

U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

MONTHLY
LABOR REVIEW

VOLUME XV

NUMBER 1



JULY, 1922

WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

CERTIFICATE.

This publication is issued pursuant to the provisions of the sundry civil act (41 Stats. 1430), approved March 4, 1921.

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT

15 CENTS PER COPY
SUBSCRIPTION PRICE, \$1.50 PER YEAR

Contents.

Special articles:	Page.
Efficiency of American labor, by Ethelbert Stewart, U. S. Commissioner of Labor Statistics.....	1-12
Problems and importance of factory inspection, by John P. Meade.....	13-23
Industrial relations and labor conditions:	
Germany:	
Recent changes in the distribution of wealth.....	24-30
Representation of works councils on boards of directors of corporations.....	30-32
Prices and cost of living:	
Retail prices of food in the United States.....	33-53
Retail prices of coal in the United States.....	54-57
Comparison of retail price changes in the United States and foreign countries.....	57-59
Revised index numbers of wholesale prices.....	59-62
Great Britain. Retail prices of clothing, 1914 and 1922.....	62, 63
Wages and hours of labor:	
New York. Average weekly earnings of State factory workers in April, 1922.....	64
China. Wages in a cotton mill.....	65
France:	
Wages in beet sugar and coal mining industries and in domestic service.....	65-68
Wages in the territory of the Saar.....	69, 70
Eight-hour day in the merchant marine.....	70, 71
Great Britain. Wages of farm labor in England and Wales, by Mrs. V. B. Turner.....	71-86
Manchuria. Wages of Chinese and Japanese workers.....	86, 87
Netherlands. The 48-hour week.....	87
Peru. Wages and working conditions of agricultural laborers.....	87, 88
Switzerland. Extension of the working week in certain industries.....	88
Production and efficiency of labor:	
"Idle-day" costs in the coal mining industry.....	89, 90
France. Production per worker in iron mines of Lorraine.....	90, 91
Great Britain. Operations of British coal mines, January 1 to April 1, 1922.....	91, 92
Labor agreements, awards, and decisions:	
Railroads—Decisions of the Railroad Labor Board.....	93-101
Ladies' garment industry—Cleveland.....	101-109
Printing industry—	
Pressmen.....	109
Web pressmen—Washington, D. C.....	109-113
Stereotypers—New York.....	113-115
Woman and child labor:	
Negro women in industry.....	116-118
Child labor in oyster and shrimp canning.....	118, 119
Children of wage-earning mothers.....	119, 120
New York. Report on woman workers.....	120-123
Great Britain. Limitation of child labor.....	123

	Page.
Employment and unemployment:	
Employment in selected industries in May, 1922.....	124-126
Government construction contracts.....	126-130
Recent statistics of employment:	
Iowa.....	131
Massachusetts.....	131, 132
New York.....	132
Pennsylvania.....	132-134
Great Britain:	
Volume of employment in April, 1922.....	134-136
Report of employment exchanges.....	136, 137
Employment of ex-service men.....	137, 138
Industrial hygiene:	
Definition of the physician in industry.....	139
Industrial poisoning from mercury.....	139, 140
Great Britain. Report on miners' nystagmus.....	140, 141
Workmen's compensation and social insurance:	
Recent reports—	
Georgia.....	142, 143
Louisiana.....	143, 144
Nova Scotia.....	144, 145
Great Britain. National health and unemployment insurance.....	146
Labor laws and court decisions:	
Status of unincorporated labor organizations as to liability for damages and acts affecting interstate commerce.....	147-152
Workmen's compensation provisions for longshoremen.....	152-154
New York and Massachusetts. Safety standards.....	154, 155
Wisconsin. Nature of penalty in contempt proceedings.....	155-157
Australia. Labor laws, 1921.....	157, 158
Canada. Labor legislation.....	158-162
Denmark. New law on employment exchanges and unemployment insurance.....	162-164
Japan. Health insurance law.....	164
Spain. Industrial accident law amended.....	164-166
Labor organizations:	
Membership of American trade-unions, 1915 to 1920.....	167-169
Canada. Trade-unionism in 1921.....	170, 171
Great Britain. Amalgamation and federation of trade-unions.....	171, 172
Strikes and lockouts:	
Chile. Coal strike.....	173-175
China. Recent strikes in Hongkong and Shanghai.....	175, 176
Denmark. Labor conflict.....	176, 177
France. Strikes, 1915 to 1918, and November, 1921, to February, 1922.....	177, 178
India. Report of industrial-disputes committee of Bombay.....	178-180
Conciliation and arbitration:	
Conciliation work of the Department of Labor in May, 1922, by Hugh L. Kerwin, Director of Conciliation.....	181, 182
Immigration:	
Statistics of immigration for April, 1922, by W. W. Husband, Commissioner General of Immigration.....	183-188

	Page.
What State labor bureaus are doing:	
Ninth annual convention of Association of Governmental Labor Officials of the United States and Canada.....	189-192
Louisiana.....	192-195
Pennsylvania.....	195-197
Tennessee.....	197-199
Wisconsin.....	199, 200
Current notes of interest to labor:	
Bureau of accident statistics of the Safety Institute of America.....	201
Journal of Personnel Research.....	201
New York City. Reconstruction hospital for industrial cases.....	201, 202
Argentina:	
Report of the national pension fund of employees of private companies.....	202
Minors employed in 1921.....	202
China. Cost of labor and material in Shanghai building industry.....	203
Great Britain. Labor Magazine (new organ of labor movement).....	203
Japan. Reduction of employees in shipyard.....	203, 204
Spain:	
Creation of an institute for occupational retraining.....	204, 205
Reorganization of the Ministry of Labor.....	205, 206
Directory of labor officials in United States and Canada.....	207-226
Official publications relating to labor:	
United States.....	227, 228
Foreign countries.....	228, 229

MONTHLY LABOR REVIEW

VOL. XV—NO. 1

WASHINGTON

JULY, 1922

Efficiency of American Labor.¹

By ETHELBERG STEWART, U. S. COMMISSIONER OF LABOR STATISTICS.

FEW statistical subjects are more discussed than the one used as the title for this address; there is none upon which we know less. On the one hand we hear much of the superiority of the American workman; on the other, we hear much of the degeneration of American labor, of loafing on the job, of job making, etc. When we ask for proof, for figures, for output per man per hour or per day taken from the records that are the basis of pay rolls, we are told, "Oh, I have no figures, but what I state is a matter of common knowledge."

Now, I believe there are certain rules of evidence under which judges, particularly of courts of chancery, may take "judicial notice" of things which are not and need not be proven, upon the ground that they are matters of common knowledge. For instance, statements in an almanac as to whether it was full moon or dark of the moon in a certain place on a certain date, or the number of counties in a State, may be accepted without proof as a matter of common knowledge. But a statement as to whether the number of tons of coal that the bituminous miners were taking out per day in a given mine in 1913 exceeded the number of tons per day taken out in the same mine in 1922 is not a matter of common knowledge when not backed by figures from the output sheets, the time cost sheets, and the pay roll, and can not be introduced as testimony even "for what it is worth." Not only is it worthless but there is growing up a very strong suspicion that it has contributed a very large share to the hatred and bad blood that seems unfortunately to be on the increase as between the employing and the employed portions of our population. No statistician would accept such testimony as relating to output per man-hour. "Common knowledge" can not be tabulated. It can not be worked up into an index number nor can percentages of increase or decrease from year to year be worked out.

Labor cost per unit of production in any industry as expressed in money, while interesting and economically important, is not illuminating on the subject of labor efficiency. That the labor cost in a pair of shoes to-day is two and one-fourth times what it was in 1913 may be entirely due to increase in wages; and the question as to whether the output per man per hour in shoe factories has increased or decreased since 1913 can not be determined by the labor cost per pair of shoes.

Again, total output per man-hour or day based upon all employees is likely to be very misleading in those industries where a very considerable proportion of so-called common labor is employed. Output per man, all labor combined, does not indicate anything, or at

¹ Paper read at the Ninth Annual Convention of Governmental Labor Officials of the United States and Canada, Harrisburg, Pa., May 22-25, 1922.

least does not indicate much as to the efficiency of American labor. Common labor in the United States may be less efficient than it was 30 or 40 years ago, but it is no longer American. In such industries as the iron and steel, coal mining, railroad construction, brick making, and textile mills, and a great many other of our basic industries, immigrant labor, of low-grade efficiency, was sought for and the industries in consequence overrun by races physically weak, as, for example, the Italian, untrained in any industrial occupation, as was practically all of the southwestern Europe immigration. These men are physically weak. They have neither the immediate strength nor the endurance to stand up under hard labor that the common labor of 40 years ago possessed, and as a result of this inability of immigrant labor to stand the work it did not prove cheap, and machinery has largely taken the place of common labor.

In an article which was published in the MONTHLY LABOR REVIEW (pp. 1-11) for February, 1921, I have examined critically the figures which indicated that the output per man per hour in the bituminous coal fields was steadily decreasing. The fact is that the number of noncoal getters—that is, laborers in the mine and on top of the mine—had very greatly increased; in a number of cases the actual coal getters had decreased. In the bituminous mines in 1917 the total increase in men employed over 1916 was 7.5 per cent. The underground employees, who represented 79 per cent of the total, increased only 5 per cent, whereas the surface labor increased 21 per cent. Not only that, but the 5 per cent increase in underground employees was largely made up of workmen other than the actual coal diggers. In Illinois in 1917 the actual miners—pick miners, machine runners, and loaders—were 67.9 per cent of the total employees. You will understand that these are the men who get the coal. In January, 1919, the per cent these men were of the total had fallen to 65.

When we consider the actual miner, therefore, the output per day is not $3\frac{1}{2}$ tons, as indicated by dividing the output by the total employees, common labor and all, but the average is well over 7 tons for pick miners, and if we take the average for pick or hand mining and machine mining together—that is to say, if we take the pick miners, the machine runners, and the loaders—the average in good mines runs up to 10 and 12 tons per day, or a ton and a half per one-man hour at the face of the working; and the figures show a substantial increase in output per one-man hour as between 1919 and 1921.

Another thing must not be forgotten when we speak of average output per man. I once heard a governor of a State ask Susan B. Anthony if she thought a woman had as much intelligence as a man. Miss Anthony's reply was, "Which woman, which man?" The output per man per hour depends so much upon the man and the conditions under which he labors that a person who simply wants to rant and harp on inefficiency can make his selection, while the man who wants to show that the American worker is overworked and is producing more than a human being can or ought to be expected to stand can also make his selection.

For instance, in 1919 in a coal mine in Illinois with a 42-inch seam, with an average output of 4.9 tons per day per pick miner, practically 10 per cent of the miners produced less than 3 tons a day; 21 per cent produced more than 3 and less than 4 tons per day; 24 per cent

produced 4 but less than 5 tons per day; and 27 per cent produced 5 but less than 6 tons per day, while 2 men in that mine produced 10 tons of coal per day for the entire pay-roll period. In another mine, with a 69-inch vein, the average was 9.6 tons per day. One man produced less than 3 tons per day, 2 men produced less than 4 tons per day, and 10 men produced 7 and under 8 tons per day, while 8 men produced 12 tons a day, 5 men produced 13 tons a day, and 7 men produced over 13 tons a day for the entire pay-roll period. Incidentally, the day was an eight-hour day and it was a union mine, where everybody is supposed to be reduced to a common level and no man permitted to do more than any other man. In another mine, also in Illinois, where the average was 7.9 tons per day, 41 men produced the average, 45 men produced 9 tons each, 20 men produced 10 tons each, and 8 men produced over 13 tons per day each.

Not only does this fact that there is no uniformity of output apply as regards men in industry but it also applies as regards establishments in the industry and practically all industries. The average output per man per day in the anthracite coal fields by establishments ranges from 1.6 to 5.2 tons per day, the general average being 3 or 3½ tons per man per day. In the coal statistics of this year compiled by the Bureau of Labor Statistics we are trying to emphasize this output per man per day and per hour.

Perhaps the most startling variation in output or seeming efficiency of labor is in the copper-mining industry. In 1918, the Department of Labor requested the Geological Survey to ascertain the relative productivity of labor in the production of copper ore, with a view to closing down, if necessary, the mines that were the least productive. This survey covered the labor employed in actual mining and did not take in the common labor around the mine. The range was from 38.5 to 416.1 pounds per man per day in 1916 and from 30.1 to 371.8 pounds per man per day in 1917. Fifteen and one-half per cent of the men employed in copper mining in 1917 produced 4.4 per cent of the total output, at the average rate of 30.1 pounds per man per day; 48.2 per cent of the men employed in the industry produced 30.1 per cent of the total output of copper produced by mines, at an average rate of 65.1 pounds per man per day; 6.5 per cent of the total employees produced 5.5 per cent of the output, at an average rate of 90.5 pounds per man per day; 15.6 per cent of the total employees produced 17.7 per cent of the output, at an average rate of 120.5 pounds per man per day; 7.7 per cent of the men produced 16.5 per cent of the output, at an average production of 227.9 pounds per day; 6.4 per cent of the miners produced 22.5 per cent of the output, at an average rate of 371.8 pounds per day.

It is a curious fact that 15.5 per cent of the copper miners were producing 30.1 pounds per day, while almost exactly the same percentage, 15.6 per cent, were producing 120.5 pounds per day, or almost exactly four times as much per man per day. This survey in 1917 covered 1,006 mines and presents a very striking example of the wide variation in productivity. One asks how a mine that gets but 30.1 pounds per man per day can exist as against a mine securing 371 pounds per day, but with this economic problem we have nothing to do at this time.

The great trouble with men who wish to make out a case is that in handling such figures as are here presented they try to make it appear that the copper miner who produces 30 pounds a day is a loafer, is "laying down" on his job, and is doing in fact less than one-tenth of the work that he ought to do, because a man can produce 371 pounds of copper per day, or do more than that, as in 1916, when he produced 416 pounds per day. As a matter of fact, the man who produced 30 pounds per day worked just as hard as and in many cases harder than the man who produced 371 pounds per day.

As an example of group efficiency, all classes of labor being taken into consideration, the Bureau of Labor Statistics has compiled some very interesting figures in the iron and steel industry. In the open-hearth steel process in a certain group of plants from which returns were received by the bureau 9,733 full-year workers—and by this we mean that the part-time or floating labor in the open-hearth furnaces reporting was reduced to full time—produced 10,524,552 tons of open-hearth steel in 1913, being 1,081 tons per full-year worker. In 1914 this had increased to 1,130 tons per full-year worker; in 1915 it was 1,339 tons; in 1916 it was 1,366 tons; in 1917 it was 1,279 tons; in 1918 it was 1,268 tons; and in 1919 it was 1,277 tons. Thus the output per man per year was greater in 1919 than it was in 1913 or 1914, but not so great as in 1915 and 1916.

In the wire-drawing plants reporting, the tons produced per full-year worker were 171 in 1913, 206 in 1914, 216 in 1915, 198 in 1916, 187 in 1917, 171 in 1918, and 169 in 1919. In tubing and pipe making the output per full-year worker was 101 tons in 1913, 98 tons in 1914, 107 tons in 1915, 98 tons in 1916, 89 tons in 1917, 83 tons in 1918, and 85 tons in 1919. In sheet and tin-plate work the output per full-year worker was 68 tons in 1913, 71 tons in 1914, 73 tons in 1915, 72 tons in 1916, 66 tons in 1917, 61 tons in 1918, and 61 tons in 1919.

Whatever of variation from year to year there is in these figures is due to the fact that in 1917 and 1918 there were drawn from this industry a great many of the higher-grade men, who went into the war or into war production along the more technical manufacturing lines, and owing to the artificial industrial boom of 1919 and 1920 these men did not return to this industry. There were, in consequence, drawn into this industry large numbers of people who not only had never worked at the industry but had never worked at anything along manufacturing lines. In 1919 and 1920 there was another intake of nonindustrials, and it is only surprising that the output per man-year did not decrease to a greater extent.

We have the figures from 1913 to 1919 for a large segment of the Bessemer steel industry on output per man per year for the total labor group; that is to say, including common and all other labor. In 1913 the output per man-year was 1,302 tons, in 1914 it was 1,303 tons, in 1915 it was 1,643 tons, in 1916 it was 1,624 tons, in 1917 it was 1,403 tons, in 1918 it was 1,232 tons, and in 1919 it was 1,216 tons.

It is very interesting to compare these figures for total labor with the output of key occupations along the same line. In a Bessemer plant the producing crew—that is, the practically skilled men, taken as a whole—produced during one pay-roll period in May, 1915, 2.36 tons per man per hour. The key man—the steel pourer—produced

32 tons per hour, the rate to the pourer at that time being 98 cents per 100 tons. In October, 1920, in the same plant, the output of the producing crew employed at that time was 3.82 tons per hour, while the steel pourer produced 60 tons per hour on the average, with the equipment and opportunity for production offered. The rate at that time was \$2.07 per 100 tons, as against 98 cents in May, 1915. It would seem, therefore, that labor efficiency among skilled men in the industry is not being reduced as the wage advances.

Taking another Bessemer plant, in March, 1914, steel pourers on the pay roll produced 37.8 tons per man per hour, the rate being 88 cents per 100 tons. In May, 1916, with the same equipment and with a rate of \$1.32 per 100 tons, the output of the steel pourer was 44.3 tons per hour, while in March, 1920, in the same plant and with a piece rate of \$2.68 per 100 tons the output was 42.5 tons per man per hour. In another plant in May, 1915, the output per steel pourer was 70.5 tons per man per hour, at a rate of 84 cents per 100 tons. In October, 1920, in the same plant the output was 77 tons per man per hour, with a rate of \$1.88 per 100 tons.

In a 10-inch bar mill the entire productive crew of 52 men produced in a pay-roll period in 1915, 323 pounds of iron bars per man per hour. In October, 1920, in the same mill, a crew of 51 men produced 515 pounds per man per hour. A 12-inch bar mill in 1915 with an entire working crew—speaking now of skilled men, no repair labor or general labor being included—of 51 men produced 401 pounds per man per hour. The same mill produced in October, 1920, with 46 men in the crew, 542 pounds of bar per man per hour. In another 12-inch bar mill in the same plant, in 1915 the crew of 48 men produced 374 pounds per man per hour, and in October, 1920, the crew of 49 men produced 452 pounds per man per hour. In an 8-inch bar mill in 1915 the output of the productive group was 166 pounds per man-hour.

It is interesting, however, to follow the more skilled men and the real key men in one of these productive groups. In the 8-inch bar mill just referred to, the rollers produced 2.35 tons per man-hour; the finishers, of course, produced the same. The heaters produced 1.17 tons per man-hour. In a 9-inch bar mill of the same plant the rollers produced 3.74 tons per man-hour, while the group output was 223 pounds per man-hour. In an 18-inch bar mill of the same plant the rollers' output was 5.14 tons per man-hour, and the heaters produced 2.57 tons per man-hour. The output of the productive unit of 86 men was 346 pounds per man-hour.

Some interesting statistics are available on the progressive productivity of labor in the blast furnaces. In the table and chart following are given the number of employees, the total production of coal, and the production per man per year in blast furnaces in the United States from 1850 to 1920.

NUMBER OF EMPLOYEES IN AND PRODUCTION OF BLAST FURNACES IN THE UNITED STATES AND INDEX NUMBERS COMPUTED THEREFROM.

[Number of employees from Census reports of year specified, except for 1919, which is an estimate: production from Census reports 1850 to 1890 and from reports of American Iron and Steel Associations 1899 to 1920.]

[1850=100; ton=2,240 pounds.]

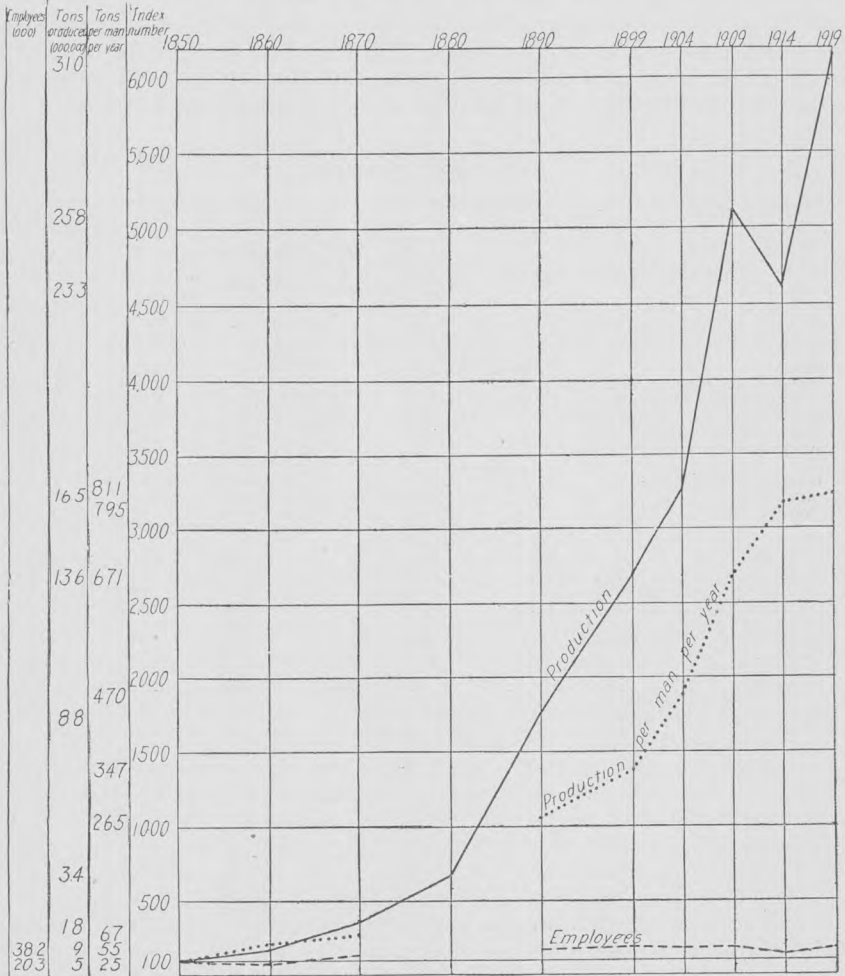
Year.	Employees.		Total production.		Production per man per year.	
	Number.	Index number.	Tons.	Index number.	Tons.	Index number.
1850.....	20,298	100	504,245	100	25	100
1860.....	15,927	78	881,749	175	55	220
1870.....	27,554	136	1,832,876	363	67	268
1880.....			3,375,911	669		
1890.....	33,415	165	8,845,185	1,754	265	1,060
1899.....	39,241	193	13,620,703	2,701	347	1,388
1900.....			13,789,242			
1901.....			15,878,354			
1902.....			17,821,307			
1903.....			18,009,252			
1904.....	35,078	172	16,497,033	3,272	470	1,880
1905.....			22,992,380			
1906.....			25,307,191			
1907.....			25,781,361			
1908.....			15,936,018			
1909.....	38,429	189	25,795,471	5,116	671	2,684
1910.....			27,303,567			
1911.....			23,649,547			
1912.....			29,726,937			
1913.....			30,966,152			
1914.....	29,356	145	23,332,244	4,627	795	3,180
1915.....			29,916,213			
1916.....			39,434,797			
1917.....			38,647,397			
1918.....			39,054,644			
1919.....	38,243	188	31,015,364	6,151	811	3,244
1920.....			36,925,987			

In 1850, with 20,298 employees, there were produced in the United States 504,245 gross tons of pig iron, an average production of 25 tons per year per man. Forty years later, in 1890, we were producing 265 tons per man per year; in 1904, 470 tons per man per year were produced; in 1909 we produced 671 tons per man; in 1914 we produced 795 tons per man; and in 1919 with 38,243 employees we produced 31,015,364 tons, or 811 tons per man per year. In other words, taking the year 1850 as 100, the index of employment in 1919 was 188, or an increase in the number of employees in the blast furnaces of 88 per cent. The index of output per man had increased from 100 in 1850 to 3,244, or 3,144 per cent.

These figures measure the output of all the blast furnaces of the country combined. The Bureau of Labor Statistics, however, has the production per full-year worker from plants employing nearly half of the total, and these figures show the output per man per year in 1913 as 1,012 tons; in 1914 it was 858 tons; in 1915 it was 1,129 tons; in 1916 it was 1,179 tons; in 1917 it was 825 tons; in 1918 it was 964 tons; and in 1919 it was 875 tons. In each of these years it was considerably higher in this selected group of blast furnaces than it was in the country as a whole.

In Bulletin No. 225 of the United States Bureau of Labor Statistics (pp. 68-146) are shown very elaborate statistics on the output per man-hour in the sawmills of the country, together with the time and wages cost per 1,000 board feet produced at a large number of mills.

BLAST FURNACES IN THE UNITED STATES.



NOTE.—Number of employees 1850, 20,298; 1860, 15,927; 1870, 27,554; 1880, not reported separately; 1890, 33,415; 1899, 39,241; 1904, 35,078; 1909, 38,429; 1914, 29,356; 1919, 38,243, estimated.

It is not my purpose to go into all this detail at this time. The figures presented in the bulletin referred to are for the year 1915. For the purpose of this address I have selected one establishment, carrying the production through from the standing tree to the lumber piled in the yard. The details will be found in the table following. I will call your attention to the fact that the total sawmill labor in producing 1,000 board feet of lumber equals 3.85 one-man hours, and the total sawmill labor cost was \$1.11 per thousand feet. The key men here, the sawyers, produced 1,000 feet of lumber in seventy-six one-hundredths of an hour at a cost of 22 cents, the edgers in four-tenths of an hour at a cost of 10 cents, and the trimmers in twenty-seven one-hundredths of an hour at a cost of nearly 6½ cents.

PRODUCTIVITY AND COST OF LABOR FOR TREE-TO-LUMBER-PILE OPERATIONS IN A REDWOOD MILL, 1915.¹

Occupation, process, or machine.	Output in board feet per one-man hour.	Wages cost per one-man hour.	Cost per 1,000 board feet produced.	
			One-man hours.	Wages.
Logging:				
Foremen, sealers, general.....	3,472	\$0.3801	0.2880	\$0.1095
Felling and log making.....	215	.2732	4.6613	1.2734
Skidding, yarding, and loading.....	259	.3042	3.8656	1.1730
Transportation and unloading.....	1,103	.3284	.9063	.2976
Maintenance of transportation.....	804	.2076	1.2436	.2582
Total, logging.....	91	.2838	10.9648	3.1117
Log pond or yard.....	2,425	.2650	.4124	.1093
Sawmill:				
Foremen.....	22,130	.6852	.0452	.0310
Deck.....	5,051	.3105	.1980	.0615
Sawing-head, gang and resaw.....	1,311	.2305	.7628	.2216
Edging.....	2,483	.2500	.4027	.1007
Trimming.....	3,725	.2392	.2085	.0642
Reuse-slasher, hog, burner.....	11,065	.2125	.0904	.0192
Filing.....	5,532	.5750	.1808	.1039
Power and oiling.....	1,002	.2046	.9983	.2941
Repair.....	4,323	.3658	.2313	.0846
Night watch and fire protection.....	4,068	.2250	.2142	.0482
Clean-up and miscellaneous.....	2,159	.1801	.4631	.0834
Total, sawmill.....	259	.2855	3.8553	1.1124
Sorting.....	474	.2291	2.1116	.4838
Yard—Green lumber:				
Foremen.....	22,130	.4259	.0452	.0192
Trucking.....	4,442	.2218	.2251	.0499
Piling.....	483	.2008	2.0716	.4161
Total yard.....	427	.2072	2.3419	.4852
Total, tree to lumber pile.....	58	.2693	19.6860	5.3024

¹ U. S. Bureau of Labor Statistics Bul. No. 225: Wages and hours of labor in the lumber, millwork, and furniture industries, 1915, pp. 77, 78.

Unpublished statistics for the lumber industry in 1921, in the hands of the Bureau of Labor Statistics and now in the course of preparation, show considerable difference in the details, particularly as to the labor cost per thousand board feet, but, taking it all in all, show an increase in the efficiency of labor; that is to say, a reduction in the time cost

per thousand board feet. I submit herewith details from two States, 17 establishments in Alabama and 15 establishments in California. In this table, however, only the direct productive sawmill labor is included.

PRODUCTIVITY AND COST OF LABOR FOR SAWMILLS IN ALABAMA AND CALIFORNIA IN 1921.

Occupation.	One-man hours per 1,000 board feet.	Board feet per one-man hour.	Labor cost.	
			Per hour.	Per 1,000 board feet.
Alabama.				
Doggers.....	0.3	3,632	\$0.191	\$0.06
Setters.....	.2	4,496	.269	.05
Sawyers.....	.3	3,046	.559	.17
Saw tailers.....	.2	6,433	.181	.04
Edgemen.....	.2	5,205	.309	.06
Trimmers.....	.2	4,995	.233	.05
Machine feeders.....	.5	1,996	.293	.10
Laborers.....	9.2	109	.155	1.43
Other employees.....	3.8	262	.253	.96
All occupations.....	14.9	67	.196	2.92
California.				
Doggers.....	0.2	4,315	\$0.466	\$0.09
Setters.....	.2	6,354	.539	.11
Sawyers.....	.2	4,308	.753	.15
Saw tailers.....	.2	5,872	.470	.09
Edgemen.....	.2	5,814	.614	.12
Trimmers.....	.1	7,409	.503	.05
Machine feeders.....	.1	13,573	.479	.05
Laborers.....	4.1	243	.406	1.66
Other employees.....	3.4	298	.523	1.78
All occupations.....	8.7	116	.472	4.11

In an investigation by the Taft Tariff Board in 1911, in textile mills, men working on almost identical pieces of cloth were found weaving all the way from 2.7 yards per hour to 3.5 yards per hour, but here again the figures are not altogether indicative of American labor. At the beginning of the World War only 36 per cent of the employees of the woolen and worsted mills of the United States were American born, and of these 27 per cent had worked in the industry less than one year and 12 per cent one year and less than two years; and taking all nationalities, 52 per cent of the males and 48 per cent of the females had worked in the mills less than one year, while 54.5 per cent of the males and 45.5 per cent of the females had worked less than one year in the occupations in which they were found at the time of the investigation.

Some interesting figures are being brought out in the course of a current investigation by the Bureau of Labor Statistics in the ribbon industry. The following table shows the average output per hour, time cost per yard, and weaving cost per yard for two periods of three weeks each in February and in April, 1920.

AVERAGE OUTPUT PER HOUR, TIME COST PER YARD, AND WEAVING COST PER YARD IN THE RIBBON INDUSTRY, FEBRUARY AND APRIL, 1920.¹

Kind of ribbon.	Width of ribbon (inches).	Period covered (1920).	Average output per hour (yards).	Time cost per yard (minutes).	Weaving cost per yard.
Satin-taffeta.....	4½	{ February... April.....	1.25 1.4	47.4 42.9	\$0.64 .688
Satin.....	7	{ February... April.....	1.023 1.043	58.8 57.4	.936 1.006
Taffeta.....	5½	{ February... April.....	1.137 1.095	52.6 54.7	.78 .839

¹ This table refers to weaving only.

Between the two periods covered there was a strike for shorter hours and higher rates of pay. The strike was successful. It is interesting, therefore, to note that on a satin-taffeta ribbon the average output per man per hour was 1.2 yards, that is to say, the time cost per yard was 47 minutes, and the weaving cost 64 cents. After the strike, the hours of the establishment having been reduced, the output per man per hour on the same ribbon was 1.4 yards per hour or practically 43 minutes per yard. The weaving cost, however, had increased to 68.8 cents by reason of the increase in wages.

In the investigation of wages and hours of labor in the boot and shoe industry for 1916, published in Bulletin No. 232, the Bureau of Labor Statistics secured the itemized time cost by operation in the production of 100 pairs of shoes. This totaled 1 hour and 25¾ minutes per pair of shoes one-man time. During the war that time was considerably increased owing to the changed character of the employees in the boot and shoe industry. Since the war, in another factory, the statement was made that this time cost had been very much reduced and that it now stands at a range of from 54 minutes to 1 hour and 6 minutes.

I have been surprised at the amount of time-cost material there is in the possession of the Bureau of Labor Statistics. No particular stress has been put upon this point heretofore. It will be the policy of the bureau now to collect this information wherever it can be done with a reasonable expenditure of time. I want to call your attention to the fact that the Agricultural Department in its Office of Farm Management and Farm Economics has given us the exact time cost or one-man hours in the production of a bushel of wheat and various other farm products. From the report of the Federal Trade Commission on commercial wheat-flour milling it is possible to deduce the one-man-hour time in the production of a barrel of flour from the wheat. The Bureau of Labor Statistics also has information upon this point. The time required to convert a barrel of flour into loaves of bread can be ascertained by the Bureau of Labor Statistics.

I will state at this point that a movement is on foot whereby through the cooperation of the Babson Statistical Organization and the Department of Labor more satisfactory figures on efficiency will be secured in the near future. Without doubt this commission will enter the field of the building trades and attempt to ascertain some definite facts. Here again, as in the matter of copper-ore mining, already referred to, the same amount of labor expended may produce

very different results when measured by the unit in the industry, which may and does furnish a plausible basis for some very unfair attacks upon American workers. You hear it said that before the war a man would lay 1,500 bricks a day, that in Chicago you could get 2,000 bricks laid per man per day, and that now 500 and 750 are all you can get. The fact is, that any statement which does not go beyond the number of bricks laid by a man in a day does not convey any adequate information. It all depends upon whether a bricklayer was working on an 8-inch wall, a 12-inch wall, a 16-inch wall, a 20-inch wall, or a 24-inch wall, whether he was laying to a line and filling in behind his own work or whether he was laying to a line and someone else was filling in behind him, whether he was laying face brick or building a dead wall. The same man might lay 1,500 or 1,800 bricks one day and lay 400 the next day, and work harder on the 400 face bricks, pointed mortar, than he did on the 1,500 bricks. In other words, without some sort of a description of the work a thousand bricks is not the unit of the bricklayer's efficiency.

I remember when in the town of Hof, Germany,² in 1911, where the bricklayers were then paid 48 pfennigs an hour, amounting to about 10 cents at that time, they told me that the union rate was 650 bricks in a day of 10 hours. They were careful to give me the size of the brick and the kind of wall, which we would here call a straightaway 16-inch wall. I was told that this was not a printed rule of the union in Hof, though in Hamburg the bricklayers' union had a definite limit of 800 bricks per day. I asked the union official in Hof how they regulated this output if it was not a written rule of the union. I said to him, "What would you do with a man who laid more than 650 bricks in a day?" His reply was, "Oh, he would drink his beer alone." What the war did to the union rules among the building trades in Germany I do not know, but I do know that the statements made about output in the bricklaying trade in the United States since the war, which have come to me, have never been accompanied with definite data as to the width of the wall and the kind of work being done, or with copies of production or time-cost sheets that would confirm the statements made.

I am well aware that in some quarters objections will be made to such time-cost studies as will give us any real information as to efficiency. I know that any attempt to keep time on processes or occupational cost will meet with opposition by workmen. This is because of a misapprehension that the purpose is to speed up, to get a pace set that it will be hard to keep, and then to demand that pace as a test of efficiency. Unfortunately, any time cost is immediately associated with "Taylor systems," with "production engineering," and that spells a drive to the workmen.

The essential basis of a study of efficiency is a time record, whether of machines or of men. With that sort of efficiency which seeks to drive men, and has for its purpose unreasonable speeding up, it is needless to say I have no sympathy; but for many reasons it is as important in an industry to know the time cost of production as it is to know the labor cost or the material cost. The men should be met fairly and squarely on this point, and for that matter on all

² The size of brick used in Hof, Germany, at that time was 12 centimeters wide, 7½ centimeters thick, and 25 centimeters long. Bricks of the same size were used at Hamburg. They were referred to as the Reichsforma or legal size of brick.

points. Their pay is measured by their time. They know exactly what they get in wages for a given amount of time. The employer's factory time is measured by product, and he is entitled to know how much he is getting for his time. Workmen know what is an honest day's wage for an honest day's work; the employer is entitled to know what is an honest day's work for an honest day's wage. Workmen measure their time by a definite thing, dollars and cents; the employer is entitled to a definite measure of his factory time, such as a hundred pairs of shoes, a thousand yards of cloth, or a thousand bricks in the wall. We must go at this from a purely scientific point of view, and take a record of what the worker does, not to speed him up and see how much he can do, but so that a building contractor, for instance, can be reasonably sure of the time cost as well as the wage cost of a thousand bricks in the wall in just the same way that he is reasonably sure of getting ten hundred bricks for the price of a thousand.

I would like to suggest, if any of the State bureaus of labor statistics or industrial commissions are now or are likely soon to take up investigations where units of production can be definitely stated, that they get in touch with the Bureau of Labor Statistics of the United States Department of Labor and see if a plan can not be worked out by which there will be incorporated in the schedule inquiries which will develop these units of time and labor cost.

Problems and Importance of Factory Inspection.¹

By JOHN P. MEADE, DIRECTOR, DIVISION OF INDUSTRIAL SAFETY, DEPARTMENT OF LABOR AND INDUSTRY, MASSACHUSETTS.

THE subject assigned to me involves a discussion of factory inspection, and is to be confined to specific problems connected with inspection work. Many other duties of the ordinary industrial inspector can have no mention here. In this topic we deal, however, with what is the most important duty assigned by law to this official, for it touches problems that deal with the conservation of human life, strength, and energy. The details of inspection work as usually conducted in a large industrial plant might be reduced to a recital of routine mechanical operations. However, we can not leave our subject with only this simple duty attended to. It is necessary, if we would adequately describe efficient work of this type, to deal with those underlying and controlling reasons that make factory inspection important to the welfare of the community and workmen alike.

Factory inspection rests upon the principle that work places should be made safe for employees. Its fundamental purpose is to protect the life and health of workmen from hazards arising in connection with machinery and industrial processes. Although one of the last nations to give adequate attention to the need of conserving the human side of industry, the United States has made rapid progress in the development of factory inspection within the last 10 years.

In a survey of industrial conditions in the city of Pittsburgh made in 1908 one of the leading figures in that movement gave expression to an opinion which at that time stated concisely the attitude of the industries of the United States toward workmen engaged in hazardous trades.

He said, "The Slavs from Austria-Hungary, the Latins from the Mediterranean provinces, the Germans, or the British-born who came to Pittsburgh to do the heavy work of manufacture came from a region of law and order to a region of law-made anarchy, so far as the hazards of industry are concerned. For there is scarcely a country of modern Europe but has brought its statutes abreast of industrial progress and wrought out for itself, as we have not, some visible adjustment between civil rights, human needs, and the ceaseless operations in which groups of men and powerful appliances join in producing what the world wants."

Among the problems created by the development of the industrial system in the United States is that of maintaining safety and health in work places. The rapid and exacting nature of certain mechanical processes and the unwholesomeness of many industrial occupations and environments have brought new risks to vitality and health. The suffering caused to victims of industrial accidents and the poverty ensuing in families where the head was stricken down while engaged in his daily work combined to arouse the people in this country to the need of scientific treatment in providing for health and safety in industry.

¹ Paper read at the Ninth Annual Convention of Governmental Labor Officials of the United States and Canada, Harrisburg, Pa., May 22-25, 1922.

Conserving the life, health, and energy of our employees or wage earners is not an individual question; it is a question requiring social action and is now recognized as a legitimate function of government. Gradually new principles born of this experience found their way into our industrial life. The theory advanced rapidly that immunity from grave industrial hazards and protection against occupational illness and disease were essential to the well-being of our wage earners.

It was urged that the loss in time because of incapacity produced by industrial injury should be made a charge upon the manufactured product and this much of the burden carried by the consuming public.

Compensation laws spread rapidly throughout the country, recognizing this principle in part, and inspired interest in the work of reducing human waste in industry. It was quickly learned that the economic losses sustained in this respect constituted a serious tax upon the productive labor power of the country.

It is well to quote interesting figures in this connection that we may the more realize the gravity of this situation. We are told that in 1919 there occurred in the industries of the United States about 23,000 fatal accidents and 575,000 nonfatal accidents causing four weeks or more disability.

In June, 1921, Mr. Hoover's committee on elimination of waste in industry reported in its findings to the American Engineering Council at St. Louis that this amount of incapacity represented an approximate wage loss of \$1,184,000,000. The total direct cost of industrial accidents in the United States for the same year, including medical aid and other legitimate charges, was not less than \$1,014,000,000, of which \$349,000,000 was borne by employers and \$665,000,000 by employees and their dependents.

This report also stated that these approximate figures are actually short of the amount, as they do not include other items of expense incurred by workmen and not paid by employers or insurance companies. The opinion is expressed by these eminent authorities that 75 per cent of this loss could be avoided.

That other important side of this problem, dealing with the conditions that give rise to occupational disease, must occupy an important place in the duties of the factory inspector. The economic loss sustained through occupational disease can not be adequately demonstrated in figures.

Disease hazards in industry may not always be as clearly defined as those hazards responsible for industrial accidents. Doctor Thompson reflects accurately on the relation of occupational diseases in industrial injuries when he says:

A man's hand lies upon the workbench, cut off by a revolving saw—nothing could be more definite as to the relationship of cause and effect. He recovers from the injury, and it is easy to determine the degree of his incapacity for future work. The condition is self-limited and nonprogressive. With industrial diseases, on the other hand, many complex factors arise. Is the mercurial poisoning of which he is the victim likely to continue its destructive effects until the victim dies, or is he likely to recover completely upon cessation of this hazardous work? Such are the types of questions which constantly arise in connection with the occupational diseases and it requires far more experience and judgment to solve them justly and accurately than it does to determine the nature and extent of the great majority of industrial accidents. Some industrial diseases and the effects of some industrial poisons it is true are as definite in their results as are accidents, but their number is limited in comparison

with the vast number of cases of disease, often obscure, very slow in onset and chronic in course, which affect many large classes of workmen. The misery and poverty entailed by the partial disability produced by more insidious poisons or injurious surroundings are much more difficult to estimate with accuracy.

Injuries sustained through the inhalation of metallic, mineral, or organic dusts often are more far reaching than the results of traumatic amputations. The progressive inspector who fully realizes the importance of his mission will sense the need of treating each side of this question with adequate attention. This is the task that confronts the factory inspector wherever his field of activity may be. In dealing with this problem no one should realize more than he that being a mere agency does not measure up to his responsibility. He must be more than an agency if he is to be successful in this work; he must be an active influence.

Before the era of workmen's compensation acts the use of the police power to make work places free from industrial hazards was exercised through statutes general in their character. Comparatively easy was the task to have belts and pulleys adjacent to passageways or work places of operators properly safeguarded. Projecting set screws, defective couplings, inrunning gears, and sprocket wheels evoked no discussion as to the application of legal requirements. Guarding machinery at the point of operation, however, was an entirely different problem.

On this subject even experts might disagree. Such a condition threatened seriously the purpose of the movement to make industry safe for the workman. The experience of years in the enforcement of general statutory principles proved that technical experience in the processes of industry was an essential element for the control of factory hazards.

When the legislatures of the industrial States authorized the labor departments to make rules and regulations for the preventing of injuries to workmen it made possible the providing of safeguards to hazardous conditions which could not be reached by general statutory principles.

Standards prepared under the auspices of employers and workmen, and usually approved by the highly trained safety engineer, now constitute the basis of rules and regulations adopted by labor departments for the safeguarding of human life and energy.

The removal of dusts, gases, fumes, excessive heat, and other impurities from factory workrooms is now recognized as essential to protect the health of employees. These hazards can be adequately controlled by the installation and operation of efficient mechanical exhaust systems. The need of such devices in printing offices, brush factories, and in the buffing, grinding, and plating trades, in the rubber industry, in the stereotype and electrotype foundries, and in other industries too numerous to mention is now generally acknowledged.

No program of factory sanitation is now considered adequate or complete that does not include clean, pure drinking water, provided in each factory workroom, and washing and toilet facilities kept in a proper and sanitary condition for the use of employees. Also, it must include workrooms well ventilated and lighted, and suitable lockers maintained in establishments where the nature of the employment

makes necessary complete change of clothing. Good health is often the only asset of the workman, and any impairment of it might prove as important as the loss of a finger by contact with the power press, or loss of a limb with all of its serious consequences. Many employers realize that vigorous health of workmen is essential in manufacturing establishments.

Investigation has shown that impairment of the workman's health is usually followed by a loss of efficiency. It is here that the competent inspector becomes a valuable asset to both workman and employer. He must be able to point out the type of exhaust system necessary to dispose of fumes, dusts, and gases properly. He must be familiar with the best methods of ventilation in workrooms and be well qualified to advise in connection with general and local lighting.

Ordinary factory inspection experience is not sufficient to attain this result. Intensive training in the examination of causes underlying industrial accidents and occupational disease is necessary to do inspection work properly. It provides an intimate knowledge with the condition responsible for loss of human life and energy.

Inspectors derive the greatest benefit from this experience and acquire technical knowledge which can be applied to conditions found in their daily work. It enables them to speak with authority on practical means for accident prevention. In Massachusetts this plan works well. A description of the work in this State may prove interesting. During the year ending November 30, 1921, 1,448 work accidents were investigated by the inspectors of the department of labor and industries. These were mainly injuries causing death or permanent or partial disability, including the loss of limbs, hands or feet, fingers or toes, or the sight of eyes. By this practice the department checks up the inspection work and ascertains if machine and factory hazards are controlled as the law directs. If an accident is investigated in a plant where an inspection has not been made during six months previous, this duty is attended to at the same time. Careful examination of the facts in connection with occupational accidents places an inexhaustible fund of valuable experience at the disposal of safety organizations. Practical advice and assistance can be given to employers and employees from inspectors who examine the facts incidental to each accident experience. It is well known that comparatively few accidents now occur on unguarded machinery. In 1921 10,057 accidents, or less than 19 per cent of the tabulatable accidents occurring in the industries of Massachusetts were occasioned by contact with machinery, exceedingly few cases in this group being traceable to unguarded machines.

Defective factory conditions, falling on slippery floors, stumbling over objects in passageways, and cleaning machinery while in motion, are potential factors in the causation of industrial injuries. While these dangers are most effectively controlled through the means of frequent factory inspection, the investigation of accidents emphasizes the need of constant vigilance in grappling with them.

This statement is well supported by the Massachusetts experience. From July 1, 1920, to June 30, 1921, there were 155,554 accident reports filed with the department of industrial accidents in that State. Of these, 53,313 were tabulatable, which includes death, permanent

total, permanent partial, and temporary total disabilities. Death resulted in 296 of these cases, 6 involved permanent total disability, while 1,371 were of a permanent partial nature and 51,640 were temporary totals.

Reduction of the accident rate in our industrial plants can be accomplished only through giving more attention to the causes of nonmechanical injuries. The factory inspector should be familiar with the accident causation in each industry, for his experience becomes a valuable asset to employers in maintaining a high degree of safety in their establishments.

In the large manufacturing districts of Massachusetts this routine work has done much to impart vigor to the work of safety committees. Their attendance at shop meetings and safety councils enables the contribution of valuable assistance from a wide field of experience. The investigation of accidents to children between 14 and 16 years of age has been made a leading factor of this work.

It has proved to be a strong factor in preventing exposure of the child to hazardous work and is useful in securing compliance with the requirements of the certificate law. In the past year it was necessary to issue 76 orders to employers who violated the statute relative to prohibitive employment for minors, and prosecution was necessary in 35 cases where children were permitted to work on dangerous machinery.

Many of these violations of the law never would have been discovered were it not for the policy of investigating injury to children. An interesting development in the experience acquired by this plan is the opportunity for cooperation with directors of continuation schools in teaching pupils the need of exercising due care in industry.

It is of interest to know that 24,000 children, between the ages of 14 and 16 years, in the industrial establishments of Massachusetts are now attending 47 continuation schools where the law provides they must receive instruction at least four hours a week. In the large industrial centers of the State where these schools are located children come for instruction from the work places in the manufacturing plants.

They are instructed not to play on or around elevators or in proximity to hazardous machinery of any type. They are told not to clean or oil machinery while it is in motion or to remove guards from machinery under any circumstances or to fail to secure first-aid treatment for all injuries, however slight.

Splendid cooperation has been received from some of the directors of these schools in the work of emphasizing the importance of these principles. It is the practice in many of these schools to ascertain the kind of work the child is engaged in, and if it is found to be illegal in any respect action is taken to remedy the condition. Inspectors of the department have been active in addressing pupils in attendance at these schools and advising them with reference to the factory hazards in their locality. Efforts in this direction are now achieving substantial results.

The accident statistics for Massachusetts for the year ending June 30, 1919, indicate that 10 children between 14 and 16 years of age were victims of fatal accidents, while 62 sustained permanent disabling injuries. For the year ending June 30, 1921, 5 children of the

same age group lost their lives because of accidents in industry, and upon 13 were inflicted injuries of a permanently disabling type.

In the previous year 49,781 minors between 14 and 16 were employed, and in the last-named period approximately 36,000. While the number of minors in this age group in industry during 1921 is approximately 25 per cent less than that of 1919, the fatal accident rate has been reduced 50 per cent and the rate of permanent disabling injuries reduced about 80 per cent. The substantial progress made in reducing accidents to minors is due to the joint work of the continuation school and the inspectors of the Department of Labor and Industries of Massachusetts. From this experience inspectors are able to give practical advice and assistance to employers in the reduction of the accident rate. It enables danger points to be well known and provides a definite program for the control of certain factors conducive to occupational injury.

Equally productive of good results is the use of investigation in the case of occupational diseases. In manufacturing establishments where toxic substances are used uncontrolled fumes, gases, and dusts constitute a menace to the health of the employees. Only through careful investigation of instances where employees have been affected by these hazards can actual results be achieved. In the year 1921, 96 cases of lead poisoning were investigated by the inspectors connected with the Department of Labor and Industries of Massachusetts.

It is interesting to note that 48 of these occurred in the painting business and that nearly all owed their origin to the fact that workmen mixed and handled lead and oil or inhaled or swallowed the dust of old paint which they scraped or rubbed down with sandpaper or pumice.

In the building trades, painters were often found working in unfinished buildings where water and toilet facilities had not been installed and no suitable facilities provided for washing and changing work clothing. Frequently these workmen ate the noonday luncheon without taking ordinary precautions against the possibility of lead poisoning. Investigating lead poisoning in the rubber industry determined the fact that this disease is frequently traceable to the compounding room, where mechanical exhausts are not provided to control the dust hazards. The use of litharge and urotopin without proper means to prevent exposure by the employee, frequently is found to be a causative factor. Through investigation of lead poisoning cases contracted in this manner the inspection force become familiar with essential factors and derive constructive knowledge for prevention work. No attempt can be made here to enumerate the many types of hazards conducive to industrial disease. The few mentioned indicate that simple means are often adequate for the prevention of occupational injury. The inspector with vision, force, and ability, who carefully examines the causes responsible for industrial injury, usually has unobstructed admission to the management where the policies of the industry are defined. Work of this kind is usually welcomed by progressive employers. Superintendents and foremen willingly give time to an intelligent practical presentation of the means by which accidents may be reduced in their plant. An inspector equipped with the solid experience acquired from close

contact with these conditions in industry is usually well able to solve problems found in the course of factory inspection.

It is impractical to formulate a uniform rule for making inspections. There is such a wide range in size and capacity of establishments in the same industry that such a plan is impossible. There are also many different classes of industries, each having its own specific dangers. Each establishment must be considered separately, and the advice given necessarily will depend upon the character of the operations and number of employees and conditions found in the plant. Each industry has its own traditions and peculiar hazards. Every inspection must be made with this point in view. The inspector must be quick to perceive the good and bad conditions existing. Mechanical dangers can not engage his attention exclusively. If industry were combed clear of machinery hazards we would still have serious industrial accidents. Most of the real hazards in industry now arise from unsafe practices, and the inspector who can detect careless methods and suggest safer ways of accomplishing the result is the agency we must look to for the best type of factory inspection work. His advice may be most useful when it is quite outside the scope and the authority vested by the police power. He must be familiar with safe methods of operation in plants similar to the one he is required to inspect and must be thoroughly acquainted with standards for the safeguarding of machinery.

Without this experience it is not possible to convince foremen or mechanics that his recommendations are practical, unless first-hand knowledge can be brought to bear on the subject.

In a furniture factory he learns that the woodworking machinery includes the dominant machine hazard. In the metal trades the power punch press is an important factor in the accident frequency of the plant. In the foundries, blast furnaces and moveable cranes and the pouring of molten metal become objects of his attention. Calender rolls in the rubber industry come promptly to his mind and his interest may quickly afterwards be centered on the compounding room, where litharge, oxides of iron, urotropin, and other toxic substances are frequently used.

He is usually skilled in the location of work places where danger lurks. There should be no question as to his right to visit industrial establishments for the proper discharge of his duties. In Massachusetts inspectors are authorized by law to enter all buildings and parts thereof used for industrial purposes, to examine the hazards connected with the machinery and processes of industry, the means of escape from fire, the sanitary provisions for employees, the lighting, and the means of ventilation. Inspectors are also empowered to make investigations as to the employment of women and minors, and to secure compliance with all other provisions of the law dealing with the employment. Any person who hinders or delays such an inspector or officer in the performance of his duties, or who refuses to admit, or who locks out any inspector from a place he is authorized to enter, or refuses to give the information which is required for the proper enforcement of certain sections of the labor laws, is penalized by a fine of not less than \$25 nor more than \$200 or by imprisonment for not more than two months, or by both such fines and imprisonment.

Seldom has it been necessary to invoke the penalty provided for this purpose.

It is gratifying to state that inspectors of the Department of Labor and Industries of Massachusetts have received respectful consideration from employers and cooperation has been freely accorded them in the performance of their duties. Our experience is that employers fully realize the value of technical advice in the work of making their establishments safe for their employees.

The first objective for the competent inspector is to get in touch at once with that official in the plant who is invested with authority to receive and act upon his recommendations. Usually, in the large plants, some one is designated to accompany the inspector in the examination of plant conditions. It may be the employment manager, safety engineer, or master mechanic. The method of procedure must be governed by circumstances in connection with the plant.

For instance, an inspection of a textile factory would not be the same as that of the shoe factory or a foundry or a machine shop. While many statutes of a general nature relating to the safety and health of employees would apply in one as well as the other, there are some laws that apply only in certain kinds of industrial establishments and would have no application in others. Inspection should be made in a systematic manner, going through the various buildings or departments of an establishment in the regular order. By this it is meant that advantages are gained frequently when doing inspection work if the consecutive processes in the manufacture of the product are followed consistently.

If minors are employed the employment and educational certificates on file should be carefully examined. In the examination of the employment certificate, which is the lawful permission for a child between 14 and 16 years of age to be employed, the inspector should see that the specific nature of the employment is stated and that the child is not employed at trades prohibited by law or in occupations forbidden by the statutes, or in proximity to hazardous machinery. It is the duty of the inspector to see that certificates are promptly returned to school authorities on termination of the employment. He must also observe if a list of minors between 14 and 16 years of age is posted near the principal entrance to the factory. Where women and minors are employed, he must note if a legal time notice is posted and hours of labor are properly inserted in accordance with the statutes, and that women and minors are provided with suitable seats if required by law.

In general, he then observes conditions relative to the safeguarding of machinery and belts; the condition of floors; sees that exit doors are not locked; that stairs are properly handrailed; if proper ventilation is provided; if dusts, gases, and fumes which are injurious to health are removed or rendered harmless in so far as it is practical to do so. He must note if pure drinking water is provided, and if his inspection is in a textile factory where humidifying systems are in use, he must see that the amount of moisture does not exceed that specified by law and that pure water is used in such systems.

The number, construction, and location of toilets must be noted in order to ascertain if they are provided as the law requires, and he

must assure himself that washing facilities are provided and maintained in accordance with the rules and regulations of the department.

In textile and cotton factories he must also see that specifications regarding the construction of cloth and rates of compensation, when employees are paid by the piece, are properly posted; see if the work-rooms are properly lighted and if there is adequate protection from glare. He ascertains if a medical and surgical chest or a medical room is provided in manufacturing establishments or in other places of employment if required by law.

He notes if positive arrangements are provided on each floor at a convenient point within the room in which machinery is located whereby either the entire power supply on that floor may be cut off as a whole or the one or more lines of shafting used in driving counter-shafts over machines or connected directly to machines may be cut off independently.

Types of emergency stopping devices such as friction clutches, motor stops, or engine stops must meet with his approval. The construction and materials for guards are carefully examined. They must be suitable in connection with belts and pulleys so that spokes will be guarded and that the section of pulley receiving belt will be adequately covered to prevent anyone being caught between belt and pulley. Set screws on revolving parts, in running gears and sprocket wheels, couplings and collars, dead ends of shafting, and all the well-known mechanical dangers are carefully noted. Those other factory hazards so often prolific in causing industrial injury, in which are included defective stairs, obstructed passageways, and failure to provide railings, occupy a prominent place in his inspection.

If the industry is one in which special rules and regulations have been adopted for the safeguarding of workers against dangers existing therein, great care must be exercised that the danger points are noted thoroughly and correctly. In the briefest outline the functions of the industrial inspector are herewith described. No reference is made to boiler or elevator or building inspection, as the program provides for separate discussion of these topics. The usual procedure is for the department of labor and industries to issue orders upon requisitions from the inspector, requiring proprietors of establishments to comply with provisions of the law.

When recommendations are conveyed it must be made perfectly clear what each requirement is. Nothing will neutralize the effect of the inspector's personal contact with an establishment so quickly as a formidable list of requirements that are not clearly understood. To guard against these unfavorable developments, the safest practice is to leave a copy with the safety engineer, master mechanic, or some one invested with responsibility to make the changes required. The easiest part of the inspector's work is to issue recommendations; the real work begins in securing compliance with them. We come now to one of the practical problems of factory inspection and that is the accurate timing of compliance visits. Unless great care is exercised in the discharge of this duty the waste of much time and effort is inevitable.

It is obvious that the time necessary for complying with statutory requirements varies considerably. Construction work for the installation of toilet and washing facilities in large mills may require several

months. Good judgment in timing reinspection visits under such circumstances may result in saving time for valuable service in hazardous workshops. The inspector who deals with this problem effectively extends his activity into a larger area of the industrial field and is of greater service to a department than one who occasionally displays spectacular brilliancy in some particular instance and then willingly follows ordinary routine without special attention. It is here that the efficiency of the inspector's work is tested. The growth of the movement to conserve health and safety in industry is measured very largely by the amount of inspection work done. In the past two years much attention has been given to this problem in Massachusetts. During the year 1920, 33,925 visits in this connection were made, resulting in the issuance of 19,073 orders. The total number of compliances in the same period was 22,365. The record of compliances exceeded the number of orders issued because of the numerous orders outstanding from the previous 12 months. For the year ending November 30, 1921, 34,589 inspections were made, 22,574 orders were issued, and 21,000 orders complied with. The total number of outstanding orders at the close of business on November 30, 1921, was 1,574.

If substantial progress is to be made, the constantly changing operations in industry must be met with the application of rules and regulations to prevent hazards to health and energy. With the number of inspectors in each industrial State below the minimum for the accomplishment of the duties imposed by law, it is clear that foresight, judgment, and good direction must be brought to bear on the problem of saving time in connection with compliance visits. Fixed rules to be applied mechanically will not result in success. Much will depend upon the use made of each visit by the inspector. If genuine difficulties exist, indicating that extension of time will be necessary to secure compliance with a given order, a good understanding as to the approximate period of time necessary should be agreed upon. Difficulties in this connection will be surely experienced unless the authorized representative is consulted with. Too much time is often wasted in dealing with subordinates who are not familiar either with the requirements or purposes of the law. This situation is particularly true in the case of large corporations.

It is in this side of the work that tact, ability, and judgment must be exercised by the inspector if successful results are to be accomplished. The modern system of factory inspection depends very largely upon the manner in which the work is done at this point. Proper handling of negotiations in this connection often removes the ordinary objection of legal interference in business details and management. Cooperation from employers in complying readily with the rules and regulations for the prevention of accidents and loss of health will be measured very largely by the progress made in this direction. The constant aim of authorities vested with powers of factory inspection should be to cultivate this policy if lasting results are to be achieved.

When this treatment fails to bring compliance with the legal requirements of the statute, then prosecution must take place.

We now come to a feature of the work that deserves the best thought and consideration. Where the requirements of the law are

willfully resisted, there is seldom any treatment more efficacious than prompt application of the penalty through court action. The attitude of some individuals in this connection, however, does not justify the use of obtrusive methods in exercising authority delegated by the statute to an inspector. Neither should it diminish regard for the right of private citizens in the slightest degree. The doctrine of punishment should be evoked only in the case of those who defy the law. The ordinary employer is not in this class. His usual attitude is to comply with the requirements of the statutes. The individual is found, however, in every industrial State whose selfish greed subordinates human health and energy to the acquisition of personal wealth. Commercialism of this kind is not a good asset for any community. It breeds discord and promotes strife between workmen and employer. The penalties provided for violation of the law dealing with industrial health and safety should fall swiftly and heavily upon offenders of this type. The competent inspector will always remember that it is his department that is in action when he is in the field. Upon him ultimately rests the responsibility of success or failure. If he would make his work in a plant durable he will endeavor to secure, as a means of making permanent the duty of maintaining safe work places in the establishment, the support of the employer and employees in the organization of a movement for the prevention of industrial injury. Where these factors are joined together and a determined effort made to reduce occupational accidents, improvement is inevitable. The inspector who can point to plants organized on these lines has rendered the highest type of service to industry. He has done even more. He has instituted an enterprise the dividends of which are the prevention of human suffering, the saving of human life, the preservation of the home and family.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS.

Recent Changes in the Distribution of Wealth in Germany.

THIS bureau is in receipt of a report from the economist consul in Berlin, dealing with the effect of the inflation of German currency on the economic condition of the various classes in Germany.¹ This report shows that the effect of a rise in prices is to reduce the real income of certain classes and to increase that of others. The rise and fall of prices, the consul explains, is the result of a cyclic movement which brings about, in alternation, periods of so-called "prosperity" and of business and industrial depression.

During the period of prosperity there takes place a great inflation of credit, expansion of business enterprise, and increase in the production of commodities. The original stimulus for this expansive movement is usually the scarcity of commodities caused by the reduced production during the preceding period of depression which gives rise inevitably in course of time to a new demand for commodities.

Other factors, however, frequently play a part in stimulating a so-called business boom, such as a war, the exploitation of newly occupied territory or of recently discovered natural resources. The rising prices usually keep ahead of the cost of production and the expansion in business accelerates the turnover for the business enterpriser. Consequently the profits of the managers and owners of business enterprises are augmented. Furthermore, the demand for a greater production of commodities increases the demand for workers and thus tends to raise the scale of wages. On the other hand, salaries and land rents respond much more slowly to the effects of the rise in prices and consequently the real income of salaried persons and landowners diminishes. The interest on long-term bonds does not increase. Consequently bondholders are affected in a similar fashion.

After the period of prosperity has run its course and has resulted in an overproduction of commodities and in an excessive inflation of credit which can no longer sustain itself, there comes the crisis which leads to a deflation of credit, shrinking of business enterprise, and decrease in the production of commodities. During the consequent period of depression, the profits of the managers and owners of business enterprises decrease greatly, the demand for labor diminishes, and results in a lowering of the wage scale and widespread unemployment. On the other hand, inasmuch as the normal income of salaried persons, landowners, and bondholders is influenced to a proportionately small extent, their real income increases owing to the fall in prices.

Effect of Depreciation of Currency.

THE recent rise in the nominal price level in Germany, the consul thinks, is due mainly to the inflation of the currency, and has had a marked effect on the distribution of the wealth of the country.

Generally speaking the effects of currency inflation in Germany have been similar to the effects of the upward movement of prices in the prosperity phase of the trade cycle. But in certain respects these effects have been greatly accentuated by the excessive rise in nominal prices which has not signified a corresponding rise in the real prices. Furthermore, many of the losses experienced by the classes which suffer during such a period will never be compensated for by gains during a period of defla-

¹ The data on which this consular report is based are from Statistisches Reichsamt, Preussisches Statistisches Landesamt, Berliner Tageblatt, Frankfurter Zeitung, Metallarbeiter Zeitung, Reichsarbeitsblatt, Muenchener Neueste Nachrichten, Acht Uhr Abendblatt, Die Weltbuehne, Vossische Zeitung, and Die Bank.

tion, thus distinguishing this period from the second phase of the trade cycle, characterized by business and industrial depression.

Effect on Salaried Workers, Bondholders, and Real Estate Owners.

The result of the inflation of the currency has been to reduce the real income or purchasing power of many of the salaried workers, since their incomes have not increased so fast as the cost of living.

Among these may be mentioned the incomes of teachers, some of the professional classes, and many business employees, especially those who are not organized. Inasmuch as these persons belong to the so-called middle class, this class has, on the whole, been impoverished to a considerable extent by currency inflation.

Bondholders have suffered perhaps more than any other class from currency inflation. Even though bondholders are usually entitled to demand payment in gold, they are now receiving interest and repayment on principal in currency which is worth only a comparatively small fraction of the currency with which they purchased their bonds. As a consequence the Government and the corporations which sold these bonds are escaping from a large part of the responsibility of repaying their debts. A considerable portion of the bondholders are of the middle class and many of them more or less dependent upon the revenue from their bonds, so that these losses give rise to much suffering.

While land values will, doubtless, in the end readjust themselves to the new currency standard, owners of land and buildings are temporarily suffering a loss from currency inflation. As pointed out above, during a period of rising prices, rents on real estate tend to rise less rapidly than the price level. But the losses of landowners have been greatly accentuated in Germany by Government regulations of rents, especially in the cities, which has kept rents far below the price level. For example, in Berlin from April 1, 1922, real estate owners were permitted to add 120 per cent to the pre-war rent upon dwellings, and for business buildings 120 per cent upon the pre-war rent up to 2,000 marks, 150 per cent up to 5,000 marks, and 180 per cent over 5,000 marks. Furthermore, part of this increase must be paid into a public fund for the construction of new buildings.

Consequently it is pointed out, the incomes of real estate owners have probably not more than doubled since the beginning of the war, and are not at all commensurate with the cost of living.

Statistics of mortgages on real estate in Prussia reported by the Preussische Statistische Landesamt indicate a great increase of mortgages in 1919 and 1920. Whereas during the war the number of mortgages on real estate decreased, the mortgages registered in 1920 were greater by 4,766,100,000 marks than the mortgages registered in 1919, an increase of over 75 per cent. In the cities the increase was 92.1 per cent, as compared with 56.02 per cent in the rural districts. In the city of Berlin the mortgage indebtedness was 13 times as great as in 1919. Whether or not this increase in mortgage indebtedness is an indication of loss on the part of the real estate owners it is difficult to ascertain. The increase is, doubtless, in part a direct effect of the depreciation of the paper currency which forces the owners to borrow sums which are nominally much higher than in the past. But the great increase in mortgage indebtedness, especially in the cities, may also be an indication of the stringent financial conditions of the real estate owners due to their inability to raise their rents commensurate with their costs.

Currency inflation has severely penalized thrift and patriotism. The savings which have been put into insurance policies as a protection against illness or old age, into savings banks, and into such investments as the purchase of bonds, such as Government war loans, and to a smaller degree of real estate, have to a large extent melted away as a result of the depreciation of the unit of the value. The most effective safeguards for the protection of property in normal times become almost valueless during a period of currency inflation. The sufferings caused by the sudden disappearance of the apparently stable safeguards of these property rights can never be measured.

Effect on Owners of Industrial Enterprises.

Owners of business establishments usually gain as a result of currency inflation, because the nominal value of their enterprises and the profits therefrom increase as rapidly as or more rapidly than the currency depreciates in value.

Furthermore, the enterprises with outstanding indebtedness, as for example, in the form of bond issue, are benefited by the fact that these debts can be repaid in a depreciated currency, thus resulting, in effect, in a partial repudiation of the debt.

It is impossible to estimate the profits of the profit-taking class in Germany during the past few years and to compare them with pre-war profits. Statistics of dividends declared have little significance as a measure of profits. They must be interpreted in connection with increases in capitalization, expansion of plants, and reserves laid aside. Furthermore, the desire to dodge heavy taxes on profits doubtless gives rise frequently to devices to hide profits.

The valuation of industrial and business enterprises is revealed in a measure by the prices of the shares and stocks of these enterprises upon the security markets. During the past few years quotations of these shares and stocks have risen greatly, as contrasted with the prices of bonds, inasmuch as bond prices have not risen at all and in many cases have fallen. It is true that few, if any, of these shares and stocks have risen to a degree commensurate with the depreciation in the exchange value of the German currency. But in a study of recent changes in the distribution of wealth within the country, this would not be a correct measure to use. The prices of these securities should be compared rather with the prices of commodities and of land. It is, however, difficult even to make this comparison because the situation has been greatly complicated by the issue of large blocks of capital shares by many of these corporations which have thus watered the stock, so to speak, and neutralized in considerable part the upward tendency caused by currency inflation. Furthermore, the shares of corporations with large outstanding bond issues have usually risen more than the shares of other concerns because these heavily indebted concerns have profited greatly by being relieved in large part from the burden of their debts.

Index figures are quoted from the Statistisches Reichsamt, showing that while in February, 1922, the value of these stocks and shares was less than 8 times as much as in 1913, the prices of commodities were nearly 40 times as much as in 1913. The shares of the different business establishments, however, varied greatly, showing that "the intrinsic value of these properties played an important part in determining the market quotations" of their stock. Thus, in February, 1922, the index of the market quotations of the shares of 10 establishments producing foodstuffs was 10 times that of the shares of 40 banks. "Inasmuch as the property of these banks consists of assets to be paid in paper marks, the market quotations of their shares had risen very little."

It is stated that security prices rose very little during the war, but increased rapidly beginning with the year 1919. In March, 1922, these prices were nearly three times what they were at the beginning of 1921, and over five times what they were at the beginning of 1920, corresponding closely to the increases that had taken place in the price of commodities.

This great rise in security prices during the past two and a quarter years and the violent fluctuations which have accompanied it have affected to a considerable extent the distribution of the ownership of industrial and business concerns represented by these securities. It is not unlikely that, as usually happens during a period of violent speculation, the smaller and weaker shareholders have been shaken out to a large degree. Furthermore, there has been taking place an accumulation of the securities and, in consequence, of the ownership of these industrial and business concerns in the hands of powerful moneyed groups and the transfer of large blocks of these securities to foreign ownership.

Effect on Wage Earners.

The report states that, according to the cost of living index of the Statistisches Reichsamt, the index figure for the cost of living increased from 100 in January, 1920, to 275 in December, 1921.

But this increase represents only food, rent, heating and lighting, and therefore excludes other necessary or more or less necessary commodities, such as clothing, transportation, schooling, medical assistance, etc., the prices of some of which have

doubtless risen considerably more than is represented by this cost-of-living index. The Statistisches Reichsamt index for wholesale prices rose from 802.5 in December, 1919, and 1,255.7 in January, 1920, to 3,487 in December, 1921. The Frankfurter Zeitung index figure for wholesale prices rose from 100 at the beginning of 1920 to 320 at the beginning of 1922. It is doubtless safe to assume that the cost of living for the great mass of the population increased at least 300 per cent during these two years.

