----	-----	2	-----	-----	2	
Miquelon and St. Pierre.....	(1)	3	1	30	9	10	33	
Total, America.....	-----	436	57	102,820	12,179	12,236	103,256	
Grand total, all countries.....	164,667	82,045	12,397	206,200	23,211	35,608	288,245	

<sup>1</sup> Annual quota for colonies, dependencies, or protectorates in Other Europe, Other Asia, Other Africa, Other Pacific, and in America is included with the annual quota for the European country to which they belong. Quota for Turkey in Asia is included with that for Turkey in Europe.

TABLE 5.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING DECEMBER, 1926, AND FROM JULY 1 TO DECEMBER 31, 1926, BY SPECIFIED CLASSES

[The number of immigrants 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, countries, States, and occupations]

Class	Fiscal year 1926	July to December, 1926	December, 1926
<i>Nonimmigrants</i>			
Government officials, their families, attendants, servants, and employees.....	5,666	3,081	380
Temporary visitors for—			
Business.....	19,951	11,434	1,620
Pleasure.....	36,663	19,305	2,140
In continuous transit through the United States.....	25,574	13,898	1,856
To carry on trade under existing treaty.....	904	681	85
Total.....	88,758	48,399	6,081
<i>Nonquota immigrants</i>			
Wives of United States citizens.....	16,810	14,741	1,836
Children of United States citizens.....	14,344	13,810	1,813
Residents of the United States returning from a visit abroad.....	83,754	55,509	4,445
Natives of Canada, Newfoundland, Mexico, Cuba, Haiti, Dominican Republic, Canal Zone, or an independent country of Central or South America.....	2150,299	286,935	210,321
Their wives.....	1,965	1,495	161
Their children.....	1,190	1,85	111
Ministers of religious denominations.....	664	343	47
Wives and ministers.....	235	177	25
Children of ministers.....	436	341	61
Professors of colleges, academies, seminaries, or universities.....	151	108	22
Wives of professors.....	39	30	2
Children of professors.....	26	11	—
Students.....	1,920	1,331	103
Veterans of the World War.....	72	2,860	220
Wives of veterans.....	3	445	72
Children of veterans.....	8	579	91
Spanish subject admitted into Porto Rico (act approved May 26, 1926).....		1	—
Total.....	249,916	157,801	17,130
Total quota immigrants (charged to quota).....	157,432	82,045	12,397
Grand total admitted.....	496,106	288,245	35,608

<sup>1</sup> Wives, and unmarried children under 18 years of age, born in quota countries.

<sup>2</sup> 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 BUREAUS

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**A**MONG the activities of State labor 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.*—Report of operations under the State workmen's compensation act, page 57; and changes in volume of employment in 682 establishments, page 109.

*Connecticut.*—Report of operations under the State workmen's compensation act, page 59.

*Idaho.*—Report of operations under the State Workmen's compensation act, page 60.

*Illinois.*—Changes in employment in the State, page 111.

*Iowa.*—Report of operations under the State workmen's compensation act, page 61; and per cent of change in number of employees in specified industries in the State, page 113.

*Maryland.*—Changes in employment in Maryland industries, page 114.

*Massachusetts.*—Changes in volume of employment in the industries in that State, page 115.

*New York.*—Average weekly earnings of factory workers, 1914 to 1926, page 94; and changes in employment and pay roll in New York State factories, page 116.

*Oklahoma.*—Changes in employment and amount paid in wages in 710 establishments, page 118.

*Pennsylvania.*—Report of operations under the State workmen's compensation act, page 62.

*Wisconsin.*—Volume of employment in Wisconsin industries, page 118.

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### Changes in Personnel

**S**TATE labor offices.—Mrs. Emma Fall Schofield resigned on January 20, 1927, as one of the commissioners of the Massachusetts Department of Industrial Accidents to become an assistant attorney general of that State. In her new capacity she will have charge of the workmen's compensation cases for the State.

J. B. Clinedinst, labor commissioner of Nevada, has resigned the commissionership, his resignation to become effective April 1, 1927.

It is reported that Mr. Chas. A. Waters has been appointed secretary of labor and industry of Pennsylvania, succeeding Mr. Richard Lansburgh.

*Labor unions.*—G. W. Perkins, president of the Cigar Makers' International Union, has retired after a continuous service of 35 years as president and of 42 years in various official capacities in that organization. His successor in office is I. M. Ornburn, who assumed office on January 1, 1927.

# CURRENT NOTES OF INTEREST TO LABOR

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## Physical Examination of Workers

**PHYSICAL** examination of workers in hazardous employ for their own protection has been advocated but has met antagonism on the part of many workers, who fear that in some way the weaker framed or less fortunate physically would be discriminated against, disregarding the fact of their economic need for remunerative employment. On this subject the views of Frank C. MacDonald, president of the California State Building Trades Council are of interest:

To the average workman his job is in a sense synonymous to life. He must work to live. He views with suspicion the activities of employers with regard to medical examinations and safety rules. He thinks that medical examinations are held for the purpose of eliminating him from his job. He imagines that most safety rules are promulgated for the purpose of speeding him up in his work. Because of this suspicion and misunderstanding, the nation is subjected to great loss and the workman to grave danger.

Millions of workmen are doing heavy work which they are physically unfit to perform, such as men whose hearts have become injured through years of laborious effort. Such workmen are frequently required to do heavy lifting, and other strenuous work that jeopardizes their lives because of this weakened heart condition of which they are in ignorance. Countless workmen have other impaired or diseased physical conditions which make them liable to attacks of dizziness or fainting, yet such workmen are sent to work in highly dangerous places.

Then again there are numerous workmen with defective vision who, because of such impaired eyesight, are barely able to do their work. If these workmen were examined by competent oculists they could be furnished with corrective glasses. This would make them more efficient workmen and less liable to accidents.

It might be possible for arrangements to be made through the United States Department of Labor whereby doctors in the Federal, State, and municipal employ would examine such workmen who would voluntarily submit to examination. Such a procedure would obviate the fear that the workman has, that if the doctor representing the company for whom he works were to examine him he might cause his discharge because of some physical disability. Unquestionably if the doctors in the employ of the Federal, State, and municipal governments were to make such examinations they would discover physical defects in thousands of cases, and would be able to advise workmen as to the proper corrective treatment. In many other cases they could warn the physically defective worker against that particular character of work which jeopardizes his life.

# BIBLIOGRAPHY

## Workers' Leisure: A Selected List of References<sup>1</sup>

Compiled by LAURA A. THOMPSON, LIBRARIAN, UNITED STATES DEPARTMENT OF LABOR

### General Discussion

- ALGER, GEORGE W.  
Leisure—for what?  
Atlantic Monthly, April, 1925, v. 135, pp. 483-492.
- ARONOVICI, CAROL.  
Organized leisure as a factor in conservation.  
American Journal of Sociology, January, 1919, v. 24, pp. 373-388.  
Aspects of leisure in relation to democracy, industry, and conservation.
- BARKER, ERNEST.  
The uses of leisure.  
Journal of Adult Education, September, 1926, v. 1, pp. 27-35.
- BOSANQUET, B.  
Place of leisure in life.  
International Journal of Ethics, January, 1911, v. 21, pp. 153-165.
- BRIANT, FRANK.  
Social work in relation to industry.  
Ways and Means, July 12, 1919, pp. 35, 36.  
Increased hours of leisure require increased provision of recreative agencies.
- BURNETT, L. R.  
City's responsibility for the leisure time of the industrial men.  
American Physical Education Review, January, 1924, v. 29, pp. 1-4.  
By the Director of Recreation, Paterson, N. J.
- CANNON, C. J.  
New leisure.  
North American Review, September, 1926, No. 223, pp. 498-506.
- CHILD, RICHARD WASHBURN.  
How are you expressing yourself?  
Playground, September, 1926, v. 20, pp. 309-311.
- COLLIER, JOHN.  
Leisure time. The last problem of conservation. New York [n. d.] 16 pp.  
Reprinted from The Playground, June, 1912, v. 6, pp. 93-106.
- CUTTEN, GEORGE B.  
Leisure and education.  
Playground, February, 1927, v. 20, pp. 601-605.
- The Threat of Leisure. New Haven, Yale University Press, 1926. 166 pp.  
CONTENTS: I. Leisure?—II. How did we obtain our leisure?—III. Shall we standardize work and play?—IV. How are we investing our leisure?—V. Is leisure a menace?—VI. Can we use leisure to advantage?—VII. Is education a solution?—Suggested reading list (pp. 150-163).
- DICKINSON, SAMUEL C.  
What to do with the other eight hours . . . Tucson, Ariz., University of Arizona, Bureau of Mines, 1917. 14 pp. (Arizona, State Bureau of Mines, Bul. No. 68. Welfare series No. 1.)
- GREEN, WILLIAM.  
The five-day week.  
North American Review, December, 1926, pp. 567-574.  
A discussion of the human value of leisure as well as its economic significance.

<sup>1</sup> Does not include Workers' Education, which was covered in separate bibliographies in the Labor Review for June, 1922 (pp. 181-198) and September, 1924 (pp. 190-203).

- HART, JOSEPH K.  
Place of leisure in life.  
American Academy of Political and Social Science. *Annals*, March, 1925, v. 118, pp. 111-115.
- HOWE, FREDERICK C.  
Leisure.  
Survey, January 3, 1914, v. 31, pp. 415, 416.  
Some suggestions for the redemption of leisure by the substitution by the community itself of new kinds of play and culture for those of the commercialized agencies.
- The Modern City and Its Problems. New York, Scribner, 1915. 390 pp.  
Recreation and the problem of leisure: pp. 305-321.
- JORDAN, H. W.  
Spare time.  
Journal of Industrial and Engineering Chemistry, March, 1921, v. 13, pp. 253, 254.
- KELLEY, Mrs. FLORENCE.  
The right to leisure.  
Charities, September 2, 1905, v. 14, pp. 1055-1062.
- LIES, EUGENE T.  
Community recreation: Its significance, objectives, machinery and standards.  
(In National Conference of Social Work, Proceedings, 1926. pp. 493-500.)
- LLOYD, ALFRED H.  
Ages of leisure.  
American Journal of Sociology, September, 1922, v. 28, pp. 160-178.  
Need of a new culture for the age of the automatic tool.
- MACKAYE, PERCY.  
Civic Theater in Relation to the Redemption of Leisure: A book of suggestions. New York, Mitchell Kennedy, 1912. 308 pp.
- MANNING, WILLIAM THOMAS.  
The church and wholesome play.  
Playground, January, 1927, v. 20, pp. 537, 538.  
Address before Thirteenth Recreation Congress.  
Leisure needed for physical development, for culture, and for spiritual life.
- MENNICKE, CARL.  
Die kulturbedeutung des achtstundentages.  
Die Arbeit (Berlin), July 15, 1924, v. 1, pp. 32-38.
- MULLENBACH, JAMES.  
Industry and leisure time.  
Playground, September, 1924, v. 18, pp. 333, 334, 369, 370.  
Speed and monotony of modern industry has deadened the creative impulse of the worker.  
The demand of the worker for leisure is for a chance for adequate personal expression.
- PANGBURN, WEAVER.  
Community responsibility for the conservation of leisure time and child life.  
American Review, July, 1924, v. 2, pp. 411-419.
- The workers' leisure and his individuality.  
American Journal of Sociology, January, 1922, v. 27, pp. 433-441.
- PATRICK, G. J. W.  
The play of a nation.  
Scientific Monthly, October, 1921, pp. 350-362.
- PAYNE, A. A.  
Education for leisure as well as for vocation.  
English Journal, April, 1921, v. 10, pp. 208-216.
- POUND, ARTHUR.  
The Iron Man in Industry: An outline of the social significance of automatic machinery. Boston, Atlantic Monthly Press, 1922. 230 pp.  
The need of education for leisure because it has become, under the conditions of automatic production, education for life is discussed in chapter 10 (pp. 196-215).
- The right use of leisure.  
Journal of the National Institute of Social Sciences, 1924, v. 9, pp. 27-35.  
Delivered at annual meeting of National Institute of Social Sciences, January 29, 1924.

- RAINWATER, CLARENCE E.  
Socialized leisure.  
*Journal of Applied Sociology*, May-June, 1923, v. 7, pp. 255-259.
- REEVE, Mrs. A. H.  
Leisure and the home.  
*Playground*, December, 1926, v. 20, pp. 494-496, 523.  
Address at Thirteenth Recreation Congress, Atlantic City, October 18-22, 1926.
- ROOSEVELT, THEODORE.  
Leisure and the home.  
*Playground*, December, 1926, v. 20, pp. 487-493.  
Paper read at Thirteenth Recreation Congress, Atlantic City, October 18-22, 1926.
- ROSS, EDWARD A.  
Adult recreation as a social problem.  
*American Journal of Sociology*, January, 1918, pp. 516-523.
- RUSSELL, B.  
Leisure and mechanism.  
*Dial*, August, 1923, v. 75, pp. 105-122.
- SIMON, A. M.  
Evolution of leisure for the many.  
*Craftsman*, September, 1905, v. 8, pp. 777-780.
- TAFT, LORADO.  
Beauty and leisure time.  
*Playground*, December, 1923, v. 17, pp. 492-494, 523.
- THORNDIKE, EDWARD LEE.  
The right use of leisure.  
*Journal of the National Institute of Social Sciences*, 1924, v. 9, pp. 19-26.  
Address delivered at the annual meeting of the National Institute of Social Sciences, January 29, 1924.
- TOWERS, AL.  
Recreation and industry.  
*Playground*, September, 1924, v. 18, pp. 335, 336, 370.
- UNWIN, RAYMOND.  
The influence of housing conditions on the use of leisure.  
*International Labour Review*, June, 1924, v. 9, pp. [815]-828.  
Discusses the need of space in and about the house and in the neighborhood for the wholesome use of leisure and the advantages afforded by the adoption of the garden city principle. Pleads also for the introduction of handicraft as a part of the leisure time program.  
Same in part in *Town Planning Institute Journal*, February, 1925, v. 7, pp. 204-207.
- VIEWS OF WELFARE WORKERS. Leisure organization a community problem.  
*Industrial and Labour Information*, April 7, 1924, v. 10, pp. 34-37.  
Quotations from the memorandum of the Interim Committee of the International Association for the Promotion of Industrial Welfare, and summary of a report of the Liverpool Council of Voluntary Aid.
- WARING, S. J.  
The workman's leisure.  
*Ways and Means*, May 3, 1919, pp. 276, 277.  
Leisure to be worth while needs happiness of home life, contact with nature, access to books.
- WATSON, E.  
Significance of leisure.  
*Contemporary Review*, August, 1920, v. 118, pp. 238-245.
- WOLL, MATTHEW.  
Leisure and labor.  
*Playground*, September, 1925, v. 19, pp. 322, 323.
- YARROS, V. S.  
Mechanism, leisure, and beauty.  
*Open Court (Chicago)*, December, 1923, v. 37, pp. 734-740.
- Reports by Countries  
General and International
- BEAUFRETON, MAURICE.  
Leisure time occupations in the country.  
*International Review of Agricultural Economics*, January-March, 1925, n. s. v. 3, pp. 3-27.  
Belgium, France, Germany, Great Britain, Canada, and United States.

**BOUTHOU, GASTON.**

La durée du travail et l'utilisation des loisirs. Paris, Giard, 1924. 152 pp.

**COUNTRY WORKERS' RECREATIONS.** The problem of rural life.

Industrial and Labour Information, June 30, 1924, v. 10, pp. 506-510.

Brief notes on France, Belgium, Luxemburg, Germany, and Austria.

**GIANI, MARIO.**

Il dopolavoro all'estero. Roma, Opera nazionale dopolavoro [1925?] 60 pp. (Quaderni del dopolavoro, No. 2.)