It is extremely difficult to secure comprehensive wage statistics for purposes of comparison with these price and cost-of-living statistics. The Frankfurter Zeitung has published wage statistics covering a large number of workers in many different industries, most of whom live in Frankfort. The wage index for these workers rose from 100 at the beginning of 1920 to 355 at the beginning of 1922. The "Deutscher Metallarbeiter Verband," or union of metal workers, the largest German trade-union, including over 1,500,000 workers, has published statistics of the wages of its members in 222 cities. According to these statistics the index for the wages of the skilled laborers rose from 100 at the beginning of 1920 to 360 at the beginning of 1922, and for the wages of the unskilled laborers from 100 at the beginning of 1920 to 378 at the beginning of 1922. These statistics indicate that apparently during the past two years, to say the least, wages have risen as much and perhaps somewhat more than the rise in prices and the cost of living.

The present period of inflation and business expansion has probably benefited the wage workers as well as their employers, though to a smaller degree. The increased demand for commodities, which has stimulated production temporarily, has increased the demand for labor, so that there has been comparatively little unemployment during the past year or two. The figures of unemployment for the large trade-unions in Germany including over 6,500,000 workers indicate that the unemployment among these workers ranged somewhat as follows during the last three calendar years: In 1919 the average for the 12 months was 3.7 per cent, and unemployment was at its highest in January when it was 6.6 per cent, and at its lowest in September at 2.2 per cent. In 1920 it averaged 3.8 per cent, and was at its highest in July at 6 per cent, and at its lowest in March and April at 1.9 per cent. In 1921 it averaged 2.8 per cent, and was at its highest in February at 4.7 per cent, and at its lowest in October at 1.2 per cent. In other words, according to these averages the unemployment in 1921 was about three-fourths of the unemployment in 1920 and 1919.

The following figures give the averages of the monthly averages of unemployment for these trade-unions for each of the past 15 years:

AVERAGE PER CENT OF WORKERS UNEMPLOYED EACH YEAR, 1907 TO 1921.

Year.	Per cent.	Year.	Per cent.	Year.	Per cent.
1907.....	1.6	1912.....	2.0	1917.....	1.0
1908.....	2.9	1913.....	2.9	1918.....	1.2
1909.....	2.8	1914.....	7.2	1919.....	3.7
1910.....	1.7	1915.....	3.2	1920.....	3.8
1911.....	1.9	1916.....	2.2	1921.....	2.8

It will be noted that the unemployment in 1921 was no higher than in three of the seven pre-war years reported.

During the past three years unemployment increased when the German mark appreciated in value and decreased when the mark depreciated in value, in other words, when prices were rising. This influence of the fluctuating exchange value of the mark was so strong as in several instances to counteract normal seasonal influences upon unemployment. This was especially true of the year 1921, during which the mark depreciated rapidly in value and was accompanied by a corresponding decrease in unemployment. These facts are all the more remarkable because during the same period, and especially the past two years, there was an abnormally large amount of unemployment in the countries possessing a more or less stable currency. According to trade-union statistics, which correspond to the above German statistics, during 1921 unemployment rose in Holland to 16 per cent, in England to 23 per cent, and in Sweden to 28 per cent. In other words, currency inflation was causing business and industrial expansion in Germany while in other countries deflation, especially of credit, gave rise to business and industrial depression.

Currency Inflation in Relation to the Trade Cycle.

THE recent expansion in industrial and business activity in Germany has been due, in part, the writer thinks, to the demand for commodities caused by the depletion during the war of the stocks of many necessary and useful commodities, such as buildings, clothing, machinery, tools, vehicles, books, etc.

In this respect this period has resembled the prosperity phase of the trade cycle. But it has been stimulated to an abnormal degree by the rapid rise in the price levels caused by currency inflation. Furthermore, inasmuch as prices have not risen so rapidly as the exchange value of the mark has depreciated, the prices of German commodities have been somewhat favorable for foreign purchasers in spite of the fact that prices for export goods have usually been much above inland prices. Consequently, German exports have increased to a certain extent. Thus, while in May, 1921, the exports amounted to 1,145,000 tons, in December, 1921, they were 1,929,519 tons, and in January, 1922, 2,027,000 tons.

This increase has, however, been a comparatively small factor in the whole situation. The average monthly exports in 1913 were 6,150,000 tons, in 1920, 1,660,000 tons, and for the eight months, May to December, 1921, 1,710,000 tons. In other words, the exports in 1920 and 1921 were barely one-fourth the exports in 1913. These figures are, to be sure, somewhat misleading, because the post-war figures do not include large quantities of coal sent out of the country as reparations payments. However, even if coal is omitted from these figures, the average monthly exports in 1913 were 2,450,000 tons, in 1920, 920,000 tons, and in 1921, about 1,060,000 tons. In other words, exclusive of coal, exports in 1920 and 1921 were less than two-fifths of the exports in 1913.

But this period of industrial and business expansion, which resembles the prosperity phase of the trade cycle, can not long continue. Currency inflation can not go on indefinitely, because it leads inevitably to the depreciation of the value of the inflated currency to approximately zero. By that time, if not earlier, must begin the process of deflation.

Inasmuch as currency depreciation results in a great rise in the cost of the raw materials which must be imported to manufacture commodities for exportation, the prices of these commodities inevitably rise before long to such a level as to check exports and a so-called favorable balance of trade. Consequently, when the present demand for commodities, arising largely out of the shortage caused by the war, is more or less adequately supplied, industrial and business activity will shrink, profits will diminish, wages will decrease and unemployment increase. This will probably coincide approximately with the period of business expansion and of prosperity in the countries with more or less stable currencies. In other words, currency inflation reverses the order of the trade cycle in point of time in comparison with the countries which have not experienced currency inflation.

Concentration of and Foreign Investments in German Industry.

PRIOR to the war there was a strong tendency toward concentration and combination in German industry. This tendency, the report states, has continued, and perhaps has become stronger since the termination of the war. Consequently, the ownership and control of many large industrial concerns have been passing into the hands of powerful financial groups.

Furthermore a considerable amount of property has passed into the hands of foreigners as the result of large investments made by them. The desire to offset this and prevent foreign control of German industry has led to the issue, in many cases, of shares possessing manifold voting rights, whose ownership is restricted to Germans.

Summary of Changes in the Distribution of Wealth.

ECONOMIC conditions in Germany are at present characterized by great mobility and therefore instability.

The currency is depreciating and its exchange value fluctuating violently. Prices and the cost of living are rising constantly. Future tax legislation and other forms of legislation may affect the ownership and control of property. Furthermore there is great uncertainty in the foreign relations of Germany, especially with regard to reparations payments. In view of these more or less chaotic conditions the data are not available for an accurate and comprehensive description of the distribution of wealth in Germany. But the above statistics furnish the basis for a few tentative generalizations as to present tendencies with respect to the ownership and control of wealth.

The middle class has been greatly impoverished and to a certain extent pushed down toward the level of the manual workers. Thus the same process is taking place, though to a much smaller degree, as in Russia and Austria, where the middle class has, to a large extent, disappeared. This class has borne a large part of the losses resulting from the almost complete evaporation of the value of the Government war loans amounting to approximately 100,000,000,000 marks, as well as of many private bond issues which prior to the war were regarded as safe investments.

During the so-called "prosperity" phase of the trade cycle rising prices usually keep ahead of the cost of production and thus augment the profits of enterprisers and of the owners of industrial and business concerns. This has been particularly true recently in Germany because, as a result of inflation, the currency in circulation has greatly depreciated, thus causing the prices to rise rapidly. Consequently, prices have been leaping ahead of the cost of production because the raw materials have been purchased at a lower scale of prices than the scale at which the finished products were sold. As a consequence, manufacturers and merchants have had almost unparalleled opportunities to make large profits with very small risks.

These profits, however, have not been of much value to these enterprisers and owners of industrial and business concerns unless they have transformed them from paper money, which has been rapidly losing its value, into objects possessing intrinsic value. Consequently, those who have in reality profited during the past few years have been the persons with sufficient foresight to anticipate the loss of the purchasing power of money, and who have invested their profits as soon as possible in objects of intrinsic value, or in the currencies of other countries which are at present more or less stable. The result of this process probably will be that wealth will be more and more accumulated in the hands of persons possessing sufficient foresight and comprehension of conditions during a period of currency inflation to take advantage of those conditions as contrasted with the persons lacking such foresight and knowledge.

Though the city real estate owners have experienced more or less loss temporarily, they will probably finally come into their own at the time when the intrinsic value of their properties will be adequately measured in terms of a stable currency. The country landowners have suffered very little, if at all, from the existing situation, since their property depends very little upon the value of money. Whether or not they have benefited by the confiscation by the Government of the estates of the former ruling families it is not yet possible to ascertain.

The managers and owners of industrial and business enterprises have doubtless been benefited more or less by the present situation, especially those who have possessed the foresight to invest in property possessing intrinsic value. The results are likely to be greater segregation of wealth in the hands of a comparatively small class and more concentration of the control of industry in the form of cartels and trusts. While the wage earners have been benefited a little along with their employers, in all probability they will more than pay for it in the end by means of their losses during a period of industrial depression.

Thus the ultimate outcome with respect to the distribution of wealth may prove to be that the more affluent have profited from the losses of the less affluent and that the distinction between the rich and the poor classes has been considerably accentuated. The economic, political, and social consequences from this situation are likely to be very far reaching.

Possible Remedies.

THE consul is of the opinion that the German Government will probably attempt to control in a measure the concentration of wealth and of industry by means of tax legislation, the regulation of combinations, cartels, and trusts, etc.

But very little, if anything, can be done to indemnify the persons who have experienced losses as a result of currency depreciation. Attempts have been made in the past during periods of currency inflation to adjust obligations to the depreciation in the value of the currency. These attempts to protect creditors from losses due to currency depreciation were carried out only in part and with great difficulty. Under present conditions it would be far more difficult to enforce a similar scale of adjustment. A century and more ago obligations were not bought and sold as freely as at present, and it was frequently true that the same creditors retained an obligation throughout the period of depreciation until the adjustment was made. But to-day this would be an exceptional case, because bonds and similar obligations are bought and sold over and over again, frequently without any record being kept of the creditors through whose ownership they have passed. Consequently, such an adjustment enforced by the Government would bring a huge windfall to the last and, so to speak, accidental owners of these obligations, but would not compensate the original and earlier owners for their great losses. It would, therefore, to a very slight measure remedy the ethical wrong which has been caused by currency depreciation. Furthermore, in many cases it would be absolutely impossible to carry out such readjustment, because the debtors could not possibly repay their debts according to such a scale without becoming bankrupt.

Another serious obstacle in the way of such readjustment is the fact that the Government itself is one of the largest debtors. The funded debt is approximately 90,000,000,000 marks, contracted as gold marks. If repaid in accordance with such a scale, it would make the outlook for the German Government far more hopeless than it is at present and would place an almost insuperable obstacle in the way of currency reform. In addition to the funded debt is a nominally much larger floating debt, which on March 31, 1922, was 272,000,000,000 marks, contracted at various times when the mark had depreciated in value in varying degrees. These facts alone are sufficient to indicate that it is very doubtful if the losses of creditors due to currency depreciation can, to any appreciable degree, be indemnified.

Representation of Works Councils on Boards of Directors of German Corporations.¹

ARTICLE 70 of the German Works Councils Law provides as follows:

If in undertakings in which a board of directors exists equipartisan representation of the employees on the board of directors is not prescribed by other laws, the works council shall, in pursuance of a special law to be enacted later, send one or two of its members to the said board of directors, who shall represent the interests and demands of the employees as well as their views and wishes concerning the organization of the establishment. These representatives shall have a seat and vote in all meetings of the board of directors, but shall receive no compensation other than for their personal expenses. They shall be under obligation to observe secrecy as to confidential information given them.

The special law mentioned in the article quoted has been a subject for discussion for more than a year. As early as June 8, 1921, a draft of the proposed legislation was submitted to the National Economic Council (*Reichswirtschaftsrat*). About the middle of December, 1921, the draft went to the committee on social legislation of the Reichstag. On January 15, 1922, the committee reported the bill favorably, and on February 15 it was passed by the Reichstag. The following is a translation of the text of the law:

ARTICLE 1. A board of directors, within the meaning of article 70 of the Works Councils Law, without consideration of the designation employed in the articles of incorporation, is that organ of a joint-stock company, commandite stock company,² company with limited

¹ Reichsgesetzblatt, Berlin, Feb. 25, 1922, and consular report from Berlin dated Mar. 20, 1922.

² A stock company with two classes of stockholders, one of which is liable only for payment of the subscribed stock, while the other class is personally liable for all the liabilities of the company.

liability, registered cooperative society, mutual insurance company, or mining company, which in the commercial code, the law on companies with limited liability, the law on purchasing and economic cooperative societies, the law on private insurance undertakings, and the mining laws is designated as board of directors.

ART. 2. If in one of the corporations specified in article 1 there exist one or more works councils or central works councils for the workers employed by it, the representation of the works council members on the board of directors prescribed in article 70 of the Works Councils Law is regulated by the following provisions.

ART. 3. In so far as the Works Councils Law and the present law do not provide otherwise, the legal regulations applying to other members of the board of directors shall also be applicable to the works council members elected to the board of directors.

ART. 4. If more than three members of the board of directors may be elected in accordance with the articles of incorporation (by-laws, constitution) in force at the time fixed for holding the election, or if both groups of employees (manual workers and salaried employees) are represented in the electoral body, two works council members shall be elected on the board of directors. In all other cases one works council member is to be elected as a member of the board.

For each works council member elected to the board of directors there shall also be elected two alternates.

ART. 5. In the case of corporations in which only one works council or a central works council exists this works council or central works council shall elect from among its members those who are to sit on the board of directors. In the case of corporations in which several works councils exist, these councils combined shall be the electoral body even if part of the councils are combined into a central works council.

All members of the electoral body who on the date of the election have been employed at least one year by the corporation in question and have not been deposed as works council members during the last two years in accordance with article 39 of the Works Councils Law are eligible as members of the board of directors. The requirement of one year's employment is waived when the number of persons eligible to the board of directors is not at least four times as large as the number of members to be elected to the board.

ART. 6. The voting shall uniformly be effected by secret ballot and a simple majority be required for election.

If two members of the board of directors are to be elected, the minority group of the employees (article 16 of the Works Councils Law) may, if at least two members of the electoral body belong to it, resolve by a majority or parity of votes to elect a representative on the board of directors. Under such conditions each of the two groups of employees (manual workers and salaried employees) holds a separate election.

Reelection is permissible.

Details as to the procedure of elections will be regulated by the national minister of labor.

ART. 7. Membership in the board of directors terminates through resignation or through loss of membership in the works council to which the member of the board of directors belongs.

ART. 8. If a works council member ceases to be a member of the board of directors, his place on the board is taken by an alternate in accordance with the provisions of the voting regulations. If no alternate is available a new election must take place.

ART. 9. Articles 1 to 8 shall also be applicable to a corporation already formed but not yet registered, provided that the corporation has already a board of directors.

ART. 10. The present law is also applicable to other forms of representation of employees designated in article 62 of the Works Councils Law, provided such representation has been established for the works of only one corporation and consists of the employees of the corporation.

ART. 11. This law comes into force on February 1, 1922. The first elections are to take place within three months after the coming in force of the law.

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices.¹

Table 1 shows for the United States retail prices of food on May 15, 1921, and on April 15 and May 15, 1922, as well as the percentage changes in the year and in the month. For example, the price of bread was 9.9 cents per pound on May 15, 1921, 8.7 cents per pound on April 15, 1922, and 8.8 cents per pound on May 15, 1922. These figures show a decrease of 11 per cent in the year, but an increase of 1 per cent in the month.

The cost of the various articles of food,² combined, showed a decrease of 4 per cent in May, 1922, as compared with May, 1921, but an increase of two-tenths of 1 per cent in May, 1922, as compared with April, 1922.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MAY 15, 1922, COMPARED WITH APRIL 15, 1922, AND MAY 15, 1921.

[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 (-) May 15, 1922, compared with—	
		May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.
		Cents.	Cents.	Cents.		
Sirloin steak.....	Pound.....	40.1	36.4	37.7	- 6	+ 4
Round steak.....	do.....	35.6	31.4	32.5	- 9	+ 4
Rib roast.....	do.....	30.2	27.3	27.9	- 8	+ 2
Chuck roast.....	do.....	22.0	19.5	19.9	-10	+ 2
Plate beef.....	do.....	15.0	13.0	13.0	-13	0
Pork chops.....	do.....	35.1	33.0	34.4	- 2	+ 4
Bacon.....	do.....	43.5	39.7	39.8	- 9	+ 0.3
Ham.....	do.....	48.7	50.7	51.3	+ 5	+ 1
Lamb.....	do.....	34.7	38.5	39.2	+13	+ 2
Hens.....	do.....	41.3	37.8	37.7	- 9	- 0.3
Salmon, canned, red.....	do.....	37.9	32.4	32.3	-15	- 0.3
Milk, fresh.....	Quart.....	14.4	12.7	12.5	-13	- 2
Milk, evaporated.....	15-16 oz. can.....	14.3	11.1	11.0	-23	- 1
Butter.....	Pound.....	42.5	45.2	44.9	+ 6	- 1
Oleomargarine.....	do.....	30.8	27.7	27.5	-11	- 1
Nut margarine.....	do.....	28.2	26.9	26.7	- 5	- 1
Cheese.....	do.....	31.5	32.1	30.8	- 2	- 4
Lard.....	do.....	16.7	16.9	17.0	+ 2	+ 1
Crisco.....	do.....	21.7	22.1	22.2	+ 2	+ 0.4

¹ In addition to monthly retail prices of food and coal, the bureau secures prices of gas and dry goods from each of 51 cities. These prices are published at quarterly intervals in the MONTHLY LABOR REVIEW.

² The following 22 articles, weighted according to the consumption of the average family, have been used from January, 1913, to December, 1920: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea. The remainder of the 43 articles shown in Tables 1 and 2 have been included in the weighted aggregates for each month, beginning with January, 1921.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE MAY 15, 1922, COMPARED WITH APRIL 15, 1922, AND MAY 15, 1921—Concluded.

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (—) May 15, 1922, compared with—	
		May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.
		<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Eggs, strictly fresh.....	Dozen.....	33.4	31.7	33.5	+ 0.3	+ 6
Bread.....	Pound.....	9.9	8.7	8.8	-11	+ 1
Flour.....	do.....	5.7	5.3	5.3	- 7	0
Corn meal.....	do.....	4.5	3.9	3.8	-16	- 3
Rolled oats.....	do.....	9.9	8.7	8.8	-11	+ 1
Corn flakes.....	8-oz. package.....	12.6	10.1	10.0	-21	- 1
Cream of Wheat.....	28-oz. package.....	29.8	25.9	25.8	-13	- 0.4
Macaroni.....	Pound.....	21.0	20.0	20.1	- 4	+ 1
Rice.....	do.....	8.8	9.4	9.5	+ 8	+ 1
Beans, navy.....	do.....	7.9	9.3	9.7	+23	+ 4
Potatoes.....	do.....	2.2	2.9	3.0	+36	+ 3
Onions.....	do.....	5.6	13.8	9.8	+75	-29
Cabbage.....	do.....	5.6	5.3	5.7	+ 2	+ 8
Beans, baked.....	No. 2 can.....	14.6	13.1	13.1	-10	0
Corn, canned.....	do.....	15.9	15.6	15.5	- 3	- 1
Peas, canned.....	do.....	17.5	17.8	17.8	+ 2	0
Tomatoes, canned.....	do.....	11.4	13.7	13.7	+20	0
Sugar, granulated.....	Pound.....	8.4	6.7	6.6	-21	- 1
Tea.....	do.....	70.0	67.7	67.9	- 3	+ 0.3
Coffee.....	do.....	36.1	35.7	35.9	- 1	+ 1
Prunes.....	do.....	18.7	20.0	20.4	+ 9	+ 2
Raisins.....	do.....	31.0	24.4	24.1	-22	- 1
Bananas.....	Dozen.....	40.7	36.1	36.2	-11	+ 0.3
Oranges.....	do.....	46.7	61.1	62.0	+33	+ 1
All articles combined ¹					- 4	+ 0.2

¹ See note 2, p. 33.

Table 2 shows for the United States average retail prices of specified food articles on May 15, 1913 and 1914, and on May 15 of each year from 1917 to 1922, together with the percentage changes in May of each of these specified years compared with May, 1913. For example, the price of fresh milk per quart was 8.8 cents in May, 1913; 8.9 cents in May, 1914; 10.4 cents in May, 1917; 13.2 cents in May, 1918; 14.9 cents in May, 1919; 16.2 cents in May, 1920; 14.4 cents in May, 1921; and in May, 1922, 12.5 cents. As compared with the average price in May, 1913, these figures show the following percentage increases: 1 per cent in May, 1914; 18 per cent in May, 1917; 50 per cent in May, 1918; 69 per cent in May, 1919; 84 per cent in May, 1920; 64 per cent in May, 1921; and 42 per cent in May, 1922.

The cost of the various articles of food combined showed an increase of 44 per cent in May, 1922, as compared with May, 1913.

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

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

Article.	Unit.	Average retail price May 15—										Per cent of increase (+) or decrease (-) May 15 of each specified year compared with May 15, 1913.							
		1913		1914		1917		1918		1919		1920		1921		1922			
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.						
Sirloin steak.....	Pound.	25.6	25.8	32.3	40.0	44.4	43.4	40.1	37.7	+1	+26	+56	+73	+70	+57	+47			
Round steak.....	do.	22.2	23.3	29.6	38.0	41.6	39.9	35.6	32.5	+5	+33	+71	+87	+80	+60	+46			
Rib roast.....	do.	20.0	20.3	25.8	31.8	35.2	33.4	30.2	27.9	+2	+29	+59	+76	+67	+51	+40			
Chuck roast.....	do.	16.1	16.5	21.5	27.8	29.7	26.5	22.0	19.9	+2	+34	+73	+84	+65	+37	+24			
Flate beef.....	do.	12.2	12.5	16.3	21.9	22.5	18.8	15.0	13.0	+2	+34	+80	+84	+54	+23	+7			
Pork chops.....	do.	20.9	22.3	30.6	36.7	43.0	42.5	35.1	34.4	+7	+46	+76	+105	+103	+68	+65			
Bacon.....	do.	26.9	26.8	41.8	50.5	56.7	52.6	43.5	39.8	-0.4	+55	+88	+111	+96	+62	+48			
Ham.....	do.	26.7	26.7	38.7	43.6	54.5	55.5	48.7	45.1	0	+45	+71	+104	+108	+82	+92			
Lamb.....	do.	19.4	19.8	29.7	36.8	39.6	42.1	34.7	39.2	+2	+53	+90	+104	+117	+79	+102			
Hens.....	do.	22.2	22.7	29.3	37.9	43.5	47.1	41.3	37.7	+2	+32	+71	+96	+112	+86	+70			
Salmon (canned), red.	do.	.....	.....	25.7	29.6	31.9	37.1	37.9	32.3	.....	.....	.....	.....	.....	.....	.....
Milk, fresh.....	Quart.	8.8	8.9	10.4	13.2	14.9	16.2	14.4	12.5	+1	+18	+50	+69	+84	+64	+42			
Milk, evaporated.....	(3)	.....	.....	.....	.....	15.1	14.7	14.3	11.0	.....	.....	.....	.....	.....	.....	.....
Butter.....	Pound.	35.9	32.7	46.7	51.0	67.9	71.6	42.5	44.9	-9	+30	+42	+89	+99	+18	+25			
Oleomargarine.....	do.	.....	.....	.....	.....	40.4	43.3	30.8	27.5	.....	.....	.....	.....	.....	.....	.....
Nut margarine.....	do.	.....	.....	.....	.....	35.3	36.5	28.2	26.7	.....	.....	.....	.....	.....	.....	.....
Cheese.....	do.	21.9	22.8	33.8	33.4	42.2	42.9	31.5	30.8	+4	+54	+53	+93	+96	+44	+41			
Lard.....	do.	15.8	15.5	27.8	32.9	38.8	29.8	16.7	17.0	-2	+76	+108	+146	+89	+6	+8			
Crisco.....	do.	.....	.....	.....	.....	33.9	37.2	21.7	22.2	.....	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh.....	Dozen	26.8	26.7	40.0	42.4	53.1	52.9	33.4	35.5	+2	+52	+61	+102	+101	+27	+27			
Bread.....	Pound.	5.6	6.2	9.5	9.9	9.3	11.5	9.9	8.8	+11	+70	+77	+75	+105	+77	+57			
Flour.....	do.	3.3	3.3	8.8	6.6	7.5	8.7	5.7	5.3	0	+167	+100	+127	+164	+73	+61			
Corn meal.....	do.	2.9	3.1	5.3	7.0	6.2	6.7	4.5	3.8	+7	+83	+141	+114	+131	+55	+31			
Rolled oats.....	do.	.....	.....	.....	.....	8.5	10.5	9.9	8.8	.....	.....	.....	.....	.....	.....	.....
Corn flakes.....	(3)	.....	.....	.....	.....	14.1	14.1	12.6	10.0	.....	.....	.....	.....	.....	.....	.....
Cream of Wheat.....	(4)	.....	.....	.....	.....	25.1	30.1	29.8	25.8	.....	.....	.....	.....	.....	.....	.....
Macaroni.....	Pound.	.....	.....	.....	.....	19.3	20.7	21.0	20.1	.....	.....	.....	.....	.....	.....	.....
Rice.....	do.	8.6	8.7	10.5	12.3	13.4	18.7	8.8	9.5	+1	+22	+43	+56	+117	+2	+10			
Beans, navy.....	do.	.....	.....	19.1	17.8	12.0	11.8	7.9	9.7	.....	.....	.....	.....	.....	.....	.....
Potatoes.....	do.	1.6	1.9	6.0	2.2	3.3	9.6	2.2	3.0	+19	+275	+38	+106	+500	+38	+88			
Onions.....	do.	.....	.....	8.6	5.6	10.7	8.0	5.6	9.8	.....	.....	.....	.....	.....	.....	.....
Cabbage.....	do.	.....	.....	.....	.....	9.6	8.4	5.6	5.7	.....	.....	.....	.....	.....	.....	.....
Beans, baked.....	(6)	.....	.....	.....	.....	17.5	16.8	14.6	13.1	.....	.....	.....	.....	.....	.....	.....
Corn, canned.....	(5)	.....	.....	.....	.....	19.1	18.6	15.9	15.5	.....	.....	.....	.....	.....	.....	.....
Peas, canned.....	(5)	.....	.....	.....	.....	19.0	19.1	17.5	17.8	.....	.....	.....	.....	.....	.....	.....
Tomatoes, canned.....	(6)	.....	.....	.....	.....	15.8	15.1	11.4	13.7	.....	.....	.....	.....	.....	.....	.....
Sugar, granulated.....	Pound.	5.4	5.0	10.1	9.1	10.6	25.4	8.4	6.6	-7	+87	+69	+96	+370	+56	+22			
Tea.....	do.	54.4	54.7	55.9	63.8	69.8	74.0	70.0	67.9	+1	+3	+17	+28	+36	+29	+25			
Coffee.....	do.	29.8	29.7	30.1	30.1	40.5	49.2	36.1	35.9	-0.3	+1	+1	+36	+65	+21	+20			
Prunes.....	do.	.....	.....	15.3	16.5	23.2	28.3	18.7	20.4	.....	.....	.....	.....	.....	.....	.....
Raisins.....	do.	.....	.....	14.4	15.1	16.5	27.4	31.0	24.1	.....	.....	.....	.....	.....	.....	.....
Bananas.....	Dozen	.....	.....	.....	.....	38.8	43.2	40.7	36.2	.....	.....	.....	.....	.....	.....	.....
Oranges.....	do.	.....	.....	.....	.....	54.1	71.8	46.7	62.0	.....	.....	.....	.....	.....	.....	.....
All articles combined. ³	.....	.....	.....	.....	.....	.....	.....	.....	.....	+1	+56	+64	+91	+123	+50	+44

¹ All.
² 15-16 ounce can.
³ 8-ounce package.
⁴ 28-ounce package.
⁵ No. 2 can.
⁶ See note 2, p. 33.

Table 3 shows the changes in the retail price of each of 22 articles of food ³ as well as the changes in the amounts of these articles that could be purchased for \$1, each year, 1913 to 1921, and in May, 1922.

³ Although monthly prices of 43 food articles have been secured since January, 1919, prices of only 22 of these articles have been secured each month since 1913.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1, IN EACH YEAR, 1913 TO 1921, AND IN MAY, 1922.

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.
1913.....	<i>Per lb.</i> \$.254	<i>Lbs.</i> 3.9	<i>Per lb.</i> \$.223	<i>Lbs.</i> 4.5	<i>Per lb.</i> \$.198	<i>Lbs.</i> 5.1	<i>Per lb.</i> \$.160	<i>Lbs.</i> 6.3	<i>Per lb.</i> \$.121	<i>Lbs.</i> 8.3	<i>Per lb.</i> \$.210	<i>Lbs.</i> 4.8
1914.....	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915.....	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916.....	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917.....	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918.....	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919.....	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920.....	.437	2.3	.395	2.5	.332	3.0	.262	3.8	.183	5.5	.423	2.4
1921.....	.388	2.6	.344	2.9	.291	3.4	.212	4.7	.143	7.0	.349	2.9
1922: May.....	.377	2.7	.325	3.1	.279	3.6	.199	5.0	.130	7.7	.344	2.9
	Bacon.		Ham.		Lard.		Hens.		Eggs.		Butter.	
1913.....	<i>Per lb.</i> \$.270	<i>Lbs.</i> 3.7	<i>Per lb.</i> \$.269	<i>Lbs.</i> 3.7	<i>Per lb.</i> \$.158	<i>Lbs.</i> 6.3	<i>Per lb.</i> \$.213	<i>Lbs.</i> 4.7	<i>Per lb.</i> \$.345	<i>Lbs.</i> 2.9	<i>Per lb.</i> \$.383	<i>Lbs.</i> 2.6
1914.....	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915.....	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916.....	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917.....	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918.....	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919.....	.554	1.8	.531	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920.....	.523	1.9	.555	1.8	.295	3.4	.447	2.2	.681	1.5	.701	1.4
1921.....	.427	2.3	.488	2.0	.180	5.6	.397	2.5	.509	2.0	.517	1.9
1922: May.....	.398	2.5	.513	1.9	.170	5.9	.377	2.7	.335	3.0	.449	2.2
	Cheese.		Milk.		Bread.		Flour.		Corn meal.		Rice.	
1913.....	<i>Per lb.</i> \$.221	<i>Lbs.</i> 4.5	<i>Per lb.</i> \$.089	<i>Lbs.</i> 11.2	<i>Per lb.</i> \$.056	<i>Lbs.</i> 17.9	<i>Per lb.</i> \$.033	<i>Lbs.</i> 30.3	<i>Per lb.</i> \$.030	<i>Lbs.</i> 33.3	<i>Per lb.</i> \$.087	<i>Lbs.</i> 11.5
1914.....	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915.....	.232	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916.....	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917.....	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918.....	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919.....	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920.....	.416	2.4	.167	6.0	.115	8.7	.081	12.3	.065	15.4	.174	5.7
1921.....	.340	2.9	.146	6.8	.099	10.1	.058	17.2	.045	22.2	.095	10.5
1922: May.....	.308	3.2	.125	8.0	.088	11.4	.053	18.9	.038	26.3	.095	10.5
	Potatoes.		Sugar.		Coffee.		Tea.					
1913.....	<i>Per lb.</i> \$.017	<i>Lbs.</i> 58.8	<i>Per lb.</i> \$.055	<i>Lbs.</i> 18.2	<i>Per lb.</i> \$.298	<i>Lbs.</i> 3.4	<i>Per lb.</i> \$.544	<i>Lbs.</i> 1.8				
1914.....	.018	55.6	.059	16.9	.297	3.4	.546	1.8				
1915.....	.015	66.7	.066	15.2	.300	3.3	.545	1.8				
1916.....	.027	37.0	.080	12.5	.299	3.3	.546	1.8				
1917.....	.043	23.3	.093	10.8	.302	3.3	.582	1.7				
1918.....	.032	31.3	.097	10.3	.305	3.3	.648	1.5				
1919.....	.038	26.3	.113	8.8	.433	2.3	.701	1.4				
1920.....	.063	15.9	.194	5.2	.470	2.1	.733	1.4				
1921.....	.031	32.3	.080	12.5	.363	2.8	.697	1.4				
1922: May.....	.030	33.3	.066	15.2	.359	2.8	.679	1.5				

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 each of 22 food articles,⁴ by years from 1907 to 1921, and by months for 1921 and for January, February, March,

⁴ See note 2, p. 33.

April, and May, 1922.⁵ 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 1920 was 168, which means that the average money price for the year 1920 was 68 per cent higher than the average money price for the year 1913. The relative price of bacon for the year 1919 was 205 and for the year 1920, 194, which figures show a drop of 11 points but a decrease of only 5 per cent in the year.

In the last column of Table 4 are given index numbers showing the changes in the retail cost of all articles of food combined. From January, 1913, to December, 1920, 22 articles have been included in the index, and beginning with January, 1921, 43 articles have been used.⁴ For an explanation of the method used in making the link between the cost of the market basket of 22 articles, weighted according to the average family consumption in 1901, and the cost of the market basket based on 43 articles and weighted according to the consumption in 1918, see MONTHLY LABOR REVIEW for March, 1921 (p. 25).

The curve shown in the chart on page 39 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The retail cost of the food articles included in the index has decreased since July, 1920, until the curve is brought down in May, 1922, to approximately where it was in April, 1917. The chart has been drawn on the logarithmic scale,⁶ because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

⁴ See note 2, p. 33.

⁵ For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19-21.

⁶ For a discussion of the logarithmic chart, see article on "Comparison of arithmetic and ratio charts," by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 20-34. Also, "The 'ratio' charts," by Prof. Irving Fisher, reprinted from Quarterly Publications of the American Statistical Association, June, 1917, 24 pp.

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS, 1907 TO 1921, AND BY MONTHS FOR 1921 AND FOR A PART OF 1922.

[Average for year 1913=100.]

Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast.	Plate beef.	Pork chops.	Ba- con.	Ham.	Lard.	Hens.	Eggs.	But- ter.	Cheese	Milk.	Bread.	Flour.	Corn meal.	Rice.	Pota- toes.	Su- gar.	Cof- fee.	Tea.	All articles com- bined.	
1907.....	71	68	76	.....	.....	74	74	76	81	81	84	85	.....	87	.....	95	88	.....	105	105	.....	.....	82
1908.....	73	71	78	.....	.....	76	77	78	80	83	86	86	.....	90	.....	102	92	.....	111	108	.....	.....	84
1909.....	77	74	81	.....	.....	83	83	82	90	89	93	90	.....	91	.....	109	94	.....	112	107	.....	.....	89
1910.....	80	78	85	.....	.....	92	95	91	104	94	98	94	.....	95	.....	108	95	.....	101	109	.....	.....	93
1911.....	81	79	85	.....	.....	85	91	89	88	91	94	88	.....	96	.....	102	94	.....	130	117	.....	.....	92
1912.....	91	89	94	.....	.....	91	91	91	94	93	99	98	.....	97	.....	105	102	.....	135	115	.....	.....	98
1913.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
1914.....	102	106	103	104	104	105	102	102	99	102	102	94	104	100	113	104	105	101	108	108	100	100	102	
1915.....	101	103	101	101	100	96	100	97	93	97	99	93	105	99	125	126	108	104	89	120	101	100	101	
1916.....	108	110	107	107	106	108	106	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114	
1917.....	124	130	126	131	130	152	152	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	146	
1918.....	153	165	155	166	170	186	196	178	211	177	165	151	162	156	175	203	227	148	188	176	102	119	168	
1919.....	164	174	164	169	167	201	205	199	234	193	182	177	193	174	179	218	213	174	224	205	145	129	186	
1920.....	172	177	168	164	151	201	194	206	187	210	197	183	188	188	205	245	217	200	371	353	158	135	203	
1921: Av. for year..	153	154	147	133	118	166	158	181	114	186	148	135	154	164	177	176	150	109	182	145	122	128	153	
January.....	159	163	157	148	140	171	171	180	141	200	229	159	175	183	193	203	173	176	176	176	129	133	172	
February.....	151	153	148	138	129	156	166	179	131	201	139	148	174	173	189	197	167	121	153	162	126	131	158	
March.....	154	157	142	141	130	168	155	181	124	203	121	150	176	171	188	194	160	113	147	176	125	131	156	
April.....	157	160	154	140	127	177	164	183	116	202	99	145	169	167	184	179	153	106	135	176	123	129	152	
May.....	158	160	153	138	124	167	161	181	106	194	97	111	143	162	177	173	150	101	129	153	121	129	145	
June.....	157	160	151	135	117	162	159	182	103	181	101	105	133	160	175	179	150	101	159	142	120	126	144	
July.....	158	161	148	129	109	163	160	190	106	182	122	122	133	157	173	176	147	100	200	129	120	127	148	
August.....	157	160	147	130	112	181	162	197	115	183	138	134	148	161	173	173	150	101	247	136	119	127	155	
September.....	153	154	144	128	110	179	159	191	113	179	146	132	148	158	171	170	147	103	235	133	119	127	153	
October.....	147	148	139	124	109	171	153	180	109	175	171	139	149	160	170	164	143	107	206	125	119	127	153	
November.....	141	139	135	120	106	152	147	170	105	168	201	139	151	161	166	155	140	108	188	122	119	127	152	
December.....	139	138	135	120	106	145	143	165	101	168	204	136	149	158	163	152	137	107	182	118	119	124	150	
1922:																								
January.....	139	136	135	119	106	138	139	164	97	173	145	118	149	153	157	148	130	107	194	113	120	126	142	
February.....	139	135	134	118	106	140	140	173	101	173	140	120	149	148	154	155	130	107	194	116	119	125	142	
March.....	141	138	136	121	107	149	144	185	109	177	92	120	149	146	155	161	130	107	182	118	119	124	139	
April.....	143	141	138	122	107	157	147	188	107	177	92	118	145	143	155	161	130	108	171	122	120	124	139	
May.....	148	146	141	124	107	164	147	191	108	177	97	117	139	140	157	161	127	109	176	120	120	125	139	

TREND IN THE RETAIL COST OF ALL ARTICLES OF FOOD, COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO MAY, 1922.

[Average cost for 1913=100.]



RETAIL PRICES OF FOOD.

Retail Prices of Food in 51

AVERAGE retail food prices are shown in Table 5 for 39 cities for 1921. For 12 other cities prices are shown for the same dates by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

[The prices shown in this table are computed from reports sent monthly to the bureau by retail dealers.]

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	24.0	36.8	34.4	35.7	23.3	39.2	33.9	36.0	26.8	39.6	33.9	34.8
Round steak.....	do.....	21.0	34.5	31.4	32.1	22.0	36.0	30.9	32.9	22.5	35.4	30.5	30.5
Rib roast.....	do.....	19.1	29.3	27.5	28.1	18.7	31.3	27.2	29.0	19.9	29.9	25.0	25.3
Chuck roast.....	do.....	14.9	20.8	19.4	19.2	15.7	22.5	18.7	18.9	16.8	23.5	19.7	20.0
Plate beef.....	do.....	10.8	13.7	12.1	13.1	12.8	15.9	12.3	12.5	10.5	14.6	12.5	13.0
Pork chops.....	do.....	22.5	33.9	31.5	33.1	18.3	33.3	31.4	34.0	20.8	33.7	30.8	32.0
Bacon, sliced.....	do.....	31.0	43.5	38.4	38.8	23.3	36.4	32.9	33.5	33.1	48.5	41.2	42.0
Ham, sliced.....	do.....	29.0	46.9	48.9	49.7	31.0	52.8	54.4	54.9	30.0	50.6	49.6	50.4
Lamb.....	do.....	20.0	35.7	38.3	40.5	18.0	34.6	39.3	39.2	21.7	36.8	40.0	39.0
Hens.....	do.....	19.6	32.7	31.4	30.6	22.6	44.6	39.5	38.7	18.0	34.5	32.0	30.9
Salmon, canned, red.....	do.....	.....	34.9	30.6	30.6	.....	34.0	27.2	27.1	.....	39.0	31.8	30.9
Milk, fresh.....	Quart.....	10.0	20.0	16.7	15.7	8.8	14.0	12.0	12.0	10.3	20.0	20.0	20.0
Milk, evaporated.....	15-16 oz. can.....	.....	15.1	13.6	13.4	.....	13.8	10.3	10.4	.....	15.6	12.1	12.2
Butter.....	Pound.....	39.3	48.1	48.3	47.5	38.6	49.4	49.7	50.2	41.0	46.7	48.5	47.1
Oleomargarine.....	do.....	.....	37.2	28.9	28.9	.....	30.6	25.0	24.9	.....	36.4	32.6	31.8
Nut margarine.....	do.....	.....	31.0	25.3	25.8	.....	28.7	26.1	25.7	.....	31.5	29.6	27.5
Cheese.....	do.....	25.0	27.9	30.2	29.6	22.0	31.5	32.4	30.7	21.8	29.1	30.0	29.0
Lard.....	do.....	15.5	17.2	18.1	18.1	14.3	14.7	15.6	15.8	15.8	17.1	17.1	17.2
Crisco.....	do.....	.....	20.1	21.4	22.1	.....	18.9	20.2	20.3	.....	25.9	20.7	21.6
Eggs, strictly fresh.....	Dozen.....	22.6	30.6	28.3	32.0	22.4	32.0	20.4	31.0	23.8	30.3	27.9	30.6
Bread.....	Pound.....	6.0	11.1	10.0	10.0	5.4	9.2	8.6	8.6	5.3	9.4	9.2	9.2
Flour.....	do.....	3.7	6.0	5.7	5.8	3.2	5.6	5.1	5.1	3.8	6.5	5.9	5.9
Corn meal.....	do.....	2.5	3.4	2.8	2.8	2.4	3.7	3.1	3.1	2.2	3.2	2.8	2.8
Rolled oats.....	do.....	.....	11.0	9.5	9.8	.....	9.6	8.9	8.4	.....	11.6	9.5	9.8
Corn flakes.....	8-oz. pkg.....	.....	13.4	9.7	9.7	.....	11.8	9.4	9.2	.....	14.1	10.2	9.8
Cream of Wheat.....	28-oz. pkg.....	.....	31.6	27.0	27.2	.....	27.8	24.7	24.6	.....	32.1	27.1	26.8
Macaroni.....	Pound.....	.....	22.6	22.0	21.9	.....	21.1	18.6	18.7	.....	22.0	18.6	18.6
Rice.....	do.....	8.6	7.7	9.1	9.3	9.0	9.3	9.1	9.2	8.2	8.5	8.9	9.0
Beans, navy.....	do.....	.....	9.7	10.4	11.0	.....	7.8	9.0	9.2	.....	9.0	9.8	10.3
Potatoes.....	do.....	2.0	3.2	3.9	4.4	1.9	1.9	2.9	3.4	1.9	3.3	3.9	4.2
Onions.....	do.....	.....	7.3	14.4	10.4	.....	6.3	14.1	10.0	.....	7.6	13.4	10.9
Cabbage.....	do.....	.....	3.8	4.7	4.4	.....	4.7	4.9	4.7	.....	4.8	4.6	5.1
Beans, baked.....	No. 2 can.....	.....	13.8	13.4	13.3	.....	13.0	12.0	11.7	.....	16.2	14.8	14.7
Corn, canned.....	do.....	.....	15.2	15.7	16.2	.....	15.9	14.9	14.3	.....	16.3	16.4	16.6
Peas, canned.....	do.....	.....	18.1	17.0	17.4	.....	16.1	16.4	16.4	.....	21.1	20.2	20.5
Tomatoes, canned.....	do.....	.....	10.3	13.8	14.1	.....	9.6	12.1	11.7	.....	10.2	13.3	13.1
Sugar, granulated.....	Pound.....	5.3	8.6	7.1	7.2	4.5	7.6	5.8	5.8	5.2	8.8	6.7	6.7
Tea.....	do.....	60.0	91.1	88.1	88.2	56.0	67.0	66.6	66.1	61.3	86.2	79.9	79.7
Coffee.....	do.....	32.0	33.0	35.2	35.8	25.2	31.3	31.2	31.0	28.8	39.0	36.2	36.4
Prunes.....	do.....	.....	18.5	20.4	21.1	.....	18.0	18.4	18.6	.....	21.2	21.3	22.0
Raisins.....	do.....	.....	35.0	24.9	25.3	.....	29.1	23.2	22.6	.....	32.5	25.3	25.1
Bananas.....	Dozen.....	.....	30.5	26.7	27.0	.....	30.4	25.0	24.5	.....	40.9	33.5	33.8
Oranges.....	do.....	.....	43.8	60.5	59.5	.....	54.1	61.4	65.4	.....	45.0	53.3	57.3

Cities on Specified Dates.

May 15, 1913, for April 15, 1922, and for May 15, 1922, and May 15, with the exception of May, 1913, as these cities were not scheduled

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES.

As some dealers occasionally fail to report the number of quotations varies from month to month.]

Boston, Mass.				Bridgeport, Conn.				Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
May 15—		Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	
1913	1921						1913	1921						1913	1921			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
137.0	160.2	156.8	158.3	44.6	39.6	41.9	22.3	37.7	33.3	35.5	31.5	30.2	32.0	21.8	39.7	36.8	36.8	
34.0	53.8	46.5	47.6	41.3	34.1	35.9	19.3	32.5	27.2	29.6	27.3	25.5	27.6	20.5	38.8	34.1	35.4	
24.4	37.0	33.9	34.1	34.2	30.9	32.7	17.5	28.9	26.1	26.6	24.7	17.4	17.9	20.8	32.2	30.0	30.0	
17.0	25.0	23.3	23.0	24.1	21.7	22.1	15.3	21.0	18.8	19.2	18.4	12.2	12.9	15.0	25.1	22.6	22.5	
-----	16.7	14.4	14.6	11.5	9.5	9.9	11.8	13.6	11.9	11.7	13.1	31.6	34.8	12.0	18.1	16.1	15.5	
23.4	39.8	37.8	38.4	36.3	34.3	35.8	19.8	36.5	34.3	3.70	34.7	5.04	5.00	22.3	40.2	33.4	33.8	
25.4	39.4	36.0	36.2	47.5	44.1	44.3	22.0	33.5	32.5	32.7	54.3	56.7	55.4	25.5	44.1	35.8	36.0	
31.8	55.0	59.6	59.8	56.3	61.7	62.9	25.7	47.1	50.3	50.2	54.7	31.5	32.7	26.7	47.8	49.7	50.7	
23.5	38.2	41.5	41.9	35.6	38.4	41.1	18.7	29.4	33.5	34.9	30.1	37.3	32.4	21.3	41.5	48.0	45.5	
25.6	47.5	41.4	41.9	45.3	40.7	40.6	22.5	41.9	37.9	38.5	40.7	36.8	35.8	21.4	43.5	38.9	38.2	
-----	36.9	31.1	30.9	39.9	32.8	32.8	-----	34.7	27.7	27.5	42.0	14.0	14.0	-----	34.3	28.5	28.0	
8.9	15.3	13.5	12.9	15.0	12.0	12.0	8.0	14.0	13.8	12.0	14.9	11.9	11.5	11.7	21.0	18.7	18.7	
-----	14.8	11.5	11.5	14.5	11.3	10.9	-----	13.5	10.2	10.1	15.3	43.1	44.3	-----	13.3	10.9	10.7	
36.0	45.4	45.9	46.3	44.5	45.0	45.7	34.1	41.1	44.7	44.1	35.7	27.5	30.0	36.2	45.1	45.3	45.1	
-----	33.5	30.3	29.6	30.7	24.3	25.5	-----	31.0	27.1	27.1	32.5	28.0	30.0	-----	30.6	27.6	26.6	
22.1	30.0	26.8	26.7	28.1	24.3	24.0	-----	27.8	26.4	26.1	30.4	35.6	34.9	-----	30.0	34.0	28.0	
16.0	34.6	34.6	33.9	35.1	33.1	32.1	19.0	31.3	31.4	29.4	37.2	20.8	20.9	20.3	28.4	28.7	27.3	
-----	17.0	17.1	17.5	15.5	16.2	16.1	14.3	14.9	15.8	15.5	22.3	25.0	25.1	15.0	18.9	18.6	18.3	
-----	21.6	22.3	22.3	20.0	21.0	21.1	-----	19.6	20.0	19.6	27.9	36.7	34.4	-----	20.0	21.7	22.0	
32.1	51.1	44.0	44.6	45.6	39.5	42.4	25.4	35.5	32.7	33.8	38.3	-----	-----	25.4	31.8	30.4	32.5	
5.9	9.9	8.5	8.5	11.0	8.4	8.4	5.6	8.5	8.6	8.6	3.6	9.6	9.8	6.0	11.4	9.5	9.5	
3.7	6.4	6.0	6.1	5.7	5.3	5.3	3.0	5.0	4.9	5.0	6.3	5.8	5.9	3.7	6.6	6.1	6.1	
3.6	5.9	4.8	4.4	8.6	6.9	7.1	2.5	4.4	3.6	3.7	5.0	4.0	4.0	2.3	3.1	2.9	3.0	
-----	9.0	8.4	8.2	9.9	8.4	8.3	-----	7.6	7.5	7.4	8.6	7.0	6.9	-----	11.0	9.6	9.8	
-----	12.8	10.6	10.4	11.4	9.5	9.5	-----	11.2	9.4	9.3	14.5	12.0	12.1	-----	12.9	10.6	10.5	
-----	29.4	26.2	26.0	28.8	25.2	25.3	-----	28.1	24.9	24.9	33.4	29.6	29.3	-----	30.2	24.9	25.0	
-----	24.4	24.0	23.9	24.8	24.5	24.5	-----	22.0	22.3	22.3	22.0	22.9	22.6	-----	20.7	20.2	19.8	
9.2	10.8	10.3	10.3	9.4	9.8	9.8	9.3	8.4	9.1	9.3	10.1	9.5	9.6	5.5	6.0	6.7	6.7	
-----	8.0	9.1	9.3	8.8	9.4	10.1	-----	7.8	8.8	8.9	9.1	9.3	9.3	-----	10.0	9.8	10.1	
1.8	1.7	2.6	2.3	1.8	2.9	2.7	1.4	1.2	2.5	2.4	1.3	1.6	1.5	2.0	2.8	3.6	3.5	
-----	5.8	14.5	10.2	5.8	15.1	8.9	-----	5.4	14.2	9.4	3.2	14.1	12.9	-----	5.3	14.7	9.3	
-----	7.0	6.3	7.2	5.8	6.5	6.6	-----	5.4	5.6	5.6	6.6	5.6	6.3	-----	2.6	3.8	3.2	
-----	16.9	14.4	14.5	13.1	11.9	11.5	-----	11.9	11.0	10.8	20.8	19.3	19.3	-----	12.2	11.3	11.3	
-----	19.6	18.4	18.6	19.8	18.4	18.4	-----	15.9	14.8	14.5	17.5	17.4	17.3	-----	15.0	14.7	14.7	
-----	20.5	21.2	21.4	20.2	19.9	19.9	-----	15.7	16.8	16.7	17.8	16.6	16.8	-----	18.7	19.7	20.0	
-----	12.1	14.3	14.0	11.7	13.3	13.4	-----	11.6	13.5	13.7	13.2	16.4	16.4	-----	10.2	11.9	12.0	
5.2	7.9	6.4	6.4	7.8	6.1	6.1	5.3	7.7	6.3	6.3	10.4	8.6	8.6	5.0	7.6	6.0	6.0	
58.6	66.3	67.5	67.3	58.6	57.0	56.4	45.0	64.1	58.4	58.4	75.4	79.2	78.8	50.0	75.2	74.6	73.3	
33.0	41.7	41.0	41.0	34.8	34.4	34.6	29.3	33.5	33.2	33.8	48.6	44.5	45.2	26.0	33.1	31.8	32.3	
-----	18.5	20.3	20.4	17.8	19.4	20.0	-----	17.8	20.0	19.4	19.8	21.1	20.7	-----	17.9	19.7	20.0	
-----	31.4	22.8	21.6	31.6	24.1	24.2	-----	30.2	21.6	20.9	32.2	27.7	27.7	-----	31.0	24.9	24.9	
-----	48.0	44.5	45.3	39.4	35.6	35.9	-----	48.9	43.9	43.1	43.1	17.1 ²	14.8 ²	-----	45.5	33.5	33.0	
-----	49.5	68.0	69.8	47.4	64.7	64.9	-----	52.8	65.4	66.6	39.9	60.0	57.9	-----	44.6	54.2	58.8	

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.
² Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.
		1913	1921			1913	1921			1913	1921		
Sirloin steak.....	Pound.....	Cts. 22.6	Cts. 38.1	Cts. 35.4	Cts. 36.7	Cts. 23.9	Cts. 35.5	Cts. 32.5	Cts. 33.6	Cts. 25.2	Cts. 38.0	Cts. 32.0	Cts. 35.0
Round steak.....	do.....	19.1	31.0	27.9	28.4	21.0	33.0	29.1	30.1	22.0	33.0	26.3	28.9
Rib roast.....	do.....	19.1	30.4	28.4	29.0	19.3	30.1	27.0	27.7	20.0	27.4	24.0	24.7
Chuck roast.....	do.....	15.2	21.1	18.5	19.0	15.6	20.7	17.5	17.9	17.2	21.7	18.3	19.1
Plate beef.....	do.....	11.3	13.8	11.6	11.6	12.4	16.9	13.6	13.4	12.1	13.5	11.3	11.4
Pork chops.....	do.....	18.0	31.1	30.8	32.4	19.5	33.7	34.1	35.2	21.0	34.5	32.8	34.6
Bacon, sliced.....	do.....	31.4	52.3	46.6	46.4	25.7	37.6	31.0	32.3	27.1	43.1	37.9	38.5
Ham, sliced.....	do.....	32.5	50.9	50.9	50.9	28.5	51.1	52.0	53.7	36.0	52.2	49.9	51.0
Lamb.....	do.....	20.3	34.4	38.6	39.1	16.8	36.4	36.9	38.8	21.0	32.8	36.2	36.4
Hens.....	do.....	21.2	39.6	36.5	35.2	24.6	44.5	38.2	38.1	22.9	41.8	39.5	37.7
Salmon, canned, red.....	do.....	.....	37.1	33.3	32.7	.....	35.3	27.8	28.1	.....	38.0	30.7	30.7
Milk, fresh.....	Quart.....	8.0	14.0	12.0	12.0	8.0	13.0	12.0	12.0	8.0	14.0	11.0	11.0
Milk, evaporated.....	15-16-oz. can.....	.....	13.8	10.1	10.0	.....	13.9	10.3	10.3	.....	14.2	10.3	10.4
Butter.....	Pound.....	32.5	37.6	41.8	41.1	35.9	39.8	43.5	42.0	36.8	40.7	47.4	46.0
Oleomargarine.....	do.....	.....	25.2	23.3	23.1	.....	29.9	28.1	28.1	.....	29.9	28.3	27.8
Nut margarine.....	do.....	.....	23.7	22.7	22.5	.....	27.9	26.9	26.5	.....	28.3	25.6	25.9
Cheese.....	do.....	25.3	35.8	33.7	32.9	21.0	34.0	32.8	31.7	23.0	29.3	32.2	29.4
Lard.....	do.....	14.7	15.9	16.1	16.3	14.1	13.6	14.4	14.7	16.5	17.7	17.5	17.4
Crisco.....	do.....	.....	21.3	21.7	21.9	.....	20.9	20.8	20.8	.....	21.0	21.8	21.6
Eggs, strictly fresh.....	Dozen.....	23.7	32.4	31.6	34.0	22.0	27.9	28.2	29.8	25.6	33.1	31.8	33.7
Bread.....	Pound.....	6.1	9.9	9.7	9.7	4.8	10.0	8.5	8.4	5.5	8.7	7.9	7.9
Flour.....	do.....	2.8	5.3	4.9	4.9	3.3	5.9	5.3	5.3	3.2	5.8	5.3	5.3
Corn meal.....	do.....	2.9	6.1	5.1	5.0	2.6	3.6	2.9	2.8	2.7	4.7	3.4	3.4
Rolled oats.....	do.....	.....	9.5	8.1	8.0	.....	10.0	8.5	8.3	.....	10.1	8.1	8.7
Corn flakes.....	8-oz. pkg.....	11.9	9.6	9.5	.....	11.9	9.6	9.6	.....	13.0	10.5	10.6	.....
Cream of Wheat.....	28-oz. pkg.....	28.3	24.9	24.7	.....	29.7	25.1	24.6	.....	28.3	25.5	25.6	.....
Macaroni.....	Pound.....	19.4	18.4	18.3	.....	19.1	17.3	17.0	.....	21.0	20.3	20.5	.....
Rice.....	do.....	8.7	8.8	9.8	9.9	8.8	8.7	8.8	9.5	8.5	8.0	9.4	8.9
Beans, navy.....	do.....	.....	7.5	9.2	9.4	.....	6.5	8.6	9.0	.....	6.8	9.1	9.4
Potatoes.....	do.....	1.3	1.8	2.7	2.8	1.6	2.5	3.2	3.6	1.5	1.9	3.1	3.1
Onions.....	do.....	.....	5.1	12.5	8.5	.....	5.7	13.2	8.9	.....	6.6	12.6	9.7
Cabbage.....	do.....	.....	5.7	4.6	5.4	.....	5.3	4.9	5.3	.....	6.1	5.8	6.0
Beans, baked.....	No. 2 can.....	14.9	12.6	12.6	.....	13.3	11.2	11.1	.....	13.8	12.0	11.9	.....
Corn, canned.....	do.....	15.0	14.3	14.1	.....	15.3	15.0	14.6	.....	17.4	16.6	15.8	.....
Peas, canned.....	do.....	15.3	15.6	15.6	.....	17.2	17.1	17.0	.....	17.5	17.9	17.5	.....
Tomatoes.....	do.....	.....	11.8	14.3	14.1	.....	11.2	13.4	13.8	.....	12.2	13.9	13.9
Sugar, granulated.....	Pound.....	4.9	8.0	6.2	6.2	5.0	8.2	6.6	6.6	5.1	8.3	6.7	6.7
Tea.....	do.....	53.3	65.7	62.0	62.0	60.0	72.0	69.1	69.1	50.0	68.9	63.9	65.2
Coffee.....	do.....	30.7	32.6	34.4	34.2	25.6	32.1	30.8	31.2	26.5	37.7	35.8	35.8
Prunes.....	do.....	.....	19.4	20.9	20.8	.....	22.3	20.0	20.1	.....	17.7	18.3	19.5
Raisins.....	do.....	.....	30.5	25.3	24.7	.....	31.2	22.5	22.1	.....	30.0	22.9	22.3
Bananas.....	Dozen.....	.....	39.7	35.8	35.3	.....	41.4	37.5	37.0	.....	51.6	45.4	43.7
Oranges.....	do.....	.....	42.6	58.0	58.6	.....	45.1	58.9	64.2	.....	49.9	61.0	61.2

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.
					1913	1921			1913	1921		
Sirloin steak.....	Pound.....	Cts. 34.2	Cts. 32.5	Cts. 32.5	Cts. 24.7	Cts. 36.5	Cts. 34.1	Cts. 35.0	Cts. 26.0	Cts. 37.9	Cts. 35.8	Cts. 36.7
Round steak.....	do.....	34.2	31.3	31.6	23.3	35.1	31.7	33.2	22.0	33.6	30.1	31.3
Rib roast.....	do.....	28.8	25.9	26.1	17.9	27.0	25.8	26.1	23.3	29.2	26.1	27.3
Chuck roast.....	do.....	24.2	21.1	21.6	16.1	22.9	20.8	21.0	14.0	21.5	17.4	18.5
Plate beef.....	do.....	18.9	17.0	16.7	12.1	15.3	14.5	14.0	10.3	13.0	10.6	10.2
Pork chops.....	do.....	34.5	29.6	29.4	21.7	32.6	32.1	33.2	21.3	35.3	32.1	34.2
Bacon, sliced.....	do.....	53.4	50.5	50.2	29.0	41.9	38.4	38.5	26.3	41.6	36.5	36.0
Ham, sliced.....	do.....	51.5	51.4	51.4	30.3	52.3	54.6	55.4	28.3	49.8	50.0	50.0
Lamb.....	do.....	37.0	37.5	37.5	20.7	34.3	39.3	41.4	19.3	32.5	40.8	39.2
Hens.....	do.....	31.8	32.3	31.1	22.0	37.6	34.2	35.4	22.0	35.7	34.8	34.6
Salmon, canned, red.....	do.....	37.2	32.4	31.8	.....	42.7	39.7	39.0	.....	37.5	30.7	31.0
Milk, fresh.....	Quart.....	16.0	14.8	14.8	8.0	12.0	10.3	10.0	12.5	21.0	15.0	14.7
Milk, evaporated.....	15-16-oz. can.....	14.8	11.7	11.5	.....	14.3	10.0	10.1	.....	14.4	11.3	11.4
Butter.....	Pound.....	37.5	45.5	43.8	34.7	38.9	43.3	42.1	39.2	43.8	47.3	46.1
Oleomargarine.....	do.....	33.1	30.3	31.6	.....	29.2	27.3	27.1	.....	31.5	28.5	26.8
Nut margarine.....	do.....	28.9	28.4	28.6	.....	27.3	26.3	26.2	.....	30.7	27.0	27.0
Cheese.....	do.....	26.4	28.2	27.7	20.8	30.3	31.5	30.9	22.5	25.9	29.8	27.8
Lard.....	do.....	19.4	18.5	18.1	15.2	14.1	14.4	14.5	15.5	13.8	17.6	17.3
Crisco.....	do.....	21.4	24.1	24.4	.....	21.8	21.8	21.7	.....	20.8	22.6	22.5
Eggs, strictly fresh.....	Dozen.....	24.2	25.0	28.1	21.8	25.8	26.6	28.5	28.8	31.5	32.4	33.7
Bread.....	Pound.....	8.9	7.0	7.0	5.1	9.2	8.1	8.1	6.5	10.4	10.4	10.7
Flour.....	do.....	6.1	5.4	5.4	3.2	5.6	4.9	5.0	3.8	6.5	6.1	6.1
Corn meal.....	do.....	4.0	3.4	3.6	2.5	3.3	3.0	2.9	2.9	3.5	3.0	3.0
Rollod oats.....	do.....	10.7	9.0	8.8	.....	9.7	7.9	8.1	.....	11.3	10.1	9.7
Corn flakes.....	8-oz. pkg.....	13.4	10.2	10.1	.....	12.1	9.7	9.6	.....	13.9	9.8	10.0
Cream of Wheat.....	28-oz. pkg.....	29.8	24.7	24.8	.....	31.8	26.2	26.3	.....	30.6	27.4	27.4
Macaroni.....	Pound.....	20.6	20.4	20.3	.....	20.7	18.8	19.1	.....	22.0	19.6	19.1
Rice.....	do.....	6.6	8.0	8.1	9.2	9.2	9.9	10.0	6.6	7.3	9.1	8.9
Beans, navy.....	do.....	8.8	9.8	9.8	.....	6.9	9.8	10.3	.....	9.2	10.0	10.5
Potatoes.....	do.....	3.9	3.6	4.3	1.3	1.7	2.5	2.7	2.3	3.2	4.1	4.0
Onions.....	do.....	4.6	10.9	8.9	.....	6.0	13.2	9.4	.....	4.8	11.9	9.9
Cabbage.....	do.....	3.6	4.1	4.4	.....	6.1	5.0	5.7	.....	3.4	3.7	3.9
Beans, baked.....	No. 2 can.....	13.4	13.6	13.7	.....	13.9	12.9	13.0	.....	13.7	12.3	11.7
Corn, canned.....	do.....	12.8	13.9	14.0	.....	13.5	14.4	14.3	.....	15.8	17.0	15.5
Peas, canned.....	do.....	17.6	18.9	19.0	.....	14.4	15.5	15.3	.....	19.3	18.6	19.0
Tomatoes, canned.....	do.....	10.6	13.7	13.9	.....	11.7	14.2	14.7	.....	10.4	13.7	12.8
Sugar, granulated.....	Pound.....	8.3	6.3	6.5	5.6	8.6	7.0	7.0	5.9	8.4	6.8	7.0
Tea.....	do.....	71.0	71.9	73.9	60.0	80.8	74.2	74.2	60.0	86.7	85.2	86.5
Coffee.....	do.....	30.8	31.3	30.8	30.8	39.0	36.4	36.6	34.5	37.9	37.7	38.2
Prunes.....	do.....	18.3	22.8	23.5	.....	19.3	20.4	21.2	.....	17.1	19.5	20.3
Raisins.....	do.....	32.2	24.8	24.3	.....	34.1	26.2	25.8	.....	33.1	25.2	24.7
Bananas.....	Dozen.....	32.8	28.3	29.6	.....	29.3	29.3	30.3	.....	33.1	27.0	26.5
Oranges.....	do.....	45.2	56.6	56.4	.....	47.4	59.9	60.2	.....	46.4	52.5	54.0

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	23.2	32.7	29.8	31.7	22.0	37.2	34.3	36.0	22.2	32.7	28.8	31.3
Round steak	do.	19.3	29.8	25.5	27.9	20.5	33.2	30.0	31.7	20.0	28.9	25.4	27.6
Rib roast	do.	21.1	26.5	22.8	23.0	18.5	28.7	26.2	26.7	19.0	25.8	23.3	24.3
Chuck roast	do.	15.5	18.6	16.6	16.6	16.5	22.8	20.9	20.8	15.5	20.0	18.0	18.8
Plate beef	do.	12.2	14.5	12.5	12.2	11.5	14.6	12.8	12.1	10.3	10.8	9.8	9.0
Pork chops	do.	20.4	30.2	28.9	30.5	19.5	30.3	32.0	33.8	18.4	30.6	30.4	33.1
Bacon, sliced	do.	30.0	42.7	36.3	38.0	26.8	44.8	41.7	42.5	25.0	46.1	42.0	42.7
Ham, sliced	do.	29.3	47.9	49.3	51.0	27.3	47.1	48.3	49.8	27.5	48.2	51.0	52.7
Lamb	do.	20.8	32.8	39.3	38.6	20.0	36.1	40.2	41.0	17.0	31.8	35.1	36.7
Hens	do.	20.0	33.1	31.2	31.1	22.0	39.4	38.3	36.6	21.2	32.8	34.3	33.7
Salmon, canned, red	do.	40.0	39.3	38.4	44.9	32.5	32.1	43.6	38.8	38.9	38.9	38.9	
Milk, fresh	Quart.	10.0	17.3	15.0	15.0	7.0	9.0	9.0	7.0	11.0	10.0	10.0	
Milk, evaporated	15-16-oz. can.	15.6	11.9	12.0	14.8	10.6	10.5	14.6	11.6	11.5	14.6	11.6	
Butter	Pound	38.6	39.8	44.6	41.6	33.5	37.6	41.9	41.5	33.4	37.2	41.2	40.3
Oleomargarine	do.	28.3	28.8	30.6	27.1	24.6	24.4	30.6	26.3	26.1	26.3	26.1	
Nut margarine	do.	27.9	27.4	28.0	26.0	24.3	23.9	25.9	24.8	24.5	25.9	24.8	24.5
Cheese	do.	21.3	25.9	26.5	26.5	21.3	25.6	28.8	27.5	19.8	28.6	30.4	29.3
Lard	do.	15.5	15.0	15.8	16.2	15.5	17.3	17.4	17.2	15.4	15.5	16.3	16.4
Crisco	do.	20.8	21.5	22.2	22.4	21.2	21.7	21.5	22.9	23.1	21.5	22.9	23.1
Eggs, strictly fresh	Dozen	22.9	27.6	27.7	30.0	21.3	27.7	28.0	29.3	21.4	26.5	28.1	28.7
Bread	Pound	6.0	10.1	9.2	9.2	5.6	9.4	8.4	9.1	5.6	9.6	8.8	8.9
Flour	do.	3.6	6.2	5.6	5.6	3.1	5.4	4.9	5.0	2.9	5.5	5.3	5.3
Corn meal	do.	2.0	2.7	2.8	2.7	3.0	5.1	3.8	3.7	2.4	4.6	3.8	3.9
Rolled oats	do.	10.9	9.5	9.5	7.0	7.1	6.9	8.0	7.7	7.7	8.0	7.7	7.7
Corn flakes	8-oz. pkg.	12.4	10.3	10.1	12.2	9.4	9.4	12.8	10.2	10.2	12.8	10.2	10.2
Cream of Wheat	20-oz. pkg.	29.3	26.7	26.7	29.6	25.2	25.0	30.2	25.3	25.6	30.2	25.3	25.6
Macaroni	Pound	17.9	17.1	17.3	20.2	17.0	17.1	17.4	17.6	17.5	17.4	17.6	17.5
Rice	do.	7.5	6.3	7.9	8.3	9.0	9.9	9.7	10.0	9.1	8.6	9.2	9.3
Beans, navy	do.	7.2	9.3	10.6	7.3	9.2	9.6	8.2	9.5	9.6	8.2	9.5	9.6
Potatoes	do.	1.6	2.4	2.9	3.5	1.1	1.5	2.3	2.4	1.1	1.7	2.6	2.6
Onions	do.	5.2	13.0	8.1	5.3	14.7	9.4	6.1	13.3	11.1	6.1	13.3	11.1
Cabbage	do.	4.3	3.4	4.3	6.4	5.1	5.8	6.1	5.3	5.8	6.1	5.3	5.8
Beans, baked	No. 2 can.	14.6	13.2	13.3	13.2	11.1	11.1	16.6	14.1	14.0	16.6	14.1	14.0
Corn, canned	do.	14.3	14.6	14.6	15.0	14.8	14.6	13.9	13.7	13.3	13.9	13.7	13.3
Peas, canned	do.	16.7	17.8	18.7	15.3	15.5	15.5	14.6	15.9	15.6	14.6	15.9	15.6
Tomatoes, canned	do.	10.7	13.1	13.7	12.8	14.6	14.7	14.2	14.8	14.9	14.2	14.8	14.9
Sugar, granulated	Pound	5.2	8.6	7.0	6.8	5.3	7.9	6.4	6.4	5.5	8.7	6.7	6.8
Tea	do.	63.8	88.4	88.0	87.1	50.0	70.2	68.0	69.1	45.0	65.3	63.0	62.9
Coffee	do.	27.5	36.3	37.7	27.5	32.1	32.3	32.4	30.8	38.7	39.9	40.1	40.1
Prunes	do.	20.5	20.4	20.9	20.1	20.8	20.9	19.8	20.9	21.5	19.8	20.9	21.5
Raisins	do.	34.1	25.6	26.4	30.4	24.9	24.7	30.1	25.0	25.1	30.1	25.0	25.1
Bananas	Dozen	37.3	32.3	34.4	31.8	9.5	9.6	13.8	10.9	10.6	13.8	10.9	10.6
Oranges	do.	47.6	63.1	63.2	45.9	58.2	63.0	49.2	65.2	64.7	49.2	65.2	64.7

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.	May 15, 1922.
					1913	1921					
Sirloin steak.....	Pound.....	<i>Cts.</i> 43.2	<i>Cts.</i> 35.4	<i>Cts.</i> 38.1	<i>Cts.</i> 25.1	<i>Cts.</i> 36.5	<i>Cts.</i> 34.0	<i>Cts.</i> 33.0	<i>Cts.</i> 34.2	<i>Cts.</i> 32.0	<i>Cts.</i> 33.0
Round steak.....	do.....	37.0	30.1	31.3	22.0	32.8	29.7	30.5	32.7	30.7	32.0
Rib roast.....	do.....	34.7	29.8	30.5	18.1	26.6	24.8	24.6	25.5	23.7	24.0
Chuck roast.....	do.....	22.8	18.8	18.5	15.6	20.2	19.0	18.8	22.0	20.0	20.2
Plate beef.....	do.....	15.9	13.3	13.3	10.4	11.9	11.0	10.5	14.2	12.8	12.5
Pork chops.....	do.....	33.9	29.9	31.8	19.0	31.9	31.5	31.8	31.0	31.3	31.2
Bacon, sliced.....	do.....	42.8	35.4	35.1	28.0	50.6	46.1	46.3	45.3	41.3	42.0
Ham, sliced.....	do.....	43.5	43.0	43.7	29.0	52.6	55.4	55.0	49.7	52.0	51.7
Lamb.....	do.....	38.5	41.9	40.6	18.8	32.8	39.6	40.0	33.8	39.0	36.5
Hens.....	do.....	43.2	36.5	37.1	19.5	35.2	33.7	31.6	36.1	33.0	34.2
Salmon, canned, red.....	do.....	33.5	29.1	29.8	.....	37.9	33.2	33.2	35.9	33.1	33.1
Milk, fresh.....	Quart.....	20.0	17.0	17.0	7.9	12.0	11.0	11.0	13.3	10.8	10.4
Milk, evaporated.....	15-16-oz. can.....	14.8	10.4	10.3	.....	14.8	10.8	10.8	14.7	11.0	11.0
Butter.....	Pound.....	49.6	47.0	47.8	35.0	39.0	41.5	41.6	39.5	41.5	41.6
Oleomargarine.....	do.....	29.0	26.8	27.0	.....	32.0	29.1	29.8	30.4	27.3	27.4
Nut margarine.....	do.....	28.5	27.9	27.5	.....	28.9	28.1	27.9	28.8	27.1	27.0
Cheese.....	do.....	28.6	28.4	26.8	22.5	30.3	31.1	29.9	29.8	31.7	30.2
Lard.....	do.....	17.0	16.5	16.7	17.8	18.6	19.6	19.6	16.9	16.3	16.6
Crisco.....	do.....	20.2	21.1	21.3	.....	23.4	23.8	24.3	23.2	22.5	22.7
Eggs, strictly fresh.....	Dozen.....	33.4	29.4	32.9	22.3	26.6	27.0	28.6	26.9	25.0	28.5
Bread.....	Pound.....	9.7	8.0	7.9	5.2	11.1	9.8	9.8	10.8	9.0	8.9
Flour.....	do.....	5.9	5.3	5.2	2.8	4.9	4.5	4.7	5.8	5.3	5.3
Corn meal.....	do.....	3.7	3.2	3.2	2.3	4.4	3.5	3.5	4.3	3.6	3.5
Rolled oats.....	do.....	9.9	7.9	7.9	.....	11.2	10.2	10.1	11.1	8.8	8.8
Corn flakes.....	8-oz. pkg.....	12.3	9.7	9.4	.....	14.5	10.9	10.6	13.8	10.4	10.0
Cream of Wheat.....	28-oz. pkg.....	28.9	25.7	24.8	.....	31.0	25.4	26.1	30.4	27.3	27.3
Macaroni.....	Pound.....	20.2	19.8	19.8	.....	20.0	20.2	20.4	20.1	19.9	20.0
Rice.....	do.....	10.0	9.8	9.8	8.5	8.0	9.0	9.0	8.9	10.0	10.0
Beans, navy.....	do.....	8.0	9.4	9.8	.....	7.6	9.5	10.2	7.2	9.7	10.0
Potatoes.....	do.....	2.3	3.3	3.6	1.3	2.2	2.6	2.9	1.8	2.6	2.7
Onions.....	do.....	7.5	14.4	10.2	.....	5.8	14.6	9.8	6.6	13.8	10.9
Cabbage.....	do.....	4.3	5.1	4.1	.....	5.4	4.9	5.5	6.7	5.2	7.0
Beans, baked.....	No. 2 can.....	11.6	10.4	10.3	.....	17.5	14.6	14.9	15.0	12.9	13.1
Corn, canned.....	do.....	16.6	14.9	14.5	.....	14.4	15.7	15.7	15.2	14.7	14.5
Peas, canned.....	do.....	21.5	20.4	19.7	.....	15.1	16.3	16.6	17.0	16.8	16.8
Tomatoes, canned.....	do.....	10.8	12.9	12.9	.....	11.7	14.4	14.7	12.0	15.0	15.3
Sugar, granulated.....	Pound.....	8.1	6.2	6.4	5.7	8.9	7.0	7.0	9.1	7.2	7.2
Tea.....	do.....	83.2	75.1	73.8	56.0	74.9	69.9	70.3	63.9	61.0	61.7
Coffee.....	do.....	41.6	37.1	36.8	30.0	33.1	37.5	38.5	33.9	33.9	34.5
Prunes.....	do.....	16.7	19.4	19.5	.....	19.6	20.4	20.8	23.5	23.1	22.4
Raisins.....	do.....	30.9	24.5	23.6	.....	33.2	27.6	27.4	32.0	27.0	26.5
Bananas.....	Dozen.....	38.2	35.5	34.1	.....	41.6	40.0	40.0	41.2	40.4	40.5
Oranges.....	do.....	46.7	61.4	61.2	.....	40.5	56.1	56.1	43.6	57.3	61.1

¹The 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.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Richmond, Va.				Rochester, N. Y.			St. Louis, Mo.			
		May 15—		Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.
		1913	1921						1913	1921		
				Cts.	Cts.	Cts.	Cts.	Cts.			Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	21.8	41.3	38.1	39.2	39.6	35.0	35.9	23.3	35.6	32.5	33.0
Round steak.....	do.....	19.6	37.2	33.0	34.0	34.1	29.3	30.9	21.1	33.4	29.5	30.2
Rib roast.....	do.....	18.9	32.1	29.8	30.3	29.2	26.1	26.6	18.0	29.9	26.4	26.5
Chuck roast.....	do.....	15.3	24.8	21.1	23.3	23.8	21.0	21.4	13.7	20.3	18.3	18.9
Plate beef.....	do.....	12.4	19.1	15.9	17.2	13.7	11.5	11.6	11.0	14.9	13.1	12.8
Pork chops.....	do.....	20.8	36.2	30.9	34.4	37.5	35.1	36.7	19.5	31.4	29.8	30.5
Bacon.....	do.....	25.0	38.5	33.9	35.0	35.3	31.9	31.5	25.3	39.4	37.8	39.6
Ham.....	do.....	25.7	43.9	44.8	44.8	48.2	49.9	50.4	26.7	47.4	49.1	49.4
Lamb.....	do.....	19.7	42.0	43.1	47.9	35.0	39.3	39.2	19.0	32.9	41.4	38.8
Hens.....	do.....	21.0	42.5	36.5	36.6	47.2	42.9	42.1	18.5	35.5	35.3	33.7
Salmon, canned, red.....	do.....	16.3 ¹	14.9 ¹	14.5	14.5	36.6	29.9	29.9	35.7	33.2	32.8	
Milk, fresh.....	Quart.....	10.0	14.0	13.0	13.0	12.5	12.0	11.0	8.0	14.0	10.0	10.0
Milk, evaporated.....	15-16-oz. can.....	15.1	12.3	12.2	14.8	11.3	11.3		13.4	9.9	9.8	
Butter.....	Pound.....	39.0	52.0	52.9	52.9	42.8	45.3	45.6	33.3	41.5	46.5	45.2
Oleomargarine.....	do.....	33.5	30.9	30.1	31.0	48.4	28.5	28.5		29.4	26.2	
Nut margarine.....	do.....	30.3	27.7	27.9	27.9	26.6	26.5		26.3	25.1	25.2	
Cheese.....	do.....	22.3	31.9	31.4	31.0	32.4	32.5	32.4	19.2	27.6	29.2	26.7
Lard.....	do.....	15.0	17.4	17.7	17.7	16.7	16.8	16.7	13.7	12.0	12.9	13.1
Crisco.....	do.....	22.1	22.0	21.7	20.0	21.0	21.0		21.5	20.6	20.8	
Eggs, strictly fresh.....	Dozen.....	24.0	33.0	29.5	33.7	34.1	32.3	34.1	20.0	26.8	27.9	29.4
Bread.....	Pound.....	5.3	10.7	9.1	9.1	8.6	8.1	8.1	5.5	10.6	9.3	9.4
Flour.....	do.....	3.3	5.8	5.4	5.4	5.6	5.2	5.3	3.0	5.1	4.7	4.8
Corn meal.....	do.....	2.0	4.2	4.1	4.1	5.4	4.9	4.9	2.1	3.4	2.7	2.9
Rollod oats.....	do.....	11.0	10.2	10.1	8.1	7.3	7.4			9.7	8.1	8.0
Corn flakes.....	8-oz. pkg.....	12.9	10.3	10.0	12.7	9.8	9.8			10.7	9.3	9.3
Cream of Wheat.....	28-oz. pkg.....	30.7	27.9	27.1	28.8	25.0	25.0			30.4	25.0	24.9
Macaroni.....	Pound.....	21.0	21.5	21.7	20.8	18.9	19.0			21.2	20.8	20.8
Rice.....	do.....	9.8	10.5	11.0	11.8	8.7	9.3	9.5	8.3	7.9	8.9	8.9
Beans, navy.....	do.....		8.8	9.8	10.1	8.0	9.0	9.5		6.7	9.1	9.6
Potatoes.....	do.....	1.7	2.2	3.8	4.1	1.1	2.4	2.3	1.3	2.2	2.9	3.2
Onions.....	do.....	5.3	13.5	11.7	6.0	13.7	10.3			5.5	12.4	7.8
Cabbage.....	do.....	4.8	5.8	5.7	5.7	5.9	6.1			5.3	4.3	4.9
Beans, baked.....	No. 2 can.....	12.0	12.0	11.9	12.0	11.3	11.3			12.1	11.0	11.0
Corn, canned.....	do.....	15.1	15.3	15.5	16.1	15.5	15.2			14.9	15.2	14.9
Peas, canned.....	do.....	20.0	19.6	19.8	18.6	19.1	18.9			15.7	16.2	16.6
Tomatoes, canned.....	do.....	12.1	13.1	12.8	12.6	13.4	13.4			10.7	13.8	13.9
Sugar, granulated.....	Pound.....	5.0	8.6	6.7	6.7	7.7	6.3	6.3	5.2	8.0	6.5	6.5
Tea.....	do.....	56.0	84.0	79.1	80.7	60.6	60.6	60.3	55.0	69.7	70.1	68.1
Coffee.....	do.....	26.8	36.7	35.4	36.0	33.0	33.1	32.9	24.3	32.9	34.2	34.5
Prunes.....	do.....	21.8	21.6	22.1	21.0	19.7	19.7			19.2	20.0	20.9
Raisons.....	do.....	32.0	23.9	23.6	30.3	24.1	24.7			30.4	25.1	24.9
Bananas.....	Dozen.....	40.6	37.8	37.1	45.3	42.0	42.3			33.7	32.5	31.7
Oranges.....	do.....	44.1	63.5	64.2	46.9	58.8	57.5			43.6	56.3	56.8

¹ Pink.² No. 2½ can.³ Per pound.

RETAIL PRICES OF FOOD.

51

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

St. Paul, Minn.			Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.
			1913	1921			1913	1921						1913	1921		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
35.8	31.3	34.8	22.5	30.5	28.6	28.5	20.3	31.0	31.2	30.9	35.8	30.0	30.9	24.3	49.4	45.5	47.3
29.9	26.3	28.8	20.0	27.9	24.3	24.8	19.0	28.9	28.1	28.0	30.8	26.4	27.1	21.0	40.3	35.7	37.3
29.3	26.1	27.3	19.6	25.0	21.3	21.7	20.7	29.0	29.1	28.5	27.1	25.0	25.0	22.3	35.9	34.3	34.9
22.3	19.6	20.9	13.7	19.7	16.9	17.4	14.6	18.8	19.6	19.1	18.8	17.0	18.0	17.0	26.5	24.3	24.7
12.8	10.1	10.7	11.7	13.5	12.6	12.6	13.3	15.2	14.9	14.4	16.1	15.0	15.4	12.1	13.1	11.3	10.9
30.4	30.4	33.8	23.1	34.5	32.2	32.3	24.0	38.9	39.1	38.7	35.0	29.1	31.1	20.5	39.9	35.6	37.5
43.9	40.6	41.1	30.8	45.4	40.0	39.7	32.8	56.4	54.4	52.5	40.8	35.5	35.5	27.3	42.2	43.3	42.0
47.1	49.4	50.6	29.3	46.2	48.3	49.7	30.0	54.3	57.5	56.2	42.8	42.3	41.8	29.3	53.1	56.7	57.3
31.2	37.5	37.7	19.6	30.2	34.0	33.9	16.7	30.2	37.3	34.7	38.8	38.3	40.8	21.7	43.3	43.3	46.8
34.1	33.2	32.9	24.3	41.0	35.2	35.8	25.2	45.3	40.1	40.5	34.2	33.1	33.1	23.7	49.1	45.7	46.5
39.6	36.6	36.8	.....	39.6	35.8	35.0	.....	32.8	28.0	27.9	42.2	35.8	36.6	.....	42.5	37.7	37.6
11.0	10.0	10.0	8.7	12.5	9.0	9.0	10.0	14.6	13.0	13.0	20.0	18.0	18.0	8.6	13.0	12.0	12.0
14.6	11.7	11.6	.....	13.5	10.7	10.7	.....	12.7	10.2	10.1	14.0	10.2	10.2	.....	14.2	11.5	11.3
36.5	40.0	40.0	35.6	38.5	39.3	40.7	33.6	41.8	43.4	45.1	45.7	45.9	45.9	36.6	43.9	43.8	44.8
30.3	27.1	26.8	.....	35.0	.....	.....	.....	26.8	27.0	26.7	36.6	31.7	30.9	.....	30.5	25.8	25.8
27.1	26.2	26.2	.....	27.2	29.9	28.9	.....	27.2	27.3	27.2	30.2	28.1	27.5	.....	29.4	26.0	26.5
29.2	30.9	30.0	23.3	28.4	27.1	26.6	20.0	27.0	33.8	33.8	33.9	28.9	27.9	18.3	32.4	31.4	30.6
16.6	16.6	16.8	19.2	19.0	19.1	19.0	18.3	20.9	19.4	19.3	17.2	18.3	17.8	15.6	17.5	17.6	17.7
24.4	24.4	24.3	.....	26.8	25.4	25.1	.....	22.3	23.8	24.0	20.0	20.3	20.1	.....	22.9	22.1	22.0
25.8	28.9	29.5	23.8	31.0	28.2	28.1	24.5	30.3	32.0	30.5	31.4	31.4	33.1	25.0	36.1	34.8	30.5
9.5	8.5	9.3	5.9	9.8	9.4	9.4	5.9	9.6	8.5	8.5	10.6	8.3	8.7	5.6	11.0	9.4	9.4
5.5	5.5	5.5	2.6	3.4	3.5	3.3	3.3	6.3	5.5	5.4	5.9	5.7	5.7	3.5	6.6	5.7	5.8
4.7	3.5	3.5	3.3	4.1	3.6	3.6	3.4	5.1	4.7	4.6	2.8	2.6	2.6	.....	7.6	6.2	6.1
9.4	8.9	8.7	.....	9.3	9.7	9.4	.....	10.3	9.8	9.6	11.1	8.6	8.6	.....	11.1	9.7	9.9
13.9	10.0	10.0	.....	14.4	12.6	12.6	.....	13.0	11.3	10.5	12.1	8.9	8.9	.....	12.9	10.1	10.2
29.8	26.2	26.2	.....	32.8	26.4	26.3	.....	28.8	25.1	24.9	29.6	25.6	25.5	.....	29.1	27.3	26.9
19.4	18.8	18.5	.....	22.5	21.6	21.3	.....	14.5	13.0	12.8	20.0	18.6	18.6	.....	24.2	23.2	23.2
8.9	9.5	9.4	8.2	8.3	8.8	8.8	8.5	9.0	9.1	8.9	7.3	8.3	8.4	8.5	9.7	9.7	9.8
9.0	9.4	9.7	.....	9.1	8.9	9.3	.....	6.7	8.3	8.3	9.7	9.5	10.4	.....	10.0	10.1	10.3
1.4	2.7	2.7	1.1	1.7	2.1	2.0	1.4	3.3	3.3	3.3	2.6	3.1	3.3	1.5	1.6	3.0	3.3
3.3	13.3	11.9	.....	2.9	14.1	11.0	.....	1.8	11.0	9.4	6.8	14.5	10.4	.....	7.4	13.3	9.4
6.2	5.2	5.8	.....	7.5	5.1	6.0	.....	.....	.....	.....	3.7	5.2	4.8	.....	6.2	6.2	6.2
17.8	14.3	14.0	.....	18.1	17.9	17.0	.....	17.7	15.2	15.0	14.2	12.1	12.3	.....	13.9	12.5	12.5
16.5	15.0	15.0	.....	17.0	14.9	14.9	.....	18.3	17.3	16.6	15.0	14.3	14.1	.....	16.0	17.1	16.9
16.1	16.3	16.6	.....	15.8	15.6	15.7	.....	18.8	17.8	18.0	18.0	17.0	17.2	.....	16.4	17.7	17.0
13.3	14.0	14.0	.....	10.6	14.5	14.1	.....	² 11.4	² 14.2	² 13.8	10.3	12.6	12.4	.....	12.1	13.6	13.8
9.0	7.0	6.9	5.9	9.4	7.8	7.8	5.3	8.8	6.7	6.5	8.0	6.1	6.2	5.5	8.2	6.7	6.8
70.8	63.5	63.5	65.7	83.3	81.6	80.9	50.0	58.1	56.1	56.7	69.2	67.9	66.5	52.5	63.6	59.5	60.0
40.8	40.4	40.0	35.8	47.3	43.8	44.1	32.0	35.6	34.3	34.9	30.5	31.6	31.3	31.3	39.1	37.5	37.5
19.7	20.8	21.8	.....	16.7	18.9	19.7	.....	15.6	18.0	18.6	16.5	19.1	18.9	.....	18.3	17.4	18.5
32.3	26.8	27.0	.....	30.9	25.2	25.2	.....	29.1	22.6	22.2	31.1	22.3	22.8	.....	30.7	25.0	24.6
² 13.1	³ 11.6	³ 11.3	.....	³ 17.8	³ 16.2	³ 16.1	.....	41.4	36.4	39.3	45.0	28.7	27.9	.....	36.8	35.3	35.3
52.7	63.8	66.9	.....	45.4	52.1	51.3	.....	43.3	60.0	60.0	45.0	66.1	69.0	.....	47.5	61.1	64.1

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Concluded.

Article.	Unit.	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		May 15—		Apr. 15, 1922.	May 15, 1922.	May 15, 1921.	Apr. 15, 1922.	May 15, 1922.	May 15—		Apr. 15, 1922.	May 15, 1922.
		1913	1921						1913	1921		
Sirloin steak.....	Pound.....	Cts. 23.8	Cts. 33.4	Cts. 30.8	Cts. 31.4	Cts. 37.9	Cts. 32.2	Cts. 33.9	Cts. 27.5	Cts. 47.2	Cts. 40.4	Cts. 42.1
Round steak.....	do.....	21.5	30.1	26.9	27.8	36.4	31.9	33.2	23.6	41.3	34.6	35.3
Rib roast.....	do.....	19.6	27.5	23.8	24.7	25.4	22.5	22.7	21.9	36.7	31.3	34.2
Chuck roast.....	do.....	16.8	19.8	17.7	17.7	20.9	19.1	19.6	17.6	25.3	21.5	22.4
Plate beef.....	do.....	12.9	16.1	13.8	13.8	15.5	13.3	13.2	12.1	14.5	12.4	12.9
Pork chops.....	do.....	24.6	37.6	33.8	34.5	32.0	30.1	31.6	21.1	38.7	35.5	37.7
Bacon.....	do.....	31.7	53.8	49.9	50.7	39.7	37.9	38.3	26.5	40.5	37.3	37.4
Ham.....	do.....	30.8	53.9	53.6	53.8	48.5	49.3	51.1	28.0	55.5	56.5	57.2
Lamb.....	do.....	20.8	30.8	35.1	35.0	35.8	41.1	40.7	20.9	41.2	44.5	46.8
Hens.....	do.....	24.5	36.1	35.3	36.4	34.5	34.3	34.3	22.4	47.5	40.9	41.6
Salmon, canned, red.....	do.....		35.7	30.7	30.9	39.1	34.3	34.5		37.3	30.1	29.7
Milk, fresh.....	Quart.....	8.5	12.0	12.0	12.0	12.5	11.8	11.0	8.0	14.0	13.0	13.0
Milk, evaporated.....	15-16 oz. can.....		12.3	10.4	10.3	15.6	11.7	11.6		14.6	11.0	10.9
Butter.....	Pound.....	35.0	35.4	41.6	43.5	40.9	44.7	43.9	38.7	46.7	49.2	49.0
Oleomargarine.....	do.....		27.5	28.2	27.5	29.9	28.4	28.3		33.0	27.1	26.9
Nut margarine.....	do.....		28.5	28.6	28.3	27.8	27.7	27.4		29.1	26.9	26.7
Cheese.....	do.....	21.7	31.3	33.3	32.0	32.4	34.1	32.7	23.5	34.0	35.8	32.6
Lard.....	do.....	17.6	20.9	18.7	18.6	16.2	17.0	16.8	14.8	15.8	16.2	16.7
Crisco.....	do.....		24.4	24.8	25.1	23.7	22.0	22.4		21.0	21.5	21.7
Eggs, strictly fresh.....	Dozen.....	25.0	28.8	29.2	30.8	28.7	28.9	29.8	23.9	34.6	32.4	35.7
Bread.....	Pound.....	5.5	9.9	9.9	9.9	10.4	9.7	9.7	5.6	10.5	8.6	8.6
Flour.....	do.....	3.0	5.1	5.1	5.2	5.9	5.5	5.6	3.7	6.2	5.0	5.6
Corn meal.....	do.....	3.0	4.7	3.8	3.7	4.5	4.1	4.2	2.4	3.9	3.6	3.6
Rolled oats.....	do.....		8.8	8.4	8.5	11.3	10.2	10.2		11.2	9.6	9.4
Corn flakes.....	8-oz. pkg.....		13.8	12.0	11.8	14.6	10.5	10.1		11.9	9.9	9.9
Cream of Wheat.....	28-oz. pkg.....		30.7	27.4	26.9	30.5	27.9	27.4		29.1	25.6	25.4
Macaroni.....	pound.....		18.1	18.9	18.8	23.1	20.0	20.2		22.1	22.0	22.2
Rice.....	do.....	7.7	10.0	18.9	10.6	9.5	10.1	10.1	9.4	9.4	10.0	9.9
Beans, navy.....	do.....		7.3	8.7	9.2	7.6	9.8	10.7		7.8	9.4	9.7
Potatoes.....	do.....	1.0	2.2	2.4	2.3	2.2	2.8	3.0	2.1	2.0	3.8	4.2
Onions.....	do.....		3.2	12.1	11.9	7.6	17.0	10.0		6.7	15.3	10.7
Cabbage.....	do.....		6.5	6.1	6.5	6.7	5.5	7.1		5.3	5.1	5.2
Beans, baked.....	No. 2 can.....		18.0	16.5	16.1	15.4	13.1	13.3		12.1	11.3	11.2
Corn, canned.....	do.....		16.6	17.4	17.5	14.7	15.0	15.1		13.8	14.8	14.6
Peas, canned.....	do.....		17.1	18.6	18.8	17.1	16.9	17.0		15.3	16.8	17.0
Tomatoes, canned.....	do.....	1 12.5	1 15.7	1 15.4	12.2	16.1	15.5			11.2	13.1	12.9
Sugar, granulated.....	Pound.....	5.9	9.5	7.3	7.1	9.3	7.3	7.3	4.9	8.0	6.5	6.5
Tea.....	do.....	50.0	64.4	63.4	63.8	81.3	73.0	73.0	57.5	74.0	71.3	72.2
Coffee.....	do.....	28.0	37.4	38.6	39.2	37.0	36.1	36.5	28.8	33.9	32.9	32.9
Prunas.....	do.....		16.1	20.3	21.3	22.0	21.1	20.7		21.1	20.7	21.5
Raisins.....	do.....		30.4	24.8	24.5	34.2	25.1	24.8		30.3	24.4	24.3
Bananas.....	Dozen.....	2 16.8	2 15.1	2 15.0	2 11.0	2 9.8	2 9.8			42.5	37.6	37.2
Oranges.....	do.....		40.7	59.0	59.0	45.4	64.5	58.0		48.5	64.8	68.2

1 No. 2½ can.

2 Per pound.

Comparison of Retail Food Costs in 51 Cities.

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food⁷ in May, 1922, compared with the average cost in the year 1913, in May, 1921, and in April, 1922. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. 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.⁸

⁷ For list of articles, see note 2, p. 33.⁸ The consumption figure used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY 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 MONTHLY LABOR REVIEW for March 1921, p. 26.

Effort has been made by the bureau each month to have perfect reporting cities. For the month of May, 99.4 per cent of all the firms reporting in the 51 cities sent in a report promptly. The following were perfect reporting cities; that is, every merchant in the following-named 43 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Birmingham, Boston, Bridgeport, Butte, Charleston, Chicago, Cincinnati, Cleveland, Columbus, Denver, Detroit, Fall River, Indianapolis, Kansas City, Little Rock, Los Angeles, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, San Francisco, Savannah, Scranton, Seattle, Springfield, and Washington, D. C.

The following summary shows the promptness with which the merchants responded in May:

RETAIL PRICE REPORTS RECEIVED DURING MAY.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received.....	99.4	99.5	99.4	100	98	99
Number of cities in each section from which every report was received.....	43	12	7	14	4	6

TABLE 6.—PERCENTAGE CHANGES IN THE RETAIL COST OF FOOD, IN MAY, 1922 COMPARED WITH THE COST IN APRIL, 1922, MAY, 1921, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

City.	Percentage increase May, 1922, compared with year 1913.	Percentage decrease May, 1922, compared with May, 1921.	Percentage increase May, 1922, compared with April, 1922.	City.	Percentage increase May, 1922, compared with year 1913.	Percentage decrease May, 1922, compared with May, 1921.	Percentage increase May, 1922, compared with April, 1922.
Atlanta.....	41	2	1	Minneapolis.....	41	0.3	1
Baltimore.....	44	3	1	Mobile.....	3		a 0.2
Birmingham.....	44	4	1	Newark.....	33	4	a 2
Boston.....	39	6	a 1	New Haven.....	35	5	a 1
Bridgeport.....	8		a 0.1	New Orleans.....	42	1	a 0.1
Buffalo.....	41	1	a 2	New York.....	42	3	a 0.2
Butte.....		0.3	1	Norfolk.....		8	1
Charleston, S. C.....	46	6	a 1	Omaha.....	39	3	0.4
Chicago.....	43	2	0.2	Peoria.....		5	0.2
Cincinnati.....	41	4	1	Philadelphia.....	42	2	1
Cleveland.....	34	5	0.4	Pittsburgh.....	35	6	a 0.3
Columbus.....		6	a 0.2	Portland, Me.....		5	a 1
Dallas.....	40	3	1	Portland, Ore.....	28	b 0.1	1
Denver.....	28	4	2	Providence.....	41	7	a 1
Detroit.....	42	2	0	Richmond.....	53	1	2
Fall River.....	39	4	a 1	Rochester.....		2	a 1
Houston.....		4	1	St. Louis.....	38	5	1
Indianapolis.....	34	3	0.4	St. Paul.....		b 2	3
Jacksonville.....	35	3	0.3	Salt Lake City.....	20	7	a 0.1
Kansas City.....	36	7	a 1	San Francisco.....	34	4	a 1
Little Rock.....	36	3	3	Savannah.....		5	1
Los Angeles.....	31	4	0.2	Scranton.....	46	4	0.2
Louisville.....	31	2	0.3	Seattle.....	34	b 2	1
Manchester.....	38	7		Springfield, Ill.....		3	a 0.2
Memphis.....	35	1	a 1	Washington, D.C.....	49	2	1
Milwaukee.....	41	0	1				

a Decrease.

b Increase.

Retail Prices of Coal in the United States.^a

THE following table shows the average retail prices of coal on May 15, 1921, and on April 15 and May 15, 1922, for the United States and for each of the cities included in the total for the United States. Prices for coal are secured from the cities from which monthly retail prices of food are received.

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 used. The coal dealers in each city are asked to quote prices on the kinds of bituminous coal usually sold for household use.

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.

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAY 15, 1921, AND ON APRIL 15 AND MAY 15, 1922.

City, and kind of coal.	1921	1922	
	May 15.	April 15.	May 15.
United States:			
Pennsylvania anthracite—			
Stove.....	\$14.794	\$14.887	\$14.844
Chestnut.....	14.878	14.939	14.906
Bituminous.....	10.392	9.622	9.504
Atlanta, Ga.:			
Bituminous.....	8.813	7.346	7.058
Baltimore, Md.:			
Pennsylvania anthracite—			
Stove.....	¹ 14.500	¹ 15.000	¹ 15.000
Chestnut.....	¹ 14.500	¹ 14.750	¹ 14.750
Bituminous.....	8.139	7.850	7.750
Birmingham, Ala.:			
Bituminous.....	8.733	5.892	5.802
Boston, Mass.:			
Pennsylvania anthracite—			
Stove.....	15.000	15.000	15.000
Chestnut.....	15.000	15.000	15.000
Bridgeport, Conn.:			
Pennsylvania anthracite—			
Stove.....	14.000	13.000	13.000
Chestnut.....	14.000	13.000	13.000
Buffalo, N. Y.:			
Pennsylvania anthracite—			
Stove.....	12.720	12.813	12.813
Chestnut.....	12.720	12.813	12.813
Butte, Mont.:			
Bituminous.....	12.014	11.464	11.458
Charleston, S. C.:			
Pennsylvania anthracite—			
Stove.....	¹ 17.000	¹ 17.000	¹ 17.000
Chestnut.....	¹ 17.100	¹ 17.100	¹ 17.100
Bituminous.....	12.000	12.000	12.000
Chicago, Ill.:			
Pennsylvania anthracite—			
Stove.....	14.910	15.410	15.390
Chestnut.....	15.060	15.380	15.360
Bituminous.....	8.588	8.765	8.683
Cincinnati, Ohio:			
Pennsylvania anthracite—			
Stove.....	15.500	15.000	15.500
Chestnut.....	15.750	15.000	15.333
Bituminous.....	6.929	6.615	6.577

¹ Per ton of 2,240 pounds.

^a Prices of coal were formerly secured semiannually and published in the March and September issues of the MONTHLY LABOR REVIEW. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAY 15, 1921, AND ON APRIL 15 AND MAY 15, 1922—Continued.

City, and kind of coal.	1921	1922	
	May 15.	April 15.	May 15.
Cleveland, Ohio:			
Pennsylvania anthracite—			
Stove.....			
Chestnut.....	\$13.913	\$14.375	\$14.375
Bituminous.....	13.938	14.375	14.438
Columbus, Ohio:			
Pennsylvania anthracite—			
Chestnut.....	14.833	14.750	14.750
Bituminous.....	7.638	6.663	6.645
Dallas, Tex.:			
Arkansas anthracite—			
Egg.....	17.000	18.125	18.125
Bituminous.....	14.500	15.308	15.154
Denver, Colo.:			
Colorado anthracite—			
Stove, 3 and 5 mixed.....	16.083	15.917	15.917
Furnace, 1 and 2 mixed.....	16.083	15.917	15.917
Bituminous.....	10.699	10.237	10.243
Detroit, Mich.:			
Pennsylvania anthracite—			
Stove.....	14.550	14.563	14.563
Chestnut.....	14.550	14.563	14.563
Bituminous.....	9.882	8.688	8.688
Fall River, Mass.:			
Pennsylvania anthracite—			
Stove.....	15.250	15.250	15.250
Chestnut.....	15.000	15.000	15.000
Bituminous.....	11.500	9.000	9.000
Houston, Tex.:			
Bituminous.....	13.000	11.500	10.667
Indianapolis, Ind.:			
Pennsylvania anthracite—			
Stove.....	15.375	15.625	15.625
Chestnut.....	15.417	15.667	15.667
Bituminous.....	8.650	7.102	6.989
Jacksonville, Fla.:			
Pennsylvania anthracite—			
Stove.....	17.167	17.500	17.500
Chestnut.....	17.875	17.500	17.500
Bituminous.....	12.250	13.000	13.000
Kansas City, Mo.:			
Arkansas anthracite—			
Furnace.....	16.500	16.286	16.286
Stove, or No. 4.....	17.188	17.250	17.063
Bituminous.....	9.600	8.656	8.766
Little Rock, Ark.:			
Arkansas anthracite—			
Egg.....	16.000	15.000	15.000
Bituminous.....	12.000	12.067	12.067
Los Angeles, Calif.:			
Bituminous.....	18.111	19.000	18.000
Louisville, Ky.:			
Pennsylvania anthracite—			
Stove.....	17.000	16.750	.....
Chestnut.....	17.000	16.750	.....
Bituminous.....	7.923	6.635	6.620
Manchester, N. H.:			
Pennsylvania anthracite—			
Stove.....	16.500	16.000	16.000
Chestnut.....	16.500	16.000	16.000
Bituminous.....	11.333	10.500	10.500
Memphis, Tenn.:			
Pennsylvania anthracite—			
Stove.....	18.000	18.000	18.000
Chestnut.....	18.000	18.000	18.000
Bituminous.....	8.196	7.786	7.786
Milwaukee, Wis.:			
Pennsylvania anthracite—			
Stove.....	15.800	15.980	15.980
Chestnut.....	15.800	15.950	15.950
Bituminous.....	10.639	10.366	9.759
Minneapolis, Minn.:			
Pennsylvania anthracite—			
Stove.....	17.220	17.750	17.750
Chestnut.....	17.320	17.750	17.750
Bituminous.....	12.292	11.950	11.950
Mobile, Ala.:			
Bituminous.....	10.813	9.000	8.719

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAY 15, 1921, AND ON APRIL 15 AND MAY 15, 1922—Continued.

City, and kind of coal.	1921	1922	
	May 15.	April 15.	May 15.
Newark, N. J.:			
Pennsylvania anthracite—			
Stove.....	\$12.375	\$12.750	\$12.750
Chestnut.....	12.375	12.750	12.750
New Haven, Conn.:			
Pennsylvania anthracite—			
Stove.....	13.708	14.000	14.000
Chestnut.....	13.708	14.000	14.000
New Orleans, La.:			
Pennsylvania anthracite—			
Stove.....	20.750	17.000	16.750
Chestnut.....	20.750	17.000	16.833
Bituminous.....	10.409	9.344	8.786
New York, N. Y.:			
Pennsylvania anthracite—			
Stove.....	13.133	13.142	13.142
Chestnut.....	13.117	13.142	13.142
Norfolk, Va.:			
Pennsylvania anthracite—			
Stove.....	14.000	14.000	14.000
Chestnut.....	14.000	14.000	14.000
Bituminous.....	11.464	9.238	9.429
Omaha, Nebr.:			
Pennsylvania anthracite—			
Stove.....	22.000	22.000	22.000
Chestnut.....	22.000	22.000	22.000
Bituminous.....	12.281	11.857	11.857
Peoria, Ill.:			
Pennsylvania anthracite—			
Stove.....	15.500	15.500	15.500
Chestnut.....	15.500	15.500	15.500
Bituminous.....	6.250	6.464	6.625
Philadelphia, Pa.:			
Pennsylvania anthracite—			
Stove.....	¹ 13.813	¹ 14.094	¹ 14.094
Chestnut.....	¹ 13.813	¹ 14.094	¹ 14.094
Pittsburgh, Pa.:			
Pennsylvania anthracite—			
Stove.....	¹ 15.000	¹ 15.750	¹ 15.750
Chestnut.....	¹ 15.467	¹ 15.667	¹ 15.667
Bituminous.....	7.781	6.750	6.750
Portland, Me.:			
Pennsylvania anthracite—			
Stove.....	15.120	15.843	15.843
Chestnut.....	15.120	15.843	15.843
Bituminous.....	9.800		
Portland, Oreg.:			
Bituminous.....	13.105	12.925	13.194
Providence, R. I.:			
Pennsylvania anthracite—			
Stove.....	² 15.000	² 15.000	² 15.000
Chestnut.....	² 15.000	² 15.000	² 15.000
Bituminous.....	² 10.500		
Richmond, Va.:			
Pennsylvania anthracite—			
Stove.....	14.188	14.250	14.250
Chestnut.....	14.188	14.250	14.250
Bituminous.....	10.816	9.846	8.692
Rochester, N. Y.:			
Pennsylvania anthracite—			
Stove.....	13.050	13.450	13.450
Chestnut.....	13.050	13.450	13.450
St. Louis, Mo.:			
Pennsylvania anthracite—			
Stove.....	16.000	15.938	16.063
Chestnut.....	16.188	16.125	16.250
Bituminous.....	6.895	6.868	6.855
St. Paul, Minn.:			
Pennsylvania anthracite—			
Stove.....	17.217	17.750	17.750
Chestnut.....	17.317	17.750	17.750
Bituminous.....	13.414	12.344	12.384

¹ Per ton of 2,240 pounds.

² Fifty 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 MAY 15, 1921, AND ON APRIL 15 AND MAY 15, 1922—Continued.

City, and kind of coal.	1921	1922	
	May 15.	April 15.	May 15.
Salt Lake City, Utah:			
Colorado anthracite—			
Furnace, 1 and 2 mixed.....	\$18.100	\$19.125	\$19.125
Stove, 3 and 5 mixed.....	19.200	20.000	20.000
Bituminous.....	9.488	8.966	8.580
San Francisco, Calif.:			
New Mexico anthracite—			
Cerrillos egg.....	26.500	27.250	27.250
Colorado anthracite—			
Egg.....	26.000	26.250	26.250
Bituminous.....	18.455	19.250	18.038
Savannah, Ga.:			
Pennsylvania anthracite—			
Stove.....	³ 17.100	³ 16.600	³ 16.100
Chestnut.....	³ 17.100	³ 16.600	³ 16.100
Bituminous.....	³ 12.500	³ 10.767	³ 10.100
Seranton, Pa.:			
Pennsylvania anthracite—			
Stove.....	9.517	9.700	9.700
Chestnut.....	9.517	9.700	9.700
Seattle, Wash.:			
Bituminous.....	⁴ 11.597	⁴ 10.107	⁴ 10.080
Springfield, Ill.:			
Bituminous.....	4.300	4.525	4.675
Washington, D. C.:			
Pennsylvania anthracite—			
Stove.....	¹ 14.229	¹ 14.593	¹ 14.679
Chestnut.....	¹ 14.171	¹ 14.571	¹ 14.607
Bituminous.....	¹ 10.136	¹ 9.035	¹ 8.871

¹ Per ton of 2,240 pounds.

³ 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.

⁴ Prices in zone A. The cartage charge in zone A is \$1.85, which has been included in the average. The cartage charges in Seattle range from \$1.75 to \$2.80, according to distance.

Comparison of Retail Price Changes in the United States and Foreign Countries.

THE index numbers of retail prices published by several foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced to a common base, namely, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers compiled by the bureau, because of the fact that in some instances satisfactory information for 1913 was not available. For Belgium, Denmark, Germany, Great Britain, Norway, Sweden, and the city of Rome, Italy, the index numbers are reproduced as published in the original sources. With three exceptions all these are shown on the July, 1914, base in the source from which the information is taken. The index numbers for Belgium are computed on April, 1914, as the base period, those for Germany on the average of October, 1913, January, April, and July, 1914, while those for Rome are based on the first half of 1914. The index numbers here shown for the remaining countries have been obtained by dividing the index for each month specified in the table by the index for July, 1914, or the nearest period thereto, as published. As shown in the table, the number of articles included in the index numbers for the different countries differs widely. These results should not, therefore, be considered as closely comparable with one another. In a few instances,

also, the figures here shown are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities included at successive dates.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES.

[July, 1914=100.]

Year and month.	United States: 22 foodstuffs, to December, 1920; since that time 43 foodstuffs; 51 cities (variable). Weighted.	Australia: 46 foodstuffs; 30 towns. Weighted.	Belgium: 56 articles (variable); 59 cities. Not weighted.	Canada: 29 foodstuffs; 60 cities. Weighted.	Denmark: Family food budget; 5 persons. Weighted.	France: Family budget, 13 articles.		Germany: Family food budget; 5 persons. Weighted.
						Cities over 10,000 population (except Paris). Weighted.	Paris only. Weighted.	
July, 1914....	100	100	¹ 100	100	100	¹ 100	100	³ 100
July, 1915....	98	131	.....	105	128	² 123	120	.....
July, 1916....	109	130	.....	114	146	² 141	129	.....
July, 1917....	143	126	.....	157	166	² 184	183	.....
July, 1918....	164	131	.....	175	187	² 244	206	.....
July, 1919....	186	147	.....	186	212	² 289	261	.....
1920.								
July.....	215	194	453	227	253	² 388	373	1, 156
August.....	203	194	463	221	.....	.....	373	1, 049
September....	199	197	471	215	.....	.....	407	1, 032
October.....	194	192	477	213	.....	² 450	420	1, 129
November....	189	186	476	206	.....	.....	426	1, 184
December....	175	184	468	200	.....	.....	424	1, 272
1921.								
January.....	169	186	450	195	276	² 429	410	1, 265
February....	155	184	434	190	.....	.....	382	1, 191
March.....	153	181	411	178	.....	.....	359	1, 188
April.....	149	173	399	171	.....	² 363	328	1, 171
May.....	142	168	389	165	.....	.....	317	1, 152
June.....	141	165	384	150	.....	.....	312	1, 175
July.....	145	161	379	148	236	² 350	306	1, 274
August.....	152	158	384	154	.....	.....	317	1, 399
September....	150	154	386	159	.....	.....	329	1, 418
October.....	150	.....	391	155	.....	² 348	331	1, 532
November....	149	146	394	149	.....	.....	326	1, 914
December....	147	143	393	148	.....	.....	323	2, 088
1922.								
January.....	139	142	387	149	197	² 323	319	2, 219
February....	139	140	380	143	.....	.....	307	2, 727
March.....	136	141	371	142	.....	.....	294	3, 152

Year and month.	Great Britain: 21 foodstuffs; 600 towns. Weighted.	Italy: Family food budget; 5 persons; Rome. Weighted.	Netherlands: 27 foodstuffs; Amsterdam. Weighted.	New Zealand: 59 foodstuffs; 25 towns. Weighted.	Norway: Family food budget. Weighted.	South Africa: 18 foodstuffs; 9 towns. Weighted.	Sweden: 21 articles; 44 towns. Weighted.	Switzerland: 9 groups of foodstuffs. Not weighted.
July, 1914....	100	⁴ 100	⁵ 100	100	100	⁶ 100	100	7 100
July, 1915....	132 ²	95	.....	112	.....	⁶ 107	² 124	7 119
July, 1916....	161	111	.....	119	⁸ 160	⁶ 116	² 142	7 140
July, 1917....	204	137	.....	127	.....	⁶ 128	177	.....
July, 1918....	210	203	.....	139	279	134	268	.....
July, 1919....	209	206	210	144	289	139	310	.....

¹ April, 1914.

² Quarter beginning month specified.

³ Average for October, 1913, January, April, and July, 1914.

⁴ January-June.

⁵ Year 1913.

⁶ Year.

⁷ Previous month.

⁸ August.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES—Concluded.

Year and month.	Great Britain: 21 food-stuffs; 600 towns. Weighted.	Italy: Family food budget; 5 persons; Rome. Weighted.	Netherlands: 27 food-stuffs; Amsterdam. Weighted.	New Zealand: 59 food-stuffs; 25 towns. Weighted.	Norway: Family food budget. Weighted.	South Africa: 18 food-stuffs; 9 towns. Weighted.	Sweden: 21 articles; 44 towns. Weighted.	Switzerland: 9 groups of food-stuffs. Not weighted.
1920.								
July.....	258	318	217	167	319	197	297	246
August.....	282	322	219	171	333	196	308	.....
September.....	267	324	223	173	336	195	307	.....
October.....	270	341	226	177	340	197	306	262
November.....	291	361	220	176	342	196	303	.....
December.....	282	375	208	179	342	188	294	.....
1921.								
January.....	278	367	199	175	334	172	283	243
February.....	263	376	200	178	308	165	262	237
March.....	249	386	199	169	300	160	253	234
April.....	238	432	193	169	300	156	248	231
May.....	232	421	189	167	292	152	237	212
June.....	218	409	186	166	290	144	234	210
July.....	220	402	185	164	292	139	232	214
August.....	226	416	184	163	297	134	234	209
September.....	225	430	184	161	290	133	228	206
October.....	210	452	173	156	288	131	218	200
November.....	200	459	159	152	281	129	211	198
December.....	195	458	154	150	268	125	202	192
1922.								
January.....	185	469	152	147	257	123	190	189
February.....	179	463	154	145	245	120	189	179
March.....	177	446	148	141	238	121	185	177

Revised Index Numbers of Wholesale Prices.

THE Bureau of Labor Statistics announces that a complete revision has been made of its series of index numbers showing changes in the level of wholesale prices. This revision consists of (1) a regrouping of the commodities and the addition of a considerable number of new articles, and (2) the use of the 1919 census data for weighting purposes in place of the 1909 census data formerly employed.

In preceding reports of the bureau the plan was followed of confining an article to a particular group, regardless of its fitness for inclusion also under other group designations. With the new plan articles properly falling under more than one of the classifications adopted have been included under each classification. For example, structural steel, nails, and certain other metal products used in building have been put in the group of building materials as well as in that of metals. Similarly, food articles produced on the farm that reach the consumer practically unchanged in form, as potatoes, rice, eggs, and milk, are included both among farm products and among foods. In computing the general index number for all commodities, however, such articles have been counted only once, thereby avoiding duplication in the final result. A transfer of an article to a different group has been made in a few instances in revising the classification of commodities.

The weighting of the prices used in constructing the index numbers for the different groups of commodities by the new 1919 census figures of production, instead of the 1909 data used in preceding reports, conforms to the plan contemplated by the bureau at the inception of

its weighted index number system in 1914 of revising the weighting factors every 10 years as new census information should become available. All computations have been carried back to 1913 in order to insure comparability of the figures and also to provide a pre-war standard for measuring wholesale price changes.

The following table gives the revised index numbers for the several commodity groups from January, 1913, to May, 1922, the latest month for which complete information is available. For comparison with the new series, the old general index of all commodities is shown in the last column of the table. Publication of the old series was suspended with the April, 1922, figures.

REVISED INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES AND BY MONTHS, 1913 TO 1922.

[1913=100.]

Year and month.	Farm products.	Foods.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.	
										New index.	Old index.
1913.											
Average for year.....	100	100	100	100	100	100	100	100	100	100	100
January.....	98	99	99	100	107	101	100	100	106	100	109
February.....	98	98	100	101	105	102	101	100	105	100	100
March.....	98	98	100	101	105	103	101	100	103	100	99
April.....	99	98	100	98	104	103	101	100	100	100	98
May.....	97	97	100	98	103	103	100	100	98	99	98
June.....	98	99	100	98	101	102	100	100	100	99	100
July.....	99	101	100	99	98	99	100	100	100	100	100
August.....	100	102	100	101	98	99	100	100	98	100	101
September.....	103	103	101	101	98	99	100	100	100	102	102
October.....	103	102	101	102	97	98	100	101	98	101	101
November.....	103	103	101	102	94	97	100	100	97	100	101
December.....	103	101	100	99	89	96	98	100	96	99	99
1914.											
Average for year.....	103	102	98	93	85	92	101	100	95	98	100
January.....	103	101	99	99	88	93	98	100	94	98	100
February.....	103	100	99	99	89	94	98	100	96	99	99
March.....	102	98	99	100	89	94	98	100	98	98	99
April.....	102	95	99	98	88	93	97	100	98	98	98
May.....	101	96	99	95	85	93	97	100	99	97	98
June.....	101	97	99	91	84	93	96	100	95	97	99
July.....	103	99	99	91	83	92	95	100	93	97	100
August.....	106	109	99	89	84	93	96	100	94	101	103
September.....	106	111	97	89	86	92	109	100	96	102	104
October.....	101	106	96	88	83	90	108	100	92	97	99
November.....	102	106	94	88	80	88	107	100	91	97	98
December.....	101	105	94	88	81	88	107	100	96	97	98
1915.											
Average for year.....	104	105	98	88	99	94	134	100	95	101	101
January.....	104	106	94	87	82	88	108	99	99	98	99
February.....	105	108	95	86	86	89	116	99	93	99	101
March.....	104	106	95	84	88	90	118	99	93	99	99
April.....	104	105	96	82	90	90	118	99	93	99	100
May.....	105	105	96	82	96	93	116	100	93	100	101
June.....	101	102	96	81	102	93	123	100	93	99	99
July.....	104	104	96	81	105	94	130	100	94	100	101
August.....	103	102	97	85	103	93	136	100	93	100	100
September.....	101	99	99	91	104	94	143	100	92	100	99
October.....	106	102	101	94	105	98	151	100	93	102	101
November.....	104	106	105	98	110	101	165	100	95	104	103
December.....	105	108	107	103	122	104	179	101	100	108	106
1916.											
Average for year.....	123	121	127	126	162	120	181	106	121	127	124
January.....	110	109	110	113	133	110	184	103	110	113	110
February.....	110	110	114	115	142	113	204	103	105	115	112
March.....	111	112	117	119	156	118	206	104	108	119	114
April.....	113	114	118	120	164	120	200	104	110	121	117
May.....	115	115	120	120	168	121	193	105	114	122	118

[60]

WHOLESALE PRICES.

REVISED INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES AND BY MONTHS, 1913 TO 1922—Continued.

Year and month.	Farm products.	Foods.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.	
										New index.	Old index.
1906.											
June.....	114	115	122	122	164	120	191	105	120	123	119
July.....	117	117	125	121	158	120	175	107	120	123	119
August.....	125	122	128	116	157	120	157	107	121	128	123
September.....	131	126	130	120	160	121	158	107	124	130	128
October.....	136	134	137	128	164	124	161	109	132	136	134
November.....	147	141	147	155	174	126	167	111	139	146	144
December.....	146	137	154	163	199	132	172	111	147	149	146
1917.											
Average for year.....	190	167	175	169	231	157	202	125	148	177	176
January.....	152	140	158	171	195	138	173	118	149	153	151
February.....	157	145	157	178	204	140	173	119	150	157	156
March.....	166	148	158	174	218	144	181	120	151	162	161
April.....	184	164	164	164	230	155	186	121	153	173	172
May.....	196	175	167	178	240	159	194	121	151	183	182
June.....	195	171	174	183	267	169	195	123	153	185	185
July.....	196	169	181	176	292	168	205	129	153	188	186
August.....	202	175	185	167	282	167	211	129	150	189	185
September.....	202	176	185	160	260	167	223	130	147	187	183
October.....	207	180	185	153	207	156	231	130	142	183	181
November.....	212	181	191	161	183	156	223	131	140	183	183
December.....	207	181	195	163	183	158	228	133	140	182	182
1918.											
Average for year.....	218	188	228	170	187	172	215	153	156	194	196
January.....	211	182	201	164	183	161	223	137	145	184	185
February.....	211	183	205	164	184	161	227	138	145	186	186
March.....	211	179	211	165	184	164	229	140	147	187	187
April.....	213	181	220	166	184	169	228	144	152	190	190
May.....	209	180	228	169	185	170	222	146	155	190	190
June.....	210	180	233	169	184	172	205	152	160	191	193
July.....	217	185	238	175	189	177	209	159	159	196	198
August.....	227	189	239	175	190	179	212	161	160	200	202
September.....	234	195	245	176	190	179	210	163	161	204	207
October.....	225	198	245	176	192	177	211	164	163	202	204
November.....	225	204	241	179	191	177	209	164	164	203	206
December.....	227	206	233	179	187	177	194	163	163	202	206
1919.											
Average for year.....	231	207	253	181	162	201	169	184	175	206	212
January.....	224	203	220	178	175	175	181	167	166	199	203
February.....	216	194	210	178	170	173	169	165	163	193	197
March.....	224	190	203	178	163	171	162	164	161	196	211
April.....	230	205	205	177	153	169	160	167	160	199	233
May.....	234	210	216	178	153	173	161	168	161	202	217
June.....	226	204	243	180	154	189	162	180	167	203	217
July.....	241	210	232	181	160	209	167	183	177	212	213
August.....	242	214	276	184	162	225	170	188	187	216	225
September.....	225	205	233	188	161	229	170	190	189	210	220
October.....	227	205	291	189	162	223	173	194	187	211	223
November.....	237	210	304	188	164	232	176	217	189	217	230
December.....	242	220	317	189	168	248	182	222	189	223	238
1920.											
Average for year.....	218	220	295	241	192	264	200	254	196	226	243
January.....	247	231	339	164	175	274	189	239	194	233	243
February.....	237	222	346	199	190	293	195	242	197	232	249
March.....	237	220	344	208	197	297	205	242	200	234	253
April.....	243	238	336	231	203	300	210	242	206	245	255
May.....	241	248	328	239	202	293	213	247	208	247	272
June.....	237	243	314	250	200	275	212	248	205	243	269
July.....	233	238	300	250	202	269	212	275	203	241	232
August.....	218	221	286	269	202	265	209	274	199	231	250
September.....	210	215	266	281	200	255	205	273	195	226	242
October.....	187	201	245	280	191	240	198	271	188	211	225
November.....	173	190	226	264	176	215	181	260	179	196	207
December.....	152	170	215	254	160	204	164	242	166	179	189
1921.											
Average for year.....	124	144	180	199	129	165	136	195	128	147	153
January.....	143	162	196	247	153	192	153	217	154	170	177
February.....	133	151	188	225	147	180	149	217	147	160	167
March.....	127	151	183	212	140	173	143	216	139	155	162
April.....	117	144	176	205	138	167	135	216	130	148	154

REVISED INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES AND BY MONTHS, 1913 TO 1922—Concluded.

Year and month.	Farm products.	Foods.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.	
										New index.	Old index.
1921.											
May.....	118	139	173	200	138	165	134	209	126	145	151
June.....	114	137	172	191	133	163	133	196	125	142	148
July.....	119	141	172	186	124	160	129	180	123	141	148
August.....	123	146	171	184	117	156	129	179	119	142	152
September.....	124	142	178	181	116	156	131	179	118	141	152
October.....	124	140	180	189	116	159	131	180	118	142	150
November.....	121	139	180	197	114	163	129	178	119	141	149
December.....	120	136	180	199	113	158	127	178	121	140	149
1922.											
Average for year.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
January.....	122	131	176	195	112	157	124	178	117	138	148
February.....	131	135	174	191	110	156	123	177	117	141	151
March.....	130	137	172	191	109	155	125	175	117	142	152
April.....	129	137	171	194	113	156	124	175	116	143	152
May.....	132	138	175	216	119	160	122	176	116	148	.....

Retail Prices of Clothing in Great Britain, 1914 and 1922.

ACCORDING to the Labor Gazette (London) for May, 1922, page 203, retail prices of clothing rose steadily from 1914 until the summer of 1917 when there followed a more rapid rise until after the armistice. Clothing prices then remained almost stationary until the fall of 1919 when they advanced again, reaching a maximum of 330 per cent above the pre-war level in the summer of 1920. In October, 1920, a decline set in, and by October, 1921, the average percentage increase in retail prices of clothing over the 1914 rates had fallen to 165 per cent, and on April 1, 1922, the average increase as compared with prices in July, 1914, was 140 per cent.

The following statement gives the average percentage increase in retail prices of clothing April 1, 1922, as compared with prices July, 1914, by groups. Labor used in making up these garments cost about one and one-half times the corresponding pre-war charges, which fact has been taken into account in computing the final percentage.

Group.	Per cent of increase.
Men's suits and overcoats.....	110
Woolen material for women's outer garments.....	170
Woolen underclothing and hosiery.....	160
Cotton material for women's outer garments.....	230
Cotton underclothing material and hosiery.....	160
Boots.....	120

The table which follows, taken from the same issue of the Labor Gazette, shows the general range of price quotations used in determining the index number, and the Gazette states in this connection that the method of calculation of the index number "is that of combining the percentage changes in the prices quoted by retailers from month to month and not that of averaging the prices quoted." The quotations for materials are "per yard"; for footwear, "per pair"; and for other articles, "each."

RANGE OF RETAIL PRICES OF CLOTHING USED BY WORKING-CLASS FAMILIES
 JULY, 1914, AND APRIL 1, 1922.

[1s. at par=24.3 cents; 1d.=2.03 cents.]

Article.	Ranges of retail prices.	
	July, 1914.	Apr. 1, 1922.
Men's suits and overcoats:		
Ready-made suits.....	21s.-30s.	45s.-65s.
Ready-made overcoats.....	21s.-30s.	45s.-65s.
Suits made to order.....	30s.-42s.	63s.-90s.
Overcoats made to order.....	30s.-35s.	60s.-90s.
Woolen material for women's outer garments:		
Costume cloth.....	1s. 6d.-3s.	3s. 11d.-7s. 11d.
Tweed.....	1s.-2s.	1s. 11d.-4s. 11d.
Serge.....	1s.-2s.	2s. 6d.-4s. 11d.
Frieze.....	1s. 6d.-3s.	2s. 11d.-6s. 11d.
Cashmere.....	1s. 6d.-2s.	2s. 11d.-5s. 11d.
Woolen underclothing and hosiery:		
Men's vests and pants.....	2s. 6d.-2s. 11d.	5s. 11d.-8s. 11d.
Men's merino socks.....	6½d.-1s.	1s.-2s. 3d.
Women's vests.....	1s.-1s. 6½d.	2s. 6d.-4s. 11d.
Women's woolen stockings.....	9¾d.-1s. ¾d.	1s. 11d.-2s. 11d.
Flannel.....	8¾d.-1s. ¾d.	1s. 6d.-3s.
Cotton material for women's outer garments:		
Print.....	3¾d.-4¾d.	10½d.-1s. 6¾d.
Zephyr.....	3¾d.-4¾d.	1s.-1s. 6¾d.
Sateen.....	3¾d.-4¾d.	1s.-1s. 6¾d.
Drill.....	4¾d.-6¾d.	1s.-2s.
Galatea.....	4¾d.-6¾d.	1s.-2s.
Cotton underclothing and hosiery:		
Men's cotton socks.....	4¾d.-7¾d.	1s.
Women's cotton stockings.....	4¾d.-1s. ¾d.	1s.-1s. 6¾d.
Calico, white.....	2¾d.-4¾d.	6¾d.-1s. 3d.
Longcloth.....	3¾d.-4¾d.	3¾d.-1s. 3¾d.
Shirting.....	3¾d.-4¾d.	1s. ¾d.-1s. 6¾d.
Flannelette.....	2¾d.-4¾d.	8¾d.-1s. 3d.
Boots:		
Men's heavy boots.....	5s. 11d.-8s. 11d.	14s. 6d.-21s.
Men's light boots.....	6s. 11d.-10s. 6d.	14s. 6d.-21s.
Women's boots.....	4s. 11d.-8s. 11d.	10s. 6d.-20s.
Boys' boots.....	3s. 11d.-5s. 11d.	8s. 6d.-13s. 6d.
Girls' boots.....	3s. 6d.-5s. 11d.	7s. 11d.-12s. 6d.

WAGES AND HOURS OF LABOR.

Average Weekly Earnings of New York State Factory Workers in April, 1922.

THE average weekly earnings of New York State factory workers declined 42 cents from March to April, according to a statement issued by the New York State Department of Labor. The April average was \$24.15, a reduction of 8 per cent in comparison with April, 1921. This statement is based on reports from 1,648 representative manufacturers of the State. Part-time work instituted as the result of seasonal curtailment was the chief cause of the decreased earnings reported. Some industries showed lower average earnings because the factories were closed for the observance of religious holidays. Several industries reported a gain in average earnings because of increased seasonal activity or improvement in business conditions.

Large reductions in earnings were reported by the clothing, and furs, leather, and rubber goods groups of industries. Other reductions reported took place in the manufacture of paper, the printing and paper goods industries, and in the manufacture of food and tobacco products, miscellaneous wood products, furniture, pianos, oil products, heating apparatus, iron and steel products, sheet-metal products, tools and cutlery, silk, cotton, and knit goods, stone and mineral products, and glass.

Increases in earnings were reported as having occurred in the millinery, beverages, miscellaneous chemical products, drugs and chemicals, automobiles, silverware, structural iron, machinery, instruments and appliances, shipbuilding, wool manufactures, cement and plaster, and brick industries, and in the factories making boxes, woodwork, and house trim.

Average weekly earnings in the 11 chief industry groups in April were as follows:

Stone, clay, and glass products.....	\$23.31
Metals, machinery, and conveyances.....	25.65
Wood manufactures.....	24.27
Furs, leather, and rubber goods.....	23.05
Chemicals, oils, and paints.....	25.30
Paper.....	25.59
Printing and paper goods.....	30.28
Textiles.....	19.56
Clothing, millinery, and laundering.....	21.72
Food, beverages, and tobacco.....	22.78
Water, light, and power.....	32.76
Total.....	24.15

Wages in a Chinese Cotton Mill.

A REPORT from the American economist consul in Shanghai gives the following wage rates for a cotton factory at Ningpo as published in Finance and Commerce, Shanghai, February 22, 1922. The wages, which are for a 12-hour day, are reported in Mexican currency. In United States currency the wages would be about 50 per cent of these figures.

DAILY WAGE RATES FOR SKILLED AND ORDINARY LABOR IN A CHINESE COTTON MILL.

[1 dollar, Mexican=51.4 cents.]

Occupation and sex.	Minimum.	Maximum.
Skilled labor:	<i>Mexican money.</i>	<i>Mexican money.</i>
Men.....	\$0.35	\$0.60
Women.....	.30	.50
Ordinary labor:		
Men.....	.30	.50
Women.....	.20	.30
Boys (age about 15 years).....	.20	.30
Girls (age about 15 years).....	.10	.20
Small boys (age about 10 years).....	.10	.20
Small girls (age about 10 years).....	.07	.10

Wages in Beet-Sugar and Coal-Mining Industries and in Domestic Service in France.

WAGES prevailing in France in 1921 in the beet-sugar and mining industries and among servants in cities of more than 10,000 population are reported in the Bulletin du Ministère du Travail for January-February-March, 1922 (pp. 7, 8, 17-19, 31-34).

Wages in Beet-Sugar Industry.

THE beet-sugar industry of 1920-21 showed not only a greatly increased acreage under cultivation and much greater production than in the season of 1919-20, but also a considerably larger labor force and an increase in the average wages paid to the employees in this industry.

The labor personnel—men, women, and children—increased from 13,159 in the preceding year to 15,405 in 1921. The average daily wages of men for the same period increased from 13.70 francs (\$2.64, par) to 19.83 francs (\$3.83, par). Women's wages increased from 8.13 francs (\$1.57, par) to 10.60 francs (\$2.05, par), and those of children from 6.41 francs (\$1.24, par) to 8.47 francs (\$1.63, par).

The following table shows the number of employees and the average daily wages in beet-sugar factories in the various Departments of France:

NUMBER OF FACTORIES, NUMBER OF EMPLOYEES, AND AVERAGE DAILY WAGES OF EMPLOYEES IN BEET-SUGAR FACTORIES IN THE DIFFERENT DEPARTMENTS OF FRANCE, SEASON OF 1920-21.

[1 franc at par=19.3 cents.]

Department.	Number of establishments.	Number employed during the season.			Average daily wages.		
		Men.	Women.	Children.	Men.	Women.	Children.
Aisne.....	3	625	46	.....	<i>Francs.</i> 19.63	<i>Francs.</i> 12.00	<i>Francs.</i>
Nord.....	4	555	28	15	25.36	8.09	4.00
Oise.....	17	2,547	156	54	18.24	11.22	10.80
Pas-de-Calais.....	6	1,555	154	68	22.28	8.85	6.81
Seine-et-Marne.....	12	2,538	224	136	18.68	10.87	8.79
Seine-et-Oise.....	8	985	40	13	21.39	10.36	10.35
Somme.....	4	1,878	32	16	19.18	11.25	7.73
Other departments.....	18	3,551	141	48	17.51	10.75	9.95
Total.....	72	14,234	821	350	19.83	10.60	8.47

Wages of Servants.

A COMPARISON of the wages of 11 classes of servants receiving board and lodging in cities of more than 10,000 inhabitants in 1913 and 1921 shows an average increase in the money wages of from 150 to 200 per cent in the various sections of the country. The southern part of France shows a considerably higher index than the average, while the absolute value of the wages was highest in the northern and lowest in the western part of the country. Gratuities which are not included in the table of wages often amount to more than 100 per cent of the wages, especially for valets and chambermaids. The following table shows the average wages of house servants receiving board and lodging in 1913 and 1921 in cities of more than 10,000 inhabitants.

AVERAGE ANNUAL WAGES OF DOMESTIC SERVANTS IN 1921 IN CITIES OF MORE THAN 10,000 INHABITANTS AS COMPARED WITH WAGES IN 1913.

[1913=100. Franc at par=19.3 cents.]

Class.	Average annual wage.		Index number (1913=100).
	1913	1921	
Cooks (male).....	<i>Francs.</i> 1,473	<i>Francs.</i> 3,802	258
Cooks' assistants (male).....	672	1,962	292
Valets.....	690	1,760	255
Coachmen.....	868	2,124	245
Chauffeurs.....	1,337	3,255	243
General servants (male).....	575	1,621	282
Cooks (female).....	607	1,607	265
Cooks' assistants (female).....	382	1,076	282
Chambermaids.....	482	1,136	236
General servants (female).....	378	1,042	276
Charwomen.....	.....	¹ 1.18	.....

¹ Hourly rate.

The average value of board and room per year for men was 680 francs (\$131.24, par) in 1913 and 2,180 francs (\$420.74, par) in 1921,

an increase of 220 per cent, and for women 558 francs (\$107.69, par) in 1913 and 1,962 francs (\$378.67, par) in 1921, an increase of 252 per cent.

Wages in Coal Mines.

A STUDY by the Ministry of Labor of the average wages of underground and surface miners in 1914, 1920, and 1921 covers the principal coal mines of each mining district in France for which comparable data could be secured. The figures do not include family allowances, as information in regard to these additional payments was not furnished in all cases. In all the mining districts except Nantes and Bordeaux, family allowances were reported for at least part of the mines. These allowances vary from about 0.50 franc (9.7 cents, par) to 1 franc (19.3 cents, par) per day for each child under 13 years of age. In some instances the allowances are graduated according to the number of children and in a few cases the rate varies in the different occupations. The mines of the district of Douai were not included because they are in process of being restored and it was impossible to separate the wages of workers engaged in the reconstruction work from those engaged in mining. An agreement was concluded at Douai, January 14, 1922, between representatives of the miners and the mining companies which lowered the basic daily wages of workers over 16 years of age 3.25 francs (62.7 cents, par), bringing the average wage down to 16 francs (\$3.09, par) on April 16, 1922.

The following table shows the average daily wages of pick miners, underground, and surface workers in the different mining districts in 1914, 1920, and 1921, the average wage per net ton of production and the index numbers for 1920 and 1921 compared with 1914:

AVERAGE DAILY WAGES OF WORKERS IN COAL MINES OF FRANCE IN 1914, 1920, AND 1921, AND AVERAGE WAGE PER NET TON PRODUCED.

[Franc at par=19.3 cents.]

Average daily wages.

Mining district.	Pick miners.			Surface workers.			Underground workers.			Surface and under- ground workers.			Per ton of net production.					
													Underground workers.			Surface and under- ground workers.		
	1914	1920	1921	1914	1920	1921	1914	1920	1921	1914	1920	1921	1914	1920	1921	1914	1920	1921
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Arras.....	7.49	25.90	25.90	4.05	16.13	16.13	5.95	20.90	20.90	5.00	18.52	18.60	5.47	26.90	26.90	6.74	36.62	36.62
Nantes.....	4.84	17.26	15.87	3.46	14.39	12.17	4.13	16.15	14.66	3.99	15.17	14.08	5.40	49.31	25.31	9.05	80.00	40.58
Bordeaux.....	5.29	23.74	18.59	3.25	14.63	12.09	4.60	19.07	15.63	4.20	17.79	15.45	6.85	33.25	25.91	10.06	49.16	43.32
Toulouse.....	6.60	22.48	20.15	4.03	15.80	12.86	5.69	20.20	17.78	5.16	18.96	15.90	6.05	25.85	22.21	8.82	38.78	33.66
Lyon.....	6.08	24.23	21.60	4.13	17.04	14.70	5.40	21.68	19.20	4.87	19.77	15.70	4.64	22.25	20.25	6.88	33.56	31.25
Grenoble.....	6.26	23.22	19.02	4.70	16.92	12.78	5.93	21.44	17.11	5.49	19.43	15.16	5.97	29.07	19.46	8.22	47.27	31.40
Saint-Etienne.....	7.46	25.79	21.85	4.29	17.17	14.24	5.91	22.07	19.00	5.40	20.67	17.47	5.80	28.06	24.15	7.54	38.57	32.71
Clermont-Ferrand.....	5.54	20.27	17.48	3.48	15.00	12.40	5.18	18.73	16.12	4.47	17.42	14.83	6.39	29.38	25.80	9.11	41.09	35.50
Marseille.....	6.40	14.33	17.58	3.61	14.82	12.25	5.37	19.93	16.12	5.00	18.18	14.77	3.45	14.08	12.90	4.50	19.67	18.15
Alais.....	6.59	23.00	19.04	3.74	15.26	12.76	5.53	20.48	17.00	4.92	18.50	15.32	6.51	22.70	20.58	7.53	32.94	30.77

Index numbers.

Arras.....	100	346	346	100	399	399	100	351	351	100	370	372	100	492	492	100	543	543
Nantes.....	100	357	328	100	380	351	100	384	355	100	380	352	100	912	468	100	884	448
Bordeaux.....	100	449	356	100	450	372	100	414	339	100	423	367	100	485	378	100	489	431
Toulouse.....	100	341	305	100	392	319	100	355	308	100	362	308	100	427	367	100	439	382
Lyon.....	100	398	355	100	412	332	100	401	355	100	406	359	100	479	436	100	488	454
Grenoble.....	100	371	304	100	360	272	100	361	288	100	354	276	100	487	327	100	575	382
Saint-Etienne.....	100	346	293	100	400	332	100	378	321	100	383	324	100	490	418	100	511	433
Clermont-Ferrand.....	100	366	315	100	430	356	100	362	311	100	389	332	100	467	403	100	451	390
Marseille.....	100	338	275	100	410	339	100	365	300	100	360	292	100	407	373	100	437	403
Alais.....	100	349	289	100	408	341	100	367	305	100	376	311	100	349	316	100	438	409

Wages in the Territory of the Saar.¹

THE coal mines of the territory of the Saar employed during 1921 an average of 72,400 miners, or about 40 per cent of the total labor population of approximately 180,000 in this region. Unemployment has been at a minimum in this section, the highest number of unemployed in all industries from February, 1920, to December, 1921, being 3,365 during the month of August, 1921. The average daily output per underground worker increased from 738 kilograms (1,627 pounds) in February, 1920, the period at which the governmental commission took control, to 793 kilograms (1,748 pounds) in December, 1921.