"Bibliografia dopolavoro," pp. [59], 60.

Great Britain, France, Belgium, Germany, and United States, with brief notes regarding other countries.

**INTERNATIONAL LABOR CONFERENCE.** 6th session, Geneva, 1924. International Labour Office, 1924. 2 v.

Stenographic report in French and English.

Report of the committee on the utilization of workers' spare time, pp. 552-562; Discussion, pp. 272-279, 282-300, 440-444, 643; Recommendation adopted, pp. 644-649.

**INTERNATIONAL LABOR OFFICE, Geneva.**

International labor conference. Sixth session. Geneva, June, 1924.

Development of facilities for the utilization of workers' leisure. Geneva, 1923. 30 pp. (Questionnaire I.)

## — Report of the director, 1925. Geneva, 1925.

French and English in parallel columns.

"Development of facilities for the utilization of spare time," pp. 238-241.

## — Report of the director, 1926. Geneva, 1926.

"Utilization of workers' spare time" (summary of reports from the various Governments), pp. 256-264.

## — Report on the development of facilities for the utilization of workers' leisure. Item I on the agenda. Geneva, 1924. 112 pp. (Report I.)

Prepared for the Sixth International Labor Conference, Geneva, June, 1924. Includes the reports of the different Governments in alphabetical order on each question contained in the questionnaire and a general survey of the question in the light of these replies under the headings: Means of preserving workers' leisure, Methods of utilizing leisure, and General principles.

## — Supplementary report on the development of facilities for the utilization of workers' leisure. Geneva, 1924. 47 pp.

## — Second supplementary report on the development of facilities for the utilization of workers' leisure. Geneva, 1924. 19 pp.

## — Utilization of spare time. List of documents received by the International Labour Office and placed at the disposal of delegates to the Sixth International Labour Conference ... Geneva, 1924. 19 pp.

**THE LEISURE TIME OF WORKERS.**

Playground, September, 1924, v. 18, pp. 342-347.

Summary of articles in the International Labour Review for June, 1924.

**MILHAUD, EDGARD.**

The results of the adoption of the eight-hour day: II. The eight-hour day and the human factor in production.

International Labour Review, February, 1926, v. 13, pp. 175-210.

Includes effect on the family and social life of the worker with quotations from various reports.

**TRANSPORT AND SPARE TIME.**

Industrial and Labour Information, January 12, 1925, v. 13, pp. 51-53.

**L'UTILISATION DES LOISIRS.**

L'Information Sociale (Paris), May 15 and 22, 1924, v. 17, pp. 7, 8.

Replies of the Governments of Belgium, France, and Germany to the questionnaire of the International Labour Office and quotations from the French and Belgian labor press.

**UTILIZATION OF WORKERS' LEISURE IN VARIOUS COUNTRIES.**

Monthly Labor Review, August, 1924, v. 19, pp. 296-303.

Summary of the articles published in the International Labour Review for June, 1924.

**WORKERS' GARDENS.**

International Labour Review, July, 1924, v. 10, pp. 86-119.

Traces the progress and development of the movement, particularly in Great Britain, Belgium, France, and Germany, character and size of gardens, rents, compensation for improvements, and general results.

**WORKERS' SPARE TIME.**

Industrial and Labour Information, April 20, 1925, v. 14, pp. 87-90.

Brief notes relating to United States, Belgium, and Italy.



YOUNG MEN'S CHRISTIAN ASSOCIATION. *World's committee.*

The leisure of the young worker: A report by the world's committee of the Y. M. C. A.

International Labour Review, June, 1924, v. 9, pp. 829-844.

Discusses the value and use of leisure with some examples of Y. M. C. A. educational and recreation work in different countries.

## Australia and Canada

## SOUTH AUSTRALIA AND WORKERS' SPARE TIME.

Industrial and Labour Information, July 12, 1926, v. 19, pp. 37-40.

Summary of statement from the Government of South Australia. For text see Official Bulletin (International Labour Office), July 30, 1926, v. 11, pp. 127-131.

## SPARE TIME IN THE COUNTRY. II. Overseas methods of organization.

International Labour Review, July, 1924, v. 10, pp. 120-135.

In Canada and the United States. The sections treat of community halls, use of open spaces, agricultural extension work, farm and home bureaus, public libraries and women's institutes and clubs.

## UTILIZATION OF WORKERS' SPARE TIME. Recommendation of International Labour Conference on this subject brought before the Dominion Parliament and provincial governments.

Labour Gazette (Canada), March, 1926, v. 26, pp. 243-248.

## WORKERS' SPARE TIME IN AUSTRALIA. The position in New South Wales.

Industrial and Labour Information, April 5, 1926, v. 18, pp. 3, 4.

Summary of statement from the Government of New South Wales. For text see Official Bulletin (International Labour Office), May 15, 1926, v. 11, pp. 92-95.

## "WORKERS' SPARE TIME" IN CANADA. Existing provisions for workers on farms.

Labour Gazette (Canada), September, 1924, v. 24, pp. 764-766.

## WORKERS' SPARE TIME IN CANADA.

Industrial and Labour Information, May 3, 1926, v. 18, pp. 143-146.

Summary of the Canadian order in council dated February 22, 1926. For full report of Canadian Government see Official Bulletin (International Labour Office), May 15, 1926, v. 11, pp. 95-102.

## WORKERS' SPARE TIME IN WESTERN AUSTRALIA.

Industrial and Labour Information, January 11, 1926, v. 17, pp. 3-5.

Summary of statement from Government of Western Australia.

## Austria

## KALLBRUNNER, HERMANN.

The cultivation of allotments during the war.

International Review of Agricultural Economics, June, 1922, v. 13, pp. 436-450.

## — The decline of allotment gardens.

International Review of Agricultural Economics, April-June, 1925, n. s., v. 3, pp. 270-272.

## — Development of State railway allotment gardens.

International Review of Agricultural Economics, January-March, 1923, n. s., v. 1, pp. 144-146.

## RAGER, FRITZ.

Das problem der freizeit der arbeiter in Osterreich.

Arbeit und Wirtschaft, January 1 and 15, 1924, v. 2, pp. 23, 24, 58-62.

## — The utilization of leisure in Austria.

International Labour Review, February, 1924, v. 9, pp. 227-241.

Subject is treated with special relation to the effect of the 8-hour day introduced by law in December, 1918. More active participation in trade-unionism, in politics and in cooperative societies, wider support of the workers' education movement, the development of the organization of worker-tourists, known as "The Friends of Nature" (*Die Naturfreunde*) and an increase in the number of allotment gardens are some of the results of greater leisure noted. The conclusion reached is that in spite of certain indications to the contrary, "the great majority of the workers in Austria prefer to spend the extra leisure secured to them by the 8-hour day in ways which not only are for their own personal benefit but also add to the general well-being and level of culture."

## WORKERS' SPARE TIME IN AUSTRIA.

Industrial and Labour Information, February 8, 1926, v. 17, pp. 167-169.

Summary of a report made by the Austrian Government to the International Labour Office.

## Belgium

## ALLOTMENTS DURING THE WAR: BELGIUM.

International Review of Agricultural Economics, November, 1922, v. 13, pp. 793-798.

## A BILL FOR ESTABLISHING A NATIONAL INSTITUTE FOR WORKERS' LEISURE.

Industrial and Labour Information, January 6, 1922, v. 1, pp. 30, 31.

News note from Le Peuple, December 22, 1921, regarding proposal for a national institute to encourage projects and organizations intended to secure the best possible utilization of their leisure by the workers.

HAINAUT (Province). *Commission provinciale les loisirs ouvriers*. . . . Rapport général, 1921-22, 1922-23. (Its Fascicule 4, 10.)

This committee publishes also a review "Les loisirs ouvriers."

## LINDEMANS, M.

Rural recreation.

International Review of Agricultural Economics, April-June, 1925, n. s., v. 3, pp. 273-286.

Summary of an inquiry made at the request of the Belgian Ministry of Agriculture by the State agricultural experts and State woman advisors on farm household management.

## WORKERS' LEISURE COMMITTEES IN BELGIUM.

International Labour Review, June, 1924, v. 9, pp. 863-878.

An interesting account of the activities of the workers' leisure committees set up by the provincial Councils of Hainaut, Brabant, and Liège. See also Summary of the 1924 Hainaut report in Industrial and Labour Information, April 20, 1925, v. 14, pp. 89, 90.

## WORKERS' SPARE TIME IN BELGIUM.

Industrial and Labour Information, September 13, 1926, v. 19, pp. 393-398.

Summary of memorandum to the International Labour Office from the Belgian Government on measures taken and results achieved as regards the question of utilization of workers' spare time in Belgium.

## France

## ALLOTMENTS DURING THE WAR: FRANCE.

International Review of Agricultural Economics, October, 1922, v. 13, pp. 725-734.

## BEAUDEMOULIN, JEAN.

La Loi de Huit Heures (23 avril, 1919). Enquête sur son application et sur les loisirs de l'ouvrier (étendue, répartition, utilisation). Paris, Librairie Dalloz, 1924. 275 pp.

The section entitled "Enquête sur l'utilisation des loisirs" (pp. 135-256) includes quotations from various official reports as well as letters received by the author in a personal investigation. "Bibliographie," pp. [267]-269.

FRANCE. *Ministère du Travail*.

Enquête sur l'utilisation des loisirs créés par la journée de 8 heures.

Bulletin du Ministère du Travail, August-October-November-December, 1920, v. 27, pp. 402-409, 509-513; April-June, July-September, 1921, v. 28, pp. 170-176, 309-315; April-June, July-September, October-December, 1922, v. 29, pp. 190-195, 311-313, 408-419; January-March, April-June, October-December, 1923, v. 30, pp. 54-60, 176-180, 419-424; April-June, July-September, October-December, 1924, v. 31, pp. 140-149, 226-232, 362-379.

Based largely upon data collected by the French factory inspectors under special instructions from the Ministry of Labor immediately upon the passage of the 8-hour law. Cover special facilities provided by industrial and commercial concerns, trade-unions, and various social organizations, and include special reports on the development of outdoor sports, workers' gardens, educational extension, etc.

## INQUIRY CONCERNING THE UTILIZATION OF WORKERS' LEISURE HOURS: WORKERS' GARDENS.

Industrial and Labour Information, March 9, 1922, v. 5, pp. 492-494.

Summary of report in the Bulletin du Ministère du Travail, October-December, 1922, pp. 408-417.

## RIVES, PAUL.

La corvée de joie. Paris, Les Presses universitaires de France, 1924. 211 pp.

Facts, figures, and opinions collected by the author in a personal inquiry into the attitude adopted to the question of the utilization of workers' spare time by individual employers, workers, employers' associations, socialist and Christian trade-unions, welfare and other organizations, and public officials.

## Germany

## ALBRECHT, OTTO.

Deutsche kleingartenpolitik.

Die Arbeit (Allgemeiner Deutscher Gewerkschaftsbund), September 15, 1924, v. 1, pp. 168-176.

- THE EIGHT-HOUR DAY IN GERMANY IN 1921 AND 1922.**  
*International Labour Review*, December, 1923, v. 8, pp. 863-873.  
 Summary of the German industrial inspection reports for 1921 and 1922. The section on leisure discusses the use of increased leisure due to the introduction of the 8-hour day. Many of the older workers were found to engage in subsidiary occupations, while others spent the time in development of kitchen gardens. Outdoor sports are particularly favored by the younger workers.
- GERMANY AND WORKERS' SPARE TIME.** Review of the situation.  
*Industrial and Labour Information*, September 27, 1926, v. 19, pp. 446-449.  
 Sections of the report made by the German Federal Ministry of Labor on the measures taken in Germany to give effect to the recommendation of the 1924 International Labor Conference concerning the utilization of workers' spare time.
- GERMANY: INSTITUTION OF A PEOPLE'S CINEMA ASSOCIATION IN BERLIN.**  
*Industrial and Labour Information*, September 22, 1922, v. 2, p. 575.
- RIEDEL, JOHANNES.**  
*Arbeitskunde; Grundlagen, Bedingungen und Ziele der wirtschaftlichen Arbeit ...* Leipzig, B. G. Teubner, 1925. 364 pp.  
 "Beruf und Freizeit in ihren kulturellen Zusammenhängen," von Ludwig Preller, pp. 244-250.

## Great Britain

- THE CONFERENCE OF WORKERS' TRAVEL ORGANIZATIONS.**  
*International Information (Labour & Socialist International, Zurich)*, January 29, 1927, v. 4, pp. 45-46.  
 Conference held in London, January 9-15, 1927, promoted by the British Workers' Travel Association, with delegates from Austria, Belgium, Germany, Holland, Switzerland, and Czechoslovakia.
- CONFERENCE ON CHRISTIAN POLITICS, ECONOMICS, AND CITIZENSHIP.**  
 Leisure; being the report presented to the conference ... at Birmingham, April 5-12, 1924. London, Pub. for the conference committee by Longmans, Green & Co., 1924. 111 pp. (C. O. P. E. C. commission report, vol. V.)
- GREAT BRITAIN. Adult Education Committee.**  
 The drama in adult education. London, 1926. 232 pp.  
 Includes survey of activities of the British Drama League and of amateur societies in the towns and countryside. See also Paper No. 5 on British music.
- *Mines Department. Miners' Welfare Fund.*  
 Report, 1st-4th, 1921/22-1925. London, 1923-1926.  
 Constituted under the terms of the Mining industry act, 1920, by means of a levy of 1d. per ton on the coal production of Great Britain (£1,210,561 in 1925). Joint local welfare committees consisting of representatives of owners and workers assist in the administration of the fund, four-fifths of which is used for establishing and maintaining recreation grounds, swimming pools and gymnasiums, pit-head baths, hospitals and convalescent and rest homes, and in fostering athletic, musical and social organizations.  
 Summary of the work of the fund in *Monthly Labor Review*, August, 1926, v. 23, pp. 217-224.
- INTERNATIONAL LABOR CONFERENCE, 7th session, Geneva, 1925.**  
 Proposed action by the British Government regarding recommendation adopted by the Conference at its sixth session, 16th June to 5th July, 1924. London, 1925. 3 pp. (Great Britain, Parliament, Papers by command, Cmd. 2441.)  
 The recommendation was regarding the development of facilities for the utilization of workers' spare time. See also *Official Bulletin (International Labour Office)*, Sept. 21, 1925, v. 10, pp. 150, 151.
- LEISURE OF THE PEOPLE.**  
*Spectator*, April 24, 1920, v. 124, pp. 543, 544.
- LIVERPOOL COUNCIL OF VOLUNTARY AID (INC.).**  
 Report on the uses of leisure in Liverpool. Liverpool, 1923. 28 pp.
- NATIONAL CONFERENCE ON THE LEISURE OF THE PEOPLE.**  
 Leisure of the people: A handbook, being the report of the national conference held at Manchester, November 17-20, 1919. 95 pp.
- NATIONAL COUNCIL OF SOCIAL SERVICE.**  
 Memorandum on rural development. London, 1922.
- SPARE TIME IN THE COUNTRY: I. An English experiment in organization.**  
*International Labour Review*, June, 1924, v. 9, pp. 917-938.  
 Discusses the conditions determining leisure in the country and the work carried on by various organizations along the lines of women's institutes, village clubs, music, drama, folk-dancing, educational extension, etc.

STEWART, B. MARTIN.

Recreation, use of leisure time. (*In A social survey of the city of Edinburgh.* Edinburgh, 1926, p. 70-75.)

TOMLINSON, F. L.

The allotment movement in Scotland during the war.

International Review of Agricultural Economics, January-March, 1925, n. s., v. 3, pp. 73-88.

— The cultivation of allotments in England and Wales during the war.

International Review of Agricultural Economics, April-June, 1923, n. s., v. 1, pp. 162-210.