The average daily wages in the mines increased from 5.37 francs (\$1.04, par) in February, 1920, to 21.40 francs (\$4.13, par) in July, 1920. The wages were maintained at that figure with slight changes up to April, 1921, when they were reduced to 18.09 francs (\$3.49, par). A further reduction of about 3 francs (57.9 cents, par) was put into effect December 1, 1921. The following table shows the average rate of wages (in francs) of underground workers, pick miners, and surface workers at different periods from February, 1920, to April, 1921.

AVERAGE DAILY WAGES IN MINES OF THE SAAR FOR DIFFERENT CLASSES OF WORKERS, FEBRUARY, 1920, TO APRIL, 1921.

[Franc at par=19.3 cents.]

Occupation.	Average wages in—			
	February, 1920.	April, 1920.	July, 1920.	April, 1921.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Underground workers.....	5.80	13.33	22.78	19.11
Pick miners.....	6.61	14.06	24.88	19.91
Surface workers.....	4.50	10.60	17.75	15.63
Average wage.....	5.37	12.53	21.40	18.09

In the iron and steel industry of the Saar only 15 of the 30 blast furnaces were in operation in February, 1920, while in November, 1921, the number had increased to 20. Iron production increased from 46,000 tons in February, 1920, to 95,000 tons in October, 1921, nearly reaching the average monthly production of 1913, which was 100,000 tons. The manufacture of steel ingots increased from 54,000 tons in February, 1920, to 87,000 tons in November, 1921, while the personnel in iron and steel mills increased during the same period from 26,000 to 29,000.

The wages of these workers were paid in marks until November 30, 1920, and after that time in francs. The average monthly wages of skilled and unskilled workers, married and having three children, are given in the following table:

¹ Bulletin du Ministère du Travail, Paris, January-February-March, 1922, pp. 102-105.

AVERAGE MONTHLY WAGES OF SKILLED AND UNSKILLED IRON AND STEEL WORKERS, FEBRUARY, 1920, TO NOVEMBER, 1921.

[1 mark at par=23.8 cents; 1 franc at par=19.3 cents.]

Date.	Average monthly wages of—		Date.	Average monthly wages of—	
	Unskilled workers. ¹	Skilled workers. ¹		Unskilled workers. ¹	Skilled workers. ¹
	<i>Marks.</i>	<i>Marks.</i>		<i>Francs.</i>	<i>Francs.</i>
February, 1920.....	555.00	655.00	Dec. 1, 1920, to May 31, 1921...	385.00	445.00
March to May, 1920.....	880.00	980.00	June, 1921.....	371.00	429.00
July and August, 1920.....	990.00	1,090.00	July, 1921.....	371.00	427.25
September to November, 1920.	1,186.00	1,310.00	August and September, 1921...	361.50	409.50
			October, 1921.....	346.25	392.25
			November, 1921.....	315.00	357.00

¹ Includes family allowances for workers with 3 children.

The percentage of increase of wages, based on the value of the franc in marks, from February, 1920, to November, 1921, was 1,059 for unskilled and 1,017 for skilled workers.

According to statistics of the cost of living, the report states the wages of miners and iron and steel workers have more than kept pace with living costs, particularly for men with families who have received the family allowances.

Eight-Hour Day in the French Merchant Marine.

MUCH dissatisfaction has been felt in French shipping circles for more than a year because the application of the eight-hour law to the French merchant marine has placed it in an unfavorable position as regards other countries which are not subject to such limitation of the hours of seamen. La République Française of May 18, 1922, announces the appointment of a joint commission by the undersecretary of state to the merchant service to study the question of modifications to the decree of February 24, 1920, for the application of the eight-hour law in the merchant marine. This commission is composed of representatives of ship-owners, ship officers, and the subordinate personnel.

The general secretary of the National Federation of Maritime Unions demanded of the shipping interests the suspension of all modifications of the regulations now in force until the meeting in July of the International Federation of Seamen which will decide on the internationalization of the eight-hour law and upon the means by which it can be effected. The representative of the shipping interests urged, on the other hand, that the present situation required that immediate measures should be taken to improve conditions, although it was conceded that the principle of the eight-hour law should be preserved.

In connection with the question of the hours of maritime workers it is of interest to note a recent statement of the French minister of labor¹ before the labor commission of the Chamber of Deputies

¹ Factory, Chicago, June, 1922, p. 684.

that investigation of the workings of the law in France and in other countries had convinced him that nothing would justify a revision of the law of April 23, 1919. He considered that the law provided sufficiently for the exigencies of production; the decrees by which it had been made applicable to the different industries had been promulgated only after careful study and usually with full agreement on the part of both employers' and employees' organizations, and in only two industries had there been demands for revision of the law.

Wages of Farm Labor in England and Wales.

By MRS. V. B. TURNER.

THE great body of official and unofficial publications having to do with agricultural subjects serves to emphasize the fact that agriculture is a basic, if not the basic, industry. Stress has, however, in most instances, been placed upon the scientific and economic phases of cultivation and production. Studies dealing specifically with agricultural labor are, on the whole, conspicuously few, and such reports as have been made consistently point out their own limitations and the possible inconclusiveness, for various reasons, of the data presented. The isolation of the individual farmer or group of farm workers makes difficult the consideration of a representative number of workers. Surveys of this sort are therefore often necessarily confined to particular classes of such employees or to a certain number of farms. The character of the farming and the economic weakness of farm labor, as well as national economic and political conditions, also affect the results of any investigation of agricultural labor conditions. Multiplicity in the division of labor necessary in some farming areas and the absence of more or less minute classification in others, with a consequent overlapping of duties, result in such endless variations in wages that averages must be used, which are often somewhat misleading as to actual wage conditions in many of the districts.

For all these reasons and others the review of agricultural wages in England and Wales given in this article is intended rather to throw light upon present and pre-war wage conditions of farm hands than to constitute a basis for general conclusions regarding them.

Description of Occupations or Classes.

England.

NO HARD or fast classification of the English farm workers can be made. Divisions of duties prevailing in farm work in some localities are quite different from those in others, the locality, type, and size of the farm causing a merging of duties or the opposite, as the case may be. On the small farms, particularly the small grass farms, there is a tendency for the laborer to be an "all-round" man, who may be assigned to practically any job, while the work of the large farm requires more clearly defined groups of workers. Generally speaking, the English farm laborers fall into the following classes, which in 1918 included the number of persons,

[71]

male and female, quoted: Bailiffs and foremen, 22,166; shepherds, 20,844; cattlemen, 74,028; horsemen, 128,122; laborers not designated, 433,343; making a total of 678,503.¹ At the same time there were 228,788 farmers and graziers, the relation of the farm workers to the latter class thus being in the ratio of nearly three to one.

In January, 1920, the number of permanent and casual farm workers irrespective of occupation was: 496,000 men, 15,500 girls, 52,500 women, 95,000 boys, or a total of 659,000.² In some counties it is customary to employ casual labor; in others this practice is not followed. War demands greatly affected the usual classification of labor on the farms, substitution of old men, women, and boys for the young men called into the army tending to increase the number of "all-round workers."

Bailiffs and foremen supervise manual operations for the farmer or landowner. On the large sheep farms the shepherd, who has entire care of the sheep, is the chief man on the farm, but in many places he ranks equally with the horsemen and the cowmen, the gradation depending, of course, on the type of farm. Horsemen include all men in charge of horses. They are classified as horsemen, horse-keepers, wagoners, carters, teamsmen, and hands, terms impossible of exact differentiation but covering men of widely different standing, wages, and degrees of responsibility. The large arable farms where much team work is required usually have a head horseman, or wagoner with a second horseman and carters. The head horseman is hired by the year, lives on the farm, and has general supervision of the horses. The assistants, in most instances single men between 15 and 30 years of age, work under his direction, and as a rule board or lodge with his family. Horsemen, as a class, were greatly affected by the war, as they were freely called upon for the Army, their places being taken by boys and in some cases at least by women.

Men having charge of cattle include cowmen, milkers, stockmen, yardmen, garthmen, and herdsmen, whose particular duties and relative standing are also precisely determined according to the type and scale of the farming followed. Head cowmen and herdsmen must always be experienced men and on large cattle or dairy farms have the more highly paid positions. On farms where the care of the cattle does not require the continuous labor of these men, they employ their spare time with other farm work. The regular ordinary farm laborers are by no means an unimportant factor in English agricultural work, especially on the arable farms, where they do ditching, draining, harvesting, haymaking, hedging, potato digging, thinning, thatching, and weeding. Laborers are also often plowmen, but are not responsible for the horses. The more experienced men are assigned to draining, hedging, plowing, thatching, and the management of machinery. For this more skilled work higher wages are paid and the men are more permanent.

A special class of laborers employed in market gardens and osier beds is more highly paid than the ordinary farm laborer. Casual labor is a term covering a large number of men variously known as catchmen, dotal men, daymen, jobbers, and odd men, employed for

¹ Great Britain. Board of Agriculture and Fisheries. Wages and conditions of employment in agriculture. Vol. I. General report. London, 1919, p. 2. [Cmd. 24.]

² Estimated number. Great Britain. Agricultural Wages Board. Wages Board Gazette. London, Apr. 1, 1920, p. 152.

seasonal work such as harvesting, fruit and hop picking, thrashing, hoeing, weeding, and the like. It includes the class of Irish immigrants who go to England for part of the year, often migrating from one county to another until all possible seasonal work is finished, and immigrants from industrial areas, as well as tramps and gypsies. Another type of labor is the small holder who, when not busy on his own holding, works as an extra hand on a neighboring farm. Sometimes his labor is in the nature of an exchange, the farmer furnishing team work for his holding which he repays by day labor. In a few counties small holders known as "lookers" take charge of cattle and sheep for large farmers.

Wales.

Farming conditions in Wales lead to a less detailed classification of labor than is found in England. The land suitable for arable farming is limited in extent. Consequently, a large number of the holdings are small, 44,351 out of a total 64,330 containing from 1 to 50 acres. Family farming is an outstanding characteristic of Welsh rural economy, about 60.2 per cent of all persons engaged in agriculture consisting of farmers and their relatives, as compared with 31.2 per cent for England and Wales combined. The "living-in" system prevails. The absence of social barriers between master and man is marked.³ Neither the character of the farming nor the size of the farm, therefore, demands a large supply of labor. Necessary extra help ordinarily consists of one farm boy or young man who lives with the family. On the larger farms the following classes appear: (1) Farm servants or laborers; (2) the "bound tenant," who rents a cottage from his employer and a small holding attached to his employer's farm, the conditions of whose tenancy are that he shall remain in his employer's service, that the farmer shall assist the tenant with his team at plowing and harvest, and that the tenant's family shall work for the farmer during his harvest; (3) "free-handed laborers," who work for whomever they will and change their system of hiring out as occasion demands; and (4) a special class of hill shepherds who work on several different wage bases. According to the census of 1911, the number of horsemen, shepherds, cattlemen, and other laborers was 39,766.

A noticeable feature of farm labor in Wales is the extensive employment of boys and young men, a practice which is on the increase. The principal reasons given for the farmers' apparent preference to young inexperienced men rather than to the older more experienced laborers are:

(1) Owing to the poverty of the soil and the backwardness of agriculture, farmers are unable to pay wages sufficient to secure competent and experienced men, and the latter have to migrate to areas where their skill and strength can command a better reward. Many of them forsake agriculture for mining and other industrial occupations.

(2) In some districts, owing to the scarcity of suitable cottage accommodation, young men are compelled to migrate to the works on marriage.

(3) Many farmers also prefer boys and young men because they live at the farms and are at their beck and call day and night, if required, whereas the hours of married laborers are shorter and more clearly defined. The passing of the corn production

³ Great Britain. Board of Agriculture and Fisheries. Wages and conditions of employment in agriculture. Vol. I. General report. London, 1919, p. 182. [Cmd. 24.]

act and the fixing of minimum wages has deprived this reason of much of its former force.

The chief reason, however, is undoubtedly the cheapness of single men as compared with married men. This unwillingness of farmers to employ married men at reasonable rates of pay has resulted in agriculture in Wales becoming almost a blind-alley employment. Boys and young men are content to work on the farms at low wages while they are single. When they contemplate marriage, however, they are forced to migrate to the industrial districts, where they can obtain higher wages than the farmers are prepared to pay.⁴

Corn Production Act of 1917.

OWING to the depletion of labor ranks for war purposes, the attraction of higher wages paid by industrial concerns, resulting in a great migration of the farm workers to towns and cities, and the ever increasing cost of living, farm wages gradually advanced during the period 1914-1917 (see Table 1). But in 1917 the absolute necessity of greater food supplies became alarmingly apparent. The submarine menace could be warded off only by the utmost production of which the land was capable. To encourage, therefore, increased production of corn (a term including both wheat and oats), to insure the turning of pasture into arable land, to promote proper cultivation, to afford protection with regard to rent, and to assure the farmer a price for his grain equal at least to that paid for foreign grain, the Government, through the passing of the corn production act in August, 1917, provided for a period of minimum wages for labor and guaranteed prices for grain. Part I of the act provided that for a period of five years minimum prices of grain per quarter⁵ were to be as follows:⁶

	Wheat.		Oats.	
	s.	d.	s.	d.
1917.....	60	0	38	6
1918.....	55	0	32	0
1919.....				
1920.....				
1921.....	45	0	24	0
1922.....				

As a result of this price fixing the Government agreed, in case the selling price fell below the minimum price set, to pay the farmer the difference between the guaranteed price and the selling price, and this difference was calculated not upon the actual yield but upon an assumed yield of four quarters of wheat and five quarters of oats per acre.

Part II of the act provided for a minimum rate of wages to be paid agricultural wage earners, and for the setting up of an agricultural wages board with power to fix minimum wage rates, 25s. (\$6.08, par) per week being the minimum set until the board should become operative. Part III restricted the raising of agricultural rents so far as the ability to obtain an increased rent was dependent upon the guaranty of price given in Part I of the act. Part IV empowered the boards of agriculture to enforce proper cultivation.

To carry out the provisions of the act, in addition to the national agricultural wages board on which workers and employers were both

⁴ Welsh Housing and Development Year Book, 1920. Cardiff, 1920, p. 55.

⁵ 1 quarter of wheat=480 pounds; 1 quarter of oats=312 pounds.

⁶ Great Britain. Royal Commission on Agriculture. Interim report * * * on the economic prospects of the agricultural industry in Great Britain. London, 1919, p. 5. [Cmd. 473.]

represented, district wages committees similarly constituted were also set up, whose duty it was to recommend to the wages board minimum rates of wages applicable to conditions prevailing in their districts. For the first time the minimum wage system introduced into British industry by the trade boards act, 1909, was made applicable to agriculture. This was not, however, an entirely modern system in British agriculture, such acts having been passed as far back as 1562. The opportunity for collective rather than individual agreements was eagerly accepted by the farm workers, whose principal weakness in wage bargaining had, up to this time, been due to their isolation and consequent individual contract.

The agricultural act of 1920 continued the policy of guaranteeing minimum prices for wheat and oats introduced by the corn production act, minimum prices being: Wheat, 68s. (\$16.55, par) per quarter (statutory) of 504 pounds; oats, 46s. (\$11.19, par) per quarter (statutory) of 336 pounds. Some months later, however, in order to do away with the subsidy guaranteed the farmer under the corn production act, the Government repealed the act on October 1, 1921. As a result the wages boards were swept away and with them the security attained by farm workers through the operation of the act.

Conciliation Committees.

AS A substitute for the boards conciliation committees may be set up to deal with wages and hours and other labor conditions.

Briefly, a conciliation committee may do what any body of representatives of employers and workers set round a table may do—agree upon wages, hours, and conditions. What, however, on the face of it, gives a real importance to the conciliation committees is that, if they so decide, agreements arrived at may be submitted to the Minister of Agriculture for confirmation. If the minister confirms an agreement, he will then cause the particulars to be advertised in the district to which it applies, specifying the date from which the agreement will become operative. When an agreement has been confirmed and published, the wages and conditions laid down in it become applicable to all farms in the district when the agreement comes into force.

Superficially, the machinery of the conciliation committees bears a certain resemblance to that of the Agricultural Wages Board or a trade board. But whether the Minister of Agriculture takes the steps outlined above depends upon the conciliation committees. A committee which has arrived at an agreement must by resolution decide to submit it to the minister for confirmation, and it is obviously possible for the farmers' side of a committee to thwart any such decision. Moreover, there is no central body coordinating wages and other agreements, and there may, and probably will be, under this system a multitude of wage scales in operation in the country, most of them bearing no relation to each other or to the employers' ability to pay. Nor when agreements have become operative is there any responsibility upon the State for enforcing them, as there was in the case of the Agricultural Wages Board, and as there still is in the case of the trade boards. Lastly, in districts where an agreement has been put into operation, it is possible for an individual worker to contract out of it. If a farm worker is content with a lower wage, or accepts a lower wage in order to keep his job, or because he is afraid to ask for more, he and his employer may evade the intention of the agreement. It is obvious that this provision strikes at the root of district agreements and collective bargaining, and is a menace to trade-unionism. The conciliation committees, it will be seen, are working under conditions which militate against successful working, as no doubt they were intended to do. Already there is evidence that the provisions for the registration of agreements will remain almost a dead letter, and that it will be difficult to secure agreements.⁷

The Journal of the Ministry of Agriculture for December, 1921, however, states (p. 836) that the whole of England and Wales were

⁷ Economist (London), Oct. 22, 1921, pp. 673, 674.

covered by conciliation committees at that time. In some instances local employers and workers formed separate committees for parts of areas in which wage fixing had formerly been done by the district wage committees, thus increasing the existing 39 district committees to 56 conciliation committees. Just how efficient and satisfactory they will prove has not yet been established.

Trade-Union Organization.

THE history of trade-unionism among British agricultural wage earners is a long, fragmentary one dating from 1833, and concerned chiefly with a discouraging, though not an entirely unsuccessful, struggle to increase wages. Unrest resulting from the high cost of living of the war period and the passage of the corn production act in 1917 gave such a decided impetus to increased organization among farm workers that an estimated membership of 15,000 in 1914 had increased to about 350,000⁸ in January, 1920, 150,000 being affiliated with the Workers' Union; 200,000 with the National Agricultural Laborers and Rural Workers' Union, less 2,200 who were village craftsmen of one sort or another. A few held membership in other unions. It was estimated in 1920 that about 50 per cent of the farm workers of England and Wales were organized.

Cash Wages, Earnings, and Cost of Living.

THE total earnings of agricultural laborers generally are made up in large part of the weekly, half-yearly, or yearly cash wages and supplementary earnings of various kinds. In the case of English and Welsh agricultural wage earners the cash wage is supplemented by additional remuneration from (1) overtime work; (2) piecework; (3) special customary payments in recognition of skill; and (4) allowances in kind. The amount of wages paid ordinarily depends upon local custom, proximity of industrial centers, character of the work, and the shrewdness with which the individual bargain is driven.

Average Weekly Cash Wages, 1907 to 1918.

While farm wages had advanced from the general weekly cash average of 12s. or 13s. (\$2.92 or \$3.16, par) in 1873 to 22s. (\$5.35, par) per week in 1917, the fluctuation upward had been too slight to increase materially the comfort of the worker. Upon the passing of the corn production act the newly established agricultural wages board appointed, in March, 1918, a committee to investigate the financial results of the occupation of agricultural land and the cost of living of rural workers. In the report submitted March 5, 1919, the following tables appear showing average weekly cash rates of wages, 1907 to 1918. The adult farm workers are divided into two groups, ordinary laborers and skilled men, and the average rates shown have been weighted according to the proportion of men in the different counties employed in each class.⁹

⁸ Greene, F. E.: *A history of the English Agricultural Laborer, 1870-1920*. London, 1920, p. 322. The *Labor Gazette*, London, October, 1921, p. 558, gives 221,394 as the membership for agricultural and fishing workers' unions at the end of 1920, but this number did not include those enrolled among the general workers' unions.

⁹ Great Britain. Agricultural Wages Board. Report of committee appointed to inquire into the financial results of the occupation of agricultural land and the cost of living of rural workers. London, 1919, pp. 23, 24. [Cmd. 76.]

TABLE 1.—AVERAGE WEEKLY CASH WAGES AND INDEX NUMBERS, BY SEASONS, 1907 TO 1918.

[1 shilling at par=24.3 cents; 1 penny at par=2.03 cents.]

Winter Rates.

Year.	Source.	Ordinary laborers.				Skilled workers. ¹				All classes.			
		Average rate.		Index number.		Average rate.		Index number.		Average rate.		Index number.	
		1907	1914	1907	1914	1907	1914	1907	1914	1907	1914		
1907.....	Board of Trade..	s. 14	d. 10	100	93	s. 16	d. 3	100	93	s. 15	d. 3	100	93
1914.....	Labor Gazette..	15	10	106	100	17	4	107	100	16	4	107	100
1914.....	Investigators...	16	3	109	102	16	8	102	95	16	4	107	100
1917.....	Labor Gazette..	22	3	150	140	24	0	147	137	22	9	149	139
1917.....	Investigators...	22	11	154	144	23	0	141	131	22	11	150	140
1918.....	do.....	27	1	182	171	28	11	177	165	27	8	181	169
1918.....	Minimum rate..	39	0	202	189	35	3½	216	200	31	2	204	190

Summer Rates.

1907.....	Board of Trade..	14	11	190	89	16	4	100	93	15	4	100	91
1914.....	Investigators...	16	8	111	109	17	0½	107	100	16	9	109	100
1914.....	"Laborer".....	15	9	105	94								
1915.....	do.....	17	11	120	108								
1917.....	Investigators...	23	7	158	141	25	8	157	152	24	1	156	144
1918.....	Minimum rate..	30	0	201	180	35	1½	214	208	31	2	203	187

¹ Includes stockmen, cattlemen, horsemen, and shepherds.

The total earnings in 1907 and 1918 of these classes of agricultural wage earners may be had by adding to the average cash wages shown the estimated value of their weekly allowances for the same period which appear in the following statement:

	1907		1918	
	s.	d.	s.	d.
Laborers.....		9	1	5
Skilled workers.....	1	6	2	9½
All classes.....	1	1	1	10

The estimated value of the allowances shown above does not, of course, represent their actual values to the men who received them, but rather the average value when the total value is distributed among all agricultural wage earners.

Taking the average winter rates for comparison, since they are the most complete figures available, it is apparent from Table 1 that the average weekly cash increases in the rates for the various classes of workers between 1907 and 1914 were: Ordinary laborers, 1s. (24.3 cents, par); skilled workers, 1s. 1d. (26.4 cents, par); all classes, 1s. 1d. (26.4 cents, par). But this slight rise was more than offset by the advance in cost of living. The estimated total weekly expenditure of a farm worker's family consisting of six persons rose from 20s. 2¼d. (\$4.91, par) in 1902 to 22s. 6d. (\$5.48, par) in 1912, the greatest weekly increase being in the cost of food, which advanced from 13s. 5¼d. (\$3.27, par) in 1902 to 15s. 10½d. (\$3.86, par) in 1912. By 1914 the estimated total weekly expenditure had reached 25s. 2¾d. (\$6.14, par).¹⁰

¹⁰ Great Britain. Agricultural Wages Board. Report of the committee appointed to inquire into the financial results of the occupation of agricultural land and the cost of living of rural workers. London, 1919, pp. 30, 31, 37. [Cmd. 76.]

Owing to war conditions and the ever-increasing cost of living a considerable wage advance occurred between 1914 and 1917, the average cash rate for all classes (winter rates) being 22s. 9d. (\$5.54, par) in the latter year. The corn production act, however, provided for a minimum weekly cash rate of 25s. (\$6.08, par) for this year. A similar wage increase appears between 1917 and 1918 when the minimum became 30s. (\$7.30, par), and the average minimum rates, including the value of allowances were: Ordinary laborers, 31s. 5d. (\$7.64, par); skilled workers, 38s. 1d. (\$9.27, par); all classes, 33s. (\$8.03, par.) Between 1907 and 1918 the winter cash rates for laborers had risen 102 per cent; for skilled workers, 116 per cent; for all classes, 104 per cent. Taking 1914 as a basis, laborers' winter wages increased 89 per cent; skilled workers' wages, 100 per cent; and the wages of all classes, 90 per cent. The average rate of increase over 1914, combining the summer and winter rates, was: Ordinary laborers, 83 per cent; skilled workers, 103 per cent; all classes, 88 per cent.¹¹ The estimated increase in the expenditure of farm workers' families between 1914 and 1918 was 85 per cent and this increase reached 93 per cent on January 1, 1919.¹²

It should be constantly borne in mind that the wage rates quoted are average rates and that the minimum rates fixed by the wages boards for different counties frequently ran much higher. For instance, 1918 rates for laborers varied from 30s. to 36s. (\$7.30 to \$8.76, par); those for skilled workers from 36s. to 42s. (\$7.30 to \$10.22, par), being influenced greatly, as suggested before, by local conditions, such as the character of the soil, proximity to industrial centers, cost of living, etc.

It is interesting to note that in a study made in 1918 of 26 farms the net earnings per acre had increased from 5s. 10d. (\$1.42, par) in 1913-14 to £1 11s. 9d. (\$7.73, par) in 1917-18, or 444 per cent. Labor costs on these farms had in the same time risen from 28s. 7d. to 44s. 1d. (\$6.95 to \$10.73, par), or 56 per cent.¹³

Summarizing the financial position of the farmer in 1918 the report of the committee appointed to inquire into this subject says:¹⁴

The general conclusion as regards the financial position of farmers is that in 1918 the average gross return was about 28s. [\$6.81, par] per acre, or, including house rent and the value of home-grown produce consumed, about 34s. [\$8.27, par] per acre, out of which interest on capital and remuneration for services had to be paid. It is evident, however, that this return was partially due to a compulsory lowering of the standard of farming by a lessened use of fertilizers, feeding stuffs, and labor, and that a consequent depreciation of the land has occurred, which must be made good by a considerable outlay of capital and labor in the immediate future, if the productivity of the soil is to be maintained. The further rise in wages which has occurred since the accounts on which this calculation is based were made up, may be reckoned as making an addition to the cost of labor as shown by the accounts of 4s. to 4s. 6d. [97.3 cents to \$1.09, par] per acre.

Discussing the actual status of the wage earner at this time the committee, whose report was made March 5, 1919, continues:¹⁴

The average minimum wage of agricultural workers of all classes, i. e., ordinary laborers, stockmen, etc., under the rates fixed in 1918 (including the value of allow-

¹¹ Great Britain. Agricultural Wages Board. Report of the committee appointed to inquire into the financial results of the occupation of agricultural land and the cost of living of rural workers. London, 1919, p. 24. [Cmd. 76.]

¹² *Idem*, p. 37.

¹³ *Idem*, pp. 13, 14.

¹⁴ *Idem*, p. 44.

ances), excluding extra earnings such as harvest and Michaelmas money, is reckoned at 33s. [\$8.03, par] per week. The actual expenditure of the "standard" family on food, clothing, fuel, light, cleaning materials, insurance, and rent is calculated at 46s. 5d. [\$11.29, par]. The cash income of the "standard" family, as represented by the budgets collected (comprising 1.48 earners in continuous employment and 0.275 earner in noncontinuous employment), from ordinary time-work at the fixed minimum rates may be calculated at 47s. [\$11.44, par]. This is available only on the assumptions (1) that the whole of the earnings of the subsidiary workers included in the standard family are paid into the family exchequer, and (2) that the "continuous" earners lose no time from illness or other causes; on the other hand, no allowance is made for extra money, from overtime, piecework, or special earnings.

Since there is practically no balance left between normal minimum wages and expenditure on necessaries, there is nothing available for tobacco, beer, furniture, books, newspapers, recreation, and other amenities of life, unless extra earnings more than counterbalance losses due to the causes suggested in the preceding paragraph. It is probable therefore that the records of expenditure come from families whose standard is above the average, and that in fact the general standard of living does not altogether reach the standard shown in the average budget. In particular it is certain that the worker who receives no more than the minimum time rates and has to support a wife and family by his sole efforts must live at a lower standard.

Minimum Rates, 1918 to 1921.

The minimum rates established under the corn production act were gradually increased to meet the advancing cost of living. The rates between 1918 and the fall of 1921 may be briefly summarized as follows:¹⁵

TABLE 2.—MINIMUM WEEKLY WAGE RATES FOR ADULT MALE FARM WORKERS, BY AGE OF WORKER, 1918 TO 1921.

Date of going into operation.	Minimum rate per week.	Age of worker.
	<i>s. d.</i>	
May-October, 1918.....	30 0	18
May, 1919.....	36 6	21
April, 1920.....	42 0	21
August, 1920.....	46 0	21
September, 1921.....	42 0	21

Minimum rates for ordinary laborers in excess of those given in the table and special minimum rates for horsemen, cattlemen, shepherds, etc., were fixed in some counties. The board also defined allowances in kind which might be regarded as included in the minimum rates and fixed the minimum value at which such allowances could be estimated.

During the peak of wages in 1920, minimum wages for the more skilled classes of farm hands in England ranged from 46s to 64s. (\$11.19 to \$15.57, par) per week, though in most cases of high wages the working hours were longer than the minimum (50 in summer, 48 in winter) fixed by the board.¹⁶ In four of the Welsh counties 58s. (\$14.11, par) were paid for a week of 61 hours in summer, 58 hours in winter.¹⁷ In September, 1921, as may be seen by Table 2, the decline in agricultural wages had set in.

The movement in wages back toward the old standards, is shown in the comparison of the summer rates for 1922,¹⁸ in England and

¹⁵ Labor Gazette, London, October, 1921, p. 522.

¹⁶ Great Britain, Agricultural Wages Board. Wages Board Gazette, London, Aug. 16, 1920, pp. 395-403.

¹⁷ *Idem*, pp. 404-405.

¹⁸ Labor Gazette, London, April, 1922, p. 181.

Wales, presented in Table 3, with the minimum rate of 42s. in September, 1921. The Labor Gazette states that these new rates for wages and hours have been agreed upon by the local conciliation committees and that the Minister of Agriculture has confirmed the agreements made for the Isle of Ely and for Surrey. Proportionate rates, not reported, were fixed for young men between 18 and 21 years of age.

TABLE 3.—WEEKLY AND HOURLY WAGES AND HOURS OF LABOR OF ADULT MALE AGRICULTURAL LABORERS, FOR THE SUMMER OF 1922, BY COUNTY AND PERIOD FOR WHICH OPERATIVE.¹

County or district.	Period for which operative.	Hourly rates.	Weekly rates.	Hours per week.
Brecknockshire.....	Mar. 1-Apr. 30.....	d.	s.	52
Cambridgeshire.....	Mar. 4.....	7½	34	50
Cornwall.....	Mar. 1.....		53	52
Devonshire.....	Mar. 26-Sept. 29.....		32	50
Durham.....	Mar. 1-May 13.....		42	50
Herefordshire.....	Mar. 1-Oct. 31.....		30	50
Hertfordshire.....	Mar. 4-Oct. 6.....	7½		2 50
Holland district.....	Mar. 6-June 30.....	8		
Isle of Ely.....	Mar. 1-May 31.....		31	51
Isle of Wight.....	Mar. 1.....		32	
Kesleven district.....	Mar. 18-Oct. 31.....	7½		2 50
Lindsey district.....	Mar. 18-Oct. 31.....	7½		2 50
Mertonet.....	Mar. 1-Apr. 30.....		4 33	50
Monmouthshire.....	Mar. 1.....		35	54
Montgomery.....	Mar. 1-Apr. 30.....		4 33	50
Northamptonshire.....	Mar. 4-Oct. 6.....		31	50
Nottinghamshire.....	Mar. 6-Sept. 30.....		34	53
Oxfordshire.....	Mar. 11-Sept. 29.....		30	50
Radnorshire.....	Mar. 1-Apr. 30.....		34	52
Shropshire.....	Mar. 6-Sept. 30.....	7½		2 50
Soke of Peterborough.....	Mar. 11-Oct. 6.....		31	51
Somerset.....	Mar. 1-Apr. 30.....		32	50
Suffolk.....	Mar. 1-Oct. 31.....	6 7½		50
Surrey.....	Mar. 26.....		33	50
Worcestershire.....	Mar. 13-Oct. 6.....	7½		2 50
Yorkshire (North Riding).....	Mar. 2-Oct. 31.....		35	52½
Yorkshire (West Riding).....	Mar. 13-Oct. 31.....		33	54

¹ Labor Gazette, London, April, 1922, pp. 181, 182.

² Guaranteed week.

³ For all classes except milkmen and horsemen, the rate for them being 40s 6d.

⁴ Or 36s. for a week of 56 hours.

⁵ For ordinary laborers; of 38s. per week plus cottage for horsekeepers and milkmen; and of 36s. per week for stockmen.

⁶ For ordinary laborers, with additional 6s. per week for horsemen and stockmen.

Remuneration Other Than Regular Wages.

EXTRA cash payments included up to 1918 gratuities such as beer, cider, or journey money; calf and lamb money, harvest money; overtime pay, piecework, etc.

Overtime.

Formerly recognized payments for overtime were not customary in England and Wales, except at special seasons, such as harvest and fruit-picking,¹⁹ and even at these times overtime was not granted in many cases, the men being paid instead a lump sum varying, in England from £1 to £6 (\$4.87 to \$29.20, par); in North Wales from 10s. to 60s. (\$2.43 to \$14.60, par), and in South Wales from 20s. to 30s. (\$4.87 to \$7.30, par) for hay harvest, and from 10s. to 20s. (\$2.43 to \$4.87, par) for the corn harvest,²⁰ to cover any extra

¹⁹ Great Britain. Board of Agriculture and Fisheries. Wages and conditions of employment in agriculture. Vol. I. General Report. London, 1919, pp. 97, 98. [Cmd. 24.]

²⁰ Idem, p. 193.

time they worked. When overtime was paid the rate ranged from 6d. to 8d. (12.2 to 16.2 cents, par) per hour in England; from 6d. to 1s. (12.2 to 24.3 cents, par) per hour in Wales. Men "living in" were rarely paid for work beyond their regular hours. On dairy farms hourly wages were resorted to in order to get around the payment of overtime rates. In market gardens overtime was generally counted after 5.30 p. m. and rates were slightly higher than for other agricultural work. The practice of payment for overtime has, however, been gradually increasing.

When the corn production act came into operation with its minimum wage for a limited number of hours, overtime rates were fixed, and in September, 1921, ranged between 3d. and 1s. 2d. (6.1 to 28.3 cents, par) per hour on week days and between 3½d. and 1s. 4d. (7.1 and 32.4 cents, par) on Sundays, according to the locality and the duties and age of the workers affected.²¹

Piecework.

Piecework is a matter of individual bargaining and rates are therefore too numerous and too varied to quote. Quite naturally they increased during the war to a greater extent than did time rates. The general rates for hoeing corn, for example, increased from 3s. to 6s. (73 cents to \$1.46, par) per acre in 1914 to from 7s. to 12s. (\$1.73 to \$2.92, par) in 1917-18. Piecework in agriculture is reported to be on the decrease in England, while in Wales, on the contrary, it is said to be increasing among the most enterprising farmers and the most active workers.

Allowances in Kind.

Allowances in kind are numerous and of great variety. They are more often made to the skilled man than to the ordinary laborer. The commonest allowances made the English agricultural wage earner are a cottage, either rent free or at a low customary rent ranging from 1s. to 2s. 6d. or 3s. (24.3 cents to 60.8 or 73 cents, par) a week, potatoes or potato ground, milk, free coal haulage, and wood cartage; sometimes free coal, wood, and manure. Other allowances less commonly made are straw, meal, vegetables, peat, oil; and rabbits and bacon in some counties. A shepherd is often allowed a sheep for his own use and a cowman, a cow. Extra food at harvest time and fresh meat when stock is killed are occasionally given. Generally speaking, the largest allowances are made in the lowest wage counties.

In Wales allowances in kind are of such a character as to illustrate the approximate approach of the married laborer to the position of farmer. In addition to the usual allowances they include the provision of live stock free or its purchase at reduced rates, food, bedding and pasture for live stock, small holdings at low rents, and service to bound tenants. Allowances for unmarried men and women who board with the family are usually made to the parents, in the form of potato ground, free haulage of coal, pasture for a cow, etc. Regular allowances of milk, so necessary to the health of children, are not common even in the heart of the dairy sections,

²¹ Great Britain. Agricultural Wages Board. Wages Board Gazette. London, Sept. 1, 1921, pp. 241-250.

and farmers are reported as unwilling, in many instances, to sell small quantities to workers.

Board and lodging.

Board and lodging form an important part of the wages of men, generally single, who hire for yearly or half-yearly periods and board with the family, the foreman, or other farm hands in supervisory positions. In England the prevalent yearly cash wages of such men ranged, in 1914, from £18 to £31 (\$87.60 to \$150.86, par) while in 1918 the range had increased to from £20 to £55 (\$97.33 to \$267.66, par). The estimated value of board and lodging for 1918 ranged from 14s. to 20s. (\$3.41 to \$4.87, par) per week.²³

During 1918 board and lodging in South Wales was estimated to be worth from 15s. to 25s. (\$3.65 to \$6.08, par) a week. These are the farmers' estimates and are based on the retail prices of commodities. The workers believed the estimates on the articles of food produced on the farms should have been made on the cost price to the farmer, in which case they would have been much lower, ranging from 10s. to 12s. 6d. (\$2.43 to \$3.04, par), according to whether the district was agricultural or industrial in character. The pre-war values of board and lodging in North Wales ranged from 6s. to 15s. (\$1.46 to \$3.65, par); in 1918 the estimated values were much higher, varying from 10s. to 28s. (\$2.43 to \$6.81, par). All of the estimates quoted are high, owing to war conditions.²⁴ The value of full board and lodging as fixed by the wages board for 1918 varied from 12s. to 15s. 6d. (\$2.92 to \$3.77, par) per week.²⁵ Orders of the board continued to define the value of allowances in kind and of board and lodging. Full board and lodging for adult workers (18 years of age and over) in August, 1920, was estimated at 20s. (\$4.87, par) per week; for workers 17 and under 18 years, 18s. (\$4.38, par); and for those from 16 to 17 years, 17s. (\$4.14, par). Board alone for a 7-day week was fixed at 16s. 6d. (\$4.01, par) for adults; 14s. 6d. (\$3.53, par) for boys 16 and under 18 years of age. A week's lodging for the same classes ranged from 2s. 6d. (60.8 cents, par) to 3s. 6d. (85.1 cents, par), boys 16 and under 17 years paying the former amount.²⁶

Under the old truck acts allowances in kind were considered as additions to wages and their cash value could not be deducted from them, but an order of the Agricultural Wages Board dated September 6, 1918, provided that milk, potatoes, board, lodging, and cottages could be "reckoned as payment of wages in lieu of payment in cash for the purpose of any minimum rate of wages," the value of such allowances being determined by the district wages committee, subject to review by the wages board. The cash value of allowances fixed by the board may be found on page 77. The tendency, since 1918, to reduce allowances to a cash basis and include them in wage payments is noteworthy, because the permanent character of the allowances has always been an important feature in agricultural wages.

²³ Great Britain. Board of Agriculture and Fisheries. Wages and conditions of employment in agriculture. Vol. I. General report. London, 1919, p. 127. [Cmd. 24.]

²⁴ *Idem*, p. 196.

²⁵ Great Britain. Agricultural Wages Board. Report of the committee appointed to inquire into the financial results of the occupation of agricultural land and the cost of living of rural workers. London, 1919, p. 59. [Cmd. 76.]

²⁶ Great Britain. Agricultural Wages Board. Wages Board Gazette, Aug. 16, 1920, p. 408.

They have constituted welcome additions to the family income which could be depended upon whatever the vicissitudes of the worker's life due to sickness or loss of time. If now they continue to be included as a part of cash wages, due consideration must be given to this permanent character or the worker's family will suffer in times of unemployment and sickness.

Hours of Labor.

HOURS of labor of farm hands, like their wages, are affected by various local and personal conditions. Among them are local custom, the distance men live from their work, and the type of farming done—hours being long on dairy farms, where milking is important, for instance. Hours are also influenced by the nearness of industrial centers, the tendency being in the direction of shorter hours where competition exists between industrial and agricultural industries in the demand for labor. The character of the work may lengthen or shorten the working time, cattlemen and horsemen, who have the care of their animals in addition to their day's labor, as a rule work long hours. The character of the individual farmer, too, often affects the hours his men work. The following statement summarized from an official source,²⁷ indicates the general range of working hours in 1918 for the principal classes of workers in English countries:

TABLE 4.—RANGE OF ACTUAL HOURS OF LABOR PER DAY OF FARM WORKERS IN 1918, BY CLASS OF WORKER AND SEASON.

Class of worker.	Total hours worked per day.	
	Summer.	Winter.
Cattlemen.....	9-11½	8½-11½
Horsemen.....	8½-12½	7½-12½
Laborers.....	8-11½	7-10½
Shepherds.....	8-11½	7½-10½

The working day usually begins any time from 4 to 7 a. m. and closes from 4 to 7 p. m., with meal periods of from 1 to 2½ hours. Shepherds' hours are rarely given and those quoted are a rough estimate, because the nature of a shepherd's work may require long, short, or irregular hours. The hours on dairy farms are necessarily long and have to be worked on Sunday as well as week days. Ordinary laborers in 1918 worked, on an average, from 9 to 10 hours a day in summer and 8 to 8½ in winter. Hours of horsemen and cattlemen would probably average about 10 hours. Laborers, generally, are granted 1 to 1½ hours for meals; cattlemen, from 1 to 2 hours; and horsemen, 2 hours. The short day on Saturday, which has been agitated by agricultural laborers for many years, was not general, nor was time usually allowed men to walk to their work. Holidays granted differed in different counties; some of the farmers granted Christmas and the hiring fair days, while others gave Christmas, New Year's Day, Whitsunday, and the August bank holiday. Where possible, a shift system was followed or some other arrangement made

²⁷ Great Britain. Board of Agriculture and Fisheries. Wages and conditions of employment in agriculture. Vol. I. General report. London, 1919, pp. 90-93. [Cmd. 24.]

whereby Sunday work was rendered as easy as possible. On small farms with a limited amount of help this difficulty is hard to meet.

Hours in Welsh farming districts were longer, varying in North Wales from 13 to 16 on week days (including mealtime) and from 3 to 6 on Sunday. In South Wales the ordinary working day was from 12 to 13 hours in length. The shortest day was found in the vicinity of the industrial centers and near the coal fields. Working hours are generally from 6 a. m. to 6 p. m., with longer time for cattlemen and horsemen. No "walking time" is allowed.

Hours Under the Corn Production Act.

MINIMUM wage fixing by the Agricultural Wages Board had a tendency to standardization of hours of labor on farms, the original rates being based on a maximum 54-hour week in summer, and a 48-hour week in winter. From October 6, 1919, summer hours were subsequently reduced to 50 per week, though the usual exceptions were made for shepherds and stockmen whose work necessitated longer hours. Hourly rates shown in Table 3 in connection with recent wage rates do not indicate a marked lengthening of hours up to the present.

Wage Contracts.

Pre-War Agreements.

PRE-WAR terms of engagement were either verbal or written, but the majority of them were verbal. Contracts made at "hiring fairs," a practice which still exists but is said to be gradually dying out, were often concluded by the payment of "fest money," or "earnest money" varying in amount from 1s. to 10s. (24.3 cents to \$2.43, par). Written agreements, regularly used in the northern counties of Northumberland and Lincolnshire, and latterly in a few other counties throughout the country, were usually either agreements with skilled men, such as head cowmen, shepherds, and horsemen, who had charge of the work of others and were hired by the year, or agreements with men who had free cottages, in which case a fixity of tenure rather than a definition of his term of employment was sought. Most of the written agreements contained only the barest outline of the essential details of an engagement, even those in Lincolnshire and Northumberland, in which an attempt was made to define the number and value of allowances, etc., leaving many important points to be settled. Following is a form of agreement used in Gloucestershire.

CONTRACT OF HIRING.

Name of master
 Residence
 Name of servant
 Residence
 Hired for, from
 Wages
 To serve as a

If absent from illness or other cause, wages to be deducted.

This agreement is made specially subject to the said _____, receiving from his last employer a character satisfactory to the said _____.

Signed _____, Master.
 _____, Servant.

Dated _____, _____. Earnest money _____.

In Wales no written agreements were made up to 1918, hiring being done orally, and made binding in the case of yearly contracts by the payment of "earnest money," which varied as in England from 1s. to 10s. (24.3 cents to \$2.43, par).

One of the practical difficulties met with in drawing up a really adequate agreement is the fact that weekly engagements are far more usual than the yearly periods to which such agreements are applicable. Yearly and half-yearly hirings with continuous employment at a fixed and regular wage are practiced in the north of England and in counties where pasturage is plentiful. For obvious reasons men skilled in the care of animals generally, though not always, are hired for longer periods than ordinary laborers, and in isolated sections where labor and cottages are equally scarce the longer hiring periods prevail.

The occupancy of "tied" cottages tends to lengthen the arrangement made between the farmer and his men, and in these cases the bargain is usually a monthly one. Long hiring periods, however, are not found to produce long periods of service, nor do short periods of engagements induce change of employment. Permanency, or the lack of it, depends rather upon the class of men. Skilled men in charge of animals, having responsible positions on the farm, occupying the tied cottages perhaps, and usually married, are more likely to remain, especially if the garden is a good one, while the younger, single farm servants or horsemen are restless and change their places often to better themselves.

In Wales the contrary is generally the case. Broadly speaking the unmarried men and boys who live with the family hire for the year or half year, while the married men who occupy the cottages are engaged by the week as a rule.

Contracts under the Corn Production Acts.

Collective bargaining became fairly general during the period of guaranteed prices and fixed minimum wages, representatives of the agricultural laborers' unions and of the National Farmers' Union reaching agreements for their localities based upon the established rate and cost-of-living figures. But with the repeal of the corn production act reports indicate that many of the farmers have refused to be governed by the recommendation of the conciliation committees which were substituted for the wages boards, with the result that along with the reduction of wages there may be a gradual return to the individual contract, though it is still too soon to make any definite statement regarding that point.

The effect of this association of employers and men in the wages boards is discussed by E. Selley in his "Village Trade-Unions in Two Centuries" (p. 164). He says, "Unlike representations on parish, district, and county councils the worker has as good a chance to state his case as the farmer. He has become really articulate * * *. The farm worker proved himself to be skillful in negotiation as the farmer. Both farmer and workman have benefited by the opportunity of coming face to face with each other in conference."

Methods of Wage Payment.

FARM workers are paid by different systems. As regards ordinary laborers in England, some are paid entirely by time rates, wholly or mainly in cash, others, especially those in truck-raising districts, are paid principally by piece rates, in cash, while a middle class are paid time rates part of the year, with piece rates or a bonus at harvest or haymaking. Allowances in kind made to the ordinary laborer are generally quite small. The skilled men, cattlemen, horsemen, and shepherds, are paid by time rates, usually partly in cash and partly in kind, the value of the allowances in these cases being much more important than those made to laborers.

Workers engaged by the week are generally paid by the week, though occasionally fortnightly or even monthly payments prevail. Men doing piecework often receive the regular day wages during their time of employment and the remainder when they have finished their job. As regards yearly or half-yearly men the method of payment is different. Harvest money may be paid them at the end of harvest, at Christmas time, or in two installments, and advances may also be made from time to time, but the bulk of their wages is paid at the expiration of their period of service. In these cases the fact that unmarried men are often boarded and lodged by the farmers and that the married men sometimes occupy free cottages which constitute a part of their wages, and also have allowances should be borne in mind. A few holidays are paid for in full. In districts where long engagements are made deductions are not as a rule made on account of sickness, though this practice does not apply in the case of women. The majority of the men engaged by the week are paid only for the days they work.

In Wales the period of engagement varies with the district and the section of the country. In one county of North Wales the weekly laborer, who is ordinarily a married man, is paid either weekly or monthly. Either party to the contract may give notice on one week's time.

Wages of Japanese and Chinese Workers in Manchuria.

A CONSULAR report of recent date gives the wages, in effect at the end of 1921, of Japanese and Chinese workmen in various industries in Dairen, Mukden, and Antung. The wages, which were compiled by the Kwantung Government, are as follows:

DAILY WAGES OF JAPANESE AND CHINESE WORKERS IN VARIOUS INDUSTRIES
IN MANCHURIA.

[Gold yen at par=49.85 cents.]

Occupation.	Wages in—					
	Dairen.		Mukden.		Antung.	
	Japanese.	Chinese.	Japanese.	Chinese.	Japanese.	Chinese.
	Yen.	Yen.	Yen.	Yen.	Yen.	Yen.
Cobblers.....	2.80	1.40	2.00	1.50	2.50	1.00
Farm hands.....				.45		.30
Weavers.....			3.00	1.10		.40
Dyers.....	1 50.00	1 15.00	2.20	.80		.40
Tailors.....	3.50	1.70	2.80	1.50	2.50	.70
Hat makers.....	2.50	.80	2.80	1.20		
Soy makers.....	1 80.00		2.50	1.00	1.50	
Confectionery makers.....	1 50.00	15.00	2.00	1.00	2.50	.50
Carpenters.....	3.50	1.70	3.00	1.20	3.00	1.00
Plasterers.....	3.50	1.70	3.50	1.60	3.20	1.00
Stone masons.....	3.50	1.70	3.50	1.50	3.20	1.50
Wood sawyers.....		1.30		1.50		1.00
Roofers.....		1.50		1.50		
Brickmakers.....	3.30	1.50	3.00	1.50		
Tile layers.....	3.50	1.20	3.00	1.50		
Glassmakers.....	3.00	1.20	3.70	1.50	3.20	1.00
Scaffolding makers.....	3.00	1.00	2.50	1.20		.80
Mat layers (<i>Tatami</i>).....	3.20	1.00	2.50	1.50	3.00	1.00
Paperhangers.....	3.20	1.20		3.00	3.00	1.00
Fixture makers.....	3.30	1.20	3.00	1.20	3.00	.80
Ornament makers.....	3.40	1.10	2.50	1.00	3.50	.60
Tinsmiths.....	3.30	1.20	2.50	1.00	3.00	.80
Founders.....	3.00	1.00	3.00	1.00	2.50	.80
Blacksmiths.....	3.20	1.50	3.00	1.00	2.00	1.00
Sign painters.....	2.90	1.00	3.00	1.20	2.00	1.00
Day laborers.....		.50			2.00	.50
Coolies.....		.45		.50		.50

¹ Monthly wages.

The 48-hour Week in the Netherlands.

THE Second Chamber of the States-General of the Netherlands recently voted an amendment to the law regulating the hours of labor according to La République Française (Paris), May 23, 1922. A 48-hour week has been substituted for the 45-hour week which has been in effect. The hours of work are 8½ per day and 5½ on Saturday. Other modifications have been adopted for the purpose of adapting the 8-hour law to the needs of industry. In the building industry and in public works, for example, additional hours may be worked to make up for time lost on account of the weather. Until October 1, 1923, workers over 16 years of age can be employed 10 hours a day and 55 hours a week in these industries.

Wages and Working Conditions of Agricultural Laborers in Peru.¹

IN RESPONSE to a demand for higher wages on the part of the agricultural laborers of the Peruvian valleys, the Minister of Promotion is considering a minimum wage scale for each valley, based on the cost of living and subject to an increase in relation to the sale price of exported products.

¹ Bulletin of the Pan American Union, Washington, March, 1922, pp. 301, 302.

The decree of December 7, 1921, concerns both wages and working conditions and applies to the agricultural laborers of the Chicama and Santa Catalina Valleys of Trujillo Province. Some of the provisions are as follows:

The length of a working day shall be 8 hours, in conformity with the decree of January 15, 1919, and any agreement for a longer working day, which may in no case exceed 12 hours, must be referred for approval to the Labor Inspection Commission.

Cutting and loading sugar cane shall be paid for according to the weight of the amount cut or loaded. Other work in the field shall be gauged by the work done by an average laborer in 8 hours.

In case of illness proved by a medical certificate the laborer has a right to receive half his wages, plus the food ration usually given him. If he has no family and is treated in a hospital, the food ration need not be given.

If for any reason there is an oversupply of laborers, those who are dismissed on that account will receive two months' wages if they have worked more than six months, and one month's wages if they have worked more than two months and less than six. This provision may be modified in the light of the information received by the Labor Inspection Commission.

The decree also provides for Government bank inspection of savings and mutual benefit societies, sanitary and educational inspection, the cessation of contract labor, new telegraph and post offices, and the creation of the Labor Inspection Commission referred to above, which is to consist of a Government delegate, an estate owner, and a bona fide laborer. The existence and trend of labor legislation are shown in the duties assigned to this commission. They are as follows:

To see that the regulations of the present decree are strictly complied with; to intervene in and to terminate, in accordance with existing regulations, disagreements between employees and laborers; to watch the observance of the laws regarding labor accidents, work of women and children, weekly rest period (when the Sunday rest period is not given), housing, medical attention, schools for laborers; and all labor laws and decrees now in force or promulgated in the future; and to propose to the Ministry of Promotion the means which experience may suggest for effecting permanent harmony between employers and laborers.

Extension of the Working Week in Certain Swiss Industries.

IN ACCORDANCE with an order dated April 4, 1922, weekly working hours have been increased to 52 in some Swiss industries.¹

In the case of wood sawing, carpentry, and brick and tile making increased hours will be in force until October, 1922; of certain branches of the embroidery trade, until the end of the present year; for the linen and the straw plait trade, June 30, 1922, and May 31, 1922, respectively. Under the Swiss factory act the Federal Council is empowered to extend the working hours in any industry if urgent necessity demands it or if, through the operation of the 48-hour week, an industry runs the risk of being unable to stand competition with other countries.

¹ Labor Gazette, London, May, 1922, p. 206. Quoted from Feuille Fédérale, Apr. 12, 1922.

PRODUCTION AND EFFICIENCY OF LABOR.

"Idle-day" Costs in the Coal-Mining Industry.

THE enormous loss, both in returns on the invested capital and in the wages of the workers, because of the nonoperation of many of the coal mines of the country for so large a proportion of the year was the subject of an address¹ by Mr. Francis S. Peabody at the annual convention of the International Railway Fuel Association held recently in Chicago. The total annual producing capacity of the bituminous mines of the country Mr. Peabody estimates at 1,000,000,000 tons, figured on a 300-working-day period, and the value of the investment he considers as extremely conservative when placed at \$2 per ton of annual capacity. This makes the total estimated investment in the bituminous mines of the United States equal \$2,000,000,000, which includes the value of improvements, developments, and an estimated life of each mine of 25 years. An accurate measurement of the coal consumed over a period of years is afforded by the figures for production, it is stated. The peak was reached in 1918 when the total production of bituminous coal, including export, amounted to 570,000,000 tons. The consumption in 1921 was 406,000,000 tons, but as neither 1918 nor 1921 were normal years it is estimated that with a return of normal industrial activities the annual consumption of bituminous coal would be between 450,000,000 and 500,000,000 tons. The average working time of the mines during the past 5 years has been 200 days, leaving an average of 100 idle days in the bituminous mines each year.

On the basis of these figures and using his own experience as a mine operator as a guide, Mr. Peabody estimates the annual loss to capital on account of idle-day costs at all the bituminous mines in the United States as follows: "Interest at 6 per cent for 100 idle days, \$40,000,000; labor and supply costs on idle days, \$0.128 per ton on actual production, 1921, \$51,968,000; depreciation on 25-year life of mine, \$26,666,000; taxes and insurance, \$0.013 on actual production, 1921, \$5,278,000; total idle-day cost per annum, \$123,912,000."

In addition to this loss to capital there is the even more serious loss in wages to the miners. Assuming that the average wage is \$4 per day, a conservative estimate, Mr. Peabody says, the cost to the 700,000 mine employees of 100 days of enforced idleness amounts to \$280,000,000 a year. The combined loss to labor and capital, therefore, is more than \$400,000,000 yearly without considering at all the loss to the general public of the productive effort of this large aggregation of men for one-third of the working year.

The speaker pointed out that while he considered these figures extremely conservative, still they were estimates and therefore not strictly accurate, and to supplement them he gave the following

¹ The Black Diamond, Chicago, May 27, 1922, pp. 507, 508.

additional data showing the idle-day costs of the 36 mines under his management. "Total capital investment (based on \$2 per ton annual capacity), \$40,000,000; capacity, 21,000,000 tons per annum; production, 12,000,000 tons per annum; interest on invested capital for idle days at 6 per cent, \$1,155,000; idle-day labor and supply costs, \$0.128 on actual production, \$1,536,000²; depreciation on 25 years' life of mines, \$724,350; taxes and insurance, \$156,000; total idle-day cost per annum at 36 Peabody mines, \$3,571,350." Thus an actual loss of over \$3,500,000 is shown in the operation of the mines in one company alone due entirely to the overdevelopment of the bituminous coal industry.

Three solutions, Mr. Peabody said, are possible: The bankruptcy and consequent retirement from operation of one-third of the mines now in active operation; Government ownership; or a revision of the Sherman law to allow agreements in regard to running time. Government control, he believes, has been made thoroughly unpopular through the war-time control of the railroads and the coal industry, and revision of the Sherman law to permit agreements between coal operators in regard to running time could not be expected to improve the situation since the mines are too scattered and conditions are too dissimilar to permit of any workable agreement being reached. If it were possible, however, to reach such an agreement, additional work could hardly be furnished. The most that could be expected to be accomplished would be rather a restriction in output which would result in higher price levels which might compensate operators and men in part for the lost time, but which would pass the entire burden along to the consuming public. Mr. Peabody therefore rejects these two plans as not feasible, stating that in his opinion the only solution lies in the elimination through bankruptcy of the excess mines. "Unrestricted competition," he says, "will solve the problem of too many mines, too many miners, and too great investment in the coal industry."

The truth of my statement is borne out by a review of the coal industry since Government control was relinquished. It is a known fact that very few bituminous coal mines paid a profit during the past year. Competition attained a degree of intensity never before experienced and prices averaged less than the actual cost of production. Producing companies can not continue to operate year after year and sell coal for less than it costs to produce. Some mines have already been abandoned. Many more are on the verge of bankruptcy. I estimate that it will require about 10 years to work out a complete solution, and bring about a fairly even balance between supply and demand.

To those having investments in coal mines, and particularly in the "high cost" mines, this solution is a tragic one. From the standpoint of the general public, it is the cheapest way out. To the bituminous coal industry in general, it presents an outlook that is far from pleasing, but it must be recognized as the only way by which the industry can get back to a sound and healthful basis.

Production per Worker in Iron Mines of Lorraine.

THE average production for each class of workers in the iron-ore mines of Lorraine is given in Commerce Reports, May 15, 1922 (p. 417). The statement, which is quoted from the yearbook of the mining association of Alsace and Lorraine, is as follows:

²Actual figures taken from the companies' books.

Pickmen and haulers, 8.22 metric tons (against 7.80 tons in 1920, 6.66 tons in 1919, 6 tons in 1918, and 7.06 tons in 1913); underground workers, 5.09 metric tons (against 4.79 tons in 1920, 4.18 tons in 1919, 4.06 tons in 1918, and 5.39 tons in 1913). For the whole of the personnel, the average output was 3.34 metric tons in 1921, against 3.14 tons in 1920, 2.79 tons in 1919, 2.88 tons in 1918, and 4.39 tons in 1913.

These figures show, therefore, a considerable progress over the preceding year. They even exceed those of 1913 so far as the pickmen and haulers are concerned, but the total production remains small as compared to that of before the war, especially on account of the application of the 8-hour law to the underground workers. In order to obtain a considerable increase in the yield per worker it would be necessary to modify the application of the law, to increase the number of productive workers, and to decrease the number of unproductive workers.

During the course of the year the production of the pickmen and haulers decreased from January (8.39 tons) to August (8.06 tons), then increased until October (8.23 tons), to drop again until December (8.04 tons). For the underground workers, the production declined from 5.24 tons in January to 4.90 tons in July, from which date it increased to 5.15 tons in November and fell to 5.06 tons in December.

Operations of British Coal Mines, January 1 to April 1, 1922.

FROM data for the first quarter of the present year, recently issued by the British Department of Mines,¹ it appears that the output of coal was 62,202,000 tons as compared with 57,440,000 during the quarter ending December 31, 1921, and 54,296,000 tons in the first three months of 1921. The estimated average number of wage earners employed in and about the mines was 1,072,200 for the first three months of 1922 as compared with 1,213,200 similarly employed during the first three months of 1921. The number of employees in the later period represents an increase of 9,800 over the number employed in the preceding quarter, and a decrease of 141,000 when compared with the first quarter of 1921. The output per man per 7-hour shift during the quarter under review was 19 hundredweight, an average nearly equal to that in 1913 when the daily working shift was of 8 hours' duration. During the quarter ending April 1, 1922, the mines were worked 66.85 days, an increase of 5.11 days over the number worked in the preceding quarter and of 7.62 days as compared with the first three months of 1921. There were 3.24 idle days in this period, the remainder of the days not worked being due to holidays, Sundays, disputes, accidents, repairs, transport difficulties, etc. The steady increase in days worked is said to be due principally to better transportation.

The recovery of Great Britain's export coal trade since the spring of 1921 has been remarkable. The quantity of coal shipped abroad during the first quarter of 1922 was 17,640,000 tons, or about 2,300,000 tons more than in the previous quarter and twice the amount exported in the first three months of 1921.

There have been some reductions in the price of coal for domestic consumption, and selling prices of export coal, which had fallen during the past year, increased somewhat during February and March of 1922. Variations in prices for the year are shown in the following quotations: The average declared value of export coal per ton f. o. b. was 24s. 11d. (\$6.06, par) in December, 1921; 23s. 10d. (\$5.80, par) in January, 1922; 22s. 2d. (\$5.39, par) in February, 1922; and 22s. 3d. (\$5.41, par) in March, 1922.

¹ Board of Trade Journal (London), May 18, 1922, pp. 533-535; Economist (London), May 20, 1922, pp. 944, 945.

Wages, however, under the terms of the agreement of 1921² have continued to decline, a minimum basis having been reached in a number of districts. The average wage reduction since March, 1921, is estimated at approximately 7s. (\$1.70, par) per shift, which at 5½ shifts per week amounts to a cut of 38s. 6d. (\$9.37, par) a week per man. In South Wales and Monmouth the wages of workpeople in the mines, other than pieceworkers, per 7-hour shift, on March 15, 1922, were: Colliers, 8s. 10d. (\$2.15, par); rippers, 7s. 8d. (\$1.87, par); haulers, 7s. 6d. (\$1.87, par); laborers, 6s. 5d. (\$1.56, par). In Derbyshire, where coal prices are higher, wages were nearly twice those paid in South Wales, but they show decreases for the different classes of workers of over 1s. (24.3 cents, par) per shift since January 15, 1922. Pieceworkers' wages naturally average higher. No allowance is made in the rates quoted for house coal which is furnished the miners either free or at reduced prices. The subsistence wage provided for under the 1921 agreement for poor districts has been paid in Northumberland, Durham, Cumberland, Scotland (surface workers), Bristol, and Kent.

During the quarter under discussion 249 persons were killed and 1,147 seriously injured in and about all kinds of British mines, coal mines included.

² MONTHLY LABOR REVIEW, August, 1921, p. 190.

LABOR AGREEMENTS, AWARDS, AND DECISIONS.

Railroads—Decisions of the Railroad Labor Board.

TWO notable decisions of the Railroad Labor Board have been handed down reducing the wages of maintenance of way employees and railway shop laborers (Decision No. 1028, Docket No. 1300), and of the railway shopmen, including machinists, boiler makers, blacksmiths, electrical workers, sheet-metal workers, carmen, and apprentices (Decision No. 1036, Docket No. 1300). Both these decisions are effective July 1 and affect practically all important railroads throughout the country.

These decisions were reached by a two-thirds majority vote, the three labor members of the board dissenting in both cases. Compensation of approximately 400,000 maintenance men will range, the men say, from 23 to 35 cents per hour or from \$563 to \$800 per year, full time. Wage cuts for the 500,000 shopmen average about 12 per cent. Wages of the shop crafts are cut, the workers say, from 77 to 70 cents an hour; those of freight-car men from 72 to 63 cents an hour; helpers and apprentices from 54, 51 and 34 cents, to 47, 44 and 27 cents. Wages of supervisory forces are not reduced.

The board adopts as its basis the rates fixed for these classes of employees by Decision No. 147¹ and provides for the following decreases per hour.

Maintenance of Way and Railway Shop Laborers.

SECTION. 1. Bridge, building, painter, construction, mason and concrete, water-supply, and plumber foremen (except water-supply and plumber foremen coming under the provisions of sec. 1 of Art. IV, Decision No. 147), 5 cents.

SEC. 2. Assistant bridge, building, painter, construction, mason and concrete, water-supply, and plumber foremen, and for coal-wharf, coal-chute, and fence-gang foremen, pile-driver, ditching and hoisting engineers and bridge inspectors (except assistant water-supply and plumber foremen coming under the provisions of sec. 1 of Art. IV, Decision No. 147), 5 cents.

SEC. 3. Section, track and maintenance foremen, and assistant section, track and maintenance foremen, 3 cents.

SEC. 4. Mechanics in the maintenance of way and bridge and building departments (except those that come within the scope of agreements with the Federated Shop Crafts), 4 cents.

SEC. 5. Mechanics' helpers in the maintenance of way and bridge and building departments (except those that come within the scope of agreements with the Federated Shop Crafts), 1 cent.

SEC. 6. Track laborers, and all common laborers in the maintenance of way department and in and around shops and roundhouses not otherwise provided for herein, 5 cents.

SEC. 7. Drawbridge tenders and assistants, pile-driver, ditching and hoisting firemen, pumper engineers and pumpers, crossing watchmen or flagmen, and lamp lighters and tenders, 5 cents.

SEC. 8. Laborers employed in and around shops and roundhouses, such as engine watchmen and wipers, fire builders, ash-pit men, flue borers, coal passers (except

¹ This decision appeared in the MONTHLY LABOR REVIEW for July, 1921, pp. 143-151.

those coming under the provisions of sec. 3 of Art. VIII, Decision No. 147), coal-chute men, etc., 5 cents.

SEC. 9. For miscellaneous classes of foremen and other employees named in connection with a carrier affected by this decision, but not specifically listed under any section in the classified schedules for decreases, deduct an amount equal to the decreases specified for the respective classes to which the miscellaneous classes herein referred to are analogous.

Shop Crafts.

SECTION 1. Supervisory forces whether paid by the month or by the hour, no decrease.

SEC. 2 (a) Machinists, boiler makers, blacksmiths, sheet-metal workers, electrical workers, carmen (except freight-car men), molders, cupola tenders and coremakers, including those with less than four years' experience, all crafts, 7 cents.

(b) Freight-car men, 9 cents.

SEC. 3. Regular and helper apprentices and helpers, all classes, 7 cents.

SEC. 4. Car cleaners, 5 cents.

Not all classes of employees specified above are affected on every road. Some of the carriers presented disputes applicable only to certain classes of employees whereas others included all of these classes in the submission of the case to the board. The decision therefore specifies in the case of each carrier the classes of employees affected thereby.

The wages of workers in the shop crafts had been made practically uniform throughout the country by the wage orders of the Railroad Administration which were in effect prior to the first wage decision of the Railroad Labor Board (Decision No. 2, effective May, 1920). By the addition of uniform increases or decreases of a certain number of cents per hour the board has kept the wages of these workers standardized throughout the country. Such is not the case with the maintenance of way men, whose wages were not standardized by the Railroad Administration. The Railroad Labor Board has maintained the prevailing differentials for this class of workers. As an example of the absence of standardization of wage rates per hour for maintenance of way men the board cites the following rates paid common laborers in the maintenance of way department on six roads operating in different parts of the country.

RATES PAID FOR COMMON LABOR IN MAINTENANCE OF WAY DEPARTMENT ON SPECIFIED RAILROADS.

Southern.	Illinois Central.	Chicago Great Western.	Northern Pacific.	New York Central.	Santa Fe.
29½	29½	37	40	37	29½
30½	30½	39½		38½	30½
30½	30½	40		39½	30½
31½	31½			40	32
32	32				34
32½	32½				34½
35½	35½				35
37	37				35½
37½	39				37
39	39½				39
39½	40				40
40					

The range of rates per hour under this decision on these railroads is obtainable by subtracting 5 cents from the rates above set out.

The Labor Board is of the opinion that after the reductions made under this decision, common labor on the railroads will still be re-

ceiving, as a rule, a wage in excess of that paid to similar labor in other industries, and that the same will be true of all other classes of labor covered by this decision. The board is of the opinion, however, that the hazards and hardships of the employment, the training and skill required, the degree of responsibility to the public, and other factors mentioned in the statute combine to justify the payment of a better wage to these employees than is paid to similar labor in outside employment.

On a very considerable number of the roads, the foreman and section men are furnished living quarters and fuel by the carrier.

Moreover, "the board is not in sympathy with the idea that a governmental tribunal, empowered to fix a just and reasonable wage for men engaged in serving the public in the transportation industry, should be controlled by the one consideration of the low wages that may be paid to other labor in a period of temporary depression and unemployment. It is but just to say that railway managements have indicated no desire for such a result."

The statistical department of the board has made a study, based upon the evidence before the board, of the comparative purchasing power of the wage fixed in these decisions for common labor and certain of the shopcrafts. The results of this study are shown below:

COMPARATIVE PURCHASING POWER OF EARNINGS OF COMMON LABORERS AND WORKERS IN THE SHOP CRAFTS AT SPECIFIED TIMES.

Type of labor and date.	Average hourly rate.		Per cent of increase in cost of living over December, 1917.	Per cent of increase in purchasing power of earnings over December, 1917.
	Amount.	Per cent of increase over December, 1917.		
	<i>Cents.</i>			
Common labor:				
December, 1917.....	19.3			
January, 1920.....	37.7	95.3	40.0	39.5
May, 1920.....	46.3	139.9	52.0	57.8
July, 1921.....	37.7	95.3	26.7	54.1
Under present decision.....	32.7	69.4	17.2	44.5
Shop crafts:				
Machinists—				
December, 1917.....	50.5			
January, 1920.....	72.3	43.2	40.0	2.3
May, 1920.....	85.3	68.9	52.0	11.1
July, 1921.....	77.3	53.2	26.7	20.8
Under present decision.....	70.3	39.2	17.2	18.8
Carmen—				
December, 1917.....	37.7			
January, 1920.....	68.0	80.4	40.0	28.9
May, 1920.....	81.0	114.6	52.0	41.2
July, 1921.....	73.0	93.6	26.7	52.8
Under present decision.....	64.4	70.8	17.2	45.7

¹ March, 1922; latest figure available at time of decision.

Although average hourly earnings of maintenance of way employees are 5 cents per hour less than the earnings prior to Decision No. 2 (May 1, 1920), their value is 3.6 per cent greater due to the decrease in cost of living.

The average hourly earnings of machinists are below the earnings after Decision No. 2 was applied by 15 cents per hour; their value is 6.9 per cent greater due to the decrease in the cost of living.

The average hourly earnings of carmen are below the earnings

after Decision No. 2 was applied by 16.6 cents per hour, but their value is 3.2 per cent greater for the same reason.

Dissenting Opinion re Reduction in Wages of Maintenance of Way Men.