#### Italy

[COSTANZO, GIULIO.]

National organization of workers' spare time.

International Review of Agricultural Economics, October-December, 1925, n. s., v. 3, pp. 704-708.

A review of the Italian *Dopolavoro* movement and particularly of the organization and activities of the National Institute of Workers' Spare Time (*Opera Nazionale Dopolavoro*).

IL DOPOLAVORO. Anno 1- (15 Feb. 1923-) Roma [1923-].

Issued independently from February 15 to November 15, 1923, under title "Il Dopo-lavoro; rivista quindicinale illustrata"; from December 1923 to December, 1925, as a section in "La Stirpe" issued by the Ufficio Centrale Dopolavoro of the Confederazione delle Corporazioni Sindacali Fasciste. In January, 1926, became the official organ of the *Opera Nazionale Dopolavoro*.

FASCISTI PROGRAMME FOR THE UTILIZATION OF WORKERS' LEISURE.

Industrial and Labour Information, July 6, 1923, v. 7, p. 46.

GIANI, MARIO.

Il Dopolavoro. Roma, Opera Nazionale dopolavoro [1925?]. 46 pp. (Quaderni del dopolavoro, No. 1.)

Includes illustrations.

— L'utilisation des loisirs des ouvriers en Italie. Rome, 1924. 81 pp.

Pamphlet presented to the members of the Sixth International Labor Conference containing a review of the institutions concerned with workers' leisure in Italy.

ITALY. *Opera Nazionale Dopolavoro*.

Scopi ed organizzazione. Roma, Tip. ditta L. Cecchini, 1927. 44 pp.

Issued as the first number of its *Bollettino Ufficiale*, January 1, 1927.

This institute was established by royal decree May 1, 1925, to coordinate and promote activities for the utilization of workers' spare time. See also report of Italian Government to International Labour Office in its Official Bulletin, March 15, 1926, v. 11, pp. 49-51.

L'OEUVRE NATIONALE DES LOISIRS DE L'OUVRIER.

Bulletin du Ministère du Travail et de l'Hygiène (France), October-December, 1925, v. 32, pp. 458-460.

Summary of the act creating the *Opera Nazionale del Dopolavoro*.

POPULAR EDUCATION IN ITALY.

Industrial and Labour Information, April 21 and 28, 1924, v. 10, pp. 127-131,

LA STIRPE; Rivista delle Corporazioni fasciste ... Critica e cultura, sindacale-dopo lavoro, illustrazione dell'attività economica-politica-artistica d'Italia ... Anno 1- (dic. 1923-) Roma, [1923-]. (Monthly.)

UTILIZATION OF SPARE TIME IN ITALY.

Industrial and Labour Information, June 22, 1925, v. 14, pp. 548, 549.

#### United States

BEATTIE, W. R.

War gardens in the United States.

International Review of Agricultural Economics, April-June, 1924, n. s., v. 2, pp. 194-214.

BEVANS, GEORGE E.

How Workingmen Spend their Spare Time . . . New York, 1913. 97 pp.

An investigation made in 1912-13 as part of the work for the degree of doctor of philosophy at Columbia University; 1070 schedules were filled out by personal interviews with workingmen, principally in New York City. "From the data secured it would seem conclusive that the number of hours which a group of men work per day is directly related to the ways in which leisure time is used. The greatest contrast is apparent between the spare time spent by men in the 8-9 hour group and men in the 11-hour and over group. The 8-9 hour men engage in more social and cultural pastimes, whereas the 11-hour and over men spend most of their spare time in ways which are cheaper and more convenient. Between these two extremes the gradation of the 9-10 and 10-11 hour group is an indication that the longer the working-day the less social and educational development."

CATLIN, WARREN B.

The Labor Problem in the United States and Great Britain. New York, Harper Bros., 1926. 659 pp.

"Value and use of leisure," pp. 83, 84, 90-92, 201, 202, 536.

THE CITY WORKERS' SPARE TIME IN THE UNITED STATES.

International Labour Review, June, 1924, v. 9, pp. 896-916.

A description of some of the agencies and opportunities for recreation at the disposal of American workers.

COMMUNITY SERVICE (INC.).

Comrades in Play; Leisure time activities which the young men and young women of America can enjoy together. New York City, Community Service (Inc.), 1920. 84 pp.

See also "Community buildings for industrial towns" (1921); "Pioneering for play" (1921); and "Rural and small community recreation" (1920), published by this organization.

CROWTHER, SAMUEL.

Henry Ford: Why I favor five days' work with six days' pay.

World's Work, October, 1926, v. 52, pp. 613-616.

"It is high time to rid ourselves of the notion that leisure for workmen is either 'lost time' or a class privilege . . . We have faith that the average man will find his own best way . . . We do know that many of the men have been building homes for themselves, and to meet their demand for good and cheap lumber we have established a lumber yard where they can buy from our own forests. The men help each other out in this building."

DOUGLAS, O. W.

Industrial recreation; a recent phase in the playground movement.

American City (Town & Country ed.), October, 1917, v. 17, pp. 365-369.

FEDERATED AMERICAN ENGINEERING SOCIETIES. *Committee on work-periods in continuous industry.*

The Twelve-hour Shift in Industry. New York, E. P. Dutton & Co., 1922. 302 pp.

The investigators found conclusive evidence that where the working-day was shortened to eight hours the leisure time was used to good advantage in gardening, truck farming, odd jobs and recreation (p. 216).

GARDNER, L. C.

Community athletic recreation for the employees and their families.

American Physical Education Review, January, 1924, v. 29, pp. 4-7.

GILLIN, JOHN L.

Wholesome Citizens and Spare Time. Cleveland, Ohio. The survey committee of the Cleveland Foundation, 1918. 182 pp. (Cleveland Foundation, Publication 29.)

Includes results of an investigation of the spare-time activities of a selected group.

GLENN, JOHN M.

Industrial recreation.

Playground, September, 1924, v. 18, pp. 337-339, 366.

Recreation facilities in connection with industrial establishments.

HEINBAUGH, ZELAH.

The Why and How of Leisure-time Activities among Younger Employed Girls. New York, The Womans Press [c1925]. 76 pp.

LIES, EUGENE T.

Organized labor and recreation.

American Federationist, August, 1923, v. 30, pp. 648, 649.

NASON, WAYNE C.

Uses of rural community buildings. Washington, 1922. 32 pp. (U. S. Department of Agriculture. Farmers' bulletin 1274).

See also Farmers' bulletins 1173 and 1388.

NATIONAL CONFERENCE ON OUTDOOR RECREATION, *Washington, D. C.*, 1924.

Proceedings of the meeting of the Advisory council of the National Conference on Outdoor Recreation held in Washington, D. C., December 11-12, 1924. Washington, 1925. 55 pp. (S. Doc. 229, 68th Cong., 2d sess.)

Address of Herbert Hoover stressing need for providing increased facilities for recreation and of education for the increasing leisure time of the population, pp. 3-6.

— Proceedings of the National Conference on Outdoor Recreation held in Washington, D. C., May 22-24, 1924. Washington, 1924. 244 pp. (S. Doc. 151, 68th Cong., 1st sess.)

Report of the committee on the value of outdoor recreation to industrial workers, pp. 214, 215. See also Resolution XII, p. 154.

The addresses of President Coolidge and Col. Theodore Roosevelt and a summary of the proceedings are printed in The Playground for July, 1924.

PLAYGROUND AND RECREATION ASSOCIATION OF AMERICA.  
Yearbook for 1925.

A review and statistical report of community recreation in the United States, published as the April, 1926, number of its journal, *The Playground*. The files of this journal contain the proceedings of the annual recreation congress and other papers on various phases of community recreation.

REPORT ON OUTDOOR RECREATION FOR INDUSTRIAL WORKERS.  
*Monthly Labor Review*, September, 1926, v. 23, pp. 521, 522.

Report and recommendations of the committee on policy and administration of outdoor recreation for industrial workers to the executive council of the National Conference on Outdoor Recreation.

SAXMAN, ETHEL J.

Students' use in leisure time of activities learned in physical education in State teachers colleges. New York City, 1926. 90 pp. (Teachers College, Columbia University, Contributions to education No. 217.)

SPARE TIME IN THE COUNTRY. II. Overseas methods of organization.

*International Labour Review*, July, 1924, v. 10, pp. 120-135.

In United States and Canada. The sections treat of community halls, use of open spaces, agricultural extension work, farm and home bureaus, public libraries, and women's institutes and clubs.

STELZLE, CHARLES.

How one thousand workmen spend their spare time.

*Outlook*, April 4, 1914, v. 106, pp. 762-766.

Summarizes the results of the investigation made in 1912-13 by George E. Bevans.

STONE, RUTH I.

Recreational activities for women employees.

*American Physical Education Review*, January, 1924, v. 29, pp. 7-9.

SULLENGER, T. EARL.

One city's program for leisure time [Omaha, Neb.].

*Journal of Social Forces*, September, 1924, v. 2, pp. 718-721.

UNITED STATES. *Department of Labor. Bureau of Labor Statistics.*

Welfare work for employees in industrial establishments in the United States. Washington, 1919. 139 pp. (*Its Bul. No. 250.*)

Indoor recreation, pp. 68-86; Outdoor recreation, pp. 87-93; Education, pp. 94-99.

USE OF SPARE TIME IN THE UNITED STATES.

*Industrial and Labour Information*, December 27, 1926, v. 20, pp. 611, 612.

Summary of discussion at Thirteenth Recreation Congress of Playground and Recreation Association, Atlantic City, October 18-22, 1926. For papers read see *The Playground*, January and February, 1927.

WALDO, RUSSELL J.

Recreation as a stimulus to production; many leading plants after several years' experience indorse it as an important factor in industry.

*Manufacturing Industries*, January, 1927, v. 13, pp. 53-56.

WEIR, LEBERT H.

Vocational recreation in Indiana, 1916; vocational recreation facilities and activities of 141 business establishments. [Bloomington, Ind.], 1917. 126 pp. (Bulletin of the extension division, Indiana University, Vol. III, No. 5.)

Other Countries

ALLOTMENT GARDENS DURING THE WAR [BULGARIA].

*International Review of Agricultural Economics*, January-March, 1924, n. s., v. 2, pp. 160-162.

NYSTRÖM, BERTIL.

The use of spare time in Sweden.

*International Labour Review*, June, 1924, v. 9, pp. [845]-862.

Based on the investigation undertaken by the Swedish Government in 1922 into the economic and social effects of the eight-hour act and the supplementary inquiry made in January, 1924, among State factory inspectors and various social organizations. Describes the measures for promoting the satisfactory use of leisure by the State and municipalities and by trade-unions and employers and particularly the developments in sports, popular education, and small holdings and allotments.

THE RESULTS OF THE EIGHT-HOUR DAY IN SWEDEN.

*International Labour Review*, February-March, 1923, v. 7, pp. 321-327.

Summary of an inquiry made by the Swedish Ministry of Social Affairs in 1922. The section on social results notes the shorter working-day as having been particularly useful to the worker owning a house, a small garden, or an allotment.

**THE RIGHT TO LEISURE.**

Industrial and Labour Information, November 1, 1926, v. 20, pp. 190, 191.  
Memorandum from the Japanese Association for International Labor Legislation.

**THE USE OF SPARE TIME IN CZECHOSLOVAKIA.**

International Labour Review, June, 1924, v. 9, pp. 879-895.

Covers trade-union, political and cooperative activities, sport, building, and gardening, the development of public libraries and workers' education.

*See also* notes of later developments in Industrial and Labour Information, January 12, 1925, v. 13, pp. 54, 55, and April 20, 1925, v. 14, pp. 52, 53.

**UTILIZATION OF LEISURE IN FINLAND.**

International Labour Review, April, 1924, v. 9, pp. 573-586.

Based on information supplied to the International Labor Office by Mr. Niilo A. Mannio, Director of the General Department of the Finnish Ministry of Social Affairs. Utilization of leisure has been facilitated in Finland by the three-fold effort of the workers, the employers and the State and municipalities. For action taken by Government of Finland *see* Official Bulletin (International Labour Office), v. 11, No. 5 (rev. ed.), p. 324.

**UTILIZATION OF WORKERS' SPARE TIME IN INDIA.** Facilities for education and recreation.

Industrial and Labour Information, January 19, 1925, v. 13, pp. 97, 98.

Memorandum sent by the Social Service League of Bombay to the Deputy-secretary of the Government of Bombay.

**WORKERS' SPARE TIME IN DENMARK.**

Industrial and Labour Information, March 22, 1926, v. 17, pp. 377-379;  
December 6, 1926, v. 20, pp. 426-428.

Information submitted by the Danish Department for Intellectual Cooperation in Social Questions regarding Danish institutions for the utilization of spare time.

**WORKERS' SPARE TIME IN POLAND.** Survey of the situation.

Industrial and Labour Information, April 26, 1926, v. 18, pp. 95-99.

Memorandum from the Polish Government. *See also* Official Bulletin (International Labour Office), May 15, 1926, v. 11, pp. 103-109.

# PUBLICATIONS RELATING TO LABOR

## Official—United States

CALIFORNIA.—Industrial Accident Commission. *Report, from July 1, 1925, to June 30, 1926. Sacramento, 1926. 43 pp.*

This report is reviewed on page 57 of this issue.

CONNECTICUT.—Board of Compensation Commissioners. *Eighth report, 1925-26. Hartford, 1926. 26 pp.*

A brief review of this report is given on page 59 of this issue.

IDAHO.—Industrial Accident Board. *Fifth report, from November 1, 1924, to October 31, 1926. Boise, 1926. 131 pp.*

Data from this report are presented on page 60 of this issue.

ILLINOIS (CHICAGO).—Department of Public Welfare. Bureau of Social Surveys. *Selected bibliography on housing, zoning, and city planning in Chicago. Chicago, November, 1926. 19 pp.*

IOWA.—Workmen's Compensation Service. *Seventh biennial report, for the period ended June 30, 1926, and report of decisions by the department and State courts. Des Moines, 1926. 195 pp.*

This report is reviewed briefly on page 61 of this issue.

NEW YORK.—Board of Housing. *Preliminary report, December 15, 1926. Albany, 1926. 31 pp., plans.*

The report contains a summary of the State housing law of 1926 (see Labor Review, July, 1926, p. 77), the results of a survey of land values in Manhattan and Brooklyn, and a study of various plans of buildings, covering varying proportions of the ground site. In the most congested parts of the city, the board found about 950 assessment blocks, or about 1,250 ordinary blocks, suitable for housing of the kind contemplated. Including all costs of condemnation proceedings, compensation, and the like, the costs of these blocks range from less than \$6 up to \$14 a square foot. With land costing \$6 a square foot, it is estimated that the various types of tenements could be erected to rent at from \$9.25 to \$12.29 per room per month, the bathroom not being counted as a room in fixing the rent. With land at \$14 a square foot, the range of rentals would be from \$12.09 to \$17.80. Considerable reductions from these rents might be made possible by letting the ground floors for stores.

— Department of Labor. *Memorandum on the 48-hour week for women, by James A. Hamilton, State Industrial Commissioner. Albany, 1926. 7 pp.*

A reply to the argument that a 48-hour week is economically impossible, based on the number of workers who already have this or an even shorter week. A study made by the department in December, 1923, covering 400,000 factory workers showed the following results:

Percentage working—	
44 hours or less .....	18
45-48 hours .....	44
49-51 hours .....	21
52-54 hours .....	10
Over 54 hours .....	7
Total .....	100



This study was completed before the steel mills changed their continuous operations from a two-shift to a three-shift basis and so changed a large number of workers from the 12-hour to the 8-hour day. The effect of this change would be to decrease by about two points the proportion of workers in the last group and increase by about two points the proportion of workers on the 48-hour week. That leaves close to two-thirds of the workers in factories in this State enjoying the benefits of an 8-hour day.