THE three labor members of the board dissented from the majority opinion in both of these cases, presenting in detail the reasons for their disagreement. In the case of maintenance of way men the labor members dissented for the following specific reasons:

(1) The rates of pay established under this decision as the basic minimum rates of the transportation industry will merely perpetuate the low level of purchasing power possessed by this large class of workers in pre-war years. The opinion expressed in the majority decision, that "the board is not in sympathy with the idea that a governmental tribunal, empowered to fix a just and reasonable wage for men engaged in serving the public in the transportation industry, should be controlled by the one consideration of the low wage that may be paid to other labor," would seem to indicate a feeling that the decision should not perpetuate the injustices of a former unregulated period. Below we show clearly the fallacies of attempting to show that the rates decision will mean increased purchasing power over pre-war levels.

(2) The rates of pay established under this decision will mean annual earnings far below any minimum standard of subsistence which has been formulated, even below those of most conservative employer groups.

(3) The rates of pay established under this decision are not based upon the human needs of the hundreds of thousands of families involved. They are insufficient to provide these families with the absolute essentials.

(4) The pre-war standard perpetuated by this decision was the product of inequitable wage bargains. It is considerably below the level recognized at that time as necessary for the maintenance of health and energy.

The labor members contended that the hourly wage basis used in the majority opinion to show the increase in wages between 1917 and the present is unfair and that the daily wage basis should have been used instead, because the basic day was reduced from 10 to 8 hours during this interval. The majority decision regards this reduction in hours as an increase in pay, which the labor members feel to be unfair, basing their opinion on the report of the Lane Commission, which says:

Reductions in hours are not to be regarded as increases in pay. This rule is made necessary, first, by its justice, for it is not to be contemplated that hours are reduced to decrease earnings; and, second, by the impracticability of applying any other rule. * * * We assume the good faith of all reductions in hours as being what they pretend to be.

On the daily basis the wage increase between 1917 and 1923 would amount to 35.8 per cent instead of the 64.9 stated. This would bring a consequent reduction in the figure for the increase in the value of earnings from 44.5 per cent, the figure in the majority report, to 15.9 per cent, which in the opinion of the dissenting members is the correct figure.

In the second place, however, consideration of the entire comparison forces one to the conclusion that the period chosen presents an unfair picture. During the period 1915 to 1917 the cost of living had been rising far more rapidly than the wages of this class of employees. In other words, the \$1.93 per day representing the average wage in December, 1917, meant a lower purchasing power than the average wage in 1915.

It is hardly necessary to point out that a fairer comparison would have gone back to 1915. In that year, according to the Interstate Commerce Commission, the average hourly earnings of section men were 15 cents. For the 10-hour day this meant earnings of \$1.50. Comparing this with the earnings for the standard day under the majority decision—namely, \$2.62—we find that the level of money wages will be 74.4 per cent above the 1915 level. According to the United States Department of Labor

reports, the cost of living in March, 1922, was approximately 60.5 per cent above the average for 1915. Combining these two figures we arrive at the correct per cent by which the value of a section man's wages under the majority decision will exceed the value of his wages in pre-war days. It amounts to only 8.7 per cent, instead of 44.5 per cent, as indicated in the majority report.

There is, however, a third way in which the majority report fails to show the real effect of this decision upon the value of the wages of common labor in the maintenance of way department. The statistics presented deal only with section men. There are roughly 100,000 other unskilled workers who will also be affected by the decision. In the Interstate Commerce Commission classification these are classed as "other unskilled laborers." In the Railroad Labor Board's Wage Series Report No. 3 the number of "other unskilled laborers" is set down as 108,977.

According to the Interstate Commerce Commission report for 1915 this group received an average hourly rate of 18.2 cents in that year. Under the majority decision this same group will average approximately 35.9 cents per hour. Extended to a daily basis this will mean \$2.872 for the standard workday compared with \$1.82 in 1915. In other words, the money wages of this group of employees under the decision will be only 57.8 per cent above those which they received in 1915. This contrasts with an increase in the cost of living, already noted, of 60.5 per cent, showing a decrease of 1.7 per cent in value of their earnings.

Combining the two classes of unskilled employees in the maintenance of way department, we have approximately 330,000 men who will receive money wages for the standard day under the decision only 69.7 per cent above those which they received in 1915. In other words, the increase in the real value of the wages of this group as between the two periods will only amount to approximately 5.7 per cent.

The increase in the value of the wages of this class of employees is, therefore, so small as to be negligible. The vital question is as to the adequacy of the pre-war wage and consequently of the wage established by the present decision. The pre-war wages of this class of workers were established in a labor market which to all intents and purposes was subject to no regulation. The carriers bought this labor as a commodity at the lowest possible figure. Just and reasonable wages could not result from such a process, which is the very antithesis of the function which the Labor Board is supposed to perform under the transportation act.

According to data contained in the majority report, the minimum hourly rate of pay for section men on the railroads of the United States will, under this decision, be 23 cents. This means earnings for a full-time 48 hour week of \$11.04.

A table is presented showing the latest data on the minimum wage for women in various States from which it appears that the legal minimum wage in the United States for all women is primarily in the range from \$11 to \$15 per week. "It is a striking fact that the minimum wage for section men under the majority decision is just \$11.04 per week, with an average wage for the 250,000 section men amounting to only \$15.69 per week. This last figure is well within the range of minimum wages for women."

It can not be too strongly emphasized that a minimum wage for women workers is based upon the presumption that the woman is not responsible for the maintenance of a family, while in any virile nation which desires to preserve its growth and strength a minimum wage for men must rest upon the presumption that the normal employee either is or is to be responsible for the maintenance of a family.

It is obviously unjust to expect railroad employees who should be responsible for the maintenance of families to endure wages at a level designed as the minimum for the support of single women. Such a comparison shows the inherent absurdity of expecting a male employee to "renew his strength and to maintain his home from day to day" on the wages provided in the majority decision.

The most important grounds for dissent from the majority decision lie in the contrast between the wages therein provided and any minimum standard of subsistence which has ever been suggested whether by governmental or State departments, investigators for charitable institutions, city bureaus, or by representatives of labor. The wages provided in the decision will enable the average employee of this class to secure little more than one-half of the necessities specified in the majority of these budgets as absolutely essential. This decision will provide the section men with only about two-thirds of the goods provided by the lowest budgets of the National Industrial Conference Board. As a matter of fact the minimum rates under this

decision will scarcely buy the food part of the minimum subsistence budgets which will be cited, with nothing left for clothing, rent, furniture, heat, light, and other essentials.

As shown in the majority statement, the minimum earnings of section men will be 23 cents per hour, amounting, for a full 2,448-hour year, to \$563.04. The average earnings for this occupation will be 32.7 cents per hour, amounting to \$800.50 per year. As a matter of fact, in 1915, according to reports to the Interstate Commerce Commission, section men only averaged 93.7 per cent of full-time earnings. If during the ensuing year this average holds, the average earnings of this basic occupation in the transportation industry will amount to approximately \$750.07.

For purposes of comparison the minority group had 14 of these budgets brought up to March, 1922. The income necessary to cover these budgets ranged from \$1,144.79 to \$1,703.25. The minority opinion pointed out that the average earnings of the quarter of a million section men covered by the decision will amount to less than 70 per cent of the income necessary to pay for the lowest of these budgets, and that the minimum earnings of these men will pay for less than 50 per cent of this budget.

The report goes on to show that after deduction is made of the cost of the minimum ration of food allowed in the 14 budgets the amount remaining from the minimum earnings of the section men under the decision would range from \$143.94 to a deficit of \$95.34.

In view of the fact that the landlord is persistent, that fuel is an absolute necessity for cooking, if for nothing else, that clothing is generally considered socially desirable, and that other expenses will crop up, it is apparent that the food problem of the maintenance of way family will be acute.

The average rate established for the track laborers will mean possible monthly earnings of \$66.71. Apportioning this income, using the relative weights of the United States Bureau of Labor Statistics, the labor group found that the allowance for the various items of the family budget would be as follows:

Item.	Weight.	Amount per month.
Food.....	38.2	\$25.48
Clothing.....	16.6	11.07
Housing.....	13.4	8.94
Fuel and light.....	5.3	3.54
Furniture, etc.....	5.1	3.40
Miscellaneous.....	21.4	14.48

In a family of five this will mean an average possible expenditure per person for clothing of \$2.21 per month.

It will be clear to anyone that there are few places where decent housing can be had for \$8.94 per month, while \$3.54 will hardly more than cover gas and electricity, with no allowance for winter fuel.

But the most significant fact is the insufficiency of the allowance for food. A monthly expenditure of \$25.48 means 84.9 cents per day. Assuming that the family is normal, equivalent to 3.35 adult males, this will mean the following allowance per day for the feeding of each member of the family.

Member.	Equivalent.	Amount for food.
Man.....	1.00	25.3 cents.
Wife.....	.90	22.7 cents.
12-year boy.....	.90	22.7 cents.
6-year girl.....	.40	10.1 cents.
2-year boy.....	.15	3.8 cents.

In other words, the youngest child is to have less than a cent and a half per meal.

The inadequacy of 25.3 cents to keep up the health and energy of the wage earner is apparent when we remark that the United States Army, buying in wholesale quantities, to-day spends 40 cents per day for the ration of each enlisted man. Presumably buying on a wholesale basis, Cook County, Ill., is paying 45 cents per day for the

feeding of prisoners in the jails. Evidently the track laborer under this decision will secure considerably less than a prison ration.

In order to demonstrate clearly just what this food allowance would mean in terms of daily food consumption, the labor members had menus prepared to cover three typical days. Instructions were given that the cheapest possible foods should be used, with a view, however, to securing the greatest possible nourishment for the 25.3 cents per day allowed under the above apportionment of income. It was found that with scarcely any possibility of variety, the ration that could be purchased with the sum available per day under the decision would average slightly over 1,900 calories per day, whereas the report points out that "it is generally recognized that 3,500 calories per day is necessary for a man engaged in moderate work."

We are faced with the extraordinary fact that the track laborer with a family, on the wage carried in the decision, can secure little more than the number of calories required to maintain life without exertion of any kind. He can not secure as many calories as are required by a man who spends 14 hours of his day in a chair and exercises moderately for only two hours unless he sacrifices some of the other necessities of life.

In the case of the men receiving the minimum rate of 23 cents an hour, the allowance for food for the man was found to amount to 17.8 cents per day for three meals. This, according to the set of menus prepared, would buy food supplying an average of only 1,513 calories per day, "scarcely enough to maintain life without exertion."

It is clear, then, that on the basis of the rates of pay established under the majority decision, some quarter of a million railroad employees—an entire class—must forego the thought of a family in order to be sure of enough food to keep themselves from actual starvation. With the development of families undernourishment will immediately appear.

The above-recited facts show the grounds for our dissent. Under the decision the great body of employees in the maintenance of way department will receive real wages at about the same level as prevailed prior to the war. The pre-war wages were established in an overstocked labor market, through railroads or contractors bargaining against the weakness of individual workers in search of a job. Such unregulated conditions can not serve as a basis for the orderly establishment of just and reasonable wages by such a body as the United States Railroad Labor Board without a complete denial of its functions. * * *

We must, therefore, dissent from the decision which tends to perpetuate as the basic minimum of the railroad industry a wage level established in a wage market dominated by the impersonal law of supply and demand with the employer in this strategic position.

Opinions of Justice Higgins of the Australian Court of Conciliation and Arbitration showing the "difference which should exist between minimum rates established by such a board and those arising in the open market" are cited, and the report continues:

We believe that in this decision the Labor Board is affecting hundreds of thousands of families—it is touching the proper nurture of hosts of children. It must adopt the attitude expressed by Justice Higgins, setting the basic minimum of a great industry in terms of human needs.

The human needs of these hundreds of thousands of families were vividly brought before the board by representative families. They showed humanly what statistics can show at best only coldly—the inadequacy of the basic wage rates prevailing prior to this decision.

Dissenting Opinion re Wages of Shop Crafts.

THE labor members of the board also disagreed with the majority in the decision relative to wages of shopmen, basing their opinion on the following arguments:

(1) The wage structure for the transportation industry which is being built up in this series of decisions rests upon no consideration of the human needs of the employees affected. These human needs were set forth by data and witnesses at the recent hearings with compelling force. The majority have not considered the evidence on this point, nor have they met the issue raised. Their failure to give this, the most vital element, consideration and to inform the public impartially on the subject, vitiates the whole decision.

(2) The evidence submitted in the present hearings tended to show that an income based on the 77-cent per hour rate does not enable representative shop-craft families, with the most economical management, to procure enough food for their families or to maintain their own efficiency. This evidence included a tentative standard of living expressed in terms of goods and services to which mechanics naturally feel themselves entitled. At the current prices an increase in pay would be necessary to enable these employees to secure such a standard. Without any attempt to show that the employees affected by this decision are not entitled to such a standard, and further without any attempt to show how families can make good the food deficits, the majority decision further reduces the ability of these employees to meet the needs of their families. The undersigned dissenting members feel that the Labor Board must initiate a study which shall determine the amount necessary to meet some recognized standard, that it must use the results as a basis for its decisions, and that it must through this decision transmit this information to the public.

(3) The rates of pay contained in the award, being insufficient to provide for a family of five, tend to substantiate the position taken by management to the effect that wages need not be established with reference to the needs of a family of this size. The most careful and comprehensive investigation on this subject shows that wages which do not provide for a family of that size mean that 72 per cent of all children in families receiving this wage will be inadequately provided for during at least five critical years of their lives. Permanent traces of this malnutrition will be left on the physique of the next generation.

(4) The failure of the majority to consider the real merits of the case has created a wage structure which has no relation to any existing standards. Based on evidence in possession of the Labor Board, the minimum for the industry should have been nothing less than 50 cents per hour. Without, for the moment, questioning the justice of the differentials resulting from the majority decision, this would place the mechanics' rate at least as high as 87 cents per hour.

(5) The ordering of a larger decrease in the case of freight-car men is unjust and wholly inconsistent with former decisions of the Labor Board. In ordering such a change the majority disregard the fact that any difference in skill which may exist has been already provided for in the 5-cent differential which dates from the days of the United States Railroad Administration. They also disregard the fact that under the classification rules of the board freight-car men are mechanics and as such are entitled to the minimum rate for mechanics.

(6) The rates of pay established in this decision will mean to the employees affected lower purchasing power and lower standards as compared with prewar years. From December, 1917, to the present decision, inclusive, the maintenance of equipment forces have suffered a constant deficit, their wages at all times failing to keep pace with living costs. The figures cited by the majority to the contrary effect are a misrepresentation of the true facts as to the relative earnings involved.

(7) The savings to the railroads, as a result of the decisions of the Labor Board and of the lay-off of men, far exceed anything justified by the savings to the public in reduced rates. The employees covered by this decision alone have had their pay roll cut to the extent of \$371,817,996 per year, as hereinafter set out, based on number of employees in service as of December, 1917, while the total pay-roll cuts due to decisions alone total half a billion dollars. During the last six months of 1921 the total pay-roll slash, including the lay-offs, was running at the annual rate of \$1,300,000,000. This diminished purchasing power of the employees as a group appears in strong contrast with the increasing prosperity of the railroads noted by the Interstate Commerce Commission in its recent opinion and by the financial press.

(8) The increasing antithesis between profits and just wages will result in lower morale among the railroad employees; thus the present wage reduction will not result

in economies, and will prove contrary to the real needs of efficient and economical management.

(9) The majority have failed to carry out the function for which the Labor Board was created. Such decisions, containing no explanation of the process by which the majority arrive at the rates established, give the public an impression that these rates are not founded upon a careful consideration of the facts. A strong contrast is presented with the decisions of other wage boards, not only in this country but in other parts of the world, as well as with the decisions of the Interstate Commerce Commission, which show the public at considerable length how the evidence was weighed and the conclusions reached.

In the light of the transportation act it is the clear duty of the board, first, to act as a constructive, impartial body in providing means whereby railroad employees can have their legitimate human needs satisfied without recourse to stoppages; and, second, to enlighten the public so that through the disordered state of unregulated industry and the confusion of propaganda they shall be able to see the real facts as they affect the body politic. The decision in question fulfills neither of these duties.

Full arguments of the dissenting members on this case, some of which are similar to those in the case affecting the maintenance men, must be omitted here because of lack of space.

Ladies' Garment Industry—Cleveland.

TWO recent events in the Cleveland ladies' garment industry claim the attention of the student of labor economics. They are the renewal, with important modifications, of the continuing agreement and the wage decision of the board of referees.

Three significant developments are noted in the renewed contract: The further development of standards of production, the agreement for an employment guaranty, and the plan with respect to outside shops.

Section 6 of the agreement, which appears below, provides for the introduction of production standards or of a week work system of wage payment by July 1. A supplementary agreement on this subject specifies the method of working out the details of these standards. Paragraph 2 of section 6 provides for a plan of employment insurance the details of which are worked out in the supplementary agreement dealing with that topic. Both of these plans were described somewhat in detail by Mr. W. J. Mack in the MONTHLY LABOR REVIEW for April, 1922.

Section 9 of the agreement relates to outside shops. This section makes more stringent the provision for union conditions of work in the shops of contractors and submanufacturers dealing with manufacturers under the agreement and commits the association and the union to the development of Cleveland as a large unit manufacturing community, "convinced that this policy is fair to the workers by keeping present forces intact and helpful to the manufacturers by reducing cost due to the economy of large unit manufacturing." A joint commission is appointed to study the problem of the outside shop with a view to "the elimination of the causes and to the proper control" of such shops under this agreement.

The employment insurance scheme is modified by the recent decision of the board of referees announced April 29, which provides an optional wage reduction. Cleveland manufacturers are granted a reduction of 10 per cent provided they set aside 25 per cent of the

new scale every week for an unemployment fund. Otherwise the plan set forth in the agreement below is to prevail. This decision is a direct blow at the seasonal nature of the industry.

Wage Decision of the Board of Referees.

THE decision of the board of referees handed down April 29, 1922, is as follows:

We have given careful and prolonged consideration to the matters submitted to us, and have reached the conclusion that as a general proposition there should be no reduction from the May, 1921, scale of wages. In arriving at this decision we have had in mind all of the elements enumerated in the agreement as bearing upon the wage question, including the welfare of the industry as well as that of the individuals in it. But we have felt at all times that the great difficulty in this industry is the seasonal character of the work. The wage scale itself can form no basis upon which the workers can adjust their standards of living. The important fact is their annual earnings. The union leaders in this industry have been among the first to realize this and to urge its consideration by the referees. The referees have felt that in all their awards they must aim to create conditions which would tend to reduce the seasonal character of the industry, to increase continuity of employment, and thus to give a larger yearly income from the industry to the workers.

In December, 1920, we suggested the alternative of a lower wage with a guaranty of greater continuity of work, or a higher wage without that guaranty of continuity, giving the manufacturer his option. When we came to put the guaranty into effect in the May, 1921, award, we dropped the option feature at the request of both parties, fixed the lower wage, and made the guaranty absolute. We believe, at this time, that a somewhat different option should be offered, one which in both alternatives will provide a guaranty fund for unemployment. For we believe that there should be no retrogression, but a continuous progress in the effort to secure greater continuity of work, and to create a guaranty fund to insure that continuity.

With all of these considerations in mind we therefore award a renewal of the old wage with the old guaranty provisions. We give the manufacturer, however, conditioned on a better guaranty, one more conducive to securing at least 41 weeks' work, the option of a reduced wage. This optional award involves a 10 per cent reduction from the May, 1921, scale, adjusted to the next higher 25 cents, if the weekly rate thus established should not be a multiple of 25 cents, coupled with a guaranty such as, in the judgment of the referees, would in all probability insure either 41 weeks of actual work or payment for 41 weeks' work. The amount of the guaranty fund for each shop would be based by the referees on past experience in that shop, this being used as a forecast of the probabilities for the coming season. Where the past year shows a considerable falling off from 41 weeks' work, the guaranty fund would be so much higher. Where the past year shows an approach to 41 weeks, or the reaching of or the exceeding of 41 weeks, the guaranty fund would be less. But the guaranty fund payment in any case would have to be substantially more than the present guaranty weekly payment of $7\frac{1}{2}$ per cent of the direct labor pay roll in those shops that want to avail themselves of the optional reduction; it would have to be even substantially more than the present guaranty plus the reduction itself to accomplish the purpose of insuring, so far as human foresight can judge, 41 weeks' continuity of work or pay.

And so we have reached the conclusion that in any shop availing itself of the optional reduced wage, no matter what its past history may have been, the minimum weekly guaranty fund payment should be 25 per cent of the actual direct labor wages instead of $7\frac{1}{2}$ per cent as at present; further, that for the unemployed time within the 41 weeks the worker shall receive the full minimum instead of two-thirds of the minimum wage, provided the fund suffice therefor. To put the thing a little differently: We give to the manufacturer the option of continuing on the present basis both as to wages and as to the guaranty, or in exchange for the reduction to create a larger fund which so far as we can foresee will actually give 41 weeks' work, or the full minimum pay for the unemployed time within that 41 weeks, neither of which are actually secured to the workers in most shops under the present guaranty fund provision. While the new minimum guaranty fund in any shop is to be 25 per cent, we fix no maximum; this is a matter to be determined by the board of referees promptly on application in each case, and the amount of the guaranty fund will be fixed in each case in which an application may be made, based upon past experience, and the proba-

bility of the 25 per cent, or whatever amount may be deemed necessary, really meeting the situation. We are ready to say now that where in the past year the full 41 weeks has been attained, in those cases we will let the minimum of 25 per cent be the maximum; but where that has not been the case, then, as it recedes from that, we shall increase the guaranty percentage.

This optional award properly administered through the effective cooperation of the manufacturers, the workers, and the referees, should result in a reduction of the unit cost to the manufacturer who is in a position to avail himself of the option, in an increase in total production, and an increase in the annual earnings of the workers.

As to the two other points that were submitted to us, we again hold as we have held once or twice before, that at the present time we shall make no change. Until more standards of production are introduced and we get more light from experience, no change of the differential between minimum and standard wage will be made, and as to the method of determining the average worker's standard in any shop as between men and women, the present practice will govern.

Continuing Agreement.

THE continuing agreement between the Cleveland Garment Manufacturers' Association, the International Ladies' Garment Workers' Union, and the board of referees, reads as follows:

In renewing the continuing agreement between the signatory members of the Cleveland Garment Manufacturers' Association and the International Ladies' Garment Workers' Union, representing its members, the workers in this industry in Cleveland, and the board of referees, representing the public, the following statement of principles is accepted and adopted by all the parties to this agreement:

That it is due to the consuming public whose patronage supports the industry as well as to the very existence of the industry in Cleveland itself, that all activities, decisions, and arrangements growing out of the agreement shall be based on the principles of true efficiency and the necessity for the lowest unit cost of production possible under the wage scale as determined by the referees.

In view of the primary responsibility to the consuming public, workers and owners are jointly and separately responsible for the cost and quality of the service rendered. It is agreed that cooperation and mutual helpfulness are the basis of right and progressive industrial relations, and that intimidation and coercion have no proper place in American industry.

To provide a means whereby the parties may cooperate, both to preserve peace in the industry and to further their mutual interests in the common enterprise, this agreement is entered into between the Cleveland Garment Manufacturers' Association, on behalf of those of its members whose signatures are attached hereto, the International Ladies' Garment Workers' Union, and locals No. 26, Cloak and Suit Tailors; No. 27, Skirt and Dress Makers; No. 29, Women Garment Workers; No. 37, Ladies' Garment Pressers; No. 42, Ladies' Garment Cutters; No. 94, Sample Makers, and the Hon. Julian W. Mack, Samuel J. Rosensohn, and John R. McLane, or their successors, acting as a board of referees.

I. The parties accept as a part of this agreement, and incorporate therein, except as they may be inconsistent with the express provisions of this agreement, the principles affirmed in the agreement between the parties and the Secretary of War, bearing date of August 12, 1918, and in the awards and decisions made by the board of referees appointed thereunder.

II. There shall be a permanent board of referees of three persons, consisting of the Hon. Julian W. Mack, chairman, Samuel J. Rosensohn, and John R. McLane. This board shall have power to adjust matters which can not be settled between the parties, to establish periodic wage scales for the industry, and to see that this agreement is fairly lived up to by the parties hereto.

Vacancies in the board, from resignation or otherwise, shall be filled by joint action of the union and the association. In case they are unable to agree, the remaining referees, together with the union and the association, shall make the decision.

Any one member of the board shall have the authority to exercise the powers of the full board, except in case of dispute wherein either party requests the consideration of the full board.

III. On or about October 1 of each year the referees shall take up the matter of wage scales, and on or about November 1 shall make such changes in the then existing scale as shall, in their judgment, seem advisable. The wage scale thus promulgated by

them shall be effective at a time to be fixed by the referees, which shall not be prior to December 1 of that year, and shall be the scale in force for the year next ensuing, except that four months thereafter the subject may be reopened for the purpose of making adjustments in conformity with changes in the cost of living, which adjustments shall be made on or about April 1, and become effective at a date to be fixed by the referees, which date shall not be prior to May 1, provided, however, that the first general wage hearing under this agreement shall be held on or about April 1, 1922, and become effective at a date to be fixed by the referees, which date shall not be later than May 1, 1922.

IV. The wage scale shall be determined after thorough investigation of all ascertainable facts, with due regard to the public interest, fair and equitable wages conforming to American standards, and to the progress and prosperity of the industry. A united effort shall be made to promote all interests by increasing continuity of employment.

V. Disputes between an employer and an employee in an individual shop, affecting a member of the union, shall first be taken up between the employer or his representative and the worker concerned or his representative, who must be an employee of such shop, for the purpose of adjusting the differences between them. In case of failure to make satisfactory adjustment, the matter shall then be taken up by the manager of the union and the manager of the manufacturers' association.

Disputes of a general nature concerning such matters as hours of work, general sanitary standards, general wage scales, and classifications in connection therewith, etc., shall be taken up directly by the manager of the union and the manager of the manufacturers' association.

If they fail in either case to make a satisfactory adjustment, the dispute shall then be arbitrated by the representative of the referees appointed for that purpose and vested with the full power of the board of referees, subject only to a right of appeal to the board from his decision on matters relating to principle or policy. This representative may be called upon at any time for the investigation or hearing of cases properly brought before him. No case shall be heard by him, or by the board, which has not first been taken up in the successive steps set forth above. The decision of the representative is final unless and until overruled or modified by the board of referees, except where a member of the board, upon cause shown, shall deem it advisable to suspend execution of the decision of the representative, pending appeal.

VI. The principle of week work is reaffirmed. In accordance with the agreement heretofore entered into by the association and the union, the wage paid thereunder shall have due regard to the productive value of the individual worker based on fair and accurate standards, which standards shall be under the joint control of the association and the union and subject to review by the referees. Such production standards shall be installed in all shops and departments as soon as the individual manufacturer is prepared for the installation. Until July 1, 1922, departments and shops not upon standards shall continue the wage plan now in effect in the individual departments. After that date each manufacturer signatory to this agreement shall adopt either production standards or straight week work in all departments of his shop unless otherwise ordered by the board of referees or their representative. Such week work wage shall be based upon the productive ability of each worker, but not less than the minimum shall be paid.

Reaffirming and continuing the plan provided by the board of referees in their decision of April 22, 1921, and agreed to by the association and the union, each worker shall be guaranteed beginning January 1, 1922, not less than 41 weeks of employment in each year or pay at two-thirds his minimum so long as the fund in his shop as hereinafter limited shall enable this to be done. Each manufacturer shall lay aside each week $7\frac{1}{2}$ per cent of his direct labor pay roll to constitute an assurance of employment fund. Any worker in any shop who has been idle 11 weeks during the calendar year shall thereafter be entitled to draw upon such fund for any day of unemployment at the rate of two-thirds of his minimum wage.

The details of the production standards and guaranty plan shall be provided in a supplementary agreement which shall have the same force and effect as this agreement.

VII. The manufacturers' association and the union shall cooperate as required by the referees in seeing that all of their decisions, rulings, promulgations, or disciplinary measures are faithfully executed or complied with.

VIII. Every worker shall work for and be paid by the firm in whose shop he is employed, and not by any other employee of that firm. This clause relates to the abolishment of inside subcontracting.

IX. The association and the union commit themselves to the development of Cleveland as a manufacturing community of large units, convinced that this policy is fair to the workers by keeping present forces intact and helpful to the manufacturers by

reducing cost due to economy of large unit manufacturing. In accordance with this policy the manufacturers shall so far as possible retain and build up the personnel in factories they own or control and for which they accept the provisions of this agreement. To ascertain what causes, if any, are leading to the growth of outside shops at the expense of inside shops, a commission composed of three members from the union and three from the association shall be appointed. This commission shall study the entire problem of the outside shop and as soon as practicable shall report its findings and its recommendations for the elimination of the causes and the proper control of the outside shop under this agreement.

Until the receipt of the report of the above-named commission and its adoption, the use of outside shops shall be controlled as follows:

All workers in contracting and submanufacturing shops located in Cuyahoga County shall receive the same scale of wages and the same hours as established for the workers in the inside shops.

The referees shall have authority to decide a wage scale or any complaint with respect to any shop in the vicinity of Cleveland making garments for or selling garments to any manufacturer party to this agreement, giving due consideration to the proper interests of the parties to this agreement.

No strikes or lockouts shall be permitted in any contracting or submanufacturing shop located in Cuyahoga County or its vicinity making garments for or selling garments to any manufacturer signatory to this agreement. All disputes in such shops shall be adjusted in a manner similar to that provided in this agreement. To insure the carrying out of the terms of this agreement the union and the association of contractors and submanufacturers have signed an agreement providing for an impartial machinery and, excepting as hereinafter provided, no manufacturer party hereto shall give work to or purchase garments from any contractor or submanufacturer in Cleveland or vicinity who does not enter in and remain under the jurisdiction of the impartial machinery provided by such submanufacturers' agreement.

Any manufacturer desiring to have work done by or to purchase garments from any contractor or submanufacturer in Cleveland or vicinity who is not a member in good standing of such contractors, or submanufacturers' association shall first notify the impartial chairman accepting full responsibility for the carrying out of the provisions of this agreement within such outside shops and shall deposit with the impartial chairman surety for the fulfillment of such obligations.

X. A joint board of sanitary control may be created by the referees.

XI. This agreement shall be so administered that the position of neither of the parties to it shall be weakened.

While recognizing the right of any worker to join the union or not, as he desires, such workers as are now members or who may become members shall remain members of the union in good standing during the life of this agreement.

Any member of either group guilty of violating this agreement shall be disciplined on order of the referees.

XII. During slack periods the work shall be distributed among all the workers of a given shop or of a given division of that shop as equitably as possible.

XIII. This agreement shall remain in force until December 31, 1922, and shall be automatically renewed for another year, and so on for each succeeding year, subject only to the right of either party to terminate it on December 31, 1922, or on December 31 of any succeeding year, by giving written notice at least three months before the end of such year. Either party may, upon similar notice, at such periods, suggest amendments or a reconsideration of the terms of the agreement as a whole, in which case the referees shall call the parties into conference during the three months' period, and whatever changes may be agreed on shall become effective at the beginning of the next yearly period.

XIV. There shall be no strikes or lockouts during the life of this agreement, unless previously authorized by the referees.

XV. The expense of the referees and their representative in administering this agreement shall be borne equally by the union and the manufacturers' association by making such deposits to the order of the referees as from time to time may be required of them.

SUPPLEMENTARY AGREEMENT RELATIVE TO PRODUCTION STANDARDS.

This supplementary agreement between the board of referees, the International Ladies' Garment Workers' Union, its various locals, and the Cleveland Garment Manufacturers' Association on behalf of its members, is entered into in accordance with the provisions of Article VI of the continuing agreement effective January 1, 1922,

It is understood and agreed that the provisions of this supplementary agreement are to cover and affect departments and workers only as they are transferred to the "Plan B" method of wage payment.

I. *Plan B.*—Plan B provides for a weekly minimum guaranteed wage for each worker and an additional wage depending upon his or her production measured by standards based upon time studies. Such standards shall be fair and accurate and shall be based upon the producing ability of the average worker on a basic scale of 10 per cent above the minimum rate fixed by the referees. The standards shall be under the joint control of the union and the association subject to supervision of the referees.

II. *Present employees.*—Recognizing the fact that the introduction of standards is in cooperation with the workers, no worker now employed shall be discharged as a direct result of the installation of standards. It is understood, however, that this does not limit the right of the employer to reorganize his forces in accordance with the principles already laid down by the referees or to discharge for just cause.

III. *Committee on standards.*—The engineer in charge, employed jointly, shall be ex-officio chairman of a joint committee on standards composed of five members named by the union and five by the manufacturers' association. This committee shall have the duty and responsibility of installing and administering the wage standards subject to this memorandum of agreement and such other regulations as may be from time to time adopted jointly by the union and the association with the approval of the referees.

IV. *Shop committees.*—There shall be a committee on standards to be named by the union in every department of a shop. This committee on behalf of the workers may approve or disapprove the standards submitted to it. In case any standard is protested by either this committee or by the management, the time-study man shall review his standard. In case it is still protested, the matter shall be referred to the engineer in charge of the joint bureau for settlement. The engineer, together with the managers of the union and association may decide if a new check study is to be taken.

V. *Accumulation of standards.*—Every worker in a given department may be studied in accumulating elemental times for standards, and slow as well as fast workers are to be studied. The engineer in charge shall be responsible for the accumulation of elements and the determination of standards. All errors in standards shall be rectified upon protest of either workers or management and retroactive adjustment made. Standards shall be set on each garment at the earliest possible time and not more than one pay day shall elapse with standards unset on any garment in production.

VI. *Posting and accounting.*—The standard time for each garment or part shall be posted in the shop as soon as it has been set and approved by both sides. Each shop shall maintain a simple method of accounting for idle time and work done, so that each worker may be able to keep a record of his own earnings.

VII. *Unit of measurement.*—The unit of measurement shall be the production of a worker of average skill working at normal speed for a week of 44 hours. Such a week's production shall constitute 2,640 points.

VIII. *Allowances.*—A percentage allowance for personal needs and fatigue shall be added to each standard which allowance shall be set by the engineer in charge. An allowance for unavoidable delays shall be determined for each shop by the engineer. Until these allowances are determined, the same allowance now used in the pressing department shall govern.

IX. *Idle time.*—When a worker is called to work it shall be for not less than a day's work. For idle time spent in the factory more than 10 minutes he shall be paid at the rate of the minimum and such idle time not paid for shall not exceed 30 minutes in any one day.

X. *Subnormal workers.*—A preferential rate may be provided jointly by agreement between the union and the association for subnormal workers.

XI. *Week work.*—Workers taken from standards and given day work or week work shall be paid in the following manner in those shops where standards are set upon men:

Efficiency of each worker shall be figured from his production. His efficiency shall be taken at the end of the first eight weeks worked and thereafter at the end of each season. The workers shall be grouped in classes and the workers coming within each group shall be paid for week work at the efficiency percentage shown in the table below:

Men.

Between—	More than men's minimum.
90 and 99.9 per cent.....per cent..	5
100 and 108.9 per cent.....do....	10
109 and 117.9 per cent.....do....	14
118 and 124.9 per cent.....do....	18
125 and 130.9 per cent.....do....	25
131 and 135.9 per cent.....do....	30
136 and 140.9 per cent.....do....	35
141 per cent and up.....do....	40

Women.

Between—	More than women's minimum.
57 and 63.9 per cent.....	
64 and 71.9 per cent.....per cent..	8
72 and 81.9 per cent.....do....	20
82 and 90.9 per cent.....do....	36
91 and 99.9 per cent.....do....	68
100 and 108.9 per cent.....do....	76
109 and 117.9 per cent.....do....	82
118 and 124.9 per cent.....do....	88
125 and 130.9 per cent.....do....	100
131 and 135.9 per cent.....do....	108
136 and 140.9 per cent.....do....	116
141 per cent and up.....do....	124

In those shops where standards are set upon women, the following table shall apply:

Between—	More than women's minimum.
90 and 99.9 per cent.....per cent..	5
100 and 108.9 per cent.....do....	10
109 and 117.9 per cent.....do....	14
118 and 124.9 per cent.....do....	18
125 per cent and up.....do....	25

XII. *Duplicates.*—For work done upon duplicates workers shall be paid not less than the minimum for the time employed. After the standards are set for each garment retroactive adjustments shall be made to cover duplicates. In addition to the above the worker shall receive a departmental bonus sufficient to equalize remuneration while on duplicates with general efficiency while on stock. Such bonus shall not be added unless worker's earnings for the total hours spent on duplicates amount to at least 88 per cent of his or her minimum. Until this percentage can be correctly determined for each department by the engineer in charge the worker shall receive the bonus which has been heretofore paid for duplicates in each department. Where no bonus has been paid, the temporary bonus shall be 20 per cent. It is understood that this section applies to all operating departments, but only to such other departments in each shop as have heretofore received a bonus for work on duplicates.

XIII. *Holidays.*—Each worker shall receive pay at the minimum scale for his or her class for six holidays during the year, to wit, New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas, providing he or she is employed in the shop during any part of the shop week in which such holiday comes and does not absent himself either the day before or the day after such holiday.

XIV. *Overtime.*—For all overtime work the worker shall receive in addition to his regular earnings one-half of his standard rate per hour.

XV. *Tailors' helpers.*—Tailors' helpers shall be classified in accordance with the work which they have been regularly doing and with the way they have been doing it.

XVI. *Pay for men and women.*—The referees decide that for this interim period (until April, 1922, hearing) the present method be continued—that is to say, where men and women are employed on the same work, the tests be taken on men at men's rates and where women only are employed the tests be made on women at women's rates." (From the decision of the referees dated January 14, 1922.)

SUPPLEMENTARY AGREEMENT RELATIVE TO ASSURANCE OF EMPLOYMENT.

This supplementary agreement between the board of referees, the International Ladies' Garment Workers' Union, its various locals, and the Cleveland Garment Manufacturers' Association on behalf of its members is entered into in accordance with the provisions of Article VI of the continuing agreement effective January 1, 1922.

The provisions of this supplementary agreement are to cover and affect those departments and workers entitled to the provisions of the guaranteed employment plan as embodied in the decision of the referees dated April 22, 1921.

The decision of the referees provides for the continuity of employment as based upon the recognition of the fact that there is an obligation on the industry to provide for the regular workers a guaranteed minimum period of work or compensation for the lack of it. The decision states that there shall be as much continuity of employment as is practicable and the establishment of a minimum of 41 weeks during the calendar year 1922 is in the hope that that may be, in fact, only a minimum; that the incentive will prove sufficient to have as much of the work as possible done in Cleveland and that Cleveland will continue to develop as a garment center of large manufacturing units.

I. *Direct labor.*—Direct labor within the meaning of the referees' decisions covers all of those persons named in their classification and in addition the following unclassified workers: Sorter, draper, belt pinners, ticket pinners, assemblers, markers, cleaners, trimmers, basters, and working foremen. ("Working foremen" means those who work most of the time.)

II. *Payment to workers.*—Workers may be divided into three groups: A, week workers; B, workers on standards; and C, pieceworkers. No worker is entitled to be paid for unemployed time until that unemployed time exceeds 11 weeks. Subject to the limitations established by the referees, workers shall be entitled to pay as follows:

A. *Week workers:* Each worker shall be paid at his regular weekly rate for the time he is in the factory, plus two-thirds of his minimum rate for that portion of the 41 weeks during which he is laid off.

B. *Workers on standards:* Each worker on standards shall be paid whatever he earns when he is working, plus his minimum rate for his idle time in the factory, plus two-thirds of his minimum rate for that portion of the 41 weeks during which he is laid off. When a person working under standards is called into the factory, he must be kept there for the full day and be paid at the minimum rate for all idle time.

C. *Pieceworkers:* Each pieceworker shall be paid whatever he earns when he is working, plus his minimum rate for his idle time in the factory, plus two-thirds of his minimum rate for that portion of the 41 weeks during which he is laid off. When a pieceworker is called into the factory, he must be kept there for not less than half a day and be paid at the minimum rate for his idle time.

Idle time in the factory is not unemployed time. The pay given pieceworkers and workers under standards for idle time while in the factory, shall, therefore, not be taken from the unemployment fund, but the two-thirds of the minimum pay for the time during which any worker is laid off shall be taken from the unemployment fund.

If an employee fails to appear for work at the time when he is instructed to do so, no lay-off time shall be counted between the time when he should have appeared and the time when he actually does appear.

All claims upon the unemployment fund must be filed by the employee promptly and in no event later than two weeks after the end of the yearly period.

The lay-off time pay roll shall not be considered a part of the direct labor pay roll upon which the 7½ per cent is paid.

III. *Distribution of unemployment fund.*—It is hoped that the volume of work done inside the factories will be such that the unemployment fund in every case will be more than enough to pay the claims of all the workers. No attempt will be made at this time to prorate such fund among all workers, but whenever any worker becomes entitled to pay from the unemployment fund of his factory he shall receive such pay in full direct from his employer on the regular pay day. The matter of the distribution of the unemployment fund among the workers may, however, be changed by the impartial chairman if that should seem to him advisable.

IV. *Security.*—In case any manufacturer wants to substitute security for the 7½ per cent weekly cash deposit, the amount and nature of the security must be agreed upon with the impartial chairman before any substitution can be made.

V. *Records.*—Every manufacturer shall keep a complete labor record of every worker on Forms No. 9 and No. 14x, already provided by the industrial engineers. The association shall see to it that full data are submitted to the impartial chairman

weekly and that uniform slips are given to the workers, so that the amount of unemployed time, etc., may be properly checked.

VI. *New employees.*—Any worker employed after the calendar year has begun shall receive such proportion of the 41 weeks' guaranteed period as the date of his employment bears to the full year, with the following exception: If a new worker is employed at a time when the other workers in that department have averaged less than one week's work, he shall be presumed to have had the same amount of unemployment as the average for the department.

Printing Industry.

Pressmen.¹

ACCORDING to information furnished to the Service Bureau by local unions 125 agreements were signed during the period from May 1, 1921, to May 1, 1922. One hundred and six of these were effected through conciliation and the other 19 through arbitration. Sixty verbal agreements were also entered into during this period, and there were probably additional settlements of which the particulars have not been furnished to date. One of the most noticeable improvements was the introduction of the 44-hour week in practically all commercial shops which previously had relations with the unions. Forty-one locals received increases in wages, ranging from 75 cents to \$14 a week, while 65 locals received reductions, ranging from 17 cents to \$8 a week, and in others no changes were made in existing wages. Summarization shows that during the year period the average wage for the members advanced slightly, in spite of the "open-shop" agitation and its attempt to destroy the union. The average weekly wage at the present time for journeymen is:

Cylinder pressmen.....	\$36.60
Cylinder feeders.....	29.90
Platen pressmen.....	32.30
Platen feeders.....	19.32
Web journeymen, days.....	36.70
Web journeymen, nights.....	37.51

The figures for foremen have not been included and the average has been computed by units of locals. Had it been possible to compile this by individual membership wages it would, no doubt, show considerably higher, because the majority of the membership is located in the larger cities, which have higher rates than the smaller ones.

Web Pressmen—Washington, D. C.

A NEW contract to remain in force until September 6, 1923, has been concluded between the Associated Publishers of the District of Columbia and the Web Printing Pressmen's Union No. 6, International Printing Pressmen and Assistants' Union of North America. The arbitration board, of which Chief Justice McCoy, of the Supreme Court of the District of Columbia, is permanent umpire, assisted in making the agreement and decided the issues which could not be agreed upon. Following is the memorandum accompanying the

¹ American Pressman, May, 1922, pp. 48, 49.

decision of the umpire in this case, which sets forth the principal issues in dispute, together with their disposition.

MEMORANDUM ACCOMPANYING DECISION OF UMPIRE.

Some of the matters in dispute have been settled by the arbitrators, leaving substantially only three questions to be decided, one having to do with wages but of no considerable importance, the others fundamental because they have to do with human endurance.

It was stated during the hearings that all the pressmen are young men—under middle age. My observations confirm this statement. With two exceptions I have seen no pressmen in the Washington establishments who appeared to have come near the meridian. The significance of this fact needs no elaboration.

The conditions of employment are not favorable—necessarily so, perhaps. Work on the morning papers is done at night and that on the afternoon papers by artificial light. The noise of a press in operation is almost deafening and is practically continuous while a run is being made. Whatever may be said about the degree of skill required, presses in operation demand unremitting attention while running at a very high rate of speed.

My decisions have been reached upon a consideration of the foregoing general conclusions.

The existing contract, except so far as already changed by agreement made in the present proceedings, is the result of an arbitration.

Number of men to a press in operation.

A provision of the existing contract is as follows:

“The following number of men shall at least constitute a press crew:

“When a press is running one color as an octuple press. One pressman in charge and at least six (6) additional pressmen.”

This provision is followed by others fixing the numbers for sextuple and quadruple presses.

The publishers wish to have the fixing of the number of men to be employed “with due regard to the efficient operation of the presses and the hazard of the work.”

The fixing of a certain number of men to a press was the result of an agreement between the parties in 1919. The complaint is not so much that the number of men is too large but that “rigidity” has caused trouble and that the number of men in the pressroom and their assignment to the work to be done should be gauged by the needs of the particular office in which they are employed. The publishers cite several instances of friction during the period of the existing contract to sustain their contentions, but that friction was due to a misconstruction of the contract except in one instance which will be mentioned later. The contract fixes the number of men for a press *in actual operation*, not for a press wholly or partly dead, nor does it require that any man or certain men are to operate a certain press and no other. It does not prevent the attempted arrangements for staggering the lunch hour nor the attempted arrangement of vacations. It is not without the province of an umpire to note the significance of the fact that so far as the testimony herein shows the only trouble that has occurred has been in the office where the most has been done to make the conditions of employment the best possible.

The exception referred to above was the friction due to one man starting and making a short run of a press. In that case there was no misinterpretation of the contract, but I am constrained to say that the matter should not have been made a point of for what was done was due to an emergency and the publishers acted in good faith. Proper relations can not be maintained if the letter of the contract is made to kill the spirit of it.

If it were clear that the wish to fix the number of employees is due to a desire to limit production without reference to what may be reasonably expected of every man the decision would be easy. Arbitrary limitation of output can not be approved. But the pressmen say that they want to do a reasonable day's work and the publishers that they ask no more. What will produce the result both sides claim to seek? Any one of four courses may be followed—leave the decision to the pressmen; leave it to the publishers; leave it to the foreman; or embody a limitation in a contract. As much may be said perhaps for leaving the decision to one party as to the other. The difficulty I have had in coming to a conclusion warns me how unwise it might be to leave it to either, and this without doubting that neither would deliberately seek to

take undue advantage of the other. There is much to be said in favor of having the foreman decide, but I will state my reasons for reaching a different conclusion.

The plan of fixing the number of men is found in a considerable number of establishments in this country and in Canada and was voluntarily agreed to by the present parties on considerations of safety. It seems to me that the plan should not be changed without a clear showing that there was a mistake in this respect and no such showing has been made. The number of men so agreed to was six to an octuple press. This was increased to seven in the previous arbitration. The number of men to a press is not the same in all establishments where it is fixed by agreement. In some there are fewer pressmen than are asked for here, in others more. Why the differences exist has not been shown and perhaps can not be. Therefore we are left merely to a consideration of the circumstances in the establishments here involved. I have no doubt that in at least one office seven men are not too many but am doubtful about the others. The element of safety being involved concededly and that necessarily involving the element of fatigue due not only to muscular effort but also to conditions already mentioned and the number having been fixed by an impartial umpire I do not see how I can rightly resolve the doubt against those who have no possible way of shifting from their own shoulders the result of a mistaken conclusion.

A clause of the present contract reads: "When a double run is made on top of a double run in any twenty-four hours an additional man shall be added to the crew." This provision has not been enforced in the pressroom where the work is most exacting, and this fact affords strong proof by those most interested that it is not fairly needed for the protection of the pressmen.

Pay for overtime after a double run.

The present contract provides:

"All work done before as well as work done after the hour herein specified shall be classified as overtime, provided that all overtime work done after a double run shall be paid for at the rate of double time, this provision applying only to overtime work performed in a working day or night as fixed in paragraph No. 2 of this agreement.

"Overtime shall be paid for at the rate of time and a half, to be charged in quarter-hour fractions, but no charge shall be made for overtime caused by the delay in the pressroom in printing the regular edition of the paper."

It is said that the phrase "a double run" was there used for the first time in contracts between the parties, and that it was previously unknown in newspaper parlance. It was inserted by the umpire in the previous arbitration. I have conferred with that umpire who says that he did not use it as meaning a day and night shift or "double header."

For the purposes of this arbitration it is not contended by the union that its members should not be required to work eight hours a day on a press in practically continuous operation, while the publishers claim that they are entitled to that amount of work. In view of what has already been pointed out I think that no more should be required of the pressmen except in case of an emergency.

Time worked after eight hours because of delay in the pressroom in printing the regular edition of a paper not being classed as overtime when the union asks double pay for overtime after a "double run" it is for such overtime work as may be obviated usually by the exercise of forethought on the part of others than the pressmen.

The arbitrator representing the publishers stated that overtime after a night shift following a day shift might well be paid for at triple rates and the publishers want such work beyond the second shift penalized as much as anybody wants it penalized. That attitude is creditable and the reasons for it hold in a lesser degree in considering the question of overtime after the practically continuous operations of a press during a regular eight-hour day. It is my view that time worked thereafter should be paid for as double time.

In only one pressroom, however, are the presses kept in operation throughout practically all the eight hours. This is due to the fact that the paper there printed is issued in several editions daily and there are also predated. In the other offices the supplements and predated papers alone are printed in addition to the regular issue of only one edition. The record in this arbitration does not disclose how much time, on the average, is consumed in the last mentioned offices in printing supplements and predated parts but it is safe to say that the work in those offices is not as strenuous as in the one first mentioned. The contract about to be made must, however, in terms apply to all the offices notwithstanding such differences, and as any office under the terms already agreed to may call for the continuous operation of a press through the eight hours, the fact that in practice the burden may fall more heavily on one office than on another should not control.

I have taken practically the definition of the arbitrator for the union of the term "double run."

Lunch period.

At the close of the hearings the agreement as to lunch periods stood as follows:

"No union employee of the pressroom shall be required to work more than five hours without an allowance of one-half hour for lunch. This provision shall not apply to overtime work or for more than two lunch periods for men performing both day and night work.

"If the exigencies of the office require that the lunch period be omitted for any man or men, time and one-half shall be paid them for the half hour, or such part of it, as they forego; and such time shall be added to the regular eight-hour day.

"(NOTE.—So much of paragraph 9 as begins with the words 'This provision' and ends with the words 'day and night work' is subject to further consideration.")

Finally it was left to the umpire to settle that part which was left open for consideration.

It ought to be a very rare occasion when pressmen are required to forego the half-hour lunch period. That is permissible however by agreement. Having done so they ought not be required or permitted to work overtime without a half hour for lunch.

I have had more difficulty in deciding the matter for lunch periods when one period has been allowed in the regular eight-hour day followed by overtime work. Everyone agrees, or should, that overtime work is to be avoided as far as possible. In many lines of business it is unavoidable at times. The best solution of the problem here that I have been able to work out is to decide that when such an allowance has been made within the regular eight-hour day and overtime work is required the foreman shall decide how long the men are to work overtime before another lunch period is allowed. This will permit a handling of the matter according to circumstances. The foreman is a member of the union and the representative of the publishers. He should be capable of making reasonable decisions. An honest foreman will not be tempted to be unfair.

Extra pay for night work following day work.

The extra pay for night work following day work has been fixed at 15 per cent instead of \$1. As stated at the hearings the difference is relatively small in amount but nevertheless means something to the pressmen. The percentage basis is used elsewhere in the contract as agreed to.

Four-hour interval between day and night work.

The arbitrators agreed on the clause in regard to the four-hour rest period between day and night shifts. The stenographic record does not disclose any discussion of this matter and I do not recollect any. As the clause was agreed to I have no power to change it.

Sanitary conditions.

The purchase of uncleaned rags should be discontinued in offices where it prevails. In one office I saw a bundle of used rags many of which were evidently soiled by human contact. It was said in one office that a shroud had been furnished not cleaned after use as was evidenced by the tag attached, the ink on which had not been blurred.

In at least one office the ventilation is worse than it need be.

In one office the opportunity for escape in case of fire is bad and in another very bad.

In two offices the toilet facilities are bad and no effort to keep the dressing room clean and tidy was evident.

In one office the toilet facilities are very bad and thoroughly inadequate.

In one office the conditions in regard to such matters are in all respects excellent.

The final decision in this matter has been considerably delayed pending an effort to agree upon the wage rate for Sunday afternoon papers. An agreement has not been reached and as that question at the time of the final submission was not meant to be specifically mentioned the contract stands as then agreed to.

Pending said delay there has been a decision in an arbitration in New York City between the publishers and the web pressmen. The umpire there is an eminent

judge of a Federal court experienced in deciding difficult questions. His opinion is entitled to careful consideration. I have reviewed my conclusions in the light of that opinion.

Judge Manton, the umpire in the New York cases, reaches the conclusion that the publishers shall have the sole right to determine the number of men necessary to operate and man the presses in their respective pressrooms, whereas I have reached the opposite conclusion. There is no discussion in connection with the New York award² of specific reasons pro and con. In laying down some general principles that award states that the employer "promises care and caution according to reasonable and humane principles for the safety and health of his employee." It is my judgment that as the parties may honestly differ as to the proper number of men to be employed, due regard being had to safety and health, there is good reason for a specific agreement.

Stereotypers—New York.

THE decision of arbitrator Laurence T. Hinch in the wage scale adjustment between the Employing Electrotypers' and Stereotypers' Association of New York and the New York Stereotypers' Union No. 1, handed down on April 12, leaves unchanged the wage of electrotype finishers at \$59 per week. This is a peak wage for this class of workers and is the highest paid in the New York printing trades.

The employers asked that wages be reduced \$7 per week, or to \$52, basing their contention on living costs and the economic condition of the industry. The union made a counterdemand for an increase of \$5, or a weekly wage of \$64, on the ground of living costs, economic condition of the industry, skill required, the lag of wages behind living costs between 1914 and 1918, and the wages lost when the hours were changed from forty-eight to forty-four.

In support of their demand for revision of wages based on living costs, the employers contended that the arbitration decision must be based upon the same principle which guided the previous arbitration cases between these two parties, i. e. the fluctuation in living costs.

The chairman of the arbitration committee ruled out this contention on the ground that the contract under which the present proceedings were carried on made no stipulation binding the arbitrator to the terms of any arbitration arising under it nor did it stipulate that the decision must be based upon the relative cost of living compared with that of 1914.

The union's contention for an increase in wages based on the lag of wages behind the living costs between 1914 and 1918 was ruled out on the ground that the chairman could not consider conditions which may have prevailed prior to the last wage adjustment. "Such matters must be considered as having been decided by such adjustment."

The chairman based his decision on the standard of living, with due regard for the amount of skill required by the worker, and the economic condition of the industry. He considered upon the evidence presented, "that the nature of the trade and the work performed by finishers is such as to demand a very high degree of skill and preparation. It requires great care under exacting conditions and the workers may safely be said to be in the very highest degree skilled laborers. As such, they should be entitled to more than a mere living wage. Your chairman's decision is founded upon this

² Judge Manton's award appeared in full in the MONTHLY LABOR REVIEW for April, 1922, pp. 130, 131.

assumption; that the workers are entitled to a compensation which will not be a mere existence wage, but will enable them to live in moderately comfortable circumstances, to raise a family decently, and in general, on a scale somewhat above that of unskilled labor or skilled labor of a less highly trained nature."

In his determination of what should constitute a fair and reasonable wage for this class of workers the chairman accepted the budget presented by the unions which was based on that of the U. S. Bureau of Labor Statistics with the exception of the rent figures, the increase in which the union after investigation placed at 87.3 instead of 45.7. This union budget called for a yearly expenditure of \$2,938. The average annual earnings of finishers on the \$59 a week scale were \$2,869.

In order to determine definitely the economic condition of the industry the union suggested that a joint impartial accounting survey be made of the financial condition of the business. The employers refused to comply with this request but both parties submitted voluminous data on this point.

It was the chairman's belief that:

Unless it can be shown that the printing industry is exempt or unaffected by the general economic depression to any great extent, your chairman would feel that the general depression which has prevailed and is prevailing in a lesser degree would have great weight in determining a wage at this time.

In his decision the chairman cites the arguments of the employers and of the union on this point, as follows:

In the first place the employers base their contention on general economic conditions throughout the country, citing in support of this the number of business failures during the past three years and January this year and the amount in dollars of such failures. * * *

It is important, however, to note, as the union points out, that not a single failure has taken place in the electrotyping industry.

The employers next cite a number of facts to illustrate the conditions in their industry. They point to a decrease in amount of second-class mail matter handled by the post office. This would seem to be met in part by the union in showing that a lighter weight paper is being used because of lower prices.

The employers show that the magazines have carried less advertising matter in 1921 than in 1920. The amount in 1921, however, was still in excess of that in a normal year, which would indicate that the industry had not suffered from the depression to anything like the extent that many other industries have. The union claims advertising has increased since last July, the matter of publications leaving New York because of prohibitive costs has been much stressed. It seems, however, on the evidence submitted that 26 publications moved into New York as opposed to 24 leaving during the past year.

It seems that electrotype sales have decreased during the past year and that the scale prices of electrotypes are not adhered to, but that special discounts are given.

The employers also show that increased rents and machinery prices prevail, and that the elimination of classification by the present contract is responsible for the increased charges for time-work.

The union submits evidence showing that even with wage increases, scale prices of electrotypes increased more than costs.

As regards the general condition of the industry, it cites the formation of some 102 new printing corporations during recent months, and of 21 new advertising firms, increases in capitalization in companies in the book and job trades, of heavy purchases of new equipment, additions to plants, and full employment for the union finishers.

Upon this evidence the chairman concludes that while the industry has to some extent suffered in the general business depression it has not suffered greatly.

There is nothing to show that what decline in the business has occurred has been due to excessive labor costs. There is no satisfactory evidence to his mind showing that the industry can not continue prosperous and thriving while continuing to pay present rate of wages, or that it will suffer to any extent by so doing.

In view of these general conditions the chairman did not feel justified in awarding an increase in wages. On the other hand, he did not feel that conditions as presented in the evidence were such that a decrease in the wage scale of finishers and apprentices was necessary to a prosperous continuation of the industry. He therefore decided that wages should remain unchanged.

WOMAN AND CHILD LABOR.

Negro Women in Industry.¹

THE Women's Bureau has recently published a study of the position of negro women in industry, based on a survey made in the period from September to December, 1920. In view of the limited time, it was thought better not to make an intensive study of any one State, locality, or industry, but rather to gather facts from a wide field with a view to getting a general idea of the situation. In all, 150 plants were visited, in 17 localities in 9 States. In these something over 28,000 women were employed, of whom 11,812 were colored.

Previous investigations had shown that while, during the war, many new opportunities had been opened to colored women, they were distinctly marginal workers, being taken on only when and where a scarcity of white labor made itself felt. In this study it was found that there were only two of the industries covered, the metal trades and leather products, which they had entered for the first time during the war, but that in the other industries many new occupations had been opened to them. The largest number, however, were still in what had long been regarded as their special field, the rehandling of tobacco, in which 6,531, or over half of the total number studied, were engaged. The next largest group, 840, was found in textile work, and the next, 806, in the metal trades, which had not formerly been open to them. Food products, glass, and clothing trades also accounted for good-sized groups.

At the time of the survey, it was evident that the negro women had not gained a very firm foothold in the new fields. Twenty establishments, not included in the 150 mentioned above, were found which had employed them during the war but had dismissed them when other help was available. In 40 of the 150 establishments they had been reduced to less skilled processes than they formerly performed, and in two of these they were being weeded out as rapidly as convenient. The reasons given for these dismissals did not in general reflect upon the women; the employers preferred white workers, and took them when they could get them.

The conditions under which the women worked varied widely according to the industry, the State, and the particular employer. In general, less attention was paid to giving them healthful, cleanly, and pleasant surroundings than in the case of white workers. The larger number had long hours, 37 per cent having a scheduled week of 50 hours, and 33 per cent one of 55 hours. Toilet and washing

¹ U. S. Women's Bureau Bul. No. 20: Negro women in industry. In a book note in the MONTHLY LABOR REVIEW for April, 1922 (p. 244) it was erroneously stated that a digest of the data in this bulletin was given in the MONTHLY LABOR REVIEW for April, 1921 (p. 141, 142). The data referred to in that digest was secured by a special agent of the Women's Bureau in 1918-19 and form the basis of Chapter XIX, "Negro women in industry," of the report of the Division of Negro Economics of the U. S. Department of Labor published in 1921, entitled "The Negro at work during the World War and during reconstruction."

facilities were apt to be unsatisfactory, while rest rooms and lunch rooms were the exception. In 18 establishments adequate and sanitary first-aid dispensaries were found under the supervision of trained nurses, whose influence on the workers was marked.

In many cases the influence and advice of the nurse had an effect on the daily habits of the workers, both in the factory and in their homes, and was being reflected in better living. It may be remarked in passing that sympathy and understanding seemed to exist between negro nurses and the workers of their own race, giving these trained women a strong influence for good on the factory workers. In one large hosiery mill the manager said that a very efficient negro nurse had such strong influence over the girls that she had caused a decided decrease in his labor turnover. Here, as in some other places, a marked improvement in the personal appearance of the girls was attributed to the influence of the nurse. Through visits to these women this nurse had been successful also in improving the sanitation and economic management of their homes. She had secured the cooperation of the city health department in making and keeping clean the neglected surroundings of these workers' homes. Experience justifies the recommendation that a negro nurse be employed as supervisor of the health service in establishments where large numbers of negro women are employed.

In 132 establishments either there were no facilities for the treatment of illness and injuries, or the provision was of the slightest. In many there were conditions of poor ventilation, poor light, dusty processes, or lack of ordinary cleanliness which were distinctly prejudicial to the welfare of the workers. Seating facilities were especially unsatisfactory.

One of the most injurious conditions surrounding thousands of negro women is the arrangement for seating them when at work. It has been physiologically proved that continuous standing, or sitting on improperly adjusted chairs, is particularly injurious to the health of women, and that one of the best methods of relieving their fatigue and strain is to provide adjustable seats for use while at work. The managers of the plants included in this survey, however, seemed generally to have ignored this very important matter, as seen in the fact that 128 establishments employing 10,115 negro women (86 per cent of all) were found to have either makeshift seats or none at all.

These makeshift seats usually were stools or wooden boxes, with no back supports. Occasionally the women had tried to relieve this latter situation themselves by nailing a straight board to a box. Even where better seating was provided there was apparently little adjustment possible between the height of the worktable and the chairs. A strained posture consequently was unavoidable.

Continuous standing with no facility for sitting was quite common. Many managers were emphatic in their avowal that certain of the processes on which negro women worked could not be performed while sitting, yet in other establishments women were comfortably seated while performing these same operations.

A study of the occupations in which colored women were found showed that in many cases there was strong prejudice against admitting them to the more skilled and better paid kinds of work, which were reserved for the white women. In the establishments where they had been admitted to the better kinds of work they seemed to be giving satisfaction. Opinions as to the relative desirability of colored and white woman workers were obtained from the managers of 63 plants, in 42 of which the two races were employed in the same occupations. Fifty-four of the managers found the negro women as punctual as the whites, 1 considered them more so, and 8 thought them less punctual. Of the 42 employing them in the same occupations, 24 reported that the work done by colored women was equal in quality and quantity to that done by the white women, 7 that it was better, and 11 that it was inferior. Fifty-eight intended to retain their negro workers, two expected to weed them out, and three were undecided as to future policy.

The attitude of the colored workers toward their employment was affected to a marked degree by the treatment they received. Where they were markedly discriminated against in wages and working conditions their resentment expressed itself in indifference toward their work and a high labor turnover, but they were very responsive to fair treatment. Their reaction to the employment of negro supervisors was especially marked.

The managers of 12 establishments in which negro forewomen were employed to supervise units of negro woman workers were unanimous in their praise and recommendation of this experiment. One manager told of his experience in employing, during the absence of the negro forewoman, a white woman to supervise the negro handworkers in a plant where lamp shades were designed and made, with the partial intention of retaining her. She was so unsuccessful in inspiring the women to work and everything became so chaotic that he was most glad to welcome the negro forewoman on her return.

Another manager of a large mail-order house in which 340 negro women were employed reported that when he placed a white supervisor over the group they stopped work for a half holiday. He emphasized how very much more comfortable, interested, and energetic the women were under a supervisor of their own race. In this establishment the negro forewoman also instructed the girls, and their efficiency had greatly increased because she had inspired them with the slogan, "Make good, 100 per cent."

Another employer said absenteeism in his plant had decreased from 20 per cent to 4 per cent since a negro forewoman had been placed over the colored unit of 260 girls. * * *

The marked success of this experiment substantiates the recommendation that negro forewomen be employed to supervise units of negro woman workers.

Few opportunities were presented to negro women for training in the trades they entered, and to a considerable extent they were obliged to pick up a knowledge of their work as best they could. Twenty-five managers had a definite course in their factories designed to "break in" and train the new workers. "Five managers stated that it took longer to break in a negro than a white woman worker, but all concurred in thinking that she was just as good after she had been trained." In some plants welfare workers, as part of their province, planned and promoted industrial and educational training.

In view of the wide field covered, and the general nature of the findings, it is difficult to draw definite conclusions from the report, but the impression left is that negro women have encountered many obstacles in their new activities which might, advantageously to both sides, be avoided; that while they have not yet acquired a permanent position in industry they have made a beginning; that they respond quickly to fair treatment and to opportunities for trade training and industrial self-improvement; and that in them there is a potential labor supply of much value which has hitherto been largely neglected.

Child Labor in Oyster and Shrimp Canning.

THE United States Children's Bureau has recently published a report (Bureau Publication No. 98) on "Child labor and the work of mothers in oyster and shrimp canning communities on the Gulf coast."

This report embodies the results of an investigation made by the Children's Bureau in 1919. The study included 423 families with 1,350 children under 16 years of age. Five hundred and forty-four

working children were covered, two of whom were under 6, 332 between 6 and 14 years old, and 210, 14 or 15 years of age.

Oyster and shrimp canning being dependent upon the catch, the work began any time between 3 and 7 o'clock a. m. and kept up a few hours or a whole day, or occasionally on into the evening. Sixty-four per cent of the children worked whenever the factory was open, some worked now and then, and others only before and after school hours and on Saturday. Twenty-five per cent of the children from 10 to 15 years old were illiterate. In the same age group only 4 per cent of the children in the whole United States are illiterate. A large number of these child workers did not attend school; of the 649 between 7 and 13 years of age, 266 or 41 per cent were not in school.

The greater part of the cannery work is dirty and wet and is carried on in drafty, cold, damp sheds.

Accidents are liable to occur from the use of work knives and from the sharp oyster shells and shrimp thorns. The acid from the shrimps frequently makes the hands very sore. Many injuries were reported among the children.

An inquiry into the weekly wages of the fathers of these children revealed that one-fifth of the men from whom reports were received had never earned as much as \$15 a week, nearly one-half had never earned as much as \$20 a week, and only one-third \$25 or over in their best weeks. The average earnings of nearly one-half of the mothers were less than \$5 a week; about one-third between \$5 and \$7.50, and about one-fifth \$7.50 or over. Only one-fifteenth were able to earn \$12.50 or more in their most profitable week. Irregularity of employment is one reason advanced for these low wages, the work depending upon the amount of fish received at the cannery.

Two-thirds of the children for whom reports of earnings were obtained received on an average less than \$5 a week, over one-fourth less than \$2. With the exception of two cases all the children whose weekly earnings amounted to \$4 were regular workers, and most of them were 14 years of age or older.

Most of the employers did not pay the imported families of workers as much in actual money as the resident workers. These imported families, however, get their rent, fuel, and return fare free. Their housing, however, is reported as usually flimsy with a minimum of privacy and sanitation.

Children of Wage-Earning Mothers.

THE young children of wage-earning mothers are often inadequately cared for or receive no care whatever during the day, according to a recent report of the United States Children's Bureau entitled "Children of Wage-earning Mothers: A Study of a Selected Group in Chicago" (Bureau publication No. 102, Washington, 1922). It was also found that a large number of children were retarded in their school progress and that some were overworked because of having to perform domestic tasks beyond their strength. Many of the mothers were in very poor health, resulting apparently in some cases from under nourishment and overwork.

The study covered 843 gainfully employed mothers and their 2,066 children under 14 years of age, and included 212 colored families. The problem of wage-earning mothers was found to concern both normal and broken families. When the father was a member of the family group and was regularly employed, his wages in the greater number of cases were insufficient for the family's support.

The sanitation, child care, and training standards of the 45 Chicago day nurseries were not "uniformly high" at the time the investigation was made, in the winter of 1918-19 and the winter of 1919-20. There were only two nurseries, with a capacity of 20 each, in which colored children could be cared for. At least 25 per cent of the 1,328 children who were not sent to day nurseries had no care except during school hours.

Records were secured regarding the school attendance of 742 of the children of gainfully employed women and such records contrasted unfavorably with those of all children in 9 selected schools in 1911-12 in the city's poorer districts. One-third of the children of wage-earning mothers were "below the standard grade for their age."

The report comments on the "skill and ingenuity" of many of these gainfully employed mothers in accomplishing their domestic duties. One hundred and twenty-five out of 361 of the women of whom inquiry regarding the matter was made, reported that they did all the household work themselves.

While it is stated that it is not the purpose of the report "to solve the important problems involved in finding the best measures for obviating the need of gainful employment by mothers of young children," the following suggestions are made:

That the fathers' wages should be sufficient for an adequate standard of living.

That mothers should be trained in household economy and child care.

That the normal family group should be preserved through the reduction of industrial hazards, the safeguarding and promotion of public health, through more effective and better enforced laws relative to desertion and nonsupport.

That substitutes should be found for the father's earnings when the measures for maintaining the integrity of the family group have been neglected or unsuccessful.

The findings of the report also point to the necessity of having the children of wage-earning mothers more adequately cared for in the nurseries or through the schools, after school hours; of raising the standards of sanitation and care in nurseries; and of protecting the health of mothers from breakdown brought about by overwork.

Report on Woman Workers in New York State.

THE number of women gainfully employed in New York State, their occupations, and some important industrial facts concerning these wage earners are discussed in a Special Bulletin (No. 110, April, 1922) of the New York State Department of Labor on "Women who work." The report was prepared by the division of women in industry and the bureau of research and codes.

Number and occupations.—While approximately 20 per cent of the 8,549,399 women over 10 years of age in the United States were gainfully employed in 1920, over 25 per cent of the 4,215,968 women in New York State were thus occupied, 61 per cent of such workers being employed in Greater New York. The following table

shows the industrial distribution of the woman labor of the State as compared with the man labor:

NUMBER OF GAINFULLY EMPLOYED WORKERS IN NEW YORK STATE AND GREATER NEW YORK, BY SEX AND OCCUPATIONAL GROUPS, 1920.¹

Occupation group and sex.	New York State.		Greater New York.
	Number.	Per cent.	
All occupations:			
Men.....	3,367,907	74.79	1,839,683
Women.....	1,135,246	25.21	691,729
Total.....	4,503,153	100.00	2,531,412
Agriculture, forestry and animal husbandry:			
Men.....	305,505	97.06	6,764
Women.....	9,269	2.94	345
Total.....	314,774	100.00	7,109
Extraction of minerals:			
Men.....	7,435	98.49	575
Women.....	114	1.51	25
Total.....	7,549	100.00	600
Manufacturing and mechanical industries:			
Men.....	1,406,002	80.02	748,182
Women.....	351,104	19.98	204,130
Total.....	1,757,106	100.00	952,312
Transportation:			
Men.....	370,153	91.71	218,367
Women.....	33,422	8.29	23,012
Total.....	403,575	100.00	241,379
Trade:			
Men.....	505,254	85.44	338,298
Women.....	86,079	14.56	54,098
Total.....	591,333	100.00	392,396
Public service (not elsewhere classified):			
Men.....	98,691	98.32	60,030
Women.....	1,684	1.68	845
Total.....	100,375	100.00	60,875
Professional service:			
Men.....	162,196	56.18	100,028
Women.....	126,523	43.82	68,009
Total.....	288,719	100.00	168,037
Domestic and personal service:			
Men.....	209,493	44.29	149,623
Women.....	233,463	55.71	156,667
Total.....	472,956	100.00	306,290
Clerical occupations:			
Men.....	303,178	53.49	217,816
Women.....	263,588	46.51	184,598
Total.....	566,766	100.00	402,414

¹ Preliminary census figures, released Feb. 3, 1922.