A study made in the spring of 1923 covering about 29,000 woman employees in mercantile establishments in all parts of the State showed that 82 per cent had a working week of 48 hours or less, and that in New York City the proportion was even larger.

OHIO.—Industrial Commission and the Department of Industrial Relations. *Actuarial audit of the Ohio State Insurance Fund (workmen's compensation). Columbus [1926]. 72 pp.*

A review of the summary of this report contained in the September, 1926, issue of Industrial Relations, the periodical published by the two departments listed above, was carried in the November, 1926, Labor Review.

UNITED STATES.—Civil Service Commission. *Forty-third annual report, for the fiscal year ended June 30, 1926. Washington, 1926. lxxxviii, 176 pp.*

The report shows that on June 30, 1926, there were 60,811 persons employed in the Government service in the District of Columbia and 499,894 outside of the District, as compared with 63,756 and 500,962, respectively, in 1925. An account of the work of the director of research, included in the volume, gives samples and descriptions of tests used to ascertain the adaptability or aptitude of applicants for different types of work.

— Congress. Senate. Committee on Immigration. *Immigration of aliens into the United States. Hearing on S. 4425, December 22, 1926. Washington, 1926. 14 pp.*

— Department of Commerce. *Fourteenth annual report of the Secretary of Commerce, 1926. Washington, 1926. xii, 297 pp.*

In addition to the usual reviews of the various activities of the department during the preceding year, this report contains valuable information on the progress of the movement for the elimination of waste in industry.

— Bureau of Foreign and Domestic Commerce. *Statistical abstract of the United States, 1925. Washington, 1926. xvi, 846 pp.*

The sections of this publication which are of interest to labor give statistics of prices and cost of living, wages and hours of labor, industrial accidents, vocational education, and immigration.

— Bureau of Mines. *Information circular 6005: Bureau of Mines safety labels, by L. C. Hsley. Washington, 1926. 14 pp., illus.*

A brief review of this pamphlet is given on page 37 of this issue.

— — — *Sixteenth annual report, for the fiscal year ended June 30, 1926. Washington, 1926. v, 46 pp.*

The annual report of the Director of the Bureau of Mines outlines the work accomplished during the year in the promotion of safety in mines and in the rescue and first-aid work and gives an account of the studies in health, sanitation, and ventilation.

— — — *Technical paper 392: Accidents in the petroleum industry of Oklahoma, 1915-1924, by H. C. Fowler. Washington, 1926. iv, 29 pp., charts.*

— — — *Technical paper 394: Dust respirators, their construction and filtering efficiency, by S. H. Katz and others. Washington, 1926. iv, 52 pp., illus.*

— — — *Technical paper 400: Accidents due to explosives in metal mines of the southwest, as shown by records in Arizona, by E. D. Gardner. Washington, 1926. 29 pp.*

UNITED STATES.—Department of Commerce. Bureau of Mines. *Technical paper 406: Production of explosives in the United States during the calendar year 1925, with notes on mine accidents due to explosives*, by William W. Adams. Washington, 1926. 39 pp.

Data on mine accidents due to explosives, taken from this report, are given on page 34 of this issue.

— — — *Technical paper 408: Coke-oven accidents in the United States during the calendar year 1925*, by William W. Adams. Washington, 1926. 40 pp.

Data from this report are published on page 32 of this issue.

— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 422: Wages and hours of labor in foundries and machine shops, 1925*. Washington, 1927. iii, 159 pp.

An advance summary of this report was published in the Labor Review for December, 1925 (pp. 63-69).

— — — *Bulletin No. 423: Workmen's compensation legislation of the United States and Canada as of July 1, 1926*. Washington, 1926. v, 687 pp.

A brief review of this bulletin is given on page 55 of this issue.

— — — *Bulletin No. 425: Record of industrial accidents in the United States to 1925*. Washington, 1927. iv, 113 pp.

This bulletin is reviewed on page 31 of this issue.

— — — *Bulletin No. 430: Safety code for power presses and foot and hand presses*. Washington, 1926. iv, 64 pp., illus.

— Employment Service. *Summary of activities of the farm labor division, United States Employment Service, 1926*. Washington, 1927. 3 pp.

— Treasury Department. Public Health Service. *Annual report of the Surgeon General for the fiscal year 1926*. Washington, 1926. vii, 330 pp.

This report gives a summary (pp. 42-49) of the studies carried out during the year by the office of industrial hygiene and sanitation. These studies include an investigation of tetraethyl lead and studies of ventilation and illumination, the effects of various dusts, and posture in industry.

— — — *Public health bulletin No. 163: The use of tetraethyl lead gasoline in its relation to public health*. Washington, 1926. viii, 123 pp., illus., charts.

A summary of an advance copy of the report of the committee appointed to investigate the health hazards connected with the use of tetraethyl lead gasoline was published in the Labor Review for March, 1926. The bulletin here noted is the finished report and includes the final recommendations of the committee.

### Official—Foreign Countries

AUSTRALIA (WESTERN AUSTRALIA).—Department of Labor. *Annual report for the year 1925-1926*. Perth, 1926. 52 pp.

The report shows that during the three years 1923 to 1925 there was a steady increase in the number of factory workers, the figures for 1925 being 24,151 as against 20,770 in 1923. This took place mainly among the male workers, the number of female employees having increased only by 281.

CZECHOSLOVAKIA.—Office de Statistique. *Manuel Statistique de la République Tchecoslovaque, II*. Prague, 1925. xxviii, 656 pp.

Contains a wealth of data, including wholesale and retail prices, cost of living, insurance against industrial accidents, sickness, and old-age, occupational distribution of population, emigration, collective agreements, unemployment, strikes and lockouts, social welfare, cooperative societies, and various industrial and labor statistics. Most of the data cover one or more years in the period from 1919 to 1923.

DENMARK.—Statistiske Departement. *Strejker og lockouter i Danmark, 1921-1925.* Copenhagen, 1926. 36 pp.

A report by the Statistical Department of Denmark on strikes and lockouts in that country from 1921 to 1925.

FEDERATED MALAY STATES.—Labor Department. *Annual report for the year 1925.* Kuala Lumpur, 1926. 48 pp.

GREAT BRITAIN.—Industrial Fatigue Research Board and the Illumination Research Committee. *The relation between illumination and efficiency in fine work (typesetting by hand),* by H. C. Weston and A. K. Taylor. London, 1926. v, 11 pp., illus.

A brief review of this study is given on page 39 of this issue.

INTERNATIONAL LABOR OFFICE.—*Draft conventions and recommendations adopted by the International Labor Conference during its first nine sessions held 1919-1926.* Geneva, 1926. 127 pp.

UNION OF SOUTH AFRICA.—Department of Mines and Industries. *Annual reports of the Secretary for Mines and Industries and the Government mining engineer, 1925.* Pretoria, 1926. [Various paging.] Tables and charts.

This report on conditions in the various mines of the Union of South Africa contains data on labor which includes wages, accidents to workers, miners' phthisis, etc.

URUGUAY.—Dirección General de Estadística. *Anuario estadístico de la República oriental del Uruguay, 1924.* Tomo XXXII, Parte 6. Montevideo, 1926. 100 pp.

One section of the yearbook of Uruguay, containing statistical tables and other data on industrial accidents, strikes and lockouts, etc., covering specified years ending with 1924. The part of the report giving statistics of the work of employment offices is summarized on page 120 of this issue.

### Unofficial

AMERICAN MANAGEMENT ASSOCIATION. *Office executives' series, No. 21: A statistical analysis of personnel,* by J. P. Lamb. New York, 20 Vesey Street, 1926. 15 pp.

This analysis is summarized on page 25 of this issue.

BLACK, JOHN D. *Introduction to production economics.* New York, Henry Holt & Co., 1926. xvi, 975 pp., charts.

A textbook in economics, which instead of attempting to cover the whole field limits itself to the subject of the factors entering into production and treats these in very considerable detail. Chapter 16, under the title of "The human agent in production," discusses labor, management, and entrepreneurship.

COLUMBIA UNIVERSITY. *Studies in history, economics, and public law, No. 278: Canadian labor laws and the treaty,* by Bryce M. Stewart. New York, 1926. 501 pp.

This study traces the development of labor legislation in Canada, Dominion and provincial, with detailed comparisons of such legislation with the principles set forth in the labor section of the Treaty of Versailles. The first three chapters review the history and general problems of labor legislation in Canada, nine of the remaining ten chapters dealing, in order, with the nine principles set forth in the Peace Treaty, such as the 8-hour day, weekly rest day, child labor, etc.

COMMONS, JOHN R., AND ANDREWS, JOHN B. *Principles of labor legislation.* New York and London, Harper & Bros., 1927. xvi, 616 pp.

The last previous revision of this work was in 1920. The present revision follows the same methods of treatment as the earlier one, with such changes and additions as were made necessary by developments subsequent to 1920.

ELDRIDGE, SEBA. *Political action: A naturalistic interpretation of the labor movement in relation to the State.* Philadelphia, J. B. Lippincott Co., 1924. xviii, 382 pp. Lippincott's sociological series.

This volume deals with the question of the uses and limitations of political action in the promotion of the economic interests of subordinate income classes, and of the wage-earning class in particular. As a result of the inquiry the author draws the inference that "these classes will come to rely more and more on non-political or direct methods for the attainment of their more fundamental aims."

GILMAN, JOSEPH. *Rent levels in Pittsburgh, Pa., and their causes.* Pittsburgh, University of Pittsburgh, 1926. xviii, 74 pp., charts, map.

This pamphlet brings together the material previously published as bulletins 2 and 3 of the University of Pittsburgh studies in business administration.

GUEST, L. HADEN. *The Labor Party and the Empire.* London, Labor Publishing Co. (Ltd.), 1926. 95 pp.

Gives a general discussion of the policy of the Labor Party, dealing especially with the questions of Empire organization or Empire preference, labor and migration, and the attitude of labor toward India and Africa, respectively.

HULL, GEORGE H. *Industrial depressions, their causes analyzed and classified, with a practical remedy for such as result from industrial derangements, or iron, the barometer of trade.* New York, Codex Book Co. (Inc.), 1926. xviii, 321 pp., charts.

A historical and analytical study of industrial depressions with particular reference to the production and price of iron as a leading factor in such depressions.

HUTCHINS, B. L., AND HARRISON, A. *A history of factory legislation [in Great Britain].* London, P. S. King & Son (Ltd.), 1926. xvi, 298 pp. 3d edition.

JOHNSON, JULIA E. *Special legislation for women.* New York, H. W. Wilson Co., 1926. 142 pp. The reference shelf, Vol. IV, No. 7.

Deals with the relative merits of protective legislation for women and the policy of the advocates of the equal rights amendment, who propose to make the job safe, whoever the worker may be, and to refrain from putting women, as a group, under legislative restrictions not equally applicable to men. Gives a bibliography, and a number of articles on each side.

LABOR PARTY [Great Britain]. *Labor's policy on agriculture.* London, 33 Eccleston Square, 1926. 39 pp.

Sets forth briefly the reasons for believing that land should be a national possession, the plan for acquiring its ownership with compensation to the present holders, the methods of dealing with special problems such as the deer forests present, and the method of public control. The policy is based upon the need for increasing the productivity of English land. The object is "to secure the fullest possible use of land for and by the community by the most economical and effective means. \* \* \* Without any assistance from the public purse in the form of subsidies, it has been admitted that the production of British food can be very largely increased. If this increased output can be secured by leveling up the general methods of farming to the best methods now followed by practical farmers, still further progress awaits us in the future through the steady advancement in agricultural methods and the collective and cooperative development of the industry."

LABOR RESEARCH DEPARTMENT [London]. *The general strike, May, 1926: Trade councils in action, by Emile Burns.* London, 162 Buckingham Palace Road, S. W. 1, 1926. 191 pp.

Gives an account of the methods of organization adopted by the trades councils during the nine days of the general strike, and of the different activities they fostered.

LAUCK, W. JETT. *Political and industrial democracy, 1776-1926*. New York, Funk & Wagnalls Co., 1926. x, 374 pp.

A general discussion of the fundamentals of industrial relations. The author, after reviewing and analyzing the numerous plans of employee representation, profit sharing, and stock ownership in effect in various companies and institutions, concludes that "a definite, independent organization of employees is an essential preliminary to cooperation and industrial democracy."

LINCOLN, EDMOND E. *Steps in industry*. New York, Macmillan Co., 1926. xiv, 215.

The author seeks in this book to "popularize" the subject of economics for the benefit of the average man in industry.

METCALF, HENRY C., Editor. *Scientific foundations of business administration*. Baltimore, Williams & Wilkins Co., 1926. 341 pp. Human relations series, IV.

A series of lectures conducted in 1924-25 by the Bureau of Personnel Administration (New York City) for the study of the basic elements underlying the problems of business administration and management.

MILNES, NORA. *The economics of wages and labor*. London, P. S. King & Son (Ltd.), 1926. vii, 197 pp.

The author, who is director of the Edinburgh School of Social Study, discusses in this book fundamental economic conceptions, practical and theoretical questions regarding wages, earnings of women, and the development of trade-unionism.

NATIONAL BUREAU OF ECONOMIC RESEARCH (INC.). *Publication No. 9: Migration and business cycles*, by Harry Jerome. New York, 474 West 24th Street, 1926. 256 pp., charts.

This volume presents the results of investigations made by the National Bureau of Economic Research at the request of a committee of the National Research Council. It forms part of two series of studies. One series, planned by the committee on scientific problems of human migration appointed in 1922 by the National Research Council, deals with the character, causes, and effects of mass-movements of men. The second series, planned by the National Bureau of Economic Research, deals with the character, causes, and effects of cyclical fluctuations in economic activities.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES. *Proceedings of the sixty-fourth annual meeting, held at Philadelphia, June 27-July 2, 1926*. Volume 64. Washington, D. C. [1926]. 1208 pp.

Among the subjects discussed in this volume, which are of special interest to labor, are: "Making the contribution of the social studies effective," "Developments in industrial arts education," "Relationship between the training of foremen and city programs for vocational education," "A renaissance of apprenticeship," "What can a girls' trade school do for girls and women in industry," "Adult education as the next battle in our democracy's fight for existence," "Progress in adult education," "Adult educational interests and activities in our foreign language organizations," and "Immigration problems."

PENNSYLVANIA OLD AGE PENSION COMMISSION. *The problem of old-age pensions in industry: An up-to-date summary of the facts and figures developed in the further study of old-age pensions*, by Abraham Epstein. Harrisburg, 1926. 126 pp.

An article based on this study will be found on page 48 of this issue.

POST, LOUIS F. *What is the single tax?* New York, Vanguard Press, 1926. xiii, 140 pp.

One of a series of outlines of social philosophies published by the Vanguard Press. This particular outline, by the former Assistant Secretary of the United States Department of Labor, is an attempt to set forth in a brief form a comprehensive answer to the question "What is the single tax."

THORSTEINSSON, THORSTEINN, Editor. *Iceland. Reykjavik, 1926. 184 pp.*

This handbook, published in English, describes the country and its government, resources, institutions, etc. The section on agriculture includes information on agricultural cooperative societies and enterprises, and the one on social conditions gives information on prices, wages, and social insurance.

VEAUX, ANDRÉ. *Le libre salaire de la femme mariée et la contribution des époux aux charges du ménage.* Paris, Librairie Dalloz, 1926. 108 pp.

A study of the French act of July 13, 1907, regarding wages of married women.

WALLING, WILLIAM ENGLISH. *American labor and American democracy.* New York and London, Harper & Bros., 1926. [Various paging.]

In his introduction the editor of the volume says that "this book is as nearly an authoritative statement of the principles and policies of the American organized labor movement of the past 40 years as any statement that could be issued by any person not an active official or working member of an American union."