In 1910 the proportion of women in the clerical group was 34.5 per cent, in 1920, 46.5 per cent; while the proportion of women in the transportation group was 4.6 per cent in 1910 and 8.3 per cent in 1920. Within the same decade there was only a slight increase in the proportion of women in the professional and trade groups, while in domestic and personal service the percentage of women fell 5 points.

The total number of women gainfully employed in New York State increased by over 150,000 from 1910 to 1920. In clerical service

and transportation the number was more than doubled. There were 33,572 more women in professional service in 1920 than in 1910, and in domestic and personal service 59,506 less. The percentage of women in the manufacturing and mechanical group dropped 5 points although there were 2,000 more women in such industries.

Space will not permit of a resumé of the brief analyses made in the report under the 9 occupational groups; the following are a few outstanding statements:

About 75 per cent of the women included in the manufacturing group are classified as "semiskilled operatives," of whom more than 100,000 are employed in the clothing factories, over 47,500 in the textile industries, and about 9,500 in food factories. Among the skilled operatives in the manufacturing group, dressmakers and seamstresses far outnumber those in any other one trade; milliners rank next in numerical importance.

In the list of skilled woman operatives there are 12 building contractors, 4 carpenters, 12 glass blowers, 191 goldsmiths and jewelers, 4 mechanics, 510 painters, glaziers, etc., 62 paper hangers, 7 piano and organ tuners, and 450 upholsterers.

Hours.—The hours of women in mercantile establishments, factories, and restaurants in New York State are, generally speaking, limited by law to 9 a day and 54 a week between 6 a. m. and 10 p. m., and in mercantile establishments from 7 a. m. There are, however, 434,475 women gainfully employed whose hours are not legally regulated, the greatest number being in the domestic and personal service group.

Wages.—No statistics on wages are given in the report except in connection with compensable accidents, which are discussed further on in the bulletin. In the brief section on wages the following statement is made:

An effort to relate women's wages to their industrial efficiency has been disappointing in any comparative study of wage rates for men and women. Women's wages are almost always lower than men's. This is true even where men and women are doing the same work and the woman produces as much as the man. In fact, it may make little difference whether a woman produces more or less than a man; the wage rates may not vary with her production. Being a woman is now too often a barrier against adequate payment for service. The great need is for *accurate and scientific determination of the value of labor to the finished product regardless of the sex of the worker.*

Trade-union organization.—The number of women gainfully employed in New York State in cities of over 50,000 in 1920 was 871,503; the number reported in trade-unions was 113,354, or 13.01 per cent. It must be remembered, however, that the gainfully employed women as classified by the census include a large number in the domestic service group, also employers and salaried workers. The number of women in trade-unions in cities over 50,000 has increased about 74 per cent from 1914 to 1920.

Home work.—The number of licensed home workers in New York State in the year ending June 30, 1921, was 24,297. It is estimated that 6,000 of these were men. Seven hundred and eighty-one children under 16 years old were found doing home work, 643 of whom were under 14 years of age. Over 15,000 of the home workers were employed on clothing, more than 4,000 on embroidery, and over 1,000 on artificial flowers. More than 11,000 of these workers were Italians, over 7,500 Jewish, and nearly 2,400 Americans.

Health.—The report calls attention to the difficulty of measuring morbidity because of the lack of a commonly accepted normal health standard. Reference is made to a special bulletin on "Sickness among New York State factory workers, 1919," published in 1921 by the New York Industrial Commission,¹ which showed that the morbidity rate was 50 per cent higher for women than for men. It is pointed out that this study and other studies along similar lines cover only a limited sickness experience. Strong emphasis is laid upon the importance of having more adequate data on the causes and extent of sickness among wage earners.

Workmen's compensation.—While the percentage of gainfully employed men to women in New York State was 74.8 to 25.2 (census figures of 1920), 96 per cent of the known industrial accidents happened to men and only 4 per cent to women. According to the latest available statistics of closed cases compiled for a fiscal year (ending June 30, 1917), the wages of 90 per cent of the total number of women who were receiving compensation for industrial accidents were under \$14.50 a week, and the wages of 58 per cent of such women were below \$9.50 a week.

Labor laws.—Part III of the bulletin contains abstracts of various New York State laws for women and minors in industry. There are no regulations, however, under the labor law for women in professional and office work not connected with a mercantile establishment or factory, work in theaters, in hotels, or on farms, domestic service, work in garages where there is no repair work done, telegraphy and telephony, and interstate commerce.

Limitation of Child Labor in Great Britain.

AS THE result of an order recently issued by the British Board of Education (circular 1262) the entire education act of 1918² except section 8 (2) and section 10 will come into operation July 1, 1922.³ This is a very important announcement, since on and after July 1 of the present year no exemption from attendance at school can be granted to any child between 5 and 14 years of age for the purpose of employment of any kind and provisions for such exemptions now in force will cease to be effective. The new order will not prejudice exemptions made before the appointed day.

The two exceptions to the order, section 8 (2) and section 10 deal respectively with compulsory school attendance between the ages of 14 and 15 years and the creation of compulsory day continuation schools. Section 8 (2) is postponed (as reported in the Times) because the board "under present financial conditions is not prepared in any area to approve by-laws requiring attendance at school up to the age of 15." Section 10, dealing with compulsory attendance at continuation schools, is in force in London, Birmingham, and a few smaller areas, but for reasons not cited, it failed of securing an appointed day for becoming generally operative.

¹ MONTHLY LABOR REVIEW, April, 1921, p. 185.

² MONTHLY LABOR REVIEW, December, 1918, pp. 42-46.

³ Times Educational Supplement, (London) May 27, 1922, pp. 246, 247.

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in May, 1922.

THE Bureau of Labor Statistics here presents reports concerning the volume of employment in May, 1922, from representative establishments in 12 manufacturing industries. Comparing the figures of May, 1922, with those for identical establishments for May, 1921, it appears that in 8 of the 12 industries there were increases in the number of persons employed, while in 4 there were decreases. The largest increases were 24.6 per cent in hosiery and underwear and 23.4 per cent in car building and repairing. Because of labor disturbances the cotton manufacturing industry shows a decrease of 25.5 per cent. Cotton finishing and silk show respective decreases of 14.3 and 14.6 per cent.

Six of the 12 industries show increase in the total amount of pay roll for May, 1922, as compared with May, 1921. The remaining 6 industries show decreases in the amount of pay roll. The most important increase, 25.6 per cent, appears in hosiery and underwear. Cotton manufacturing and silk show respective decreases of 33.9 per cent and 32.9 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MAY, 1921 AND 1922.

Industry.	Estab- lish- ments report- ing for May both years.	Period of pay roll.	Number on pay roll.		Per cent of increase (+) or de- crease (-).	Amount of pay roll.		Per cent of increase (+) or de- crease (-).
			May, 1921.	May, 1922.		May, 1921.	May, 1922.	
Iron and steel.....	106	½ month.	115,709	136,593	+18.0	\$5,860,704	\$6,383,730	+ 8.8
Automobile manufacturing...	45	1 week..	92,649	100,071	+ 8.0	3,188,075	3,393,814	+ 6.5
Car building and repairing...	62	½ month.	49,111	60,620	+23.4	3,256,501	3,505,492	+ 7.6
Cotton manufacturing.....	62	1 week..	60,864	45,355	-25.5	1,049,048	693,378	-33.9
Cotton finishing.....	17	..do....	12,423	10,641	-14.3	273,354	214,418	-21.6
Hosiery and underwear.....	64	..do....	25,814	32,168	+24.6	423,482	531,993	+25.6
Silk.....	45	2 weeks..	18,072	15,435	-14.6	822,678	552,241	-32.9
Men's ready-made clothing...	43	1 week..	24,609	24,626	+ .1	736,631	592,548	-19.6
Leather manufacturing.....	35	..do....	10,507	12,327	+17.3	237,119	260,792	+10.0
Boots and shoes.....	78	..do....	56,381	60,589	+ 7.5	1,310,200	1,294,662	- 1.2
Paper making.....	59	..do....	22,289	25,953	+16.4	537,926	606,423	+12.7
Cigar manufacturing.....	54	..do....	16,690	15,215	- 8.8	320,477	271,951	-15.1

Comparative data for May, 1922, and April, 1922, appear in the following table. The figures show that in 7 industries there were increases in the number of persons on the pay roll in May as compared with April, and in 5, decreases. Respective increases of 9.7, 5.6, and 4 per cent are shown in the automobile, paper, and car building and repairing industries. Men's ready-made clothing shows a decrease of 6.9 per cent.

In May, 1922, as compared with April, 1922, all but two industries show increases in the amount of money paid to employees. Cigar making shows an increase of 14.6 per cent and the automobile industry an increase of 14 per cent. The two decreases are 2.6 per cent in silk and 2.1 per cent in boots and shoes.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN APRIL AND MAY, 1922.

Industry.	Estab- lish- ments report- ing for April and May.	Period of pay roll.	Number on pay roll.		Per cent of increase (+) or de- crease (-).	Amount of pay roll.		Per cent of increase (+) or de- crease (-).
			April, 1922.	May, 1922.		April, 1922.	May, 1922.	
Iron and steel.....	103	½ month.	122,881	126,865	+3.2	\$5,441,544	\$5,874,369	+ 8.0
Automobile manufacturing.....	44	1 week..	90,592	99,389	+9.7	2,981,591	3,376,438	+14.0
Car building and repairing.....	62	½ month.	58,302	60,620	+4.0	3,344,004	3,505,492	+ 4.8
Cotton manufacturing.....	61	1 week..	43,343	44,445	+2.5	652,409	675,715	+ 3.6
Cotton finishing.....	17	do....	10,565	10,641	+ .7	212,919	214,418	+ .7
Hosiery and underwear.....	41	do....	30,810	30,588	— .7	505,492	514,711	+ 1.8
Silk.....	65	2 weeks.	16,077	15,435	— 4.0	566,955	552,241	— 2.6
Men's ready-made clothing.....	46	1 week..	27,317	25,437	— 6.9	614,099	614,563	+ .1
Leather manufacturing.....	35	do....	12,557	12,327	— 1.8	258,823	260,792	+ .8
Boots and shoes.....	80	do....	62,633	61,203	— 2.3	1,337,064	1,308,729	— 2.1
Paper making.....	59	do....	24,581	25,953	+5.6	565,711	606,423	+ 7.2
Cigar manufacturing.....	56	do....	14,999	15,542	+3.6	242,029	277,362	+14.6

In addition to the data presented in the above tables as to the number of employees on the pay roll, 79 establishments in the iron and steel industry reported 95,699 employees as actually working on the last full day of the pay period in May, 1922, as against 78,314 employees for the reported pay-roll period in May, 1921, an increase of 22.2 per cent. Figures given by 87 establishments show that 102,369 employees were actually working on the last full day of the pay period for May, 1922, as against 99,463 for the period in April, 1922, an increase of 2.9 per cent.

Changes in Wage Rates and Per Capita Earnings.

DURING the period April 15 to May 15, 1922, there were wage changes made by some of the reporting establishments in 8 of the 12 industries.

Iron and steel.—In one shop all employees were granted wage rate increases, the tonnage men receiving an increase of 22 per cent and all other labor an increase of 10 per cent. One establishment gave an increase of 18 per cent to 56 per cent of the force. Ten plants reported wage increases of 8.8 per cent, affecting all the employees in all plants. An increase of 8.3 per cent was received by 90 per cent of the force in one plant and 33½ per cent of the force in another plant. Three plants reported a decrease of 5 per cent, affecting 60 per cent of the employees in one plant and 40 per cent in the two remaining plants. A decrease of 4 per cent was reported by two concerns, affecting 40 per cent in the first concern and 33½ per cent in the second concern. In one mill a 2½ per cent wage cut was made to 40 per cent of the men. A 2 per cent reduction in wages was reported by two mills, affecting 33 per cent of the men in one mill and 32 per cent in the second mill. Increased operations and more time worked were reported by many of the iron and steel mills, and the per capita earnings show an increase of 4.6 per cent when compared with those for last month.

Automobiles.—A wage increase of approximately 15 per cent was granted to 20 per cent of the employees in one factory. Two establishments reported a 14 per cent increase, affecting 10 per cent

of the forces, while another concern gave an increase of 8 per cent to 20 per cent of the employees. Production was increased during the period reported and the per capita earnings for May were 3.9 per cent higher than for April.

Car building and repairing.—A decrease of 5 per cent, affecting 5 per cent of the employees, was reported by one establishment. A slight increase, 0.8 per cent, was shown for per capita earnings when April and May pay rolls were compared.

Cotton manufacturing.—When per capita earnings for May were compared with those for April an increase of 1 per cent was noted.

Cotton finishing.—The per capita earnings for May were the same as those for April.

Hosiery and underwear.—An increase of 2.6 per cent in per capita earnings was shown when the April and May pay rolls were compared.

Silk.—When the April and May per capita earnings were compared an increase of 1.5 per cent appeared.

Men's ready-made clothing.—A 15 per cent wage decrease was reported by two establishments, affecting all shopmen. Three concerns reported a 10 per cent reduction, affecting 84 per cent of the force in one concern, 75 per cent of the force in the second concern, and 57 per cent of the force in the third concern. One establishment made a wage reduction of 9 per cent to 90 per cent of the men. However, an increase of 7.5 per cent in per capita earnings was shown when figures for April and May were compared.

Leather.—Decreases ranging from 5 to 10 per cent were made to 40 per cent of the employees in one tannery. When per capita earnings for May were compared with those for April an increase of 2.7 per cent was noted.

Boots and shoes.—One firm reported a wage decrease of 5 per cent, affecting 70 per cent of the employees. Per capita earnings for May increased 0.1 per cent over those for April.

Paper making.—One mill gave an increase of 20 per cent to 60 per cent of the employees. A wage decrease of 6 per cent, affecting all employees, was reported by another establishment. An increase of 1.6 per cent was noted for May per capita earnings over April figures.

Cigar manufacturing.—Two factories reported a 12½ per cent wage cut, affecting all of the employees in one factory and 5 per cent of the employees in the other factory. A wage reduction of approximately 10 per cent affected 80 per cent of the men in one concern. However, there was an increase in per capita earnings for May over April of 10.6 per cent.

Government Construction Contracts.

CONTINUING the report on this subject in the MONTHLY LABOR REVIEWS for May and June, the following table gives certain information relating to contracts entered into by the several departments or independent establishments of the Government as reported to the Bureau of Labor Statistics by these departments:

CONSTRUCTION CONTRACTS ENTERED INTO BY THE VARIOUS DEPARTMENTS OF THE UNITED STATES GOVERNMENT.

EMPLOYMENT AND UNEMPLOYMENT.

127

1271

Department and contract No.	Contractor.		Contract.		Nature of contract.	Time limit.
	Name.	Address.	Date.	Amount.		
<i>Treasury.</i>						
.....	E. P. Finn Co. (Inc.).....	63 Hudson Avenue, Albany, N. Y..	¹ May 18, 1922	\$1,752.00	Repairs to toilet room, post office, Albany, N. Y.	90 days.
.....	Jaehrig & Peoples (Inc.).....	223 Thirteenth Avenue, Newark, N. J.	¹ May 13, 1922	20,555.00	Installation of mechanical equipment to boiler house and steam and water connections to laundry at United States quarantine station, Hoffman Island, N. Y.	4 months.
.....	Warner Elevator Manufacturing Co.	2613 Spring Grove Avenue, Cincinnati, Ohio.	¹ May 22, 1922	9,480.00	Installation of 2 electric passenger elevators, United States Veterans' Hospital, Oteen, N. C.	90 days.
.....	Power, Heating & Ventilating Co.	66 Traverse Street, Boston, Mass. ...	¹ June 3, 1922	8,850.00	Installing boiler at United States marine hospital, Boston, Mass.	95 days.
.....	Otis Elevator Co.....	810 Eighteenth Street NW., Washington, D. C.	¹ June 7, 1922	9,846.00	Installing 2 electric passenger elevators at United States Veterans' Hospital, Palo Alto, Calif.	100 days.
<i>War.</i>						
.....	J. J. Keenan.....	Nome, Alaska.....	May ⁽²⁾ 6, 1922	14,552.00	Dredging mouth of Snake River at Nome.....	Sept. 15, 1922.
.....	Dravo Contracting Co.....	Diamond Bank Building, Pittsburgh, Pa.	May 6, 1922	41,300.00	Constructing steel oil barge and steel water barge; former at New York Harbor and latter at Fort Mifflin, Philadelphia.	4 months.
.....	John Walker.....	Honolulu, Hawaii.....	May 1, 1922	23,200.00	Building concrete structures at Puuloa Reservation, Oahu, T. H.	100 working days.
.....	Nashville Bridge Co.....	Nashville, Tenn.....	May 9, 1922	23,435.00	Construction of steel dredge hull at Nashville, Tenn.	150 days.
.....	William H. Ellery.....	Detroit, Mich.....	May ¹ 17, 1922	5,795.00	Removing wreck of steamer from Lake Ontario near Charlotte Harbor, N. Y.	4 months.
.....	Great Lakes Dredge & Dock Co.	D. S. Morgan Building, Buffalo, N. Y.	May 18, 1922	22,920.00	Dredging Buffalo River Entrance Channel, Buffalo, N. Y.	3 months.
<i>Navy.</i>						
4561.....	John Pringle.....	(²)	Mar. 24, 1922	(²)	Building extension to magazine and shell house, Mare Island, Calif.	
4577.....	C. F. Martin.....	Seaboard Building, Seattle, Wash.	Apr. 25, 1922	60,313.13	Building extension to storage building No. 368, Puget Sound, Wash.	179 calendar days.
4579.....	Wright & Doran.....	345 Spreckles Building, San Diego, Calif.	Apr. 20, 1922	77,000.00	Building gun shed, marine barracks, San Diego, Calif.	210 calendar days.
4583.....	Allen Pope.....	4722 Fifteenth Street NW., Washington, D. C.	Apr. 27, 1922	40,200.00	Installing coal-handling equipment.....	120 calendar days.

¹ Date of acceptance of proposal.

² Not reported.

CONSTRUCTION CONTRACTS ENTERED INTO BY THE VARIOUS DEPARTMENTS OF THE UNITED STATES GOVERNMENT—Continued.

128

MONTHLY LABOR REVIEW.

Department and contract No.	Contractor.		Contract.		Nature of contract.	Time limit.
	Name.	Address.	Date.	Amount.		
<i>Navy—Con.</i>						
4585-A	Carson & Gruman Co.	Thirty-third and K Streets NW., Washington, D. C.	May 11, 1922	\$17,883.00	Building roads and walks at Naval Experimental and Research Laboratory, Washington, D. C.	90 calendar days.
4589	W. F. Martens	Cutler Building, Rochester, N. Y.	Apr. 26, 1922	15,178.00	Building storage shed on pier H, Navy Yard, New York.	130 calendar days.
4590	John R. Proctor (Inc.)	120 Liberty Street, New York, N. Y.	May 3, 1922	82,488.00	Altering fuel-oil storage plant at naval operating base, Hampton Roads, Va.	120 calendar days.
4593	Fletcher & Warren	216 Georgia Street, Vallejo, Calif.	May 4, 1922	13,398.00	Remodeling and rebuilding quarters M-1, Mare Island, Calif.	75 calendar days.
4607	Pittsburgh-Des Moines Steel Co.	806 Curry Building, Pittsburgh, Pa.	May 3, 1922	107,890.00	Installation of oil-storage plant, elevated steel water tank, and fuel-oil tank at Coco Solo and Balboa, Canal Zone.	180 calendar days.
<i>Agriculture.</i>						
<i>Idaho:</i>						
58	Grant Smith Co.	Spokane, Wash.	May 15, 1922	101,419.97	Road, gravel and dirt, Nez Perce County.	Not reported.
<i>Iowa:</i>						
59	Longerbone Bros.	Des Moines, Iowa	May 18, 1922	5,276.38	Road, gravel and dirt, Fayette County.	Do.
164-A	Russell Condon	Omaha, Nebr.	do.	32,908.27	do.	Do.
164-B-C	Longerbone Bros.	Des Moines, Iowa	do.	27,134.61	do.	Do.
172-A-B-C	Tim Ryan & Son	Missouri Valley, Iowa	do.	36,406.23	do.	Do.
172-D	W. R. Skipman Construction Co.	Sioux City, Iowa	do.	32,414.56	do.	Do.
153-A	Cox Brothers	Dike, Iowa	May 25, 1922	30,592.93	Road, gravel and dirt, Davis County.	Do.
153-B	do.	do.	do.	12,844.10	do.	Do.
30-C	F. E. Marsh	Jeffersonville, Iowa	May 26, 1922	94,387.68	Road, gravel and dirt, Lyon County.	Do.
174	Shirley Construction Co.	Omaha, Nebr.	May 24, 1922	(1)	Road, gravel and dirt, Poweshiek County.	Do.
154-C	G. W. Condon	do.	May 29, 1922	13,732.70	Road, gravel and dirt, Carroll County.	Do.
62	Northern States Construction Co.	St. Paul, Minn.	June 6, 1922	497,145.80	Road, reinforced concrete, Black Hawk County.	Do.
91-E	J. H. Miller & Son	Clarinda, Iowa	June 1, 1922	37,386.60	Road, gravel and dirt, Wayne County.	Do.
150	do.	do.	do.	45,792.59	do.	Do.
157	Pickus Engineering Co.	Sioux City, Iowa	do.	77,317.87	Road, gravel and dirt, Floyd County.	Do.
<i>Kansas:</i>						
102	Rand Construction Co.	Kansas City, Mo.	May 29, 1922	185,452.40	Road, gravel and dirt, Wyandotte County.	Do.
30-C	F. E. Marsh	Jeffersonville, Iowa	May 26, 1922	94,387.68	Road, plain concrete, Lyon County.	Do.
<i>Maine:</i>						
48	R. H. Newell Co.	Uxbridge, Mass.	do.	79,386.10	Road, gravel, Penobscot County.	Do.
<i>Maryland:</i>						
78	P. V. Philips & Bro.	Salisbury, Md.	June 6, 1922	55,636.72	Road, plain concrete, Wicomico County.	Do.

[128]

Massachusetts:							
80-A-B.....	Carlo Bianchi & Co.....	Frammingham, Mass.....	May 31, 1922	\$178,000.00	Road, reinforced concrete, Bristol County.....	Do.	
51-B.....	L. C. Corchea & Co.....	Boston, Mass.....	do.....	100,000.00	Road, reinforced concrete, Worcester County.....	Do.	
44-A.....							
85-A.....	Lane Construction Co.....	Meriden, Conn.....	June 6, 1922	161,958.50	Road, bitumen-macadam, Berkshire County.....	Do.	
87-A.....							
80-A.....	Charles E. Horne.....	Millbury, Mass.....	do.....	143,139.00	Road, reinforced concrete, Berkshire County.....	Do.	
Missouri:							
163.....	Highway Construction Co.....	Springfield, Mo.....	May 17, 1922	10,542.84	Road, Taney County.....	Do.	
116-B.....	Mike Haase.....	Kansas City, Mo.....	May 18, 1922	28,765.93	Road, gravel and dirt, Grundy County.....	Do.	
116-B.....	St. Joseph Structural Steel Co.....	St. Joseph, Mo.....	do.....	35,951.48	4 bridges, Grundy County.....	Do.	
107-A.....	St. Louis Bridge & Supply Co.....	St. Louis, Mo.....	May 26, 1922	61,984.74	Road, reinforced concrete, Iron County.....	Do.	
Montana:							
82-D.....	Pioneer Construction Co.....	Bozeman, Mont.....	May 27, 1922	25,188.65	Road, gravel and dirt, Gallatin County.....	Do.	
145.....	Gates & Solberg Bros.....	Wolf Point, Mont.....	do.....	34,761.79	Road, gravel and dirt, Lincoln County.....	Do.	
Nevada:							
44.....	Nevada Construction Co.....	Falden, Nev.....	May 31, 1922	174,778.00	Road, gravel, White Pine County.....	Do.	
10.....	J. H. Causten.....	Lovelick, Nev.....	do.....	93,027.00	do.....	Do.	
18.....	Phelps Construction Co.....	Ogden, Utah.....	do.....	110,126.71	Road, gravel, Elko County.....	Do.	
New Hampshire:							
140-46.....	Colburn Construction Co.....	Concord, N. H.....	do.....	16,766.62	Road, bitumen-concrete, Merrimack County.....	Do.	
41.....	Ames Construction Co.....	Somersworth, N. H.....	do.....	2,404.50	Bridge, Merrimack County.....	Do.	
139.....	Winslow & Cummings.....	Nashua, N. H.....	June 5, 1922	17,593.49	Road, bitumen-concrete, Merrimack County.....	Do.	
141.....	R. H. Newell Co.....	Uxbridge, Mass.....	do.....	76,089.77	Road, bitumen-concrete, Cheshire County.....	Do.	
New Jersey:							
40-B.....	Ralph Sangiorannie.....	Newark, N. J.....	May 26, 1922	135,648.39	Road, plain concrete, Somerset County.....	Do.	
New York:							
181.....	(3).....		May 19, 1922	86,956.50	Road, reinforced concrete, Orleans County.....	Do.	
189.....	(3).....		do.....	146,165.70	Road, reinforced concrete, Chautauqua County.....	Do.	
North Dakota:							
155.....	Thomas Young & Sons.....	Devils Lake, N. Dak.....	May 16, 1922	18,256.77	Road, gravel and dirt, Ramsey County.....	Do.	
149.....	W. H. Noel.....	Jamestown, N. Dak.....	do.....	6,423.23	Road, concrete, Ramsey County.....	Do.	
133.....	Independent Bridge Co.....	Minneapolis, Minn.....	May 18, 1922	8,677.03	Road, reinforced concrete, Mountrail County.....	Do.	
80.....	Stanley Bros.....	St. Cloud, Minn.....	May 17, 1922	17,037.55	Road, reinforced concrete, Williams County.....	Do.	
85.....	J. J. Rue & Son.....	Baldwin, N. Dak.....	May 19, 1922	14,669.53	Road, reinforced concrete, Ward County.....	Do.	
84.....	do.....	do.....	do.....	8,564.82	do.....	Do.	
84.....	Stanley Bros.....	St. Cloud, Minn.....	do.....	20,800.62	Road, gravel and dirt, Ward County.....	Do.	
Ohio:							
69.....	Earl L. Reeb.....	Defiance, Ohio.....	Apr. 20, 1922	89,319.70	Road, concrete, Allen County.....	Do.	
240.....	Scott Construction Co.....	Lima, Ohio.....	Apr. 24, 1922	53,865.54	Road, concrete, Putnam County.....	Do.	
237.....	do.....	do.....	do.....	232,802.53	Road, concrete, Crawford County.....	Do.	
206-208.....	W. I. Thompson & Sons Co.....	Cleveland, Ohio.....	May 6, 1922	293,980.00	Road, reinforced concrete, Geauga County.....	Do.	
226.....	(3).....		do.....	137,720.55	Muskingum County.....	Do.	
Oregon:							
1.....	Elliott, Scoggins & Pacquet.....	Portland, Ore.....	May 22, 1922	72,288.00	Road, gravel, Deschutes County.....	Do.	
59.....	Tobin & Pearce.....	Amity, Ore.....	May 31, 1922	4,365.00	Bridge, Polk County.....	Do.	
		Not reported.					

*Award of contract deferred.

CONSTRUCTION CONTRACTS ENTERED INTO BY THE VARIOUS DEPARTMENTS OF THE UNITED STATES GOVERNMENT—Concluded.

[130]

Department and contract No.	Contractor.		Contract.		Nature of contract.	Time limit.
	Name.	Address.	Date.	Amount.		
<i>Agriculture— Con.</i>						
South Carolina:						
27-B	General Road & Drainage Construction Co.	Columbia, S. C.	May 23, 1922	\$66,254.79	Bridge, Spartanburg County	Not reported.
79-B	Beasley Construction Co.	Savannah, Ga.	May 17, 1922	25,020.76	Bridge, Jasper County	Do.
151.	White Contracting Co.	Barnwell, S. C.	May 23, 1922	19,629.79	Road, sand and clay, Barnwell County	Do.
161.	W. B. Browning	Ridgeville, S. C.	May 17, 1922	19,179.25	Road, sand and clay, Berkeley County	Do.
169.	C. E. Teague	Augusta, Ga.	May 23, 1922	9,194.58	Road, sand and clay, Barnwell County	Do.
163.	Slattery & Henry	Greenville, S. C.	May 31, 1922	108,307.21	Road, gravel and dirt, Sumter County	Do.
81-B	J. M. Gregory	Newton, S. C.	June 1, 1922	116,791.29	Road, plain and reinforced concrete, Charleston County	Do.
Texas:						
267.	Kaykendall & Shelton	Temple, Tex.	May 26, 1922	13,118.01	Road, reinforced concrete, Runnels County	Do.
267.	G. B. Heath	Midland, Tex.	do.	16,068.57	Road, gravel and dirt, Runnels County	Do.
Virginia:						
153-B	Chandler S. Ragland	Virgilina, Va.	May 31, 1922	49,099.20	Road, gravel and dirt, Charlotte County	Do.
72-D	Harris H. Oliver	Doswell, Va.	do.	6,414.04	Road, concrete, King and Queen County	Do.
102.	Robert Martin Co.	Salem, Va.	do.	40,595.28	Road, gravel and dirt, Shenandoah County	Do.
79.	Carpenter-Williams Co.	Petersburg, Va.	do.	4,835.59	Bridge, Prince William County	Do.
Washington:						
92.	Rich & Markhus	Missoula, Mont.	May 16, 1922	79,952.42	Road, plain concrete, Yakima County	Do.
West Virginia:						
115.	P. F. Flannigan	Baltimore, Md.	June 6, 1922	106,000.00	Road, bitumen-concrete, Berkeley County	Do.
120.	Capital Construction Co.	Columbus, Ohio	do.	16,751.50	Bridges, Ohio County	Do.
Wisconsin:						
152.	Lowe Bros.	Eau Claire, Wis.	June 1, 1922	24,493.21	Road, gravel and dirt, Eau Claire County	Do.
256.	Hoffman & Meeks	Black River Falls, Wis.	June 6, 1922	34,605.00	Road, gravel and dirt, Monroe County	Do.
309.	Ofstie & Muhleron	Spring Valley, Wis.	June 1, 1922	24,305.53	Road, gravel and dirt, Eau Claire County	Do.
310.	W. H. Bent	Eagle River, Wis.	do.	27,815.83	Road, gravel and dirt, Taylor County	Do.
Wyoming:						
114.	Taggart Bros.	Cowley, Wyo.	do.	63,477.30	Road, gravel and dirt, Big Horn County	Do.
117.	Raymond George	Rozet, Wyo.	do.	39,233.20	Road, gravel and dirt, Weston County	Do.
118-B	Utah Construction Co.	Salt Lake City, Utah	do.	124,371.00	Road, gravel and dirt, Fremont County	Do.
118-C	do.	do.	do.	174,709.30	Road, gravel and dirt, Hot Springs County	Do.
118-D	do.	do.	do.	4,971.90	do.	Do.
121.	Threet Bros.	Cheyenne, Wyo.	do.	16,109.00	Road, gravel and dirt, Big Horn County	Do.
123.	Fitzgerald Bros.	Saratoga, Wyo.	do.	9,318.12	Road, gravel and dirt, Albany County	Do.
124.	W. L. Connelly	Fort Laramie, Wyo.	do.	52,234.60	Road, gravel and dirt, Lincoln County	Do.
126.	Johnson Construction Co.	Basin, Wyo.	do.	25,630.00	Road, gravel and dirt, Park County	Do.

Recent Statistics of Employment.

Iowa.

A GAIN of slightly over 1 per cent in the persons employed in May, 1922, as compared with April, 1922, is shown by the figures issued by the Iowa Bureau of Labor Statistics in a press release based on a survey of 289 identical firms which employed in April 45,452 persons and in May 45,918 persons. Improvement in the period of operation of factories and other establishments is also shown, as out of every 100 firms reporting for May 79 were operating full time, 17 part time, and 4 were closed, as against 75 operating full time, 20 part time, and 5 shut down in April. The figures for the different industries are set forth in the following table:

NUMBER OF PERSONS EMPLOYED IN 289 IDENTICAL ESTABLISHMENTS IN APRIL AND MAY, 1922, AND NUMBER OF ESTABLISHMENTS OPERATING FULL TIME OR PART TIME OR CLOSED DOWN.

Industry.	Number of establishments reporting.	Number employed in—		Per cent of increase (+) or decrease (-).	Number of establishments—		
		April, 1922.	May, 1922.		Operating full time.	Operating part time.	Closed down.
Food and kindred products.....	48	7,440	7,797	+4.8	30	15	3
Textiles and clothing.....	29	2,699	2,657	-1.6	23	5	1
Iron and steel.....	64	6,343	6,242	-1.6	46	15	2
Lumber products.....	29	3,538	3,678	+4.0	26	2	1
Leather products.....	10	551	517	-6.2	8	2	.....
Paper and printing.....	22	2,385	2,414	+1.2	22	.....	.....
Medicines, chemicals, etc.....	6	233	243	+4.3	6	.....	.....
Stone and clay products.....	25	2,357	2,467	+4.7	19	1	5
Tobacco.....	7	522	518	-.8	3	3	.....
Car shops.....	8	11,300	11,485	+1.6	3	2	.....
Miscellaneous.....	41	8,084	7,900	-2.3	38	3	1
Total.....	289	45,452	45,918	+1.02	224	48	13

Massachusetts.

THE Legislature of Massachusetts has established a special commission to investigate the problems relating to unemployment and to unemployment insurance and also to report on the subject of minimum wage legislation. The body consists of two members of the senate, four of the house of representatives, three other persons from outside these two bodies to be appointed by the governor, with the advice and consent of the council. This commission is to conduct its investigations and report on or before the first Wednesday of January, 1923.

The principal subjects to be considered are the extent, nature, and causes of unemployment and what measures, public or private, individual or by community effort, can be taken to decrease it so far as affected by seasonal fluctuation and by industrial depression; placement through free employment service or the coordination of local agencies or otherwise; and relief either by insurance or advance planning and reserving of public works to be carried out in periods of unemployment.

Aside from the above the commission is to investigate the operation and administration of the minimum wage law of the State and its effect on the industries and employees therein for whom minimum wages have been established. The present law is optional, orders of the board merely naming a standard which employers may or may not accept, and the question of giving mandatory effect to the findings of the minimum wage board is to be reported on; also whether the law should be extended, amended, or repealed.

Cooperation by the departments of industrial accidents, labor and industries, and banking and insurance is provided for. Quarters are to be provided in the statehouse, where public hearings may be held. No compensation is provided for the members of the commission, but reasonable expenses may be incurred, including traveling and clerical expenses.

New York.

AS A result of continued gradual progress in business conditions, employment in New York State factories increased 1 per cent from April to May, 1922, according to a press release issued by the industrial commissioner of the New York State Department of Labor, based on reports received from 1,553 representative establishments employing over 430,000 workers in May. Seasonal activities in some industries were offset by seasonal dullness in others.

The chief increases were reported in the brick, cement, and abrasive, metal-working, woodworking, and food and beverages industries; the greatest decreases, in the clothing and textile industries. Of the 11 principal industry groups, 7 showed employment gains during May.

The iron and steel and automobile industries showed the most important gains in the metal-working group. Considerable increases were also reported in the shipbuilding and brass and copper industries, and there were substantial seasonal gains in the canning industry and in saw milling and planing.

The marked reductions in the clothing industries are accounted for chiefly by interseason dullness. The fact that certain new trade agreements had not been concluded in New York City was also a determining factor.

There were seasonal decreases in leather goods manufacture and in the industries making cotton and woolen knit goods, silk and silk goods, and miscellaneous products, but some gains in the cotton goods industry and wool manufactures.

The volume of employment in the miscellaneous paper industry was reduced by a strike in one of the largest paper bag mills.

No change took place in the boot and shoe industry, labor difficulties in the Rochester factories having prevented an increase in employment.

Pennsylvania.

THE annual report of the Pennsylvania Bureau of Employment contains separate reports from the various State employment offices of the bureau, located respectively at Altoona, Erie, Johns-

town, Harrisburg, McKeesport, New Kensington, Philadelphia, Pittsburgh, Scranton, and Williamsport, together with statistical summaries of the activities of all the offices combined, figures from which summaries are reproduced below:

CLASSIFIED SUMMARY OF ACTIVITIES OF THE 10 EMPLOYMENT OFFICES OF PENNSYLVANIA FOR THE YEAR ENDING DECEMBER 31, 1921.

Men.

Trade group.	Persons applying for positions.	Persons asked for by employers.	Persons sent to positions.	Persons receiving positions.
Agriculture.....	14,314	4,729	4,223	3,778
Building trades.....	24,969	9,392	9,282	8,062
Machinery and metals.....	43,102	8,685	9,209	7,364
Clerical.....	10,071	3,041	3,179	2,995
Hotel and institutions.....	18,604	3,367	3,690	3,098
Mine and quarry.....	9,167	10,303	4,426	4,391
Transportation.....	10,098	1,255	1,326	1,090
Sales.....	6,393	5,279	3,076	2,839
Common labor.....	320,398	19,370	20,080	18,718
Miscellaneous.....	27,528	6,079	6,310	5,648
Total.....	484,644	71,498	64,801	57,983
Retentions.....				877
The year 1920.....	280,730	525,866	219,642	206,106

Women.

Agriculture.....	151	176	139	129
Clerical.....	6,739	1,311	1,369	990
Clothing and textiles.....	730	1,059	299	277
Day workers.....	12,428	4,490	4,425	4,344
Domestic service.....	7,559	7,095	4,690	3,857
Hotels and institutions.....	7,588	3,010	2,227	1,888
Machine and factory.....	1,879	1,415	1,023	906
Professional and trained.....	278	251	156	119
Sales.....	1,647	861	666	551
Miscellaneous.....	1,629	627	488	419
Total.....	40,578	20,295	15,482	13,460
Retentions.....				70
Day workers (Altoona) ¹	21,035	20,256	20,171	20,171
The year 1920.....	30,213	32,016	23,060	21,660
Total, 1921.....	525,222	91,793	80,283	71,443
Total, 1920.....	310,943	157,882	242,702	227,796

¹ Not included in totals.

New Report Forms.

A new weekly summary report form and a revised detailed weekly report for men were introduced on January 1, 1921, for the bureau of employment. The new summary form makes it possible to give the men's reports from all offices on one page and the women's reports in a similar way. Two important revisions in the detailed weekly report form for men are a column headed "Retentions" and a double column for "Information to employer and employee." These additional columns provide space for reporting the very difficult service of the bureau in trying to keep persons on their jobs and also for information of value to both employer and employee, which is given by the various offices but which previously never was recorded either in the orders for labor or in the applications for work.

Private Employment Offices.

In 1921 there were 85,375 persons reported placed by private employment agents licensed by the department of labor and industry. This department issued during that year 278 licenses to private employment agents, the fees of such licenses bringing into the State treasury \$13,900. The following statistics for 1921 are also given in the report of the division of licensed agents:

Licenses surrendered.....	29
Licenses revoked.....	12
License regranted.....	1
Licenses refused.....	20
Wage complaints by aliens investigated and settled.....	18
Amount recovered.....	\$906.85
Investigations and inspections conducted by division.....	3,271
Violations of laws and rules discovered.....	28
Complaints regarding fees considered.....	476
Decisions favorable to agents in re complaints about fees....	91
Amount involved.....	\$570.03
Decisions favorable to complainants.....	385
Amount involved.....	\$1,742.75

Survey of Seasonal Trades.

A survey of seasonal trades in Pennsylvania was undertaken in June, 1921, by the superintendents of the State employment offices and the representative councils, at the suggestion of the commissioner of labor and industry. Some surprising facts have been disclosed by this preliminary survey. It is reported that after further investigation of a more detailed and intensive character a bulletin will probably be issued embodying the results of this study.

 Volume of Employment in the United Kingdom in April, 1922.

THE following statement as to the condition of employment in Great Britain and Ireland in April, 1922, as compared with April, 1921, and March, 1922, has been compiled from figures appearing in the British Labor Gazette for May, 1922. Similar information for January, 1922, was published in the April, 1922, MONTHLY LABOR REVIEW.

The employment situation continued bad during April, though there was an improvement in some of the industries not directly affected by the disputes in the engineering and shipbuilding trades. There were also further reductions in wages during April. When the number of persons employed in April, 1922, is compared with the number employed in March, 1922, the largest increase, 7.9 per cent, appears in the jute trade. The number of employees reported by employers in the bookbinding trades increased 5.1 per cent over the preceding month, while both the silk and the tailoring trades show an increase of 3.3 per cent. Employment in the linen trade continued bad on the whole, and showed a decline of 8.4 per cent. As regards seamen, at most of the ports considerable numbers of men failed to obtain engagements and the number employed decreased 7.8 per cent from last month. A decrease of 6.8 per cent

was noted in the iron and steel works and one of 4.1 per cent in the cement trade.

A comparison of the earnings of employees in April, 1922, with those in March, 1922, shows that here also the largest increase (23.5 per cent) occurred in the jute trade. An increase of 6.7 per cent appears in the bookbinding trades and one of 6.3 per cent in the silk trade. The most important decrease, 9.2 per cent, is shown in the linen trade. A decrease of 7.9 per cent is reported in the cement trade, and a decrease of 6.2 per cent in the brick trades.

Comparison of the number of persons employed in April, 1922, and in April, 1921, shows an increase of 64.8 per cent in the pottery trades. In the iron and steel works, an increase of 47.5 per cent appears. Respective decreases of 38.4, 9.4, and 7.1 per cent are noted in the cement trade, bookbinding trades, and printing trades.

The aggregate earnings of employees in April when compared with those for April, 1921, show an increase of 52.5 per cent in the hosiery trade, 46.2 per cent in the worsted trade, and 39.8 per cent in the cotton trades. A decrease of 49.6 per cent is reported for the cement trade.

VOLUME OF EMPLOYMENT IN THE UNITED KINGDOM (GREAT BRITAIN AND IRELAND) IN APRIL, 1922, AS COMPARED WITH MARCH, 1922, AND APRIL, 1921.

[Compiled from figures in the Labor Gazette, London, May, 1922.]

Industry and basis of comparison.	Per cent of increase (+) or decrease (-) in April, 1922, as compared with—		Industry and basis of comparison.	Per cent of increase (+) or decrease (-) in April, 1922, as compared with—	
	March, 1922.	April, 1921.		March, 1922.	April, 1921.
Coal mining:			Jute trade:		
Average number of days worked.....	+0.13	(1)	Number of employees.....	+7.9	+4.9
Number of employees.....	+0.4	(1)	Earnings of employees.....	+23.5	+19.9
Iron mining:			Linen trade:		
Average number of days worked.....	-2.9	(1)	Number of employees.....	-8.4	+38.5
Number of employees.....	+3.2	(1)	Earnings of employees.....	-9.2	+34.6
Quarrying:			Silk trade:		
Average number of days worked.....	-7.1	-8.7	Number of employees.....	+3.3	-3.7
Number of employees.....	+0.7	+15.9	Earnings of employees.....	+6.3	+2.5
Pig iron: Number of furnaces in blast.....	+4.7	² +918.2	Carpet trade:		
Iron and steel works:			Number of employees.....	+2.8	+0.9
Number of employees.....	-6.8	² +47.5	Earnings of employees.....	+3.7	+0.9
Number of shifts worked.....	-5.6	² +45.6	Lace trade:		
Tin plate, steel, and galvanized sheet trades: Number of mills in operation.....	+2.7	² +1205.7	Number of employees.....	-1.6	+6.7
Cotton trade:			Earnings of employees.....	-4.2	+27.6
Number of employees.....	+2.3	+28.3	Bleaching, printing, dyeing, and finishing:		
Earnings of employees.....	+4.3	+39.8	Number of employees.....	-1.7	+7.2
Woolen trade:			Earnings of employees.....	+1.1	+19.7
Number of employees.....	+0.9	+14.5	Boot and shoe trade:		
Earnings of employees.....	+1.0	+30.3	Number of employees.....	+1.8	+5.8
Worsted trade:			Earnings of employees.....	+3.0	+10.6
Number of employees.....	+1.6	+13.0	Leather trades: Number of employees ³	-0.2	+3.1
Earnings of employees.....	+2.0	+46.2	Tailoring trade:		
Hosiery trade:			Number of employees.....	+3.3	+1.0
Number of employees.....	+0.5	+31.8	Earnings of employees.....	+1.8	+11.0
Earnings of employees.....	-0.4	+52.5	Shirt and collar trade:		
			Number of employees.....	+0.7	-2.9
			Earnings of employees.....	-2.6	+13.1

¹ No figures due to general stoppage of work at coal mines in April, 1921.

² Increase in 1922 on account of disorganized condition of industry in April, 1921, due to general coal stoppage.

³ Based on unemployment.

VOLUME OF EMPLOYMENT IN THE UNITED KINGDOM (GREAT BRITAIN AND IRELAND) IN APRIL, 1922, AS COMPARED WITH MARCH, 1922, AND APRIL, 1921—Con.

Industry and basis of comparison.	Per cent of increase (+) or decrease (—) in April, 1922, as compared with—		Industry and basis of comparison.	Per cent of increase (+) or decrease (—) in April, 1922, as compared with—	
	March, 1922.	April, 1921.		March, 1922.	April, 1921.
Other clothing trades:			Paper, printing, and bookbinding trades—Concluded.		
Dressmaking and millinery—Number of employees.....	+2.6	-3.7	Printing trades—		
Wholesale mantle, costume, blouses, etc.—Number of employees—			Number of employees reported by trade-unions ³	-0.5	+1.1
London.....	(4)	-3.6	Number of employees reported by employers.....	-0.2	-7.1
Manchester.....	+0.4	+20.3	Earnings of employees reported by employers.....	-1.6	-9.4
Glasgow.....	+3.1	-2.9	Bookbinding trades—		
Corset trade—Number of employees.....	+1.5	+12.9	Number of employees reported by trade-unions ³	+1.1	-0.1
Woodworking and furnishing:			Number of employees reported by employers.....	+5.1	-9.4
Number of employees ²	+0.1	+2.2	Earnings of employees reported by employers.....	+6.7	-5.9
Brick trade:			Pottery trades:		
Number of employees.....	-1.1	+5.8	Number of employees.....	-0.8	+64.8
Earnings of employees.....	-6.2	-22.5	Earnings of employees.....	-4.5	+39.5
Cement trade:			Glass trades:		
Number of employees.....	-4.1	-38.4	Number of employees.....	-3.2	+6.4
Earnings of employees.....	-7.9	-49.6	Earnings of employees.....	-5.7	-11.7
Paper, printing, and bookbinding trades:			Food-preparation trades:		
Paper trades—			Number of employees.....	-0.3	+5.5
Number of employees reported by trade-unions ³	(5)	(5)	Earnings of employees.....	-0.3	-1.9
Number of employees reported by employers.....	-1.9	+4.8	Dock and riverside labor: Number of employees.....	+1.1	-1.6
Earnings of employees reported by employers.....	-1.7	-0.3	Seamen: Number of employees.....	-7.8	+34.4

² Based on unemployment.

⁴ No change.

⁵ No figures.

Report of Employment Exchanges in the United Kingdom.

AS REPORTED by the British Labor Gazette for May, 1922, the operations of the employment exchanges for the five weeks ending April 10, 1922, are summarized as follows: The average daily number of applications from workpeople during the period was 23,772; of vacancies notified, 3,178; and of vacancies filled, 2,680. This means over 7 applications for every vacancy and nearly 9 applications for every vacancy filled.

When comparing the daily average of applications from workpeople for April, 1922 and March, 1922, a decrease of 5.2 per cent is reported; while the daily average of vacancies notified and vacancies filled showed decreases of 3.6 per cent and 4.8 per cent.

The average daily number of applications from adults was 21,740—16,713 men and 5,027 women. There were 2,751 average daily vacancies reported—1,795 men and 956 women. The average number of positions filled daily, when compared with the previous month, showed a decrease of 1.4 per cent among men, while in the case of women there was a decrease of 11.8 per cent.

In the men's department there were increases in the number of vacancies filled in building and construction of works, commercial and clerical occupations and dress (including boots and shoes),

while decreases occurred in engineering and ironfounding, shipbuilding, miscellaneous metal trades, the transport trades, agriculture, and general laborers.

With reference to juveniles, 31,432 applications were received from boys and 5,450 vacancies were notified for boys. Of the vacancies notified 4,838, or 88.8 per cent, were filled.

The number of applications received from girls was 29,535. The number of vacancies notified was 7,333, of which 6,051, or 82.5 per cent, were filled.

Of the total vacancies (10,889) filled by juveniles, 1,690, or 15.5 per cent were filled by applicants who obtained their first situation since leaving school.

The following table shows, for Great Britain and Northern Ireland, the number of applications from men and women, vacancies notified, and vacancies filled during the five weeks ending April 10, 1922.

APPLICATIONS FROM WORKPEOPLE, VACANCIES NOTIFIED, AND VACANCIES FILLED DURING THE FIVE WEEKS ENDING APRIL 10, 1922, AND THE NUMBER REMAINING ON THE LIVE REGISTERS OF EMPLOYMENT EXCHANGES, GREAT BRITAIN AND NORTHERN IRELAND.

Trade group. ¹	Applications from workpeople.		Vacancies notified.		Vacancies filled.		Live register. ²	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Building.....	62,102		7,786		6,864		118,664	
Construction of works.....	8,838		19,950		19,782		19,236	
Engineering and iron founding.....	116,754	3,606	2,149	239	1,826	267	342,220	15,944
Shipbuilding.....	44,493		2,483		2,468		114,704	
Construction of vehicles.....	3,201		238		168		8,050	
Miscellaneous metal trades.....	40,478	5,505	280	185	217	149	109,228	14,362
Domestic Service.....	5,463	30,932	589	18,594	426	11,546	15,475	34,684
Commercial and clerical.....	10,478	7,681	2,136	813	1,855	657	26,690	17,805
Conveyance of men, goods, etc.....	48,735	3,964	1,689	345	1,416	320	126,215	9,663
Agriculture.....	2,220	184	1,137	92	1,083	83	4,725	429
Textiles.....	29,391	56,603	333	2,085	283	1,648	50,372	81,567
Dress (including boots and shoes).....	6,441	10,219	583	4,132	458	2,496	18,430	20,845
Food, tobacco, drink and lodging.....	5,753	6,692	180	262	129	193	15,057	13,528
General laborers.....	39,639	3,182	9,513	183	9,334	159	106,167	5,615
All other trades.....	77,411	22,262	4,821	1,723	4,344	1,335	212,094	46,294
Total.....	501,397	150,820	53,867	28,683	50,653	18,853	1,287,327	260,736

¹ Casual occupations (dock laborers and coal laborers) are excluded from this table and from all other figures above. The number of casual jobs found for workpeople in these occupations during the period was 1,930.

² Not including persons on short time.

Employment of Ex-Service Men in Great Britain.¹

SINCE August 1, 1919, 53,687 ex-service men have received training under the British industrial training scheme. On April 25, 1922, there were 21,966 men in training, and 28,772 on the waiting list. At the same time 17,805 employers had accepted 44,651 ex-service men under the "interrupted apprenticeship scheme." Up to and including April 30, 1922, 30,272 employers had enrolled on the King's National Roll under the national scheme and had furnished employment of some character for 362,393 disabled ex-service men.

¹ Labor Gazette, London, May, 1922, p. 202.

The reluctance of many local authorities and firms to employ disabled ex-service men led to the passing of a resolution in the House of Commons on April 26, 1922, to the effect—

That in the opinion of this House, the Government should be called upon fully and with the utmost promptitude to fulfill its obligations to the disabled ex-service men who have been or are now being trained, and to the disabled ex-service men now awaiting training.

That a select committee of this House be appointed to examine and report upon the system adopted in other countries to provide employment for disabled ex-service men, and to recommend a system under which men who have suffered disablement in the service of the country may be secured employment.

Empire Settlement Bill.

IN THIS connection the efforts of the British Government to place ex-service men in employment through a scheme for overseas settlement is of interest.² Through the efforts of the overseas settlement committee which was set up shortly after the armistice, 50,000 ex-service men, making with their families 100,000 persons, will, when the pending applications have been dealt with, have been given free passage to the various dominions at a cost of £2,700,000 (\$13,139,550, par). This scheme, however, lapsed at the close of 1921, and in order to make better provision for the settlement of any British emigrants in the oversea dominions the empire settlement bill was introduced in the House of Commons, April 7, 1922, and reached its second reading on April 26.

The present bill "empowers the secretary of state for the colonies to cooperate with the oversea Dominion Governments or with approved private organizations in carrying out agreed schemes. An agreed scheme may be either (a) a development or land settlement scheme, or (b) a scheme of assisted migration. In either case the scheme must provide for contributions to be made by the parties to the scheme either by way of grant, or by way of loan, or otherwise. The State contribution from British funds must not in any case exceed half the expenses of the scheme, and must bear a proper relation, in the view of the Treasury, to the contribution of the other party (i. e., Dominion Government or private organization) to the scheme. The total liability of the British Government for contributions under the bill, which is limited to 15 years, must not exceed £1,500,000 (\$7,299,750, par) during the present financial year, or £3,000,000 (\$14,599,500, par) in any subsequent year."

Especial importance is attached to juvenile migration and to the migration of women as well as to the preliminary training, both in England and in the Dominions, of persons thus assisted. The capacity of the Dominions to absorb immigration of any character must also be carefully considered and must be conditioned upon an increased development of their agricultural resources. Of the £3,000,000 (\$14,599,500, par) proposed in the bill as a normal annual expenditure £2,000,000 (\$9,733,000, par) will be available for land settlement and development schemes. It is believed that the migration of between 60,000 and 80,000 can be assisted annually out of the remaining £1,000,000 (\$4,866,500, par).

² Idem, p. 204.

INDUSTRIAL HYGIENE.

Definition of the Physician in Industry.¹

A SHORT statement defining the principles on which the work of industrial physicians is based and the scope of their work was formulated by the conference board of physicians in industry at a recent meeting. The discussion which led up to the formulation of the definition lasted several months and included consideration of many suggestions as to the duties and functions of the industrial physician.

It is understood, of course, that the physician engaged in industrial work must be well equipped from the medical and surgical point of view, but in addition to this he must have special knowledge of the hazards to be met in the particular industry with which he is connected and he must also have a knowledge of the laws of social and industrial economics and of the administrative problems which will arise in connection with his work. Only by such a broad outlook and range of information will he be successful in reducing the accident and morbidity rate and in establishing his work on a basis which will be satisfactory to himself and to the industrial organization.

The definition is as follows:

The physician in industry is one who applies the principles of modern medicine and surgery to the industrial worker, sick or well, supplementing the remedial agencies of medicine by the sound application of hygiene, sanitation and accident prevention; and who, in addition, has an adequate and cooperative appreciation of the social, economic, and administrative problems and responsibilities of industry in its relation to society.

Industrial Poisoning from Mercury.

A STUDY of mercury poisoning by Dr. R. R. Sayers (Bureau of Mines, Reports of Investigations, May, 1922, Serial No. 2354) shows that poisoning from mercury is of a common occurrence both in the mining and the smelting of this metal, although by far the greater number of cases occur among the employees about the reduction works. Modern methods of mining and recovery of the metal have greatly reduced the frequency and severity of cases, but further reduction is possible, the report states, and much can be done by both workmen and operators by taking proper precautions.

The cases of mercury poisoning occurring about mines and reduction works are usually chronic, although there is occasional development of acute symptoms when workers are exposed to excessive amounts of mercury vapors, dust, or soot. The chief symptoms of the disease are stomatitis (inflammation of the mouth), frequently with salivation, tremors, and a peculiar timidity. There are organic degenerative changes in the digestive system, the circulatory system, and the kidneys.

¹ Journal of Industrial Hygiene, Boston, June, 1922, p. 92.

The principal causes of poisoning are poor ventilation and failure to prevent the escape of mercury vapor from furnaces, condensers, and retorts, and uncleanness on the part of the workmen. In addition to these causes there is a wide variation in the susceptibility of different persons. The use of alcohol and tobacco seem to increase both susceptibility and the severity of symptoms, while women and children and tuberculous individuals are considered to be most susceptible.

Mercury poisoning is caused by the absorption and retention of small quantities of the metal or its compounds over an extended period of time. It may enter the body through the skin, the gastrointestinal tract, or the respiratory tract, and is more readily absorbed by the skin if the person is perspiring or if the mercury is impure or dirty. Metallic mercury vaporizes at low temperatures, being noticeable at 8.5° F., and the amount vaporized increases with the heat. The vapors, fumes, and dusts enter the body, therefore, through the skin, they are breathed into the lungs, or are swallowed with food or other substances taken into the mouth. While the effects of the mercury are cumulative, only a portion of the amount absorbed is retained in the body, elimination taking place slowly through the kidneys, large intestines, and the bile and saliva. Because there are usually only small amounts absorbed in any one day by a worker in a reduction plant, the development of symptoms is usually slow. The usual course of symptoms is first loss of appetite, stomatitis, and intestinal disturbances followed at varying lengths of time by the development of tremors which progress until the whole body is more or less involved. While this stage is not supposed to be dangerous to life, if exposure to mercury continues the brain may become affected, with death as the probable result.

Persons suffering from industrial mercurial poisoning usually recover, the report states, if they are removed from contact with the poison during the early stages or even after tremors develop, though recovery may take several months, but if paralysis, delirium, or insanity are present the recovery is doubtful.

Measures recommended in the report for the prevention of poisoning include adequate general and exhaust ventilation; provision of respirators; one shower bath for every 10 employees and one wash-basin for every 5 employees; individual lockers; lunch rooms; physical examinations of applicants for employment, excluding drinkers, those having tuberculosis or those in poor physical condition, and persons under 18 years of age; periodic physical examination at least every six months; instruction of employees as to the dangers of mercury poisoning and methods of avoiding it. The necessity for strict personal cleanliness and for keeping in good physical condition is emphasized.

British Report on Miners' Nystagmus.

A SUMMARY of the report of a special committee appointed by the Medical Research Council in England to investigate the cause of miners' nystagmus is given in the *Journal of the American Medical Association* of May 13, 1922 (p. 1472). The theory

accepted by various authorities¹ that the disease is caused entirely by faulty illumination is confirmed by the findings of this committee, which reached the following unanimous conclusions:

1. The essential factor in the production of miners' nystagmus is deficient illumination. Other factors, such as position during work, accidents, alcoholism, infections, malnutrition, hereditary predisposition, and errors of refraction, are of secondary importance. 2. The deficient illumination is due to the [low] illuminating power of the safety lamps, to the distance at which these lamps have to be placed from the objects at which the miner has to look, and to the great absorption of light by the coal. In addition, coal dust or dirt, obscuring the lamp glasses, the choking of the wire gauze chimneys, and moisture or low oxygen percentages in mine air all reduce the light given by oil lamps, while lack of attention has a similar effect on electric lamps. 3. Workers at the coal surface are more affected than other underground workers. This appears to be due to the unrelieved blackness of the coal and the greater need for accurate vision. 4. Distinct signs of nystagmus are present in a large proportion of coal miners, although in only a small proportion do the symptoms ever become so severe as to cause temporary incapacity.

The committee recommends an increase in the illuminating power of safety lamps to about two or three candlepower or the use of an electric lamp fixed on the miner's head or belt or in any other convenient position, so that while the light is near the working area it does not shine directly into the eyes. Whitewashing at parts of the pit other than the coal face greatly increases the visibility of objects, as well as the stone dusting which is compulsory for the prevention of explosions. The committee believes that by following these measures for better illumination it is possible entirely to eliminate nystagmus of a severity sufficient to cause disablement.

In a review of the report in *The Lancet* (London), April 29, 1922 (pp. 854, 855), special stress is laid upon the psychoneurotic symptoms which develop because of the belief, common among miners, that nystagmus causes permanent damage to the eyes or total loss of sight. A special study was made by one of the members of the committee in regard to the psychoneurotic aspect of the disease. He points out that there are two groups of these patients, those whose cases begin with nystagmus but in which a state of anxiety subsequently supervenes and those in which the psychoneurosis is primary, or at least of a severity and duration greater than can be ascribed to the ocular condition itself; in some cases of this latter group nystagmus may not develop at all. This condition is essentially similar to the neuroses of war, and "the unconscious motive," therefore, becomes a factor in the situation. Evidence of this is shown in the report by the fact that since the introduction of compensation the prevalence of disabilities from nystagmus has vastly increased. As the majority of cases are said to be of this character, improvement in illumination alone will not be sufficient to solve the problem and industrial psychology must be called upon to sort out the misfits, the potential neurotics, which the report states cost the mining industry about £300,000 (\$1,459,950, par) in 1920. The total loss to the mining industry in Great Britain from nystagmus, including lost wages and output, and compensation, is estimated at about £1,000,000 (\$4,866,500, par) a year.

¹ See MONTHLY LABOR REVIEW, August, 1916, pp. 215-222; June, 1921, pp. 116, 117.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Recent Reports.

Georgia.

THE Industrial Commission of Georgia presents as its first annual report an account of the operations of the compensation act of that State for 10 months, March 1 to December 31, 1921. The statute is an elective one, but election is presumed in the case of employers of 10 or more persons unless action to the contrary is taken. Small establishments may come under the act by agreement. But 7 employers normally covered by the act rejected it, while 277 took steps by positive election to accept the act where they were not normally covered. Employees may reject the act, and this was done in 141 cases, while 1,385 employees not covered came in by positive election. These figures are cited as showing that "the beneficial provisions of the act are appreciated by both employers and employees." It is of interest to note in this connection that Georgia is the one exception among the States of the southeastern corner of the United States which has a compensation law and is the latest State to enact such legislation. North and South Carolina, Florida, and Mississippi are near-by States in which the common law still remains as the basis of settlement of personal injuries, while west of the Mississippi River, Missouri and Arkansas are in the same group. These facts are pointed out by the commission in its report, which explains the full conviction of the commission in favor of the compensation system, with administration by industrial accident boards as contrasted with administration by the courts.

The rules and regulations formulated by the commission for its own guidance and the guidance of employers and employees are reproduced. The initial work of organization and education is referred to, covering the subject of reports from employers and employees who "had to be trained to make their reports promptly," while "the usual difficulty in securing the proper information from doctors" was an added obstacle. It is felt, however, that "we have been able in a short length of time, to secure remarkable cooperation."

During the 10 months of the operation of the act 11,778 accidents had been reported. Not all of these were compensable but most of them received medical aid and called for tabulation. Reports were furnished by 5,496 employers who insured with casualty companies licensed to write compensation insurance in the State and from 49 employers who qualified as self-insurers paying compensation direct.

Statistics are limited to a showing of the nature of the injuries and compensation and medical benefits. Eighty-two fatalities called for a total of \$155,375.70, besides medical aid, \$2,581.58, and funeral

expenses, \$7,183.89. There were 3 cases of permanent total disability, the cost of which was \$9,600 with \$256 medical costs, while 7 cases listed as "permanent partial disability" called for compensation to the amount of \$11,545.50 and medical aid, \$733.41. Besides these there were 196 dismemberments, usually classed as causing permanent partial disability, but evidently regarded separately in this presentation. These range in seriousness from the loss of an arm for which \$1,200 was given in compensation and \$60 in medical benefits, to 7 cases of loss of one phalange of little finger, at a total cost of \$361.88 and for medical aid, \$170. The total compensation paid for dismemberment was \$52,664 and for loss of function in 69 other cases, \$29,234.34. There were 2,186 cases of temporary total disability for which the compensation was \$90,366.97 and medical aid, \$139,634.02. Cases not calling for compensation because of less than 14 days duration but entitling to medical aid totaled \$68,176. The total for compensation is given as \$348,786.51, for medical aid \$162,481.56, for funeral benefits \$7,183.89, or a total of \$518,451.96.

Louisiana.

THE Workmen's Compensation Act of Louisiana is administered by the courts, so that no report of the operations of the law, as usually understood, can be made. However, the commissioner of labor and industrial statistics of the State has included in his biennial report for 1921-1922 some account of the status and effects of the law. Passed seven years ago, "only as a tryout," and over the protests of many as not being fair to the workers, amendments have been added until "it is pleasing to state that it now ranks well up among the best in the United States, possibly the fifth or sixth, in so far as relates to percentage of compensation, waiting period, doctor's care, and hospital fees, and the time period allowed to the injured when permanently disabled, and other important features." It is added that "there is still room for improvement," and recommendations in that direction are made by the commissioner. He asked that the minimum allowance be fixed at \$6 a week and the percentage basis changed to 66 $\frac{2}{3}$, retaining the present weekly maximum of \$18.

Committees have been appointed to report to the legislatures for 1920 and 1922, respectively, such recommendations as they might make for the strengthening of the provisions of the law. The second of these committees was to have information such as the commissioner of labor could furnish, he also being called on to meet with the committee. The commissioner was active in securing statistics of the operations of the laws of other States, and particularly with regard to insurance and a commission form of administration. Some form of State insurance, whether exclusive or competitive, is argued for by the commissioner on the ground of savings to employers and the safeguarding of the welfare of the workers, citing the experience of Ohio, West Virginia, and California. At the time of the submission of the report the legislature had not taken action, but the commissioner states, "I am still in favor of the creation of an industrial insurance commission and the operation of State insurance, monopolistic if it is possible to secure same, but will accept the competitive plan rather than continue under present policies, and so advised the committee."

The concluding recommendation is as to reports and investigation of accidents, urging that a law be passed requiring that all accidents to employees be reported.

Nova Scotia.

THE report of the Workmen's Compensation Board of Nova Scotia for the year 1921 is the fifth under the act. The first reference is to the subject of legislation, one amendment having been made during the year. This fixed the standard of assumed earnings of share fishermen at \$780 instead of \$1,200 per year. As the compensation payable in this industry is almost wholly on account of fatal accidents, for which there is a fixed monthly rate, the effect of this reduction is hardly apparent on the amount of compensation unless there is more than one child under 16. The statute allows \$30 per month to the widow for life or until remarriage and \$7.50 per month for each child under 16, no maximum to exceed \$60 or 55 per cent of the earnings. Where orphans alone survive the allowance to each child is doubled.

Accidents reported in 1921 amounted to 5,326 of which 48 were fatal and 462 were noncompensable; 487 others required only medical aid. The number of compensable accidents for the year was the least in the history of the law, the number in 1920, the maximum, being 6,143, while in 1921 it is estimated that the number was about 4,400. Three reasons were advanced for the diminution in the number of accidents, the first one being the falling off in the amount of business done and the number of workmen employed, the reduction in wages amounting to about \$20,000,000. Part of this is attributable to lower rates, but the major part to reduced operations. The second reason lies in the fact that employers were able to secure more experienced workmen than in 1920 when the demand for workers was much greater; while the third is the work of the Accident Prevention Association, and the large expenditures for safety work by some of the more important corporations.

It was found on summing up the financial situation for the year that the collections were largely in excess of the amounts required, permitting a retroactive adjustment in the rates for 1921. This amounted in some cases to a practical refund or credit to employers, the provisional rate of \$1.50 for general building construction falling to 10 cents. The same figures apply to the operation and maintenance of telephone and telegraph systems, stevedoring, and automobile livery, and taxicab stations. The adjusted assessment for steel and iron manufacture was 80 cents as against a provisional \$1.50, etc. These adjusted rates do not represent actual costs of accidents for the year, but indicate that the surplus was used to make up the difference, the smaller assessments covering only the balance not provided for by previous accumulations. In the building trade, for instance, the average rate for the period of 5 years was \$1.11.

Administration expenses for the year 1921 amounted to \$100,066.51, nearly \$5,000 less than for 1920. The ratio of the administrative expenses to the total accident cost for 1921 was 10.58, the average for 5 years being less than 7 per cent.

A recent development under the act is the formulation of the Nova Scotia Accident Prevention Association formed in 1919 by employers within the scope of the compensation act. There are branches in several of the larger industries, "and the board is satisfied that the association is doing good work, and that the expenses of the association, which are paid by the board, are moneys well spent." For 1920 this amounted to \$8,320.14, and in 1921 to \$7,621.90. "The prevention of one fatal accident might mean the saving of the annual expenses of this association." The actual effects of the work of the association can be determined only after the experience of several years, in more normal industrial conditions than have prevailed during its brief existence.

Tables show income and expenditure by industry classes, accidents and their disposition during 1921, balance sheet as of December 31, 1921, administrative expenses for the year, status of pension funds by classes, disaster reserve, time loss, average age, and wage of injured employees in 1920 by industry classes, nature of injuries, sex and marital condition of injured workers, causes of accidents, dependents, etc.

Compensation is paid exclusively through a provincial fund which showed assets aggregating \$4,031,567.83. There is a disaster reserve of \$575,929.38 and a pension reserve of \$2,110,316.47 with a balance to the credit of the different classes of \$435,402.80. The pension fund shows a balance for each class ranging from \$67,039 in transportation to \$1,137,695.95 in mining.

The average days lost in cases of temporary disability was 25.26, while for those causing some form of permanent disability it was 110.58. The average age of injured workers was 33.85 years and the average weekly wage was \$21.07.

From a table showing the percentage of impairment of total earning capacity in permanent disability cases it appears that there were 285 such cases in 1920, of which 11 were total. In 194 cases the impairment was less than 10 per cent, in 51 it was 10 per cent but less than 20, and in 11, 20 but less than 30, the remaining 18 cases ranging from 30 to less than 90 per cent.

Of 6,081 male workers injured in 1920, 3,482 were married, 2,269 single, and 330 widowed. There were 53 fatalities among married men, though but 46 widows were given pensions; no explanation is given with reference to the remainder. The number of dependent children was 122. Of the 62 females injured 20 were married, 34 single, and 8 widowed. No benefit to a dependent husband is reported.

Causes of accidents are given under 8 principal heads, the most prolific being rolling, falling, and flying objects, the number due to this cause being 2,880. Falls of persons were responsible for 873, and tools for 564. Moving trains and vehicles, etc., and machinery and its parts were each charged with 524 injuries, and dangerous substances with 523. The greatest number of fatalities was due to drowning (32); rolling, falling, and flying objects coming next with 24; 19 were due to moving trains and vehicles.

National Health and Unemployment Insurance in Great Britain.

THE great cost of administering the British national health and unemployment insurance schemes led to the appointment of an interdepartmental committee (see *Labor Gazette*, London, March, 1922, p. 106) "to consider the relations of health insurance and unemployment insurance, and to investigate the possibility of reducing the total cost of administration by modifying the unemployment insurance scheme and by amalgamating unemployment and health insurance cards, records, and as far as possible, administration."

Two reports¹ have recently been submitted by this committee. The first interim report, dated February 24, 1922, deals with the payment of unemployment insurance by agencies (such as trade-unions, etc.) other than the employment exchanges. At present associations paying this benefit receive an allowance for administrative expenses of not exceeding 1s. (24.3 cents, par) for each week's benefit paid through them. The report reviews the advantages and the disadvantages of this system of payment, and while the committee does not recommend the discontinuance of the system of payment of unemployment insurance through associations it does recommend that, since the "cost of work devolving upon associations does not increase in direct proportion to the number of claims paid," the rate of payments made to associations for administrative purposes should be revised, and "that the reduced rate should be based on a sliding scale dependent on the rate of unemployment."

The second interim report, dated March 17, 1922, deals with the possible amalgamation of unemployment and health insurance cards. No final conclusion is reached on this subject, but the committee states that it would not be possible to institute the use of a combined card by July, 1922, the time when the present unemployment books and health insurance cards now in use expire.

¹ *Labor Gazette*, London, May, 1922, p. 202.

LABOR LAWS AND COURT DECISIONS.

Status of Unincorporated Labor Organizations as to Liability for Damages and Acts Affecting Interstate Commerce.

THE Supreme Court of the United States on June 5, 1922, rendered its decision in the case *United Mine Workers of America v. Colorado Coal Co.*, which has attracted a great deal of attention for a number of years. The first legal procedure was taken in the District Court for the Western District of Arkansas in September, 1914, following the destruction of mine property in the State of Arkansas.

The history of the case in brief is that certain companies engaged in the mining of coal in the State of Arkansas, formerly operating as union mines, decided in 1914 to go on a nonunion or open-shop basis. This agreement involved five operating companies and other corporations interested, the mines being situated in an area in which agreements with the union were in force. When the case came to trial there was a verdict for damages in the amount of \$200,000, which was tripled under the provisions of the antitrust act; a counsel fee of \$25,000, and interest to the amount of \$120,600 were also allowed. The court of appeals considered the case on a writ of error, striking out the allowance of interest but affirming the judgment in other respects (see 235 Fed. 1, 258 Fed. 829, MONTHLY LABOR REVIEW, August 1919, pp. 231-234). The case then came to the Supreme Court on a writ of error to review this judgment, which was by a unanimous bench reversed. (42 Sup. Ct. 570.)

The opinion, which was delivered by Mr. Chief Justice Taft, set forth five principal questions in controversy. The first of these was technical, claiming a misjoinder of the plaintiffs, the mine companies, and interested corporations. This contention was rejected, as all were in a common situation and were treated as a unit by the United Mine Workers. "They were so regarded in business and in the neighborhood where the mines were."

The second contention was that the unincorporated associations of workers involved, i. e., the International Union, the District Union No. 21, and the local unions, could not be sued in their names. The nature of the organization was set forth, showing that the United Mine Workers of America is a national organization, or indeed international, since it embraces Canada. It has a constitution which sets forth its general purposes, and is composed of the classes of workmen eligible to membership, including those employed in and around coal mines, coal washers, and coke ovens. It is divided into 30 districts with subdistricts and local unions. "The ultimate authority is a general convention to which delegates selected by the members in their local organizations are elected." An interim governing body called the "international board" governs the union between conventions. This is made up of "the principal officers—the president, vice president, and secretary-treasurer—together with a member from each district. The president has much power.

When the board is not in session the individual members are to do what he directs them to do." The machinery of the organization is said to be "admirably framed for unit action under the direction of the national officers." Section 27 of its constitution provides that "the board shall have power between conventions, by a two-thirds vote, to recommend the calling of a general strike, but under no circumstances shall it call such strike until approved by a referendum vote of the members." No district shall engage in a strike involving all or a major portion of its members without sanction of the international convention or the board. Districts may order local strikes on their own responsibility, but they will not be financed by the international union unless sanctioned by the international board. Other evidences of solidarity are given and the opinion continues:

The membership of the union has reached 450,000. The dues received from them for the national and district organizations make a very large annual total, and the obligations assumed in traveling expenses, holding of conventions, and general overhead cost, but most of all in strikes, are so heavy that an extensive financial business is carried on, money is borrowed, notes are given to banks, and in every way the union acts as a business entity, distinct from its members. No organized corporation has greater unity of action, and in none is more power centered in the governing executive bodies.

Mr. Chief Justice Taft then stated that at common law unincorporated associations were recognized as having no other character than partnerships, and could sue or be sued only in the names of their members, and their liability had to be enforced against each member. "But the growth and necessities of these great labor organizations have brought affirmative legal recognition of their existence and usefulness and provisions for their protection, which their members have found necessary. Their right to maintain strikes, when they do not violate law or the rights of others, has been declared. The embezzlement of funds by their officers has been especially denounced as a crime. The so-called union label, which is a quasi trade-mark to indicate the origin of manufactured products in union labor, has been protected against pirating and deceptive use by the statutes of most of the States, and in many States authority to sue to enjoin its use has been conferred on unions. They have been given distinct and separate representation and the right to appear to represent union interests in statutory arbitrations, and before official labor boards." The further recognition of labor organizations is found to be quite common in legislative action, many statutes being listed in footnotes showing the extent to which legislatures have gone in treating such associations as distinct entities. "More than this, equitable procedure adapting itself to modern needs has grown to recognize the needs of representation by one person of many, too numerous to sue or to be sued. * * * It would be unfortunate if an organization with as great power as this international union has in the raising of large funds and in directing the conduct of 400,000 members in carrying on, in a wide territory, industrial controversies and strikes, out of which so much unlawful injury to private rights is possible, could assemble its assets to be used therein free from liability for injuries by torts committed in course of such strikes. To remand persons injured to a suit against each of the 400,000 members to recover damages and to levy on his share of the strike fund, would be to leave them remediless."

Reference is then made to a decision of the English courts, affirmed by the House of Lords, in the case of *Taff Vale Co. v. Amalgamated Society of Railway Servants*, 1901 A. C. 426, in which the liability of an unincorporated trade-union for damages due to its interference with the business of the plaintiff company was declared. It was added that though a finding in favor of "the suability of trades-unions is of primary importance in the working out of justice and in protecting individuals and society from possibility of oppression and injury in their lawful rights from the existence of such powerful entities as trade-unions, it is after all in essence and principle merely a procedural matter. As a matter of substantive law, all the members of the union engaged in a combination doing unlawful injury are liable to suit and recovery, and the only question is whether when they have voluntarily, and for the purpose of acquiring concentrated strength and the faculty of quick unit action and elasticity, created a self-acting body with great funds to accomplish their purpose, they may not be sued as this body, and the funds they have accumulated may not be made to satisfy claims for injuries unlawfully caused in carrying out their united purpose."

Citation is then made of a number of acts of Congress recognizing the legality of labor organizations, giving them a right to representation on boards and commissions, exempting them from excise taxes, accepting publications issued by them as second-class mailing matter, etc.

"In this state of Federal legislation, we think that such organizations are suable in the Federal courts for their acts, and that funds accumulated to be expended in conducting strikes are subject to execution in suits for torts committed by such unions in strikes." This conclusion was said to be confirmed by provision of the antitrust law which provides for suits against "corporations and associations existing under or authorized by the laws of either the United States, or the laws of any of the Territories, the laws of any State, or the laws of any foreign country." Of this it was said that "the words given their natural signification certainly include labor unions like these." Legislating with regard to associations, Congress "did not intend that any persons or combinations of persons should escape its application." Citation is then made of cases in which unincorporated associations were made parties to suits in the Federal court under the antitrust act "without question by anyone as to the correctness of the procedure," these cases involving a freight association (166 U. S. 290), a joint traffic association (171 U. S. 505) and a lumber association (234 U. S. 600).

The third question was as to the participation in or ratification of the interference with plaintiff's business by the international union. The strike was begun as a local strike declared by the president and officers of the district organization No. 21. This district embraced Arkansas, Oklahoma, and Texas, but the strike affected only a limited group. "There is nothing to show that the international board ever authorized it, took any part in preparation for it or in its maintenance. Nor did they or their organization ratify it by paying any of the expenses. It came exactly within the definition of a local strike in the constitution of both the national and the district organizations." It appears that the president of the national

body knew of the trouble and spoke of it at a meeting of the national board as a matter of information. The interest of the president in the events that followed appeared in various ways, but nothing that would warrant a conclusion that there was any ratification by the board which would create liability for a past tort. There was no question of contract or apparent authority to act, nor was the board chargeable with responsibility to regulate the local strike. The constitutions of the two bodies, local and national, clearly determine the question of responsibility, and nothing appears to charge the national union with such responsibility either directly or by implication. "We conclude that the motions of the international union, the United Mine Workers of America, and of its president and its other officers, that the jury be directed to return a verdict for them, should have been granted."

The next question involves two points, first whether there was a plot unlawfully to deprive the plaintiffs of their employees by intimidation and violence in the course of which property was destroyed, and secondly, whether these things were done in pursuance of a conspiracy to restrain and monopolize interstate commerce. It appears that the plaintiff companies had a single manager, who in March, 1914, decided to run the mines on a nonunion or open-shop basis. The mines were operating under a union agreement, which did not expire until July 1, following.

"To avoid the charge of a breach of the union scale he had a contract made between the Mammoth Vein Coal Mining Co., which he controlled, and the Prairie Creek Coal Co. and the Mammoth Vein Coal Co. by which the Mammoth Vein Coal Mining Co., a corporation with \$100 capital, agreed to run the mines. As it had signed no scale, he considered it free from obligation to the union. He then shut down the mines and prepared to open them on a nonunion basis on April 6. He anticipated trouble. He employed three guards from the Burns Detective Agency and a number of others to aid them. He bought a number of Winchester rifles and ammunition. He surrounded his principal mining plant at Prairie Creek No. 4 with a cable strung on posts. He had notices prepared for his former employees, who occupied the company's houses, to vacate. He had notices warning trespassers from the premises posted at the entrance to the tract that was inclosed within the cable. He sent out for nonunion men and had gathered some 30 or more at the mine by the day fixed for the opening."

These preparations led to counter activities by the union miners and their friends, who were of a predominant influence in the vicinity, the business of the various towns being dependent on union miners' patronage. A meeting was held and largely attended to consider action with reference to the change of policy proposed by the manager, and a committee was appointed to visit the superintendent of one of the mines involved. On this committee were a constable of one of the towns, who was a union man, and two other union miners. A large body of union miners accompanied this committee, and while the committee was interviewing the superintendent, asking him to send the nonunion men away, the crowd assaulted the guards and injured a number of the employees, some of them seriously. The result was that the mine was deserted, the pumps stopped, and the

mine completely filled with water. An injunction was then secured and plans made for the resumption of operations. Union activities were continued in an effort to prevent this, "either by peaceable inducement or by threats and physical intimidation." Union feeling was strong and public officials made arrests of nonunion men on "frivolous charges." Rumors as to the character of the mine guards were circulated and an attack made on a village by the constable, the cry being raised that "the scabs were surrounding the town," the purpose being to incite the hostility of the neighborhood against the nonunion workers, though any such action on the part of the guards who were in constant fear of attack in this hostile community was characterized as a "ridiculous improbability." The president of the district union offered to furnish guns, and evidence disclosed the fact that the secretary-treasurer did procure and pay for some 40 or more Winchester rifles, and that guns of like make and caliber were used in an attack that was made on a mine of one of the plaintiff companies. Most of the occupants of the premises fled, but some were captured and two were "deliberately murdered" in the presence of the officer who claimed to have the men in custody. He was subsequently tried and was acquitted on an alibi. "The overwhelming weight of the evidence establishes that this was purely a union attack, under the guidance of district officers." Dynamite and fire were used to destroy the plant, and all evidence pointed toward an intentional development of a situation "framed in advance for the purpose of relieving the officers of district No. 21 and the union miners of that neighborhood from responsibility of the contemplated execution of their destructive and criminal purpose." Their conduct was fully established on trial for a conspiracy to defeat the Federal administration of justice and for contempt, they had pleaded guilty to the charges made, and had been sentenced to imprisonment. The expenses were paid by the district out of the district treasury, the disbursements being approved by the district in convention.

These facts refute the contention that only individual members who participated in the torts could be held civilly liable for the damages. "There was evidence to connect all these individual defendants with the acts which were done, and in view of our finding that district No. 21 and the unions are suable we can not yield to the argument that it would be necessary to show the guilt of every member of district No. 21 and of each union in order to hold the union and its strike funds to answer. District No. 21 and the local unions were engaged in a work in which the strike was one of the chief instrumentalities for accomplishing the purpose for which their unions were organized." The constitution of the organization was quoted as showing the authority of the officers to order a strike, and the court found that "if in the conduct of that strike unlawful injuries are inflicted the district organization is responsible and the fund accumulated for strike purposes may be subjected to the payment of any judgment which is recovered."

The next point to consider was the relation of these activities to interstate commerce, and an account is given of the steps taken to secure nation-wide unionization of the coal industry to do away with the competition between union and nonunion mines. There

had been protracted efforts in this direction dating as far back at least as 1898 and continuing without interruption, involving the expenditure of a large amount of money and, in one or two instances, the loss of human life. Strikes carried on by the international union in Colorado, Ohio, and West Virginia had drained its treasury, and money had been borrowed by the national organization from the treasury of district No. 21, so that there is no question of the cooperative and interrelated interest of all the parties. However, it was concluded that any interference with interstate commerce was only secondary, and that mining itself not being interstate commerce is not within the power of Congress to regulate. If practices referred to had become a direct obstruction to interstate commerce, Congress might control such practices, though a mere obstruction to coal mining can not be regarded as a direct obstruction to such commerce, even though affecting it by reducing the amount of coal to be carried. The power to punish conspiracies to restrain or monopolize interstate commerce will apply only if the intention to produce this effect is an obvious consequence of what is to be done. "If unlawful means had here been used by the national body to unionize mines whose product was important, actually or potentially, in affecting prices in interstate commerce, the evidence in question would clearly tend to show that that body was guilty of an actionable conspiracy under the antitrust act. But it is not a permissible interpretation of the evidence in question that it tends to show that the motive indicated thereby actuates every lawless strike of a local and sporadic character, not initiated by the national body but by one of its subordinate subdivisions."

This case is distinguished from others in which workmen and commercial organizations had been held liable under the antitrust law for interference with interstate commerce, and the conclusion was reached that the case did not come within the provisions of the antitrust law.

The result of our consideration of the entire record is that there was no evidence submitted to the jury upon which they properly could find that the outrages, felonies, and murders of district 21 and its companions in crime were committed by them in a conspiracy to restrain or monopolize interstate commerce. The motion to direct the jury to return a verdict for the defendants should have been granted. * * *

The circumstances are such as to awaken regret that in our view of the Federal jurisdiction we can not affirm the judgment. But it is of far higher importance that we should preserve inviolate the fundamental limitations in respect to the Federal jurisdiction.

The judgment was therefore reversed and the case remanded to the district court for further proceedings in conformity to this opinion.

It is reported that the coal company has taken steps looking toward a reargument of the case.

Workmen's Compensation Provisions for Longshoremen.

THE act of the President on June 10, 1922, of signing Senate bill No. 745 has, it is hoped, made a final determination of the question as to the rights of stevedores and others of like status to secure compensation for injuries in their employment. The act is in form an amendment to sections 24 and 256 of the Judicial Code,

clause 3 of each section. These sections defined the jurisdiction of the United States district court, and gave to these courts, in their former phraseology, jurisdiction "of all civil causes of admiralty and maritime jurisdiction, saving to suitors in all cases the right of a common-law remedy where the common law is competent to give it." To this language in section 24 the new act adds the following:

And to claimants for compensation for injuries to or death of persons other than the master or members of the crew of a vessel their rights and remedies under the workmen's compensation law of any State, district, Territory, or possession of the United States, which rights and remedies when conferred by such law shall be exclusive; * * * *Provided*, That the jurisdiction of the district courts shall not extend to causes arising out of injuries to or death of persons other than the master or members of the crew, for which compensation is provided by the workmen's compensation law of any State, district, Territory, or possession of the United States.

The amendment to section 256 is of similar effect.

Those who have given attention to the subject will recall that a like effort was made in 1918, the same clauses and sections of the divisional code being then amended in more general terms, so as to save "to claimants the rights and remedies under the workmen's compensation law of any State." The difference between the present law and the earlier amendment is plain, that amendment being, in general terms, applicable to all claimants in civil causes of admiralty and maritime jurisdiction. The present law, on the other hand, excludes from its coverage masters or members of the crew of a vessel, thus limiting the act to localized or nonperipatetic workers. In other words, it applies only to workmen of practically fixed abode who would become charges upon the community in which they lived in case of poverty due to physical incapacity, and are in general subject to the laws and entitled to the privileges of their place of residence. The earlier amendment was declared unconstitutional by the Supreme Court of the United States in the case of *Knickerbocker Ice Co. v. Stewart* (1920), 253 U. S. 149, 40 Sup. Ct. 438, the court holding that the attempt of Congress to place maritime workers within the jurisdiction of a variety of courts and administrative authorities construing and applying laws of varying standards "would inevitably destroy the harmony and uniformity which the Constitution not only contemplated but actually established" in regard to maritime workers. (See further account of this case in the *MONTHLY LABOR REVIEW* for June, 1920, pp. 171-175.) The exclusion of purely maritime workers, i. e., the masters and members of the crews of vessels, is an attempt to eliminate the difficulty that was found by the Supreme Court (four justices dissenting) to exist in the amendment of 1917, though absolute certainty can not be assured until a decision is rendered by the Supreme Court, which, from past experience in this field of legislation, may be expected at no very distant date.

The report of the Committee on the Judiciary of the House of Representatives described the status of the workers likely to be affected. Dry-dock workers were regarded as practically men of fixed habitation, a representative of their association stating that such was the case, and that "it is thoroughly desirable that their compensation should be in general accord with that of other workers in a similar capacity, working in a shipyard, and it is desirable that they should have compensation covering them throughout their employ-

ment." This describes also the situation of the longshoremen, though part of their work is done on board ship. "They are part of the local labor force and are permanently subject to the same conditions as are other local workmen." Their labor takes them from point to point on the wharves and docks, unloading a dray or a railroad car, moving articles from different localities on the land at one moment and the next loading or unloading the cargo on the ship itself. "Their need for uniformity is one law to cover their whole employment, whether directly part of the process of loading or unloading a ship or not."

The matter of the enactment of this law has been one of considerable delay, the bill having passed the Senate on June 10, 1921, coming to the House on the next day and reaching the House Calendar only on January 31, 1922. It came up for consideration on the 26th day of May, and was passed after a brief discussion without a single objection being raised, several speakers urging its approval, some reference being made also to the desirability of Federal action in behalf of employees in interstate commerce by railroad. The contrasting situation with reference to these workers and those to whom the present act applies is that the latter have long expressed a general desire to be brought under compensation provisions, while the railroad workers have been sharply divided on the question, thus making it difficult to proceed with the enactment of a law on the subject.

Safety Standards—New York and Massachusetts.

A COMPARATIVELY recent development with regard to the establishment of safety regulations is the method by which special codes are drawn up in the form of orders of the industrial administrative authorities of the State. This makes it possible for special attention and study to be given to the subject, and promotes readjustment to conform with the results of experience. The Department of Labor of the State of New York has recently amended its lighting code, becoming effective May 1, 1922. The original order became effective July 1, 1918, with a revision of July 1, 1919. This order is rule 50, and in its amended form establishes minimum degrees of intensity of illumination for a wide range of industrial processes. Other rules regulate the shading of lamps and the distribution of light, while an appendix contains notes and regulations clarifying the rules and suggesting desirable illumination for various general classifications and work.

Other revisions relate to work in compressed air and to tunnel construction. These likewise were effective on the first day of May. Hours of labor and intervals of rest under varying rates of pressure are specified and the subject of decompression is regulated. Gauges, lighting, fire prevention, wash and rest rooms, sanitation and ventilation, and medical attendance and regulations are other topics considered. Separate regulations are given for safety provisions in tunnels and in caissons and places other than tunnels. The handling of explosives, codes of signals, and other details are regulated, and suggestions are given for the guidance of compressed air workers.

The rules relating to tunnel construction not under air pressure provide for care in case of accident, the handling and use of explosives, the duties of hoisting engineers, timbering, fire prevention, ventilation, sanitation, electrical equipment, etc.

The Department of Labor and Industries of Massachusetts has similarly revised its rules and regulations for the prevention of accidents in building operations. Under 19 heads directions are given with regard to general safety provisions, safety railings, protection from falling material, scaffoldings, ladders, floor openings, rigging, hoisting machines, etc. A tentative code has been formulated by the department with regard to lighting. This was promulgated in January, 1922, with a recommendation that employers test out the suggestions made with a view to ascertaining their adequacy and practicability. The code is much briefer and in more general terms than that adopted by the New York Department of Labor, but covers the same principal points.

In both the above States the rules and regulations issued by the proper authorities have the effect of law and their violation subjects the offender to punishment by fine, and in New York for repeated offenses imprisonment as well.

Nature of Penalty in Contempt Proceedings, Wisconsin.

A CASE recently decided by the Supreme Court of Wisconsin involved the consideration of the nature of the penalty inflicted for contempt of an injunctive order in a labor dispute (State ex rel. Rodd v. Verage (Apr. 11, 1922), 187 N. W. 830). The relator, Rodd, was sheriff of Oneida County, Wis., and had received into his custody one Peter Christ, sentenced to four months in jail for contempt of court. A few days before the termination of the sentence, the governor pardoned Christ, but the sheriff declined to recognize the validity of the pardon and refused to release him. The governor thereupon ordered the removal of Rodd from office and appointed his successor to fill his unexpired term as sheriff. This case was brought to decide the power of the governor to remove Rodd and the right of the latter to retain office for the remainder of his term.

The court found that Rodd had a property right in his position, from which he could be removed only for legal cause, the governor having no arbitrary power in this regard. This brought up for consideration the power of the governor to issue a pardon in a case involving the conditions that existed in the present situation. Christ, the prisoner, had been found guilty of violating an injunctive decree restraining various labor unions and individuals from intimidating, threatening, menacing or offering abuse or physical violence to the employees of the Rhinelander Paper Co. and their families, and from interfering in any manner with the company in securing employees, other than by peaceful persuasion and advice. Christ's continued violation of this injunction led the paper company to file a complaint stating the facts, and the court found that the injunction was being violated by various persons who were interfering in an unlawful way with the conduct of the company's business. This

violation made it plain to the court "that up to that time it had failed to secure the plaintiff in the rights which belonged to it under the law of the land. What was the court's further power in the premises? Was its authority in the matter of granting civil relief to the plaintiff at an end? Had impotency in the matter of enforcing civil rights been demonstrated?"

The court answered these questions by the sentence of imprisonment, not on the basis of the criminal law, which would have restricted the imprisonment to a term not exceeding 30 days, but on the basis of a statute entitled "Proceedings to punish contempts to protect the rights of parties in civil actions." (Ch. 150, Wis. Stats.) It was said to be within the power of the court to subject the offender to a punitive judgment under another provision of the law authorizing criminal punishment (secs. 2565 to 2569), which would make the incarceration criminal in character. As a matter of fact, this subject having been discussed in the court, it was ruled that the proceeding was under those provisions which relate to civil contempts, the remedial purpose of the sentence as protecting the company in the enjoyment of its legal rights standing out clearly. There was no question but that if Christ had been commanded by the court to perform a certain act, and had refused, the court might have sentenced him as a coercive measure to secure obedience and "under such circumstances the character of his imprisonment would have been beyond the ancient power of the king, or the present power of the governor to pardon." But it was claimed that where the act had been committed in violation of the order only the punitive remedy remained, in which private rights are not involved. But, the court asked, "if the court has the power to enforce the performance of an act in order to secure private rights, why does it not also have the power to prevent the performance of an act which constitutes an invasion of private rights?" The conclusion was reached that it would be a confession of impotency in the matter of granting private relief if it should be held that only criminal and not civil principles were involved, and that the imprisonment was in fact inflicted for the purpose of securing to the company its private rights, which it was the duty of the court to enforce, even though there was a punitive factor in the coercive restraint.

Tracing the history of the pardoning power from its practice under the common law as exercised by the King of England, it was found that the king could not pardon "where private justice is principally concerned in the prosecution of offenders." (Jones's Blackstone, Book 4, sec. 445). "Though the king may remit the punishment due to public justice, he can not confer a favor which may deprive another of his subjects of a right." (Chitty's Criminal Law, 742.) Since, therefore, the power of the governor to pardon was limited by the principles indicated, the pardon would be valid in this case only if the imprisonment was purely punitive and not civil and remedial. Since the contempt affected the private rights of the company in whose behalf the injunction had been issued, and it was for its protection that the imprisonment had been enforced, the court held that the governor had exceeded his power in attempting the pardon, and that the sheriff was acting within his powers in refusing to release Christ from the jail. The removal of Rodd had

therefore been without just cause and he was entitled to retain his office.

Dissenting opinions were written by two of the judges, a third dissenting without opinion, the opinions in dissent being based on the premise that the punishment was criminal and not civil, and as such was within the power of the governor to pardon.

Labor Laws of Australia, 1921.

A LEGISLATIVE digest¹ of the action of the parliaments of Australia during 1921 summarizes the principal bills and acts considered during that year. This is an official publication under the authority of the premier of New South Wales.

The Federal Parliament amended the conciliation and arbitration act so as to widen the sphere of selection for appointments as deputy president of the arbitration court; formerly the only persons eligible were justices of the high court and judges of State supreme courts. Barristers and solicitors of these courts of five years' standing are now eligible, and a deputy president or deputy presidents may be appointed to deal with a specific case or cases. Another amendment states clearly that any agreement made under the act by an individual or corporation will bind the successor or any assignee of the business of the party bound by the original agreement.

The Parliament of South Australia amended the industrial code with regard to the establishment of basic wages by making the determination of a tribunal effective for 6 months, instead of 12 as formerly, thus permitting greater flexibility and a prompter recognition of the effects of industrial changes.

In Queensland subcontractors for the first time are given protection. Plumbers, painters, carpenters, and similar workers who take subcontracts from a contractor are by a new lien act amendment given protection that is coordinate with that secured contractors on the lands on which buildings are being erected and on completed buildings or portions thereof. A wages act gives similar protection to craftsmen working for wages. The workmen's compensation law of this State was also amended so as to give the State an exclusive control of workmen's compensation insurance. Two pounds (\$9.733, par) is fixed as the minimum weekly payment for an injured worker who is the main or sole support of a wife, husband, parent, sister, or brother. An initial amount of 5s. (\$2.17, par) is given for each child under 14, up to a maximum of 30s. (\$7.30, par), thus making the maximum possible payment to an injured worker £3 10s. (\$17.03, par) per week with a total limitation of £750 (\$3,649.875, par). The definition of "worker" now includes persons earning as much as £10 (\$48.665, par) per week instead of £400 (\$1,946.60, par) per annum as formerly. Salesmen, canvassers, and collectors, if employees, likewise come under the definition, as do share farmers and their employees.

Another act relates to a form of labor camp, making the owner of a shearing station responsible for the accommodations and sanitary

¹ New South Wales. Australian legislative digest. Published under authority of the Premier of New South Wales. Sydney, 1922. 63 pp.

arrangements for shearers, even though he lets the contract for shearing to another person.

The New Zealand Employers' Federation Industrial Bulletin for March 6, 1922, reports changes effected by the consolidated "Shops and offices act, 1921." Alterations in established customs are noted specifically restricting employment of boys under 18 years of age and of women of any age to not more than 15 minutes after the statutory closing time of any mercantile establishment, such extension being permitted only for the purpose of completing any work commenced prior to closing time; nor can they be employed at all after 9.30 p. m., except on Christmas and New Year eves. Another change relates to the keeping of a wages and time book for all employees in mercantile establishments. Employees are to sign this book immediately after the receipt of wages, the same to be kept open at all times for inspection by any inspector under the act. Other provisions relate to compensatory time where stores of a certain kind are kept open on statutory half holidays, double time off being required in certain classes of establishments, while in others the time worked must be paid for at the rate of time and a half and equivalent time off be given.

Labor Legislation in Canada.

BEARING the title given above, the Department of Labor of Canada has issued a pamphlet reproducing the labor legislation of the Dominion and the various Provinces for the year 1921. Excepted is the legislation of Saskatchewan, whose legislature did not meet until December 8, and that of the second session of the legislative assembly of New Brunswick, which opened on December 29, 1921.

The order of presentation is to give the enactments of the Dominion Government first, the Provinces being taken up in geographical order from east to west. Dominion legislation reproduced relates chiefly to the subject of immigration and mainly that of Chinese. In Prince Edward Island vocational education was the only subject considered, and in New Brunswick fire prevention and housing; these are hardly classifiable as labor laws, though of indirect effect. Indeed, the classification of labor legislation made use of by the Canadian Department of Labor includes a number of subjects which are of indirect rather than direct application to the actual status or relation of employers and employees. Ordinances of the Yukon Territory were noted in the MONTHLY LABOR REVIEW for January, 1922.

Nova Scotia.

A NEW law was enacted in Nova Scotia on the subject of steam boiler inspection, repealing the act of 1914 on this subject. The statute relates to stationary boilers having a steam pressure of 15 pounds or more to the square inch and to steam boilers in excess of 25 horsepower, railway and marine engines and steam boilers used solely for horticultural or agricultural purposes being excluded. The act prescribes no standards in itself, but authorizes the governor in council to make regulations to insure safety and efficiency and to

provide for inspection and the enforcement of the regulations prescribed.

Another act authorizes the taking over and operating by the Crown of mines whose operation has ceased but is considered necessary or expedient. Workmen needed to carry on the operations must render service when so required, under penalty of fine or imprisonment, but at wages not less than the usual and customary rates for the respective classes of service.

An amendment to the workmen's compensation act reflects the tendency toward lower wage rates in fixing the estimated annual earnings of fishermen working on shares at \$780, instead of \$1,200 as contained in chapter 61, acts of 1919.

Other acts relate to woodmen's liens, miners' liens, and the furnishing of lists of employees liable to a poll tax; employers with 10 or more such employees may be required to furnish such lists, and are authorized to retain the amount of the tax out of the salary or wages due and to pay over same to the collector.

Quebec.

A NEW piece of legislation in this Province is one (ch. 46) entitled "The municipal strike and lockout act." This act is limited in its application to disputes of municipal employees relating to wages, hours, and union membership. It is unlawful for employers to declare or cause a lockout or for employees to strike on account of disputes on this subject before submission to a board of arbitration. Such boards are created on application and are to render their awards within five days; however, the effect of the award is not indicated.

The provisions of articles 3790 to 3796 of the revised statutes of 1909 relating to scaffolding are replaced by a new set of regulations. These require the employment of an inspector of scaffoldings in cities and towns "within the limit of which a public building within the meaning of article 3749 is being built or altered." This inspector must give a certificate for all scaffolding 15 feet or more in height, and the standards of construction will be furnished by the Department of Labor, compliance being required under penalty of a fine not exceeding \$50 and costs. Other laws reproduced relate to the examination and licensing of chauffeurs and electricians, vocational education, etc.

Ontario.

A N EXTENSIVE law on the subject of vocational education is reproduced, and also amendments to the mothers' allowances act. Prison labor and a two-platoon system for fire departments are other acts that only require mention; so also of the law relating to the examination, etc., of stationary and hoisting engineers.

The minimum wage act is amended so as to give the board power to temporarily suspend or vary orders or revise them in accordance with special or changed conditions in any industry or establishment; also to make different orders for the same industry or industries in different localities. The factory inspection law was amended so as to authorize inspectors under it to report violations of the minimum wage act to the minimum wage board. Other amendments to this law prohibit the employment of children under 14 years of age in any shop except those in which only the employer's own family are em-

ployed in home work, and authorize the factory inspector to require seats to be provided for female employees. Provision is made in another act for the establishment of employment service councils, either provincial or local, to assist in the placement of labor; also for advances of traveling expenses of workers where the employer agrees to repay the agency therefor.

Manitoba.

THE legislation reproduced for this Province is amendatory only, relating to cooperative associations, housing, mothers' pensions, employment in mercantile establishments, and workmen's compensation. The provision as to mercantile establishments relates to hours of closing, permitting certain articles of food, confectionery, fruit, tobacco, etc., to be sold after the ordinary hours of closing if the restricted articles are partitioned off so as not to be accessible for sale.

The amendments to the workmen's compensation law increase burial expenses from \$100 to \$150 and strike out the \$60 monthly maximum limitation on benefits to widows with dependent children and to orphans. Most striking is the increase of the maximum weekly benefit in cases of permanent total disability from \$6 to \$15 per week, striking out also the provision which limited the benefits of low-paid workers to the actual earnings where less than the minimum compensation is allowed.

Alberta.

AS IN the case of Manitoba, labor legislation last year in Alberta was amendatory, most changes being of minor importance. Compensation benefits were increased in the case of a widow or invalid husband being the sole dependent from \$30 to \$35 per month, the maximum award where there are children under 16 years of age to be \$65 per month instead of \$60. Where only children survive, the monthly benefits are \$12.50 each instead of \$10 as formerly with a maximum of \$50 instead of \$40. A new subsection is added authorizing an allowance where a person not otherwise entitled to benefits assumes the position of caretaker or foster mother for the continuance of the household of a deceased worker, such caretaker becoming entitled to benefits as if she were a widow of the deceased. The benefits for permanent total disability are changed from a fixed payment of \$10 per week with additions for dependents up to a maximum of \$16, to an award based on the average weekly earnings of the injured worker, 55 per cent being the compensation allowance. The schedule for permanent partial disabilities is also stricken out, and 55 per cent of the wage loss given as a benefit, continuing through the life of the worker. Other changes relate to computation of earnings, lump-sum settlements, etc.

British Columbia.

THE legislative body for this Province considered a larger range of subjects than any other noted. A unique provision in some of the laws is one directing that they shall come into effect when similar legislation shall have been enacted in other Provinces of the Do-

minion. This proviso attaches to the law regulating the employment of children, one fixing the hours of labor, and acts relating to night employment of women and of young persons, the obvious intent being to adopt such progressive legislation only when conditions in other Provinces are such as not to place employers at the supposed disadvantage that would result from unequal conditions. The general act as to the employment of children fixes the minimum age at 14 for boys and 15 for girls, registers being required of all under 16 years of age. These laws apply to "industrial undertakings" which shall not include agriculture, horticulture, or dairying, nor employments in which only members of the same family are engaged.

The hours of labor act applies also to industrial undertakings, which include mines and quarries, manufactures, shipbuilding, electric plants and engineering works generally. The hours fixed are 8 per day and 48 per week, with variations for the daily work time to provide for a shorter day on one day of the week. Continuous process may be carried on by shifts working not more than 56 hours per week on the average. Regulations may be made by the lieutenant governor in council which shall prescribe exceptions, either permanent or temporary; agreements may also be recognized by the Minister of Labor concerning the daily period of work, but not for work more than 48 hours per week.

The scope of the acts relating to night employment of women and children is the same as the foregoing acts, i. e., industrial undertakings. In each case the term "night" means the period between 8 p. m. and 7 a. m., the law as to women applying without discrimination of age, while as to young persons it means those under 18. Both acts carry provisions for exceptions in cases of emergency, while that with regard to young persons permits those over 16 years of age to be employed at night for continuous processes.

A fifth act to be operative only when other Provinces accept similar provisions is one relating to vacation at childbirth, providing for release from employment for six weeks prior to that event on the production of a medical certificate, and of six weeks following it; also requiring an allowance of one-half an hour twice a day during working hours in the case of mothers nursing their children.

Other acts amend the mine regulation act, the minimum wage act, the mothers' pension act, the act regulating the school attendance of children, the inspection of steam boilers, etc. The fundamental provisions of these laws are little changed except that the school attendance must be to the age of 15 years instead of 14.

A new piece of legislation is the "superannuation act" applicable to provincial, municipal, and school board employees, and optionally to every employer not included in the above "who has entered into an agreement in writing with all of his employees, or with any group of his employees, in the manner prescribed by the regulations," for the purposes of establishing a superannuation system. This agreement must be filed with the civil service commission, which is charged with the general administration of the act. The system is contributory, the standard contributions being 4 per cent of the employee's wages, and a like sum from the employer. Employees 35 or more years of age may request larger deductions, but not more than 8 per cent. Interest allowed is 5 per cent, and superannuation benefits

become available on reaching the age of 60 (55 for females) on application for superannuation or on retirement by competent authority; provision is also made for the retirement of incapacitated persons without reference to age.

New Danish Law on Employment Exchanges and Unemployment Insurance.¹

A NEW law regulating employment exchanges, unemployment insurance, and productive unemployment relief through employment at public works was enacted in Denmark on December 22, 1921, and came into force on January 1, 1922. A brief outline of this law, taken from the British Labor Gazette, was published in the MONTHLY LABOR REVIEW for June, 1922. The following more extended statement is from the Danish official publication noted.

Employment exchanges.—The system of public free employment exchanges established by the law is based upon a network of communal employment exchanges recognized, subsidized, and supervised by the State. The law intrusts the municipal employment exchange at Copenhagen with the functions of a central employment office for the entire country and provides that other communal employment exchanges may be charged with the functions of central organs for specified parts of the country. In order to be recognized by the State, communal employment exchanges must be administered by an equipartisan commission of employers and workers chosen by the communal councils. One of the most important provisions of the law is that legally recognized employment exchanges are prohibited from sending applicants for work to establishments involved in a strike or lockout.

Unemployment insurance.—The unemployment insurance system is based upon voluntary insurance. The unemployment insurance funds created by the interested parties must comply with conditions specified in the law and are recognized and subsidized by the State. The State subsidy is equal to half the amount collected in contributions from the insured persons. The communes may also subsidize these funds in an amount not exceeding one-third of the contributions of the insured persons residing within the territorial limits of the commune.

The unemployment benefit may not exceed two-thirds of the current wages earned by the insured person nor may the daily benefit exceed 4 kroner (\$1.07, par) in the case of persons with dependents or 3.50 kroner (94 cents, par) in the case of unemployed persons without dependents. In no case may the benefit be less than 1 krone (27 cents, par) per day. The law provides that the first six days of unemployment shall not be compensated by unemployment funds. This waiting time may eventually be extended by law to 15 days. Unemployment benefits may also be paid for partial unemployment (short time) provided that the loss of time exceeds one-third of the regular working time.

Recognized unemployment funds are obligated to notify the proper employment exchange of the name, address, last place of employment,

¹ Denmark. Arbejderforsikrings-Raadet, Arbejdsnaevnet, Arbejdsdirektoratet samt Arbejdsraadet. Social Forsorg, Copenhagen, Vol. XVIII, No. 1, 1922. (Joint publication.)

and wage of unemployed members, unless an agreement has been concluded by the unemployment fund and the employment exchange that unemployed members must in person report at the employment exchange before unemployment benefits will be paid to them. Unemployment benefit may not be paid to members who without justifiable reason refuse to accept employment suited to their qualifications which is offered them by the committee of the fund or by the employment exchange. The fact that the wages offered are lower than those lately earned by the unemployed member shall not be considered a justifiable reason for refusal of employment, provided that the wages offered are not lower than those normally paid in the district for the work in question.

Recognized unemployment insurance funds may conclude agreements with other funds, even with foreign funds, for reciprocal payment of unemployment benefits to members. Such agreements must, however, be approved by the director of the labor office in the Ministry of the Interior.

Special central unemployment fund.—In order to make provision for the unemployed during economic crises of exceptional seriousness the law provides that a special central unemployment fund shall be created with the twofold object of paying unemployment allowances to unemployed persons and of subsidizing productive unemployment relief work. Recourse is had to this fund for a particular industry or for all industries in general on the decision of the Minister of the Interior after consultation with a committee of 16 members appointed by Parliament.

This central unemployment fund is constituted by means of employers' contributions (payable by employers subject to compulsory accident insurance), by State grants, and by contributions from recognized unemployment insurance funds. The amount of the employers' contributions is fixed by the Minister of the Interior with due consideration for the average percentage of unemployment occurring in each industry. The State grant to the central unemployment fund for 1922 is 7,000,000 kroner (\$1,876,000, par), and in subsequent years it will be equal to one-third of the sum disbursed by the fund during the preceding year. Recognized unemployment insurance societies pay into the central fund quarterly 5 per cent of the total amount of the contributions received by them.

Unemployment benefits will be paid from the central fund in periods of exceptional unemployment to unemployed persons who are members of a recognized insurance fund but have exhausted their right to benefit, or have dependents, or satisfy certain other conditions which will be fixed by special regulations. This unemployment benefit will be paid by the local authorities of the district in which the unemployed person is resident, and two-thirds of the sums thus paid out will be refunded to the local authorities by the central fund.

Productive relief work.—Only persons unable to find employment on productive relief work will be entitled to unemployment benefit from the central fund. The organization of relief works will be encouraged by means of a grant from the central fund, the amount being proportionate to the number of persons employed on such relief work, but not exceeding 3 kroner (80 cents, par) per person per day.

The nature and conditions of employment must be such as to secure the employment of the largest possible number of unemployed persons, and to make it more advantageous for the unemployed to work on such relief works than to receive unemployment benefit, but less advantageous than to get back to their normal work.

The organization of relief works will be controlled by equipartisan commissions, and these commissions may decide that certain private undertakings shall be considered as relief works.

The law further provides for grants from the central fund to educational courses, organized for the unemployed in districts where there is considerable unemployment. Attendance at these courses may be declared compulsory for unemployed persons in receipt of unemployment benefit.

Japanese Health Insurance Law.

A SPECIAL report from the acting commercial attaché at Tokyo, Japan, summarizes the provisions of a health insurance law recently passed by the Japanese Diet. The text of the law consists of 91 articles but in brief it provides that employees in factories of every description, both official and private establishments, shall carry health insurance if their annual income is 1,200 yen (\$598.20, par) or less. The health insurance law is to be administered by the Government and the insurers are to be the Government and organized health insurance societies. These societies are to be organized by factory proprietors and their employees and one-tenth of the expense of said societies is to be borne by the Government.

The insurance premium, which must not exceed 3 per cent of the daily wage of the employee, is paid half by employers and half by the employees. Insurance is paid to employees in case of sickness, accident, death, and childbirth.

Industrial Accident Law of Spain Amended.¹

THE Spanish industrial accident law of January 30, 1900, was revised and amended by the law of January 10, 1922, effective 20 days after promulgation. The most important changes and additions are those which broaden the coverage and provide for accident prevention and industrial rehabilitation.

The employer is held responsible for accidents to his workmen caused by or occurring in the course of the employment, unless the accident is due to force majeure not connected with the work in which the accident occurs. Carelessness due to familiarity with the work does not exempt the employer from responsibility.

¹ Spain. Ministerio de Fomento. Boletín Oficial de la Dirección General de Comercio, Industria y Minas, Madrid, January, 1922, pp. 15-22.

Coverage.

THE coverage is broadened to include (1) all factories, shops, and industrial establishments, not merely those using mechanical power as in the old law; (2) agricultural, forestry, and stock-raising establishments which regularly employ more than six men or use power machinery, the responsibility of the employer in the latter case being only for those running the power machinery; (3) actors and administrative employees of theaters not receiving more than 15 pesetas (\$2.90, par) daily; (4) firemen; (5) clerks and traveling salesmen of mercantile establishments; (6) the salaried personnel of hospitals, insane asylums, poorhouses, etc.; and (7) offices or branch offices of factories, etc., covered by the provision of the act, in respect to their personnel receiving less than 5,000 pesetas (\$965, par) annually. The provisions of the act apply to the State arsenals and to factories making arms and powder, also to provincial and municipal workmen and workers engaged on public works.

Compensation.

IN CASE of temporary incapacity the employer must pay the injured worker compensation equal to three-fourths of his daily wage from the date of the accident until his return to work, without deduction for holidays. If the incapacity continues for more than a year, the compensation will be fixed in conformity with the provisions relating to permanent incapacity.

In case of permanent total incapacity for any kind of work, the compensation shall be equal to two years' wages. However, if the accident causes total incapacity for the occupation in which the worker was previously engaged, but does not prevent him from engaging in some other kind of work, the compensation will be equal to 18 months' wages. If the accident causes permanent partial disability for the injured worker's usual employment, the employer will pay compensation equal to one year's wages. The regulations to be issued within 6 months after promulgation of the law will define the injuries which are to be considered as constituting the various degrees of incapacity.

Under certain conditions the employer is also required to furnish medical and pharmaceutical aid during the period of disability.

If the accident results in the death of the worker, the employer must defray the funeral expenses in the proportion fixed in the regulations and in addition pay compensation on the following scale to the widow, to legitimate descendants (or illegitimate if recognized) under 18 years of age or incapable of working, and also to ascendants:

A sum equal to two years' wages if the worker leaves a widow with children, or grandchildren who are orphans and dependent upon her, or if the victim leaves children or grandchildren.

A sum equal to a year's wages, if he leaves a widow without children or other descendants of the deceased.

A sum equal to 10 months' wages to the father, mother, or grandparents of the deceased, if they are in necessitous circumstances, over 60 years of age, or incapable of working, provided that the worker leaves no widow or children or grandchildren, and if there are two or more relations in the ascending line. If he leaves only one such relation, the compensation payable will be equal to six months' wages.

Under certain conditions the same provisions apply in the case of the death of women as the result of accident.

Compensation will be increased by one-half if the accident occurs in an establishment in which the machinery is not provided with specified safety appliances.

Instead of the compensation provided in the act the employer may pay life pensions, provided he offers the heirs satisfactory guaranties as provided in the act.

Accident Prevention and Occupational Rehabilitation.

THE Institute of Social Reform is required to submit to the Ministry of Labor a scheme of regulations to insure the effective application of means for the prevention of industrial accidents, and the safety and hygienic measures considered necessary. The Ministry of Labor is to organize a special department for the rehabilitation of the victims of industrial accidents, in order to train them for some occupation in which they will be able to earn a livelihood.²

Insurance Against Industrial Accidents.

EMPLOYERS are allowed to take out insurance covering their liability for accidents to their employees, but this provision does not deprive the workers of the right to bring an action against the employer directly if they prefer. Insurance societies complying with the conditions of the Commercial Code and employers' mutual benefit societies are allowed to write this insurance and special privileges are conferred on the latter organizations.

If the employer or insurance company fails to pay the compensation for the death of a worker or for his total and permanent incapacity for work, the compensation will be paid immediately from a special guaranty fund. This fund will be formed by the addition of 0.1 peseta (1.93 cents, par) to each taxpayer's annual payment of the industrial and commercial tax, tax on income from investments, etc.

The provisions of this law apply also to foreign workers and their heirs residing in Spanish territory and to their heirs living abroad at the time of the accident if Spanish subjects enjoy similar advantages in the country in question either under the laws of the country or because of a special treaty.

² For the decree establishing this institute, see p. 205.

LABOR ORGANIZATIONS.

Membership of American Trade-Unions, 1915 to 1920.

THE following table, showing the membership of American trade-unions, by years, from 1915 to 1920, was compiled by Prof. George E. Barnett, of Johns Hopkins University, and published in the American Economic Review supplement of March, 1922. The data were obtained from reports of the American Federation of Labor, from proceedings of the unions, and by correspondence with the unions. The figures include the Canadian membership of national trade-unions which also have members in the United States, but do not include the membership of independent local unions in the United States. The compiler states, however, that since the membership of these local unions approximately equals that of the Canadian local unions affiliated with international unions the figures may be regarded as fairly representative of the membership of trade-unions in the United States.

Union.	1915	1916	1917	1918	1919	1920
<i>Mining and quarrying.</i>						
Mine, mill, and smelting workers.....	16,700	16,100	17,900	16,700	17,800	21,100
Quarry workers.....	3,600	3,500	3,500	3,100	3,000	3,000
United mine workers.....	311,600	318,000	352,000	413,400	393,800	393,600
Total.....	331,900	337,600	373,400	433,200	414,600	417,700
<i>Building trades.</i>						
Bricklayers and masons.....	75,900	73,800	78,500	71,600	65,200	73,600
Bridge and iron workers.....	12,300	14,200	16,000	18,600	24,100	27,700
Building laborers.....	11,100	8,000	(1)			
Carpenters, United.....	194,000	212,800	247,200	321,700	346,000	371,900
Cement workers.....	1,600	(1)				
Ceramic tile layers.....	3,000	2,800	2,800	2,500	(1)	
Composition roofers.....	1,200	1,200	1,200	1,200	1,000	1,800
Compressed air workers.....	1,200	1,400	1,600	(1)		
Electrical workers.....	36,200	36,200	41,500	54,400	131,200	139,200
Elevator constructors.....	2,700	2,800	2,900	2,900	3,000	3,100
Heat and asbestos workers.....	1,000	1,000	1,000	1,600	1,800	2,200
Hod carriers.....	31,900	32,400	32,400	36,700	40,000	42,000
Marble workers.....	1,600	600	1,000	1,000	1,000	1,200
Painters.....	75,300	78,200	85,200	84,500	82,700	103,100
Plasterers.....	18,300	18,400	19,000	19,000	19,000	19,400
Plumbers.....	41,000	45,000	52,000	60,000	60,000	75,000
Sheet metal workers.....	17,800	17,500	17,600	18,300	20,200	21,800
Slate and tile roofers.....	600	600	600	600	600	(1)
Wood and metal lathers.....	6,000	6,000	6,000	6,000	6,000	5,900
Total.....	532,700	552,900	606,500	700,600	801,800	887,900
<i>Metal, machinery, and shipbuilding.</i>						
Automobile, aircraft, etc.....	13,000	17,200	19,500	23,200	38,100	45,400
Blacksmiths.....	8,500	9,700	12,000	18,300	28,300	48,300
Boiler makers.....	17,300	18,200	31,200	55,500	84,900	103,000
Cutting die makers.....	300	200	200	200	200	200
Diamond workers.....	300	300	400	400	500	600
Draftsmen's union.....					1,800	3,500
Engineers, Amalgamated.....	3,400	3,200	3,000	2,800	2,600	(1)
Foundry employees.....	600	800	1,300	3,300	5,400	9,100
Iron, steel, and tin workers.....	6,500	6,700	11,000	16,100	19,700	31,500
Jewelry workers.....	5,300	5,300	4,800	4,800	5,100	8,100
Machinists.....	71,900	100,900	112,500	143,600	254,600	330,800
Metal polishers.....	11,000	11,500	12,000	13,500	13,000	12,500
Molders.....	50,000	50,000	50,000	50,000	50,000	50,000
Pattern makers.....	9,500	6,500	7,000	8,800	9,000	9,000

* 1 Union disbanded or amalgamated with another union.

Union.	1915	1916	1917	1918	1919	1920
<i>Metal, machinery, and shipbuilding—Con.</i>						
Pocket knife grinders.....	300	200	(¹)	-----	-----	-----
Railway carmen.....	29,300	30,800	39,000	53,000	100,400	182,100
Saw smiths.....	100	100	100	100	100	100
Stove mounters.....	1,100	1,200	1,700	1,900	1,900	1,900
Wire weavers.....	300	300	300	300	300	400
Total.....	220,400	263,100	305,500	396,200	615,900	836,500
<i>Paper, printing, and bookbinding.</i>						
Bookbinders.....	8,500	9,300	11,400	14,500	16,400	20,700
Lithographers.....	3,500	4,200	4,600	4,900	5,600	6,109
Lithograph press feeders.....	400	400	400	400	(¹)	-----
Machine printers.....	500	500	500	500	500	500
Paper makers.....	4,500	5,200	6,400	6,000	5,700	7,400
Photo engravers.....	4,800	5,100	5,100	5,100	5,000	5,900
Poster artists.....	400	400	400	400	400	400
Printing pressmen.....	22,700	29,000	33,000	34,000	34,000	35,000
Pulp and paper mill workers.....	4,300	4,400	6,500	8,000	8,400	9,500
Steel plate engravers.....	-----	-----	-----	-----	100	200
Steel plate printers.....	1,300	1,200	1,300	1,200	1,300	1,400
Steel plate transferers.....	100	100	100	100	100	100
Stereotypers.....	4,900	4,900	5,200	5,300	5,400	5,900
Tip printers.....	200	300	300	300	(¹)	-----
Typographical union.....	59,100	60,700	61,600	63,300	64,700	70,500
Total.....	115,200	125,700	136,800	144,000	147,600	163,600
<i>Lumber and woodworking.</i>						
Box makers and sawyers.....	11,000	8,000	7,000	(¹)	-----	-----
Coopers.....	3,900	3,600	3,900	4,000	4,000	4,300
Piano and organ workers.....	1,000	1,000	1,500	2,000	2,000	3,200
Shingle weavers.....	700	400	500	(¹)	-----	-----
Timber workers.....	-----	-----	200	2,300	3,200	10,100
Upholsterers.....	3,500	3,900	4,000	4,800	5,500	5,600
Wood carvers.....	1,000	1,100	1,200	1,200	1,000	1,200
Total.....	21,100	18,000	18,300	14,300	15,700	24,400
<i>Chemical, clay, glass, and stone.</i>						
Brick and clay workers.....	2,900	3,200	2,800	2,500	2,700	5,200
Flint glass workers.....	9,400	9,400	9,800	9,900	9,500	9,900
Glass bottle blowers.....	10,000	10,000	10,000	10,000	10,000	10,000
Glass work, amalgamated.....	1,100	(¹)	-----	-----	-----	-----
Granite cutters.....	13,500	13,100	12,500	11,900	10,700	10,500
Potters, operative.....	7,800	7,700	7,600	7,800	7,400	8,000
Powder workers.....	200	300	300	400	300	300
Stone cutters.....	4,400	4,300	4,100	4,200	3,900	4,000
Window glass workers.....	3,800	4,100	4,600	4,300	3,700	3,800
Total.....	53,100	52,100	51,700	51,000	48,200	51,700
<i>Food, liquor, and tobacco.</i>						
Bakery workers.....	15,800	17,500	18,900	20,400	21,000	27,500
Brewery workers.....	52,000	49,600	45,000	45,000	40,000	34,100
Cigar makers.....	39,400	37,700	41,600	39,500	36,300	38,800
Tobacco workers.....	3,900	3,400	3,200	3,300	4,200	15,200
Total.....	111,100	108,200	108,700	108,200	101,500	115,600
<i>Restaurant and trade.</i>						
Butcher workmen.....	1,800	1,700	1,500	(¹)	-----	-----
Hotel employees.....	60,600	59,000	64,600	65,200	60,800	60,400
Hotel workers.....	5,000	5,000	5,000	5,000	5,000	5,000
Meat cutters.....	6,100	7,300	9,600	29,100	66,300	65,300
Retail clerks.....	15,000	15,000	15,000	15,000	15,000	20,300
Total.....	88,500	88,000	95,700	114,300	147,100	151,500
<i>Textile.</i>						
Elastic goring weavers.....	100	100	100	100	100	100
Lace operatives.....	1,200	1,100	1,200	1,200	900	900
Machine textile printers.....	500	500	500	500	500	500
Print cutters.....	400	400	400	400	400	400
Spinners.....	2,200	2,200	2,200	2,200	2,200	2,200
Textile workers.....	18,900	25,500	37,100	45,900	55,800	104,900
Total.....	23,300	29,800	41,500	50,300	59,900	109,000

¹ Union disbanded or amalgamated with another union.

Union.	1915	1916	1917	1918	1919	1920
<i>Clothing.</i>						
Cloth hat workers.....	3,000	6,300	8,800	9,400	9,500	10,600
Clothing workers, amalgamated.....	38,000	48,000	57,000	81,000	144,000	177,000
Garment workers.....	42,200	43,000	44,900	45,900	46,000	45,900
Glove workers.....	1,000	1,000	800	700	700	1,000
Hatters.....	8,500	8,500	8,500	9,100	10,000	10,500
Ladies garment workers.....	65,300	85,100	82,300	89,500	90,500	105,400
Tailors.....	12,000	12,000	12,000	12,000	12,000	12,000
Total.....	170,000	203,900	214,300	247,600	312,700	362,400
<i>Leather.</i>						
Boot and shoe workers.....	35,600	39,000	39,600	35,800	36,800	46,700
Horse goods, workers on.....	1,800	1,800	(¹)			
Leather workers.....			3,200	4,100	6,700	11,700
Shoe workers, United.....	12,000	15,000	20,000	23,000	39,000	33,000
Traveling goods.....	900	1,000	(¹)			
Total.....	50,300	56,800	62,800	62,900	82,500	91,400
<i>Transportation.</i>						
Commercial telegraphers.....	1,000	1,000	1,000	1,000	2,000	2,200
Locomotive engineers.....	73,700	72,900	75,200	80,800	83,100	86,900
Locomotive firemen.....	83,100	93,600	103,000	113,400	123,300	125,900
Longshoremen.....	25,000	25,000	25,500	26,000	31,300	74,000
Maintenance-of-way employees.....	8,100	8,900	9,700	5,600	54,200	60,000
Marine engineers.....	9,100	9,300	10,500	7,900	12,800	17,000
Masters, mates, and pilots.....	4,500	4,000	4,300	4,800	6,200	7,100
Pavers.....	1,600	1,500	1,500	1,700	1,800	1,900
Paving cutters.....	3,500	3,300	3,200	3,200	2,600	2,600
Railroad conductors.....	48,500	48,100	48,700	50,300	52,400	56,000
Railroad patrolmen.....						2,600
Railroad signalmen.....	800	900	800	900	6,200	12,300
Railroad station agents.....	3,500	3,500	4,000	4,500	5,000	8,800
Railroad station employees.....	13,400	18,700	22,200	29,400	32,700	35,200
Railroad station men.....					6,100	4,500
Railroad telegraphers.....	25,000	25,000	27,200	37,700	44,600	48,700
Railroad trainmen.....	130,500	143,200	159,100	181,400	196,900	184,600
Railway clerks.....	5,000	5,100	6,800	17,200	71,400	186,000
Seamen.....	16,000	21,700	32,200	37,100	42,700	65,900
Sleeping car conductors.....						1,200
Steam shovel men.....	2,700	2,000	2,900	3,700	6,000	8,000
Street and electric railway employees.....	58,900	64,600	73,700	78,600	89,700	98,700
Switchmen.....	9,000	9,300	10,200	10,700	11,800	14,000
Teamsters.....	51,600	59,000	70,300	72,900	75,600	110,800
Tunnel constructors.....	1,500	2,700	3,400	2,400	2,000	3,000
Total.....	576,000	623,300	695,400	777,300	958,800	1,216,700
<i>Theaters and Music.</i>						
Actors.....	8,700	9,000	4,700	3,000	3,000	6,900
Musicians.....	60,000	60,000	60,400	65,000	65,400	70,000
Theatrical stage employees.....	18,000	18,100	18,600	18,600	18,500	19,600
Total.....	86,700	87,100	83,700	86,600	86,900	96,500
<i>Public Service.</i>						
Federal employees.....			8,100	10,900	20,400	38,500
Fire fighters.....				2,300	15,400	22,100
Letter carriers.....	33,200	33,400	32,800	32,500	33,900	22,400
Post office clerks.....	25,000	25,000	25,000	25,000	25,000	25,000
Post office clerks, Federal.....	3,200	4,200	8,100	10,100	14,500	16,200
Railway Mail Association.....	13,800	13,500	13,400	13,500	14,700	14,800
Railway postal clerks.....	2,000	2,700	(¹)			
Teachers, American Federation of.....		2,700	2,100	1,000	2,800	9,300
Total.....	76,700	81,500	89,500	95,800	126,700	160,000
<i>Miscellaneous.</i>						
Barbers.....	34,100	35,900	39,800	38,400	35,900	44,200
Bill posters.....	1,400	1,500	1,500	1,600	1,600	1,600
Broom makers.....	700	800	700	700	1,000	1,400
Brush makers.....	200	200	200	200	(¹)	
Fur workers.....	3,700	5,700	8,100	10,000	10,800	12,100
Horseshoers.....	5,700	5,800	5,400	5,400	5,400	5,400
Laundry workers.....	4,100	4,300	4,600	5,500	6,000	6,700
Oil and gas well.....					4,500	20,900
Stationary firemen.....	16,000	17,000	17,000	17,100	20,500	23,600
Steam engineers.....	21,000	21,000	22,000	23,000	25,000	32,000
Trade and Federal unions.....	23,800	35,200	53,400	66,500	65,200	86,800
Total.....	110,700	127,400	157,700	168,400	175,900	240,700
Grand total.....	2,567,700	2,755,400	3,041,500	3,450,200	4,095,800	4,924,300

¹ Union disbanded or amalgamated with another union.

Trade-Unionism in Canada in 1921.

THERE were 2,668 trade-union branches in Canada at the close of 1921, with a combined membership of 313,320, a decrease of 60,522 as compared with 1920, according to the Eleventh Annual Report on Labor Organization in Canada, published by the Dominion Department of Labor (Ottawa).

The following figures from this document show the membership in 1921 of the various branches and the changes in such membership from 1920 to 1921:

Class of union.	Membership.	
	1921	Gain or loss compared with 1920.
International.....	222, 896	-44, 351
Noninternational.....	24, 480	- 926
Independents.....	15, 644	-15, 545
National and Catholic.....	45, 000	No change.
One Big Union.....	5, 300	+300

The One Big Union refused to give information relative to that body's standing. The department learned, however, that in the late summer of 1921 per capita dues had been paid on the above listed membership. The increase noted, however, does not represent new members but those who had not paid their dues in 1920 when the membership was reduced by 36,150. Sixteen delegates and 3 executive board members attended the union's third convention which was held in September, 1921. According to the report of the secretary-treasurer, "the conditions prevailing made it difficult to organize new units."

As many organizations keep no separate records of their male and female members, it was not possible to secure exact figures regarding female trade-unionists. The total reported female membership for the Dominion was 9,247, which included women in the national and Catholic and noninternational bodies. Only 9, however, out of 98 international organizations gave information on the subject.

In 1921 efforts were made to establish a permanent association to be known as the Federation of Catholic Workers of Canada. A constitution was adopted to go into effect January 1, 1922, and officers were elected. Both the American Federation of Labor and the Canadian Trades and Labor Congress are unfavorable to the organization of wage earners on a creedal basis.

The Trades and Labor Congress reported to its 1921 convention a membership of 173,778, a slightly higher figure than for the preceding year.

The expenditures for trade-union benefits in the United States and Canada for 1921 by the central international organizations aggregated \$24,089,836, an advance of \$4,626,226 over 1920.

Four of the 15 noninternational organizations are reported as having paid \$20,775 in benefits, the greatest amount ever expended by the head offices of these bodies.

The disbursements of the local branch unions in Canada to their own members in addition to what they may have received from headquarters for 1921 aggregated \$1,503,555, an increase of \$1,179,400 over 1920. The distribution of these benefits was as follows:

Death benefits.....	\$197,306
Unemployed benefits.....	55,557
Strike benefits.....	1,046,137
Sick benefits.....	129,211
Other benefits.....	75,344

The final chapter of the Eleventh Annual Report on Labor Organization in Canada gives data regarding the 41 nontrade-union associations of the Dominion which have a combined reported membership of 43,298. Among the more important associations are those of the school teachers and the ex-service men.

Amalgamation and Federation of British Trade-Unions.

IN AN article on the "Present position of trade-unions," appearing in the Labor Magazine (London), for May, 1922 (pp. 5-7), the author discusses the tendency toward amalgamation and federation in the British trade-union movement for the purpose of securing unity of trade-union action in each important industry.

Between 1915 and 1919 amalgamations of workers' organizations took place to such an extent that at present 6 of the 18 trade groups which include the unions affiliated to the Trade-Union Congress, represent about two-thirds of the total membership. The six groups with their membership follow:

General workers.....	1,117,680
Mining and quarrying.....	937,412
Engineering and foundry trades.....	695,013
Railway unions.....	616,196
Other transport.....	470,595
Building and woodworking.....	455,717
	4,292,613

In addition to the amalgamations which have recently taken place there have been important moves toward federation, a large percentage of the total membership of the Trades-Union Congress being allied in some manner in federation activity, as shown in the following table:

FEDERATIONS OF WORKERS IN GREAT BRITAIN AND THE NUMBER OF AFFILIATED UNIONS AND TOTAL MEMBERSHIP REPRESENTED.

Federation.	Number of unions affiliated.	Total membership represented.
National Federation of General Workers.....	8	1,750,000
Building Trades Federation.....	16	500,000
Shipbuilding and Engineering Trades Federation.....	34	1,503,984
Transport Workers' Federation ¹	21	1,348,784
Total.....	79	5,102,738

¹ In process of formation.

The figures shown for the Transport Workers' Federation include the membership of the Transport and General Workers' Union, the present membership of the Transport Workers' Federation, and the membership of the three railway unions, which are now taking steps toward amalgamation.

While these movements toward union will prove advantageous to workers' organizations in securing a clearer understanding through closer contact, the author is of the opinion that neither amalgamation nor federation will suffice to enable the trade-union movement to deal effectively with the economic tendencies which influence and control conditions of labor, or the operations of strong employers' federations ready to take advantage of advantages presented.

STRIKES AND LOCKOUTS.

Chilean Coal Strike.¹

A STRIKE of the Chilean coal miners lasting 80 days and affecting about 15,000 miners in the Provinces of Concepcion and Aranco, which furnish nearly all the Chilean coal, ended on March 21, 1922, through direct negotiations between the operators and their men. A coal strike is of great economic importance in Chile because coal mining is one of the most important industries, and since the shutting down of the nitrate plants and the development of a bad business and industrial situation it has been practically the only prosperous industry in the country. The railroads, which are owned by the Government, use most of the coal.

As most of the chief coal users, profiting by their experience in 1920, accumulated large stocks of coal, and as foreign coal was cheaper and more plentiful, the strike did not affect the industrial life of the nation so seriously as the 1920 strikes.

The series of strikes in 1920 was finally settled by the Rivas Vicuña agreement, which was to be binding until December 31, 1921.² During the period of this agreement there were no prolonged strikes, but there were many short strikes and several riots. Two months before its expiration the miners gave notice that they would not renew the agreement. A little later they presented a set of demands, asking for a minimum daily wage of 6 pesos (\$2.19, par), recognition of the union, better houses, a pension system, the construction of schools and theaters, and the establishment of labor boards for settling disputes. The companies refused to accede to these terms and on January 1 proposed new working conditions, without, however, affecting wages or abolishing the eight-hour day. Furthermore, the companies declared their intention of establishing a system of compulsory medical examinations for all workmen, of closing certain unprofitable workings, and of discharging surplus employees and those whom they considered "undesirables," including in this term the strike and labor leaders, as well as of eradicating certain alleged abuses by reducing the amount of free coal furnished their employees and by selling supplies at cost price instead of below cost. The largest and most important company proposed a profit-sharing system and a bonus for regular work and agreed to improve housing conditions.

Upon learning these conditions the miners at once went on strike.

The basic issue in the strike was the question of the companies' intended discharge of surplus employees, the number being estimated at from 900 to 1,500. The miners insisted that there was no surplus, owing to the great number of deaths from smallpox, the fact that child labor in the mines was soon to be abolished, and that many men were leaving to work in the harvest fields, and proposed a "redondilla" or system of rotation at work so that all might have at least part-time employment. The operators refused to

¹ The data on which this article is based are from current issues of *El Mercurio*, Santiago; *South Pacific Mail*, Valparaiso, and *El Sur*, Concepcion.

² For a discussion of these strikes and the terms of the agreement see the *MONTHLY LABOR REVIEW* for January, 1922, pp. 33-35.

accept a system that had worked so unsatisfactorily in the shipping industry,³ on the ground that it would burden them with more employees than they could accommodate in the company houses.

In the interval between the notice of abrogation of the agreement and the beginning of the strike the companies accumulated a large coal reserve and the miners a reserve of food and money so that the former declared themselves ready for a four months' struggle and the latter for one of at least two or three months.

The Minister of the Interior and the Minister of War at once sought to arrange a settlement, but were able to do nothing more than to organize consumers' cooperative societies for the miners and have the companies agree to enlarge and improve the housing facilities. At the same time the large company previously referred to decided to establish a welfare department for its employees.

When the attempt of the Chilean Federation of Workmen to organize a general strike for January 25 met with a lukewarm response, the date for the general strike was postponed to February 10, but even then the response was half-hearted for the majority of the workmen felt that a period of industrial depression and serious unemployment was not the proper time to engage in a general strike. The railroad employees especially held aloof because they were opposed to the action of the December, 1921, convention of the Chilean Federation of Workmen in declaring their adherence to the Moscow International. As a result, the general strike failed completely. The coal strike continued, the companies still holding out for a material reduction in the force and the miners insisting that all who were employed on December 31, 1921, be reinstated and allowed to work according to the "redondilla" system.

By the middle of March the miners had exhausted their food and money resources and were constrained to negotiate with the companies. Besides, the companies had given notice that all who did not return to work on March 20 would be discharged. Accordingly on March 20 and 21 direct settlements were effected between the two leading companies and their men, which are reported to have been on essentially the same terms offered by the companies on January 1, with a few concessions such as (1) the giving to those miners who did not go to work during the first days of January on account of illness and who were to be discharged, an amount equal to an average month's wages instead of an amount equal to the wages for the month of December; (2) the postponing for a month of the ejection of discharged miners from the company houses; and (3) the delivery of the first quintal (220.46 pounds) of flour after the strike at the old (cost) price. The terms of the agreement also included the grant of a bonus of 30 centavos (11 cents, par) for each car of coal mined, which amounts to a 5 per cent increase in wages, and a 5 per cent bonus to those who work six days a week. These terms were not so favorable as those rejected by the miners earlier in the negotiations, when the two principal companies agreed to limit the number of men to be discharged to 75. Following the final settlement it was expected that the companies would discharge as many as they pleased, including the strike leaders. A request from the intendant of Concepcion for free passage for 700 unemployed miners and 200 "undesirables"

³ See MONTHLY LABOR REVIEW, January, 1922, p. 35.

together with their families at the end of March gives some indication of the extent of the dismissals.

No loss of life or special violence occurred during the strike, and following the arrangement of terms work was resumed at all the mines without incident.

Recent Strikes in Hongkong and Shanghai.

THE rapid development of the labor movement in the principal industrial cities of China has resulted in numerous strikes in the past few years and, although in most cases but a few hundred workmen have been involved, in a number of instances considerable concessions have been gained by the strikers. Forty-seven labor unions were recently listed in Shanghai according to a report of the Chinese Government Bureau of Economic Information. The following information regarding strikes during the months of March and April has been compiled from the Chinese and English press of those cities.

In Hongkong the barbers' guild in the colony demanded shorter working hours. At a joint meeting between representatives of the employees' organization and the employers two weeks later the hours were reduced to 10 daily, although the employees had demanded an eight-hour day, and it was agreed to suspend work at 5 p. m. on Sundays, the shops to be closed on holidays and festival days. The employees also were to receive the entire amount of tips and what was in effect a closed union shop was instituted.

The motormen and conductors' guild asked an immediate increase in wages, an annual bonus, and the 8-hour day. In conference 10 days later the representatives of the company and the employees agreed upon wage increases ranging from \$2 to \$12 monthly, according to length of service, a bonus of 3 weeks' extra salary at the end of the Chinese year, and the company recognized the right of the guild to make recommendations for the engagement of new motormen and conductors.

The guild of coxswains and crews of steam launches and motor boats asked increased wages varying from 50 per cent for lowest paid workers to 15 per cent for the highest. The shipowners offered increases ranging from 30 per cent to 5 per cent, which were not accepted by the employees.

Other strikes, the outcome of which is not known, were that of the stevedores who asked a 50 per cent increase in wages, and the varnishers' guild which demanded increases varying from 30 to 50 per cent and a working day of 9½ hours.

In Shanghai the employees of the Nikka mill of the Japan China Cotton Manufacturing Co. walked out on April 16 as a result of the rejection by the company of their demand for a 20 per cent increase in wages. After a strike of one week the company agreed to raise the lowest paid workers 15 per cent and those receiving higher pay 10 per cent, but the settlement was only temporary, the employees objecting to the method of payment. The number of strikers was estimated at from 3,000 to 4,000.

A three days' strike of about 400 mail carriers occurred in the latter part of April, caused by the enactment of regulations which raised the amount of the individual bond required from \$60 to \$100 and imposed a deduction of \$2 from their monthly pay for their savings

deposits. Their demands included an increase of \$5 monthly in their pay; deduction of only \$1 monthly for savings and that to be stopped when the sum accumulated amounted to \$60, the same to be returned in full upon the separation of a carrier from the office; the bond not to exceed \$60, and a reduction of the working day from 10 to 8 hours.

Two days later about 250 sorters joined the ranks of the mail carriers. Complaints upon the part of the business men and the general public because of the delayed mails caused the Ministry of Communication at Peking to direct the post-office authorities at Shanghai to treat the strikers with "sympathetic consideration" and the strikers resumed work after being granted an increase of \$2.50 per month, a 9-hour day, and having their demands met in the matter of bonds and savings deposits.

Labor Conflict in Denmark.¹

A NUMBER of the agreements between the Danish Employers' Association and the Trade-Union Federation expired February 1, 1922, and negotiations for a renewal of agreements failing, a lockout followed which paralyzed Danish industries for a period of nearly two months (February 15 to April 10, 1922). The lockout in its first stage affected about 51,000 men, which number was increased by 10,000 men in March. A greater number were affected than those directly touched by the lockout, as a large number of the workers in many of the industries were unemployed before the lockout was declared.

The conflict came in connection with a demand for wage reduction upon the expiration of the existing agreements and the question of the 8-hour day which in Denmark is not established by law but has been introduced through the agreement of May 17, 1919, between the leading employers' and labor organizations. On February 3 the Government conciliator submitted a conciliation proposal, the chief provisions of which were: A 15 per cent general wage reduction; further adjustment in August, the wages to rise or fall in exact proportion to the cost of living; and an 8-hour day, with overtime pay at the rate of time and a quarter for the first two hours of overtime, time and a half for the next hour, and double time thereafter.

On February 6 the Trade-Union Congress resolved not to recommend the proposal to the unions. The matter was then referred to the constituent trade-unions to be decided by a vote of the members. The result was an overwhelming majority for rejection, the individual vote being 56,581 to 13,801 and the union vote 22 to 3. On February 15 the employers' association declared a lockout of all unions whose agreements had expired or would expire during February and which had not concluded a new agreement. Lockout notices were issued to unions whose agreements expired March 9.

Conciliation was again attempted and on March 9 a new proposal was submitted. According to the new proposal there was to be an immediate 15 per cent reduction of wages, and in August wages were to be adjusted 1 per cent for each per cent the cost-of-living index was lower than 206 or higher than 218. Overtime was to be paid for

¹ The data on which this article is based are from consular reports dated Apr. 1, Apr. 15, and May 8, 1922, Societa Meddelanden No. 5, and current numbers of Arbejdsgiveren, the organ of the Danish Employers' Association.

at the rate of time and a quarter for the first hour and time and a third for the second hour. This differed from the former proposal in that no provision was made for wage adjustment for the first six points of rise or fall in the price index figure given out by the Statistical Department and that the overtime pay for the second hour was changed from time and a quarter to time and a third.

The Trade-Union Federation met in general congress again, and on March 14 after a nearly unanimous rejection of a proposal for a general strike, voted 328 to 272 to recommend to separate unions the conciliator's proposal of March 9. The general meeting of the employers' association of March 10 rejected the conciliation proposal of March 9. Lockout notices were issued to trades whose agreements expired in April.

Another proposal was made April 4. The April 4 agreement provided for a wage reduction of 15 per cent, but the lowest-paid workers were to be permitted to negotiate for a smaller reduction but not for less than 12 per cent. The overtime rate was not to exceed time and a quarter for the first hour of overtime or time and a third for the second. The 8-hour working day established by the agreement of May 17, 1919, was to be renewed, with regulations to prevent the misuse of overtime work. Questions as to working shifts, seasonal work, etc., were to be referred to joint committees. If both parties, before August 1, agree to an extension of last year's agreement for another year, the adjustment of wages on the basis of prices is to be postponed until February, 1923, at which time the wages are to be increased or decreased by as many per cent as the price index is above or below the index for February, 1922.

This proposal was accepted and an agreement was concluded on April 7 between the Trade-Union Federation and the employers' association. The lockout formally terminated April 10. This agreement between the two central organizations did not, however, end the dispute, since a majority of the associated unions, among these being the important Danish Workmen's Union, did not consider this agreement as binding upon them. On April 24, however, the Danish Workmen's Union accepted the proposal under certain specific conditions. According to a consular report of May 8, contracts have been concluded with all unions of importance and the dispute may be considered settled. The employers' association, however, is likely to bring a case against the central trade-union organization in the court of arbitration to determine whether or not the decisions of a general meeting of the federation are binding on the associated unions. The employers' association claims that it is understood that the compromise proposal should either be finally accepted or rejected by the federation.

Strikes in France, 1915 to 1918, and November, 1921, to February, 1922.

A STATEMENT in the latest issue of the French Labor Bulletin¹ of the number and causes of strikes in France during the 4-year period 1915-1918, and during the four months from Novem-

¹ Bulletin du Ministère du Travail, Paris, January-February-March, 1922, pp. 1-4.

ber, 1921, to February, 1922, shows a great increase in industrial unrest during the war years.

In 1915 there were only 98 strikes involving 9,344 strikers and causing 44,344 days of unemployment; in 1916, 315 strikes, including 41,409 strikers and 235,907 days of unemployment; and in 1917 the climax was reached with 696 strikes, 293,810 persons striking, and a loss of 1,481,621 working days. In 1918 a considerable reduction in the number of strikes was shown, with 499 strikes reported involving 176,187 employees and causing a loss of work of 979,632 days.

During this 4-year period the textile industries furnished the greatest number of strikes, more than one-fifth of the total number taking place in these industries. Other industries in which there were many strikes were metal working, 234; transportation, 183; clothing, 168; hides and skins, 150; building, 130; chemicals, 85; food products, 58; woodworking, 55; printing, 47; and smelting and refining, 42. It is noted that the mining industry, which ordinarily has many strikes, had only 13, involving 3,114 workers in the entire 4-year period.

Nearly one-half of the strikes were settled by a compromise, while in about one-fourth of them the strikers gained all their demands, and about the same proportion failed to secure the objects for which they were striking. The results of 71 strikes were not reported. Out of a total of 1,607 conflicts, 1,360, or 85 per cent, were caused by demands for wage increases alone or associated with other demands. Wage reductions caused 30 strikes, and during 1917 and 1918, 197 were called for the purpose of securing a reduction of working hours. Recourse to conciliation and arbitration was had in 303 cases, 108 of which were settled by justices of the peace.

In the four months from November, 1921, to February, 1922, there were 140 strikes, 3 lockouts, and 5 combinations of employers against workers, involving altogether 147,349 workers. Forty-five of the strikes were for an increase of wages, 39 against a reduction of wages, and 10 for reinstatement of workers. The textile industries again had the largest number of strikes, 37; building trades, 20; smelting and refining, 18; extractive industries, 14; and agriculture, 11. The remainder were distributed among the transportation and warehousing, woodworking, food, printing, hides and skins, and chemical industries. Thirty-nine of the strikes resulted in a compromise, 23 were successful, 49 failed, and the results of 29 were not yet determined.

Report of Industrial Disputes Committee of Bombay, India.

IN ACCORDANCE with a resolution passed by the Bombay Legislative Council on July 30, 1921,¹ the governor in council appointed an industrial disputes committee whose duty it should be "to consider and report upon the practicability or otherwise of creating suitable machinery for the prevention and early settlement of labor disputes." The committee, which was composed of four representatives of employers, three of labor, and two of the public,² has recently submitted its report,³ a brief summary of which follows:

¹ (India, Bombay). Labor Office. Labor Gazette. Bombay, September, 1921, p. 21.

² *Idem.*, October, 1921, p. 18.

³ *Idem.*, April, 1922, pp. 23-31.

STRIKES AND LOCKOUTS.

General Industrial Situation.

INDUSTRY in the Bombay Presidency is centered in Bombay, Ahmedabad, and Sholapur, having a population of 200,000, 55,000, and 20,000, respectively. In the Bombay Presidency textiles constitute the leading industry; in Bombay they are divided into (1) textile operatives, (2) transportation workers, (3) gas and electric light workers, municipal employees, (4) government employees generally; (5) engineering workshop employees; (6) general labor. This general body of labor is described as "agriculturists first and agriculturists last," who come to Bombay and work until they have funds enough to return to their villages. Though there has been no general strike in the presidency since January, 1920, a number of strikes lasting from two to five months affecting thousands of workers in different industries are reported. These strikes have been characterized by (1) frequency of strikes without notice; (2) absence of any clearly defined grievances; (3) multiplicity and extravagance of demands; (4) absence of any effective organization to present operatives' demands and to secure respect for settlements made; (5) increasing solidarity of employers and employees and capacity of workers to remain on strike.

Prevention of Strikes.

AS a means of preventing numerous strikes the committee suggests a more effective standardization of wages, by the employers in the presidency, an extension of welfare work, which includes at present, in some mills, medical attendance, maternity benefit, crèches, recreation, etc., already in active progress, and a continuous effort to increase the number of cooperative societies. Many mills now maintain grain and cloth shops, and the committee attaches special importance to the maintenance of bright, clean tea shops and, where possible, restaurants in which the workers can obtain well-cooked food at cost.

There are at present 77 trade-unions in the presidency, with a membership of 108,731 persons. In Ahmedabad the unions are said to be well supported by the men and have won complete recognition from the employers. Apart from the Ahmedabad unions the other unions in the presidency are little more than strike committees. The committee is of the opinion that there should be "neither on the part of the State nor of industry any hostility to the free evolution of the trade-union movement." It recommends the official recognition of the unions and compulsory registration under a broad and generous act.

Works committees, it is believed, discount the absence of personal contact between employers and workers in large establishments and have an educational value to the operatives.

The housing question is one of great importance in Bombay, as elsewhere, and according to the committee's report it is broadly true to say that because of the deficiency in both the quantity and the quality of housing accommodations and the pressure of excessive rents upon the wage-earning classes the "recent large increases in wages have borne no fruit in the improvement of social conditions." The report indicates, however, that real efforts are being made by

public builders to improve the housing situation. The Improvement Trust has provided 19,300 tenements, which almost replace those it has condemned, and its program calls for 6,667 additional tenements. The city is housing an increasing number of its employees. The city has erected 2,000 tenements for its employees, and the Development Directorate call for 50,000 tenements, 12,200 rooms being provided for in the present fiscal year. The mills provide quarters for their employees and encourage additional building. Though the employer is not considered a landlord, the committee encourages any efforts to relieve the housing shortage, which the report states will require at least a concentration of maximum efficiency in home-building operations. A rapid extension of education without a corresponding improvement in the conditions under which workers live would, in the opinion of the committee, accentuate rather than reduce labor unrest. A bill of compulsory education, the introduction of which will be complete in 1925, is now being prepared. The number of liquor and bucket shops should be reduced, as should also the amount of liquor which can be offered for sale and the hours during which it may be sold.

Settlement of Industrial Disputes.

AS a method of settlement of industrial disputes when all other methods have been tried and have failed, or when public peace, order, and good government demand such adjustment, the committee recommends a court of inquiry—to be followed, if necessary, by an industrial court of conciliation—modeled upon the British court of this character established in 1919. In general the court should consist of a chairman selected by the members from a panel maintained by the labor office, three members representing employers, and three representing workers in the industry concerned. The committee did not agree upon the representation of the general public, the opinion of a bare majority being that the public should not be represented on a court dealing with an industrial dispute, but should be represented when the court is inquiring into a dispute affecting a Government department or a public utility company or corporation. The minority felt that the public is intensely interested in every serious industrial dispute and should therefore be represented on the court of inquiry appointed to investigate details regarding it, as well as in the cases cited above. Voluntary agreement or a court of inquiry was preferred to the systems of compulsory arbitration which are operative in other British colonies.

CONCILIATION AND ARBITRATION.

Conciliation Work of the Department of Labor in May, 1922.

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION.

THE Secretary of Labor, through the Division of Conciliation, exercised his good offices in connection with 23 labor disputes during May, 1922. These disputes affected a total of 727,874 employees. The table following shows the name and location of the establishments or industries in which disputes occurred, the nature of the disputes (whether strike, lockout, or controversy not having reached 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 workmen directly or indirectly affected.

On June 10, 1922, there were 31 strikes before the department for settlement and in addition 11 controversies which had not reached the strike stage. Total number of cases pending, 42.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, MAY, 1922.

Name of company or industry and location.	Nature of controversy.	Craft concerned.	Cause of dispute.	Present status.
Egg inspectors, Chicago, Ill	Strike.....	Egg inspectors..	Wage cut from \$1 to 80 cents per hour.	Adjusted.
Kosher bakers, Greater New York and vicinity.	Controversy.	Bakers.....	Renewal of agreement.	Do.
American Shipbuilding Co., Lorain, Ohio.	Strike.....	Employees, ship-builders.	Wage cut 5 per cent to 22 per cent.	Do.
Broom makers, Evansville, Ind.....	do.....	Broom makers..	20 per cent cut on piece work.	Pending.
Building trades, Aurora, Ill	do.....	Bricklayers.....	Bricklayers black-listed.	Adjusted.
U. S. Tent and Awning Co., Chicago, Ill.	do.....	Sail and tent makers.	Violation of agreement alleged.	Pending.
E. H. Levy Silk Plant, Paterson, N. J.	do.....	Silk workers....	Wage cut.....	Adjusted.
Tugboats, Philadelphia, Pa.....	Controversy.	Harbor workers.	do.....	Do.
Miners of bituminous coal fields, East and Middle West United States.	Strike.....	Miners.....	Wages and agreements.	Pending.
Anthracite coal fields, Eastern United States, Pennsylvania.	do.....	do.....	do.....	Do.
Adjusted Restaurant Keepers' Association, New York City.	do.....	Waiters.....	Wage cut 22 to 40 per cent.	Do.
Waiters, Washington, D. C.....	do.....	do.....	Form of agreement..	Do.
Builders Exchange, Bakersfield, Calif.	do.....	Building trades.	Trade-unions and renewal agreement.	Pending.
Shipowners' Association, Los Angeles, Calif.	do.....	Longshoremen..	Working conditions.	Do.
Street cars, Schenectady, N. Y.....	do.....	Employees.....	do.....	Do.
Shipping Board, shipowners, Portland, Oreg.	do.....	Longshoremen, etc.	Hiring and working conditions.	Do.
Shipowners, San Francisco, Calif	Strike.....	Ship repairers...	10 per cent cut in wages.	Do.
Roofers, Oakland, Calif	do.....	Roofers.....	Wage cut.....	Do.
Bethlehem Shipbuilding Corporation, Potrero and Alameda, Calif.	do.....	Employees.....	do.....	Do.
Machinists, Peoria, Ill., contract shops.	do.....	Machinists.....	Wage cut.....	Do.
Shipowners' Association, San Pedro, Calif.	Threatened strike.	Longshoremen..	Institution group plan of hiring.	Adjusted.
Cooke Mill, Paterson, N. J.....	Strike.....	Silk workers....	Wage cut 10 per cent.	Do.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, MAY, 1922—Concluded.

Name of company or industry and location.	Terms of settlement.	Date of—		Workmen affected.	
		Begin- ning.	Ending.	Directly.	Indi- rectly.
Egg inspectors, Chicago, Ill. . . .	Compromise on 90 cents per hour.	1922. Apr. 1	1922. May 3	400	200
Kosher bakers, Greater New York and vicinity.	New contracts signed covering time to Apr. 30, 1923.	May 5	May 11	5,000	.....
American Shipbuilding Co., Lorain, Ohio.	Return to work, 8 per cent reduction.	Apr. 22	May 17	300	.....
Broom makers, Evansville, Ind.	Conferences pending	May 6	.....	12	25
Building trades, Aurora, Ill. . . .	Blacklist order rescinded.	May 11	May 13	75	600
U. S. Tent and Awning Co., Chicago, Ill.	.....	May 16	.....	22	40
E. H. Levy Silk Plant, Paterson, N. J.	Return to work under old scale of wages.	Apr. 10	June 1	100	.....
Miners of bituminous coal fields, East and Middle West United States.	.....	Apr. 1	.....	550,000	.....
Anthracite coal fields, Eastern United States, Pennsylvania.	Pending on conferences.	do.	.....	160,000	.....
Tugboats, Philadelphia, Pa.	5 per cent cut in wages accepted.	May 1	May 11	.....	.....
Adjusted Restaurant Keepers' Association, New York City.	649 restaurants affected; new agreements signed.	May 18	June 3	2,500	8,000
Walters, Washington, D. C. . . . .	.....	Apr. 20	Apr. 23	.....	.....
Builders' Exchange, Bakersfield, Calif.	.....	May 5	.....	.....	.....
Shipowners' Association, Los Angeles, Calif.	.....	May 17	.....	600	1,000
Street cars, Schenectady, N. Y.	.....	.....	.....	.....	.....
Shipping Board, shipowners, Portland, Oreg.	State conciliation board acting with conciliator.	.....	.....	.....	.....
Shipowners, San Francisco, Calif.	.....	May 29	.....	.....	.....
Roofers, Oakland, Calif. . . . .	.....	.....	.....	.....	.....
Bethlehem Shipbuilding Corporation, Potrero and Alameda, Calif.	.....	May 29	.....	.....	.....
Machinists, Peoria, Ill., contract shops.	Settlement pending; shops running with 50 per cent non-union men.	May 1	.....	.....	.....
Shipowners' Association, San Pedro, Calif.	Strike order rescinded; I. W. W. and I. L. A. entered conflict.	May 16	May 19	.....	.....
Cooke Mill, Paterson, N. J.	Company withdrew demand for cut of 10 per cent.	Apr. 10	June 1	.....	.....
				719,009	9,865

IMMIGRATION.

Statistics of Immigration for April, 1922.

BY W. W. HUSBAND, COMMISSIONER GENERAL OF IMMIGRATION.

THE following tables show the total number of immigrant aliens admitted into the United States and emigrant aliens departed from the United States in January, February, March, and April, 1922, and for the six months' period from July to December, 1921. The tabulations are presented according to the countries of last permanent or future permanent residence, races or peoples, occupations, and States of future permanent or last permanent residence. The last table (Table 6) shows the number of aliens admitted under the percentum limit act of May 19, 1921, up to June 7, 1922.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT IN JANUARY, FEBRUARY, MARCH, AND APRIL, 1922, AND DURING THE SIX MONTHS ENDING DECEMBER 31, 1921.

Period.	Arrivals.					Departures.			
	Immigrant aliens admitted.	Non-immigrant aliens admitted.	United States citizens arrived.	Aliens debarred.	Total.	Emigrant aliens departed.	Non-emigrant aliens departed.	United States citizens departed.	Total.
July to December, 1921.	200,121	65,287	133,111	6,678	405,197	137,878	86,749	162,735	387,362
January, 1922.....	15,928	6,705	12,057	892	35,582	7,708	7,877	15,519	31,104
February, 1922.....	10,792	6,851	17,573	991	36,207	7,063	7,360	19,061	33,484
March, 1922.....	14,803	9,736	21,884	1,069	47,492	8,269	7,427	20,993	36,689
April, 1922.....	18,967	10,199	19,889	1,436	50,491	13,232	11,730	26,197	51,159
Total.....	260,611	98,778	204,514	11,066	574,969	174,150	121,143	244,505	539,798

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED, AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JANUARY, FEBRUARY, MARCH, AND APRIL, 1922, BY COUNTRIES.

Country.	Immigrant.				Emigrant.			
	January, 1922.	February, 1922.	March, 1922.	April, 1922.	January, 1922.	February, 1922.	March, 1922.	April, 1922.
Austria.....	217	158	330	502	9	17	31	50
Hungary.....	89	49	37	21	119	225	233	310
Belgium.....	115	38	21	25	84	29	69	107
Bulgaria.....	17	10	1	1	29	25	11	29
Czechoslovakia, Republic of.....	1,297	180	135	75	199	277	437	627
Denmark.....	78	70	132	236	27	23	44	21
Finland.....	101	99	155	269	25	26	16	52
France, including Corsica.....	174	116	151	165	118	75	120	251
Germany.....	1,216	710	1,201	1,421	135	191	255	309
Greece.....	46	9	19	24	345	517	499	555
Italy, including Sicily and Sardinia.....	1,942	410	421	286	2,212	1,457	1,415	3,462
Netherlands.....	54	59	125	180	31	47	57	48
Norway.....	97	183	651	399	55	25	54	152
Poland, Republic of.....	606	277	239	320	545	736	1,797	1,509
Portugal, including Cape Verde and Azores Islands.....	23	4	38	27	147	87	116	336
Rumania.....	1,395	408	518	643	107	206	208	231
Russia.....	1,569	996	1,294	1,684	109	169	333	475
Spain, including Canary and Balearic Islands.....	32	20	17	26	630	348	195	374
Sweden.....	228	99	414	731	27	68	83	168
Switzerland.....	106	191	218	298	34	27	27	77
Turkey in Europe.....	51	8	44	83	30	17	4	18
United Kingdom:								
England.....	383	616	775	1,186	287	342	143	537
Ireland.....	142	175	391	833	68	136	82	150
Scotland.....	330	81	570	605	46	43	16	126
Wales.....	33	47	36	45	2	1	.....	6
Yugoslavia.....	74	18	11	10	171	273	207	635
Other European countries.....	24	31	31	19	52	30	16	24
Total, Europe.....	10,439	5,053	7,975	10,114	5,643	5,417	6,477	10,699
China.....	422	261	248	205	474	305	398	361
Japan.....	250	635	820	342	300	247	314	370
India.....	30	24	16	19	27	7	5	9
Turkey in Asia.....	67	25	21	15	19	53	82	91
Other countries of Asia.....	28	39	20	22	4	8	2	7
Total, Asia.....	797	984	1,125	603	824	620	801	838
Africa.....	19	13	11	17	7	16	3	18
Australia, Tasmania, and New Zealand.....	55	43	55	16	71	50	52	47
Pacific Islands, not specified.....	.....	4	6	4	3	1	.....	4
British North America.....	3,001	2,803	3,332	5,342	199	197	167	658
Central America.....	26	34	53	79	63	68	58	41
Mexico.....	1,223	1,509	1,725	1,911	424	308	237	366
South America.....	133	136	172	235	135	105	167	93
West Indies.....	233	212	349	644	336	281	307	466
Other countries.....	2	1	.....	2	3	.....	.....	2
Grand total.....	15,928	10,792	14,803	18,967	7,708	7,063	8,269	13,232
Males.....	8,226	5,661	7,882	9,534	6,282	5,454	6,066	9,283
Females.....	7,702	5,131	6,921	9,433	1,426	1,609	2,203	3,949

TABLE 3.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING JANUARY, FEBRUARY, MARCH, AND APRIL, 1922, BY RACES OR PEOPLES.

Races or peoples.	Immigrant.				Emigrant.			
	January, 1922.	February, 1922.	March, 1922.	April, 1922.	January, 1922.	February, 1922.	March, 1922.	April, 1922.
African (black).....	137	147	222	418	88	104	139	212
Armenian.....	73	22	31	49	15	14	11	16
Bohemian and Moravian (Czech).....	233	54	67	50	133	141	282	274
Bulgarian, Serbian, and Montenegrin.....	42	13	13	6	111	190	124	361
Chinese.....	602	369	258	201	455	301	392	350
Croatian and Slovenian.....	121	12	24	35	80	68	67	175
Cuban.....	22	14	44	24	66	48	50	64
Dahnatian, Bosnian, and Herzegovinian.....	14	7	7	12	6	15	21	35
Dutch and Flemish.....	177	139	182	263	115	83	98	126
East Indian.....	23	19	15	10	22	7	5	11
English.....	1,469	1,401	1,714	2,926	474	500	286	855
Finnish.....	92	103	151	205	26	26	17	54
French.....	778	743	1,033	1,425	176	113	191	367
German.....	1,909	1,244	1,923	2,401	192	259	359	518
Greek.....	79	27	37	31	336	535	510	563
Hebrew.....	3,056	1,781	2,039	2,666	68	58	91	106
Irish.....	498	462	826	1,536	96	166	102	214
Italian (north).....	506	83	93	66	416	221	155	690
Italian (south).....	1,498	424	415	346	1,826	1,261	1,261	2,788
Japanese.....	234	631	735	338	298	247	247	369
Korean.....	1	13	4	2	1	4	1	5
Lithuanian.....	115	79	140	144	71	87	154	376
Magyar.....	260	60	59	32	137	256	271	362
Mexican.....	912	1,332	1,632	1,848	406	276	219	312
Pacific Islander.....		2		1				
Polish.....	174	117	88	74	472	674	1,653	1,407
Portuguese.....	26	5	46	37	160	93	131	351
Rumanian.....	289	39	61	24	89	175	151	211
Russian.....	221	124	174	219	75	136	259	192
Ruthenian (Russiak).....	22	7	20	16	9	10	18	25
Scandinavian (Norwegians, Danes, and Swedes).....	536	461	1,323	1,587	135	133	199	401
Scotch.....	694	503	978	1,457	94	89	57	224
Slovak.....	830	83	51	22	52	113	148	417
Spanish.....	76	68	86	134	700	413	257	455
Spanish American.....	42	65	99	113	121	105	137	100
Syrian.....	50	46	99	42	35	22	46	77
Turkish.....	2			3	3	26	21	25
Welsh.....	41	53	47	71	6	4	4	18
West Indian.....	44	25	36	98	64	46	30	91
Other peoples.....	30	10	31	35	79	44	39	35
Total.....	15,928	10,792	14,803	18,967	7,708	7,063	8,269	13,232

TABLE 4.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING JANUARY, FEBRUARY, MARCH, AND APRIL, 1922, BY OCCUPATIONS.

Occupation.	Immigrant.				Emigrant.			
	January, 1922.	February, 1922.	March, 1922.	April, 1922.	January, 1922.	February, 1922.	March, 1922.	April, 1922.
Professional:								
Actors.....	57	33	84	32	7	9	12	18
Architects.....	11	10	6	9	2	4	1	9
Clergy.....	58	37	68	65	41	14	19	23
Editors.....	3	5	2	2		3	2	2
Electricians.....	30	28	48	89	6	12	11	12
Engineers (professional).....	49	54	78	101	22	26	21	33
Lawyers.....	7	4	13	5	3	1	2	6
Literary and scientific persons.....	14	15	26	35	12	8	12	18
Musicians.....	105	23	43	33	9	7	5	20
Officials (Government).....	62	48	47	49	23	5	19	37
Physicians.....	42	21	29	34	8	7	4	9
Sculptors.....	10	7	4	5	5	3	5	8
Teachers.....	69	68	101	156	23	19	17	23
Other professional.....	128	120	152	153	23	42	34	47
Total.....	645	473	701	768	184	160	164	265

TABLE 4.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED DURING JANUARY, FEBRUARY, MARCH, AND APRIL, 1922, BY OCCUPATIONS—Con.

Occupation.	Immigrant.				Emigrant.			
	January, 1922.	February, 1922.	March, 1922.	April, 1922.	January, 1922.	February, 1922.	March, 1922.	April, 1922.
Skilled:								
Bakers.....	96	72	121	135	23	24	35	45
Barbers and hairdressers.....	55	33	43	43	20	18	21	32
Blacksmiths.....	47	33	48	50	9	8	18	19
Bookbinders.....	5	2	2	7	1	1	1	4
Brewers.....	2	2	2	3	.....	1	.....	2
Butchers.....	73	34	70	61	8	10	29	27
Cabinetmakers.....	10	3	8	10	6	7	5	4
Carpenters and joiners.....	172	113	245	323	45	54	39	72
Cigarette makers.....	1	.....	4	3	.....	.....	.....	.....
Cigar makers.....	5	6	3	10	10	16	.....	34
Cigar packers.....	2	1	1	.....	.....	1	19	.....
Clerks and accountants.....	523	369	603	724	103	108	1	175
Dressmakers.....	151	88	125	154	14	7	108	40
Engineers (locomotive, marine, and stationary).....	37	42	57	71	26	2	19	15
Furriers and fur workers.....	6	8	5	7	3	2	7	7
Gardeners.....	26	18	40	34	10	12	4	17
Hat and cap makers.....	9	2	7	6	2	1	14	5
Iron and steel workers.....	47	27	59	62	11	8	.....	14
Jewelers.....	7	5	14	6	7	3	7	9
Locksmiths.....	33	26	4	28	3	1	3	4
Machinists.....	80	61	76	106	23	36	6	51
Mariners.....	119	179	224	176	121	85	38	66
Masons.....	55	38	54	98	20	23	67	26
Mechanics (not specified).....	97	63	79	98	30	24	17	34
Metal workers (other than iron, steel, and tin).....	9	3	4	17	2	.....	58	4
Millers.....	4	2	6	9	1	5	3	18
Milliners.....	25	23	20	36	2	2	5	3
Miners.....	138	79	109	156	116	148	6	645
Painters and glaziers.....	45	36	55	78	18	22	124	20
Pattern makers.....	2	2	1	5	.....	.....	8	1
Photographers.....	12	4	13	19	3	2	2	5
Plasterers.....	8	11	9	22	3	.....	2	5
Plumbers.....	11	11	10	14	6	2	1	4
Printers.....	20	14	25	26	3	6	4	5
Saddlers and harness makers.....	8	6	6	10	1	.....	1	.....
Seamstresses.....	75	56	74	120	6	8	1	9
Shoemakers.....	90	42	59	64	28	30	8	68
Stokers.....	27	9	23	25	8	6	40	16
Stonecutters.....	5	5	5	16	5	4	8	9
Tailors.....	195	123	155	162	51	34	3	91
Tanners and curriers.....	3	.....	4	5	2	1	44	.....
Textile workers (not specified).....	7	4	2	5	1	.....	2	.....
Tinners.....	9	5	4	5	1	2	2	2
Tobacco workers.....	2	.....	1	1	.....	.....	2	1
Upholsterers.....	4	1	4	7	.....	2	.....	1
Watch and clock makers.....	9	9	10	17	2	3	.....	2
Weavers and spinners.....	58	39	48	106	7	13	1	48
Wheelwrights.....	1	1	.....	.....	.....	.....	24	.....
Woodworkers (not specified).....	1	2	7	6	1	1	.....	1
Other skilled.....	109	87	152	173	63	37	71	129
Total.....	2,535	1,799	2,699	3,319	825	780	878	1,789
Miscellaneous:								
Agents.....	23	33	37	67	12	11	13	20
Bankers.....	7	6	6	8	16	2	10	15
Draymen, hackmen, and team- sters.....	11	14	11	24	7	6	1	7
Farm laborers.....	547	416	694	774	117	107	134	159
Farmers.....	450	312	387	596	179	155	239	306
Fishermen.....	37	24	86	56	4	6	5	11
Hotel keepers.....	4	4	11	14	5	5	2	5
Laborers.....	1,713	1,156	1,579	1,819	4,225	3,594	3,918	5,626
Manufacturers.....	4	11	10	10	8	7	3	5
Merchants and dealers.....	490	305	395	436	281	203	262	335
Servants.....	1,854	954	1,650	2,409	170	174	216	434
Other miscellaneous.....	654	556	731	802	211	227	216	336
Total.....	5,794	3,791	5,597	7,015	5,235	4,497	5,019	7,319
No occupation (including women and children).....								
	6,954	4,729	5,806	7,865	1,464	1,626	2,208	3,859
Grand total.....	15,928	10,792	14,803	18,967	7,708	7,063	8,289	13,232

TABLE 5.—FUTURE PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND LAST PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JANUARY, FEBRUARY, MARCH, AND APRIL, 1922, BY STATES AND TERRITORIES.

State and Territory.	Immigrant.				Emigrant.			
	January, 1922.	February, 1922.	March, 1922.	April, 1922.	January, 1922.	February, 1922.	March, 1922.	April, 1922.
Alabama.....	10	20	13	18	2	9	4	8
Alaska.....	4	11	4	30	3	9	6	7
Arizona.....	66	146	197	199	49	26	44	63
Arkansas.....	8	13	12	8	7	1	2	2
California.....	1,450	1,076	1,373	1,689	758	504	635	819
Colorado.....	59	49	47	92	35	33	25	55
Connecticut.....	263	121	219	233	219	145	168	277
Delaware.....	22	21	4	32	12	4	14	3
District of Columbia.....	60	66	64	83	16	19	15	21
Florida.....	144	112	123	129	75	57	141	229
Georgia.....	28	4	12	17	8		6	5
Hawaii.....	7	468	320	230		252	49	86
Idaho.....	33	32	33	45	16	5	9	5
Illinois.....	1,223	618	957	1,212	401	463	465	895
Indiana.....	122	80	87	103	40	53	74	111
Iowa.....	79	73	145	184	29	25	20	87
Kansas.....	64	33	41	41	31	25	12	30
Kentucky.....	20	14	9	16	6	3	7	3
Louisiana.....	58	63	51	47	63	40	39	59
Maine.....	237	282	445	580	13	8	28	27
Maryland.....	100	44	83	100	22	26	30	46
Massachusetts.....	987	605	970	1,917	401	272	500	888
Michigan.....	581	500	660	760	316	186	223	351
Minnesota.....	251	200	280	351	62	55	38	123
Mississippi.....	18	8	18	24	12	6	3	10
Missouri.....	153	88	85	109	48	42	66	52
Montana.....	46	42	80	82	21	15	8	21
Nebraska.....	81	40	85	107	31	30	20	38
Nevada.....	18	8	11	14	10	2	2	3
New Hampshire.....	97	97	134	261	13	15	45	47
New Jersey.....	856	356	565	754	247	246	374	508
New Mexico.....	31	40	100	45	30	29	12	28
New York.....	4,457	2,463	3,753	4,676	3,086	2,864	3,208	4,818
North Carolina.....	6	5	10	14	11			21
North Dakota.....	38	37	97	58	12	8	3	23
Ohio.....	624	234	364	429	298	267	277	692
Oklahoma.....	31	25	10	26	11	11	9	15
Oregon.....	169	95	162	217	31	26	39	34
Pennsylvania.....	1,477	699	925	1,157	671	829	1,201	1,761
Philippine Islands.....	1			1				
Porto Rico.....	39	13	20	39	20	9	14	9
Rhode Island.....	165	99	136	243	32	32	93	220
South Carolina.....	12	5	1	9	8	2		4
South Dakota.....	24	17	51	66	14	10	6	7
Tennessee.....	15	14	13	11	4	7	3	8
Texas.....	895	1,050	1,143	1,420	226	145	107	147
Utah.....	29	39	36	40	40	9	12	37
Vermont.....	80	82	75	129	4	6	3	18
Virginia.....	31	71	55	55	9	9	6	25
Virgin Islands.....				2		2		1
Washington.....	331	334	468	549	158	91	71	173
West Virginia.....	74	29	15	35	66	63	71	172
Wisconsin.....	208	133	215	244	33	51	58	95
Wyoming.....	36	18	27	35	23	17	4	45
Total.....	15,928	10,792	14,803	18,967	7,708	7,063	8,269	13,232

TABLE 6.—STATUS ON JUNE 7, 1922, OF THE IMMIGRATION OF ALIENS INTO THE UNITED STATES, UNDER THE PERCENTUM LIMIT ACT OF MAY 19, 1921.

Country or place of birth.	Total admitted July 1, 1921, to June 7, 1922. ¹	Total admissible, fiscal year 1921-22.	Number admissible during remainder of year.
Albania.....	280	287	7
Austria.....	4,392	7,444	3,052
Belgium.....	1,578	1,557	(²)
Bulgaria.....	301	301	.....
Czechoslovakia.....	14,166	14,269	103
Danzig.....	77	285	208
Denmark.....	3,089	5,644	2,555
Finland.....	2,884	3,890	1,006
France.....	18	71	53
Germany.....	4,151	5,692	1,541
Greece.....	17,815	68,039	50,224
Hungary.....	3,445	3,286	(²)
Italy.....	6,032	5,635	(²)
Luxemburg.....	42,118	42,021	(²)
Netherlands.....	93	92	(²)
Norway.....	2,252	3,692	1,350
Poland (including Eastern Galicia).....	5,443	12,116	6,673
Portugal (including Azores and Madeira Islands).....	26,121	25,800	(²)
Rumania.....	2,376	2,269	(²)
Russia (including Siberia).....	7,424	7,414	(²)
Spain.....	25,352	34,247	8,895
Sweden.....	821	663	(²)
Switzerland.....	8,457	19,956	11,499
United Kingdom.....	3,651	3,745	94
Yugoslavia.....	39,797	77,206	37,409
Other Europe (including Andorra, Gibraltar, Liechtenstein, Malta, Mermel, Monaco, San Marino, and Iceland).....	6,642	6,405	(²)
Armenia.....	143	86	(²)
Palestine.....	1,568	1,588	20
Syria.....	210	56	(²)
Turkey (Europe and Asia, including Smyrna district).....	1,005	905	(²)
Other Asia (including Persia, Rhodes, Cyprus, and territory other than Siberia which is not included in the Asiatic Barred Zone. Persons born in Siberia are included in the Russia quota).....	1,096	653	(²)
Africa.....	528	78	(²)
Australia.....	191	120	(²)
New Zealand.....	279	271	(²)
Atlantic Islands (other than Azores, Madeira, and islands adjacent to the American Continents).....	75	50	(²)
Pacific Islands (other than New Zealand and islands adjacent to the American Continents).....	81	60	(²)
Total.....	13	22	9
Total.....	³ 233,964	355,825	124,698

¹ Including aliens who were admitted in excess of quota of certain nationalities for the month of June, 1921, and charged against the quota for the fiscal year 1921-22, as provided in House Joint Resolution No. 153.

² Admissions in excess of the quota for the year represent temporary admissions made in cases involving unusual hardship.

³ Not deducting excess of 2,837 over quota, admitted from countries indicated.

WHAT STATE LABOR BUREAUS ARE DOING.

Ninth Annual Convention of Association of Governmental Labor Officials of the United States and Canada.¹

A CONVENTION of the above-named organization held its session in the Hall of the House of Representatives in the Capitol at Harrisburg, Pa., beginning Monday evening, May 22, and closing Thursday evening, May 25. There were in attendance representatives from 18 States, the Province of Ontario, Canada, and five of the bureaus of the United States Government. The published program was for the most part strictly adhered to.

At the opening session on Monday evening the president of the organization, Mr. Frank E. Wood of Louisiana, presided and gave the opening address. It had been planned to have Governor Sproul give an address, but it was not possible for him to attend so in his stead Mr. C. B. Connelley, commissioner of the Department of Labor and Industry of Pennsylvania, addressed the convention. In the absence of Hon. James J. Davis, Secretary of Labor, who was scheduled to speak before the convention, a paper on "Efficiency of American Labor," by Mr. Ethelbert Stewart, United States Commissioner of Labor Statistics, which was on the program for Thursday morning was read at this time.²

At the Tuesday morning session, with the president of the organization presiding, Hon. George Hoverter, mayor of Harrisburg and a representative of the Harrisburg Chamber of Commerce, addressed the convention. The rest of this session was given up to business matters and to reports from the various States on progress of labor legislation since the last convention, in New Orleans. The committee on revision of constitution which was recommended at the New Orleans convention made its report and a part of it was adopted, but the question of the constitution of the organization was left in a somewhat unsettled state.

The Tuesday afternoon session was given over to the discussion of child welfare. In the absence of Miss Grace Abbott, who was on the program to preside, Miss Lillie M. Barbour, of Richmond, Va., occupied the chair. The principal address was on "The Child Problem in the Sugar-Beet Industry," by Owen Lovejoy, secretary of the National Child Labor Committee. This address made a profound impression, and the discussion developed the fact that, while in no State is agricultural labor covered by either the factory or the child-labor laws, the opinion seemed quite general that certain branches of agriculture were becoming essentially factoryized so far as methods of labor were concerned; that this was particularly true in the sugar-beet industry, but it applied no less to the onion fields and to much of the truck gardening near the great cities. It will be noted later on that the convention passed a resolution expressing its views on this

¹ Full proceedings of this convention will be published as a separate Bulletin by the Bureau of Labor Statistics.

² A copy of this address will be found in this issue of the MONTHLY LABOR REVIEW, pp. 1 to 12.

subject. It had been announced that Mrs. Samuel Semple would deliver an address on "Women and Children in the Orient," but the recent acute disturbances in China made it impossible for Mrs. Semple to get away from Peking, very much to the regret of the convention. Prof. Henry J. Gideon, of the bureau of compulsory education of the Board of Public Education, Philadelphia, delivered an address on the subject "Shall Issuance and Revocation of Employment Certificates be Under Control of School or Labor Department?" Professor Gideon announced that he was a school man and viewed things from the school point of view and that his paper would reflect this point of view. The discussion which it provoked developed the fact that in some of the larger cities the school authorities are giving real assistance in the matter of enforcing the local child-labor laws. The general consensus of opinion as developed in the discussion seemed to be that there should be complete cooperation of the school boards and the child-labor enforcing authorities as at present constituted under the labor departments of the various States. Attention was called to the fact that if entire control of this matter were given over to the schools there would be as many interpretations of the child-labor law and methods of its enforcement as there are different school districts or boards in the State.

The Wednesday morning session was given over to inspection, safety, and sanitation, Mr. Fred M. Wilcox, chairman of the Industrial Commission of Wisconsin, presiding. Mr. John P. Meade, of Boston, Mass., director of the Division of Industrial Safety of that State, read a paper upon factory inspection.³ The remainder of the session was given up to discussion of boiler inspection and various forms to be used for reporting inspections. Practically all the delegates from the various States participated in the discussion.

The afternoon session of Wednesday was devoted to the employment problem, and the program as printed was adhered to, as follows:

Employment.

Seaman F. Northrup, presiding—director of industrial relations, Department of Labor, State of New York.

Address: "The United States Employment Service and its Functions," by Francis I. Jones, Director General, United States Employment Service, United States Department of Labor, Washington, D. C.

Address: "Employment Service of Canada," by H. C. Hudson, general superintendent Ontario offices, Employment Service of Canada, Toronto, Ontario, Canada.

Address: "Various Methods used by State Employment Services," by Charles J. Boyd, general superintendent Chicago Free Employment Offices, Chicago, Ill.

Address: "Making Good the Recommendations of the President's Unemployment Conference," by Otto T. Mallery, member of the industrial board, Department of Labor and Industry, Commonwealth of Pennsylvania, and a member of the President's Unemployment Conference.

At the Wednesday evening session on mediation and conciliation two addresses were delivered, one on the "Settlement of Industrial Disputes," by Dr. W. M. Leiserson, and another on the question, "Can Governmental Labor Bureaus Affect the Causes of Labor Unrest?" by Miss Mary Van Kleeck, of the Russell Sage Foundation.

Most of the Thursday morning session was devoted to the election of officers and business matters. When these were disposed of, an

³ A copy of this address will be found on pp. 13 to 23 of this issue of the MONTHLY LABOR REVIEW.

address by Mrs. Rosalie Leow Whitney, on compensation matters in New York State, and an address by Mr. Robert E. Lee, chairman of the State Industrial Accident Board of Maryland, on "Progress of Compensation Legislation," were given.

The Thursday afternoon session, presided over by Miss Mary Anderson, Director of Women's Bureau of the United States Department of Labor, had for its principal speaker Rev. J. A. Ryan, of the Catholic University, of Washington, D. C., who reviewed the theories underlying the various State laws concerning minimum wage.

The Thursday evening session was devoted to rehabilitation and medical supervision, Dr. F. D. Patterson, chief of the division of hygiene and engineering of the Department of Labor and Industry of Pennsylvania, presiding. Col. Lewis T. Bryant, commissioner of the Department of Labor of New Jersey, delivered an address, accompanied with illustrative moving pictures, on "Industrial Clinics." Commissioner Bryant showed from many living examples what can be done to restore the seriously injured men and women to industry, either along the lines in which they were injured or to entirely different vocations. His talk dispelled a great many doubts as to the ultimate value of this line of work. An address by Dr. John A. Lapp, editor of *Nation's Health*, on "Medicine and Industry" traced the progress of the industrial physician from the stage of the mere "company's doctor" to the development of a truer theory of the part that the physician must take in industry to keep men from entering occupations for which they are unfitted by health conditions, and to distribute them along the lines of occupations which will not aggravate latent tendencies to disease or functional disturbances. He made a strong plea for the elimination of a prejudice which had grown up, and which admittedly at certain times and in certain places had some basis in fact against industrial physicians. Mr. Charles H. Taylor, of the Employment Service Rehabilitation Division of the United States Veterans' Bureau, Washington, D. C., spoke upon the work of that division.

The following resolutions of general interest were adopted:

Report of the Committee on Resolutions.

Resolution No. 1.—from the committee: *Be it resolved*, That the especial thanks of the ninth annual convention of the Association of Governmental Labor Officials of the United States and Canada are due and are hereby extended to the honorable mayor of Harrisburg, to the Chamber of Commerce of said city, for the eloquent reception tendered to this association, and to Commissioner C. B. Connelley, of the Department of Labor and Industry, for the magnificent preparation made for the convention and the accommodations provided for its convenience, and to Mr. Fred J. Hartman, of the Pennsylvania department, for the able assistance rendered by him to the association and its officials.

Resolution No. 2.—from the committee: Whereas there is appearing in this country a type of labor which while basically agricultural is being conducted in such manner as to essentially factoryize such labor, as for instance the sugar beet and other intensified agricultural industries; and

Whereas child labor is alleged to be used in such cases: Therefore be it

Resolved, That it is the sense of this organization that this class of agricultural labor ought not to be excepted from the provisions of the labor laws in such cases and that in the enactment of future labor laws or amendment of present ones legislatures should consider the advisability of covering agriculture, with a view of protecting children from long hours and excessive labor in any form or under any guise.

Resolution No. 3—from the committee: Whereas since the last convention it has pleased an all-wise Providence to remove from our midst Past President Edwin Mulready, former Commissioner of Labor and Industries of Massachusetts, and

Whereas he was always wise in council and fearless in action in all things which tended to promote the interests of this association; Therefore be it

Resolved, That we the members of the ninth annual convention extend our sympathy to his bereaved family; And be it further

Resolved, That this resolution be spread on the minutes of the convention and a copy be sent to his bereaved family in Massachusetts.

Resolution No. 4, from Commissioner John S. B. Davie, of New Hampshire, is reported with recommendations that it be passed:

Whereas the success or failure of any convention depends in a large measure on the program committee: Be it

Resolved, That this convention extends to the program committee its sincere thanks for giving us a program of very high order.

Resolution No. 5, introduced by Miss Alice K. McFarland, of Kansas, is approved with recommendations that it be adopted:

Resolved, That this convention recommend that the Women's Bureau at Washington, D. C., be asked to make a study of seats for working women with special reference to posture.

Resolution No. 6, introduced by Mr. Francis Feehan, of the Pennsylvania Department of Labor and Industry, is recommended for adoption:

Be it resolved, That the officers and members of this association cooperate with the Federal Department of Labor in urging the various States to supply promptly State labor statistics on industrial accidents for compilation and publication by the Federal Government, for the general use and information of all the public without the delay that has been heretofore occasioned.

An amendment to the constitution providing that former presidents and secretaries of the association who have served a full-year term may be eligible to election as honorary life members having been adopted, Mr. George P. Hambrecht, Mr. Frank E. Hoffman, and Mr. Frank E. Wood were elected as former presidents, and Miss Linna E. Bresette as a former secretary.

The following were elected to office for the ensuing year:

Clifford B. Connelley, of Pennsylvania, president;
 John S. B. Davie, of New Hampshire, first vice president;
 Mrs. D. M. Johnson, of Washington (State), second vice president;
 Lewis T. Bryant, of New Jersey, third vice president;
 Mrs. E. L. Scott, of Virginia, fourth vice president;
 H. C. Hudson, of Toronto, Ontario, Canada, fifth vice president;
 Miss Louise Schutz, of Minnesota, secretary-treasurer.

Louisiana.

THE eleventh biennial report of the Commissioner of Labor and Industrial Statistics of the State of Louisiana, 1921-22, contains many interesting sections, some of the more important of which are briefed below:

Certificates for child workers.—Work certificates for children in New Orleans are issued by the city factories inspector and for children in other localities in the State by the department of labor. For the two years ending March, 1922, the department issued 667 certificates, a decrease of 396 as compared with the preceding biennial period. In 1920 and 1921 combined the New Orleans factories inspector issued 5,545 certificates, 1,168 less than in 1918-19.

Wages.—Wages for work of all kinds were at the highest level about midsummer in 1920, but remained at such level for only a brief period before they began to go down. This was particularly the case in the

wages of unskilled or common laborers and for a few nonunionized skilled trades. The wage decreases were neither so rapid nor so great among organized workers. The union scale of wages December 31, 1921, in the building trades ranged from 45 cents an hour for cement helpers with an 8-hour day and a 44-hour week to \$1.25 an hour for granite cutters, lathers, marble setters, and stonecutters for a similar working day and week. In the metal trades the range was from 45 cents to 75 cents an hour with an 8-hour day and a 44-hour week. The molders and molders' helpers, however, had a 48-hour week.

Collection of wages.—The Commissioner of Labor of Louisiana is not authorized by law to collect unpaid wages unless some act is violated under which a prosecution may be instituted. He feels that he should be given some authority to force the payment of wages, at least in cases where liens are not filed as a protection against loss. The failure to pay wages due is not limited to lower-class employers. The majority of the offenders are among those well able to meet their obligations. The commissioner estimates that the workers' loss in New Orleans alone because of the nonpayment of wages approximates annually \$20,000 in claims too small to be taken into court.

Farm or common labor.—The commissioner states that for the four years preceding 1921 there was to a certain extent a shortage of farm and common labor throughout the South, but declares that the labor scarcity in Louisiana was not so great as was alleged and that some employers were themselves to blame for being without help. Statistics indicate that farm laborers' wages have declined to pre-war levels, but the supply of help overbalances the demand. The average laborer, the commissioner reports, regards farm work suspiciously because of the many unfair practices of employers.

Home work.—Numerous employers of Louisiana and especially those of New Orleans give out home work. Through an investigation it was found that the wages being paid home workers were as low as 35 cents per dozen for making boys' rompers and overalls; 30 cents per dozen for men's jumpers, and from 40 to 50 cents per dozen for men's overalls.

Loans on wages.—Under an act of 1916 a license is required in the business of loaning money on wages, and the officer by whom such license is issued must make a report to the commissioner of labor on certain data connected with such issuance, who in turn shall secure a report from the licensee containing the name of the person, firm, or corporation engaged in said business, the location of the place of business, the amount of capital in use in said business, and certain other data. Despite the commissioner's efforts in the matter he has not been able to secure from the proper authorities to whom he has applied a list of the places advancing money on salaries. He feels sure, however, that there are "numerous persons, firms, and corporations engaged in this nefarious business."

Besides making usurious interest a part of the loan, these "sharks" resort to every kind of measure to get all they can from their victims, such as interest on the note's face value, forfeitures, legal fees, and collection costs. The commissioner expresses the hope that legislation may be enacted to eliminate or drastically regulate these "deplorable practices."

Accident reports.—In discussing the shortcomings of the Louisiana law in re accident reporting, attention is called to certain facts that are considered serious defects, namely, that the city factories inspector has jurisdiction only in certain matters in the city of New Orleans, that no report is required unless the accident results in the employee losing as much as two weeks from work, and that reports need be made only semiannually.

Private employment offices.—Investigations disclosed the fact that none of the private employment agencies outside of New Orleans had a city or State license or had filed a bond in accordance with the law. In New Orleans about 20 bonds were turned over to the department. Only one or two, however, were in force, and the bonds indicated that as a matter of fact the surety amounted to nothing. It was found also that the license law was not being complied with by those operating the New Orleans private employment offices. Prompt measures were taken to rectify these conditions, and it was not long before over one-half of these bureaus or agencies were put out of business and the others forced to pay attention to legal regulations. Five of the guilty parties were arrested, two of whom are reported as having served jail sentences.

The commissioner points out that the fees charged by private employment agencies are "outrageously high" and adds that the hiring and firing of men seems to have been made a "skin game." While acknowledging he has not the actual facts in the case, he declares that "it is passing strange certain agencies are always in the market for a certain class of workers and usually at the same places of employment." He asks that the law be amended to abolish or mitigate the evils attending the operation of private employment offices.

Reference was made in the May, 1922, issue of the MONTHLY LABOR REVIEW to the establishment in 1921 of a free State employment bureau under the supervision of the commissioner of labor.

Labor disturbances.—The commissioner of labor is authorized to inquire into the causes of labor controversies and report as promptly as possible the findings to the governor. The commissioner is also empowered to put under oath the parties from whom he desires to secure information, but the jurisdiction of the department extends no further.

Although many strikes have occurred since January, 1917, when the present head of the labor department took charge, he reports that in but two cases has his office been given the data requested of the strikers' representatives. In only a few instances have the employers refused point-blank to furnish the department information relative to labor disturbances, but at the same time these employers were both reticent and evasive. Under the present law the department has to accept such data as the contestants are willing to give. The commissioner has proposed legislation giving him increased authority in such matters.

In the two years ending March 1, 1922, the department investigated 30 strikes and in the preceding two years 75. Notwithstanding this great reduction in the number of strikes in the later biennial period more workers were involved.

Without taking into consideration two strikes of a national character, the commissioner of labor estimated the loss in wages

through strikes for the last two years covered by the report as \$2,665,370, the loss in days as 510,130, or about 1,400 years. Had the national strikes been included in the estimate the time loss would have been 2,000 years. Aside from the two national strikes—of the marine workers and in the printing trades—the strikes of river-front workers were the only ones of grave proportions, the last three of which involved 25 unions and a wage loss of approximately \$1,900,00.

Industrial progress.—During the biennial period 1921–22 there were quite a few accessions of important industries to the State, some of which have the most up-to-date establishments of their kind in the country. There was a steady increase in building and construction activities in New Orleans in 1921. The prospects for 1922 were reported as remarkably encouraging.

Pennsylvania.

LABOR and Industry is the title of a new monthly publication the first issue of which appeared in May, 1922, in which it is proposed “to standardize, and to present in readable form, the current information that emanates from the Department of Labor and Industry of Pennsylvania.” If the venture is successful, the publication of annual reports in bulletin form will be discontinued. Special bulletins will probably be issued from time to time as important material becomes available.

Reference is made in the new monthly bulletin to the work of the various bureaus and boards of the Department of Labor and Industry. Among the more important subjects discussed in the publication are an international safety-first exhibit, inspection work, industrial codes, and strikes. Comprehensive plans for an international “safety-first” exhibit have been submitted to the committee in charge of the Sesqui-Centennial Exposition which will be held in 1926 in Philadelphia. If the present proposal of the authorities is carried out, this exhibit will be made a permanent feature of the exposition. The forecasted results of such action are summarized as follows:

1. It would establish a clearing house for progress in industry throughout the world along lines of safety and welfare.
2. It would place the preeminently industrial State of Pennsylvania foremost in the interest of “safety first.”
3. It would establish in one of the principal centers of the world a museum that would record, by means of exhibits, the evidence of industrial progress.
4. It would be the first time on record that an international exposition has recognized the importance of a “world-wide safety movement.”

Inspection.—A “block system” of inspection, which was devised by the present commissioner of labor and industry, has been in effect in Pennsylvania since February, 1921. The six sections into which the State is divided are separated into districts each of which includes from 10 to 30 blocks. In 1921 there were 109,000 inspections made, an increase of approximately 20,000 over the preceding year. It is reported that the “block system” has resulted in the inclusion of every industrial establishment in Pennsylvania under the department’s jurisdiction, while in previous years “only a ‘hit or miss’ jurisdiction was exercised.” Some blocks are the size of a city square,

as is the case in concentrated industrial localities. Other blocks are as large as a township.

Block cards are made out, upon which are recorded information relative to each and every industrial establishment; for example, number of employees, character of business, and safety provisions. One of the difficulties at present in operating under this system is the making of the many initial inspections with a limited number of inspectors. After the whole State has been covered the number of persons required for this work can be estimated. It is believed that in the future the system will result in more efficient inspection. All industrial establishments will be covered and responsibility more definitely fixed.

Strikes.—The year 1921 was the worst in the history of Pennsylvania in the matter of strikes. The loss in wages alone from these industrial disputes was \$38,375,104, far outbalancing the wage loss from strikes during the three previous years combined, which was \$30,607,001.

The following table shows for the year 1921, by industries, the number of strikes reported and terminated, the number of strikes in which the bureau of mediation and conciliation was active, and the number of persons involved in these strikes, together with the time losses resulting therefrom:

DATA ON STRIKES, 1921.

Industry.	Total.	Pending previous year.	Reported in 1921.	Number closed.	Pending.	Bureau active.	Males.	Females.	Days lost.
Building.....	233	1	232	229	4	140	28,904		1,943,365
Clay.....	9	9		9		9	31		3,512
Clothing.....	439		439	439		92	8,431	7,135	321,253
Food.....	2		2	2		1	40		79
Leather.....	24		24	24		24	253		10,418
Lumber.....	12		12	12		12	250		1,884
Printing.....	270		270	121	149	167	3,817	53	354,616
Textiles.....	61	8	53	60	1	56	5,108	3,900	1,349,372
Metals.....	36	3	33	29	7	19	11,486		1,093,698
Mines.....	90		90	75	15	20	80,111		746,989
Public service.....	7	3	4	7		4	3,248		166,552
Tobacco.....	1		1		1	1	10	80	810
Miscellaneous.....	26	12	14	26		26	233	29	11,733
Total.....	1,210	36	1,174	1,033	177	571	141,922	11,206	6,004,261

Industrial codes.—There are 33 codes of the industrial board in effect at the present time and 7 new ones are in process of construction. The board has also approved 277 devices for the furtherance of the cause of safety. Thousands of copies of the codes are forwarded every month to persons who make request for them.

The success of the industrial board is attributed to the cooperation it has in the making of its rules. It is believed that compliance with the codes is facilitated because they are put in operation without resort to force.

On May 9, 1922, the laundries code, the mechanical power transmission code, and the scaffolds code were adopted.¹

¹ Pennsylvania Department of Labor and Industry. Industrial Board Bulletin of Information, Harrisburg, May, 1922.

Industrial board's home-work regulations.—The new principle in home-work regulations adopted by the industrial board on May 9, 1922, to become effective September 1, 1922, is embodied in section 2, on specifications, which reads in part as follows:

(a) The employer shall not furnish material to any home worker until a certificate of health has been presented from the State or local department of health, setting forth that the home has been inspected and found to be in a clean and sanitary condition and free from any infectious, contagious, or communicable disease. Such certificate shall be valid for a period of one year from date of issue unless revoked by the commissioner for cause.

The employer must keep on file, on department of labor and industry blanks, data as to the kind of home work which is being done, exactly where it is being done, and the names and ages of the persons engaged in such work.

Industrial home workers are subject to the provisions of the State laws on women and children in industry. There are also special rulings for woman and child home workers.

Tennessee.

A DIRECTORY of the industries of Tennessee covers 38 of the 104 pages of the ninth annual report of the bureau of workshop and factory inspection of that State for the year ending December 31, 1921. The following brief digest gives some of the more significant data from other parts of the publication.

Inspection work.—To facilitate the work of the several deputy factory inspectors, the chief inspector has divided the State into four districts, the local offices of such districts being Nashville, Memphis, Knoxville, and Chattanooga, respectively. Each inspector covers his own division as frequently as he can during the year. These officials are said to be thoroughly enforcing the laws and securing the support of both employers and employees in improving conditions. The bureau's policy in bringing about compliance with regulations is more pacific than harsh, resort being had to the courts in as few cases as possible.

The total number of employees in the industries inspected in 1921 was over 105,000, of whom more than 74,000 were males and nearly 30,000 females over 16 years of age. In connection with the inspection of the establishments employing these workers, 113 cities and 61 counties were visited. The bureau's inspectors are all long experienced and competent mechanics. There were approximately 2,500 inspections made in 1921. Among the subjects included in the inspectors' reports are: Sanitation, ventilation, machinery, fire escapes and fire protection, accident reporting, semimonthly pay day, dressing rooms, safety, hours, wages, toilets, posting notice and time records for female workers, and age, hours, and certificates of minors.

In the year covered by the report 949 orders were issued, 749 of which were complied with, 8 canceled, and 124 pending. In the case of 68 orders the date of compliance was not due in the period covered.

Safety and sanitation.—In the last few months of 1921 there was a remarkable improvement in factory conditions. Machinery and

hazardous places were guarded, and lockers, toilets, and shower baths provided. The number of accidents reported to the bureau was reduced about 12 per cent.

The bureau's industrial safety standards have been issued in pamphlet form and distributed among the various establishments. This publication includes photographs of different kinds of machinery and standard guards.

Industrial nursing.—The hope is expressed in the bureau's report that every industry in the State will follow the example of certain of the larger manufacturing establishments of Tennessee that have emergency hospitals and nurses to give first aid.

Enforcement of mattress law.—It is announced that hereafter all violations of the law regulating the mattress business (ch. 60, Acts of 1917) will be prosecuted. Manufacturers and dealers in this business "are not thoroughly acquainted" with the law and it is necessary to call the same to their attention.

Wages.—The following table shows the scale of wages (average weekly wage) for each of the past nine years for different classes of workers:

WEEKLY SCALE OF WAGES FOR MALE AND FEMALE ADULTS AND MINOR EMPLOYEES
1913 TO 1921.

	1913	1914	1915	1916	1917	1918	1919	1920	1921
Male adults.....	\$12.68	\$12.17	\$12.40	\$12.15	\$12.83	\$23.15	\$22.07	\$20.89	\$22.22
Female adults.....	6.92	7.47	8.58	8.69	7.40	9.21	10.77	12.02	12.99
Minor employees.....	4.89	4.28	3.97	3.70	4.46	5.75	7.14	7.97	8.48

Women's working hours.—A special report on 276 establishments employing 8,177 females gives the following figures as to the daily and weekly hours of labor in such work places:

HOURS PER DAY AND PER WEEK WORKED IN CERTAIN ESTABLISHMENTS IN 1921.

Number of establishments.	Hours worked.	
	Per day.	Per week.
95.....	8	Not over 43.
98.....	9	Not over 54.
62.....	9½	Not over 57.
19.....	10 and 10½	Not over 57.
2.....	Over 10, 10½	Over 57.

Of these 276 establishments 250 furnished seats for females and 205 provided dressing rooms.

Child labor.—The Federal child-labor tax law, passed in 1918 and recently declared unconstitutional, is reported as having been of material assistance in enforcing the State child-labor law.

Among the recommendations which the report makes relative to child labor is that children should not be permitted to work more than three hours per day in addition to their school hours.

Employment agencies.—Several employment offices in the larger cities of the State have been compelled to discontinue operations

because of the drastic character of the Tennessee employment agency act, and the few agencies now in existence are conforming with the legal requirements.

The inspection bureau desires to aid those seeking jobs but considers that one of its duties is to protect the workers from employment agencies which have not been established or which are not operating in accordance with the law.

Wisconsin.¹

THE following are the more important changes in the rules governing the hours of labor and minimum wage rates in pea canneries, which were adopted March 21, 1922:

(a) The number of days on which women may be employed in excess of the statutory 10 hours is reduced from 15 to 10.

(b) The maximum number of hours per week during emergencies is reduced from 70 to 66.

(c) All permission for overtime to girls between 16 and 17 has been struck out.

(d) The meal period rule has been rewritten to provide that meal periods must be given at the times usual for meals and may not be less than 30 minutes in length.

(e) The clause relating to wage rates has been rewritten to conform with the revision of Minimum Wage Order No. 1. All women and minor employees must be paid 22 cents an hour in places of less than 5,000 population, and 25 cents per hour in larger cities.

(f) Canneries must this year report the reasons for overtime whenever they exceed the statutory hours of labor.

Safety orders on mines.—General safety orders on mines, effective May 1, 1922, replace the general orders on lead and zinc mines, which were adopted in 1914.

A valuable compilation.—A complete history of all the general orders of the commission is being gathered together under the secretary's direction by university students. It is proposed to finish the record next year and include in it data indicating the need for the different orders. One of the students is working up a record of all the modifications to these general orders that have been allowed by the commission.

Conference re joint agreement for removal of grain dusts.—The industrial commission has suggested to the United States Secretary of Agriculture that he call a conference of the various "parties interested in terminal elevators in Middle West" for a discussion as to possibilities for a joint agreement for the removal of dust from grain being taken into elevators. The need for this action is acknowledged by all because of numerous dust explosions which have occurred within recent years in grain elevators.

Home work.—The industrial commission has received many applications for permits for home manufacture. The necessary preliminary inspections will be made by the women's department before permits are issued, in order to ascertain whether the manufacturers requesting such permits are complying with the child-labor law, the minimum-wage law, and the home-work law.

Apprenticeship.—At the close of March, 1922, there were 1,300 live contracts, the number of indentured apprentices exceeding that

¹ Wisconsin. Industrial Commission. Progress of work report, March, 1922. Madison, Apr. 28, 1922. (Mimeographed.)

for any period since the apprenticeship law was enacted in 1915. The number of new contracts received in March was 51. During that month there were 16 completions and 14 cancellations.

The Milwaukee electrical workers have declared themselves in favor of the employment in future of only apprentices and journeymen and the abolition of the helper system.

There has also been progress in developing apprenticeship standards in drug stores. The State pharmacy board is to cooperate in the working out of this problem.

In regard to the indenturing of apprentices in "struck" printing shops in Milwaukee, the commission has decided not to approve indentures for compositors in such shops as long as the strike is in active progress. It will, however, approve indentures for shops, union or nonunion, which have not been "struck," provided that apprentices so indentured will not be employed in the "struck" shops. Indentures will also be approved for apprentices in "struck" shops in trades not directly involved in the strike.

Inspections—Women's department.—During March, 1922, 226 establishments were visited; 76 of these, however, had no women or child workers. Surveys were conducted in Columbus and Fort Atkinson.

Child labor—Milwaukee office.—According to a decision of the industrial commission, Milwaukee attendance officers after May 1, 1922, will not be allowed to "call in" permits of children whose attendance is not regular at continuation schools. The practice is not warranted under the law and is exceedingly dangerous to employers. In future the commission's Milwaukee permit deputy will be the only person authorized to revoke permits, but it is planned to cooperate closely with the city superintendent's office in order to keep children from working on permits when they do not meet the legal requirements regarding attendance at the continuation school.

In March the junior placement bureau's registrations of children who desired employment totaled 120, and 78 requests for permit children by employers were received. There were 60 children placed in full-time positions and 3 in part-time positions. The placement work of the Girls' Trade School is to be cleared through the juvenile employment bureau. It is reported that one of the employees of the city superintendent's office who has in previous years had the work of placing children on farms for the summer will again look after this matter.

Proposed rules for private employment office fees.—The question of tentative rules relative to the charging of fees by private employment agencies for clerical and professional workers was discussed at several of the industrial commission's conferences last March. A decision was reached to submit the following tentative regulations to the advisory committee on employment agency fees:

- (a) A lower percentage of the salary is to be charged less well paid employees.
- (b) Complete reports shall be filed annually by all employment agencies, showing their receipts and expenses.
- (c) Refunds for positions which are supposed to be permanent, but are held only for a short time, are to be avoided if possible.

CURRENT NOTES OF INTEREST TO LABOR.

Bureau of Accident Statistics of the Safety Institute of America.

A BUREAU of industrial accident statistics¹ is to be opened in New York City by the Safety Institute of America. While the library of the institute has collected information on health and sanitation since 1907, there has been a lack, it is stated, of adequate statistical information. In view, therefore, of the fact that the accident problem is of ever increasing gravity and any real solution must be based on statistical knowledge great weight is attached by those interested in accident prevention to the establishment of a clearing house for the accident statistics of the city.

The new bureau will attempt to correlate the work of agencies now gathering statistics relating to accidents; to institute more accurate registration of accidents to children, and to standardize methods and stimulate better record keeping by those companies which participate in the cooperative industrial safety work of the institute.

Journal of Personnel Research.

THE first issue of the Journal of Personnel Research appeared in May, 1922. This is the official publication of the Personnel Research Federation, an account of whose formation may be found in the MONTHLY LABOR REVIEW of May, 1921 (pp. 176, 177). Special articles in this first number of the journal are: "Reasons for personnel research," by James R. Angell, president of Yale University; "Development of personnel research," by Alfred D. Flinn, secretary, Engineering Foundation; and "Basic experiments in vocational guidance," by C. S. Yoakum, director, Bureau of Personnel Research, Carnegie Institute of Technology. The journal contains also notices of a number of studies dealing with certain aspects of personnel now being undertaken by various organizations, associations, and universities.

Reconstruction Hospital for Industrial Cases, New York City.

THE Reconstruction Hospital in New York City,² which is dedicated solely to the care of industrial accidents and diseases and the restoration of industrial casualties to active useful life, completed its first year in April, at which time ground was broken for an extensive addition designed to put the hospital upon a national basis. The experience gained in the rehabilitation of men injured in the war has been adapted to the needs of the industrially disabled, and patients receive the benefits of an intensive study of their cases by specialists who are well versed in all forms of therapy. The hospital also provides for after-care of the patient until he is capable of earning a livelihood. About 175 cases receive treatment daily, about half of which are sent by the Government, it is said, and the

¹ Safety Institute of America. Safety, New York, June, 1922, pp. 136-138.

² Iron Age, New York, Apr. 13, 1922, p. 991.

plans for the addition provide for 175 more beds in small wards and semiprivate rooms. In addition to the usual equipment of a modern hospital there will be the most extensive physio-therapy plant in existence, rooms for occupation therapy, especially designed equipment incorporating the latest principles in rehabilitation and electro-therapy, whirlpool baths, and a gymnasium with mechanical devices for restoring the functions of stiffened joints and weakened muscles.

During the year of operation men have been sent to the hospital from all over the country and many apparently incurable cases, it is stated, have been returned to useful industrial life.

Report of the Argentine National Pension Fund of Employees of Private Companies.

THE March, 1922, issue of *Crónica Mensual*, published by the Argentine Department of Labor, contains a summary of the report covering the first 10 months' operation of the law¹ providing for the pensioning of the employees of private companies performing public utility functions, that is, the period from March 1 to December 31, 1921. During this period the national pension fund established by this law accumulated a capital of 6,350,025 paper pesos (\$2,696,221, par) from the following sources: A compulsory deduction of 5 per cent from the wages of the personnel of the companies covered by the act, 1,637,554.69 pesos (\$695,306, par); one month's pay from each employee and workman, payable in 36 monthly installments, 881,718.24 pesos (\$374,378, par); payments on account of increased wages, 78,019.88 pesos (\$33,127, par); contribution from the companies equivalent to 8 per cent of the amount of the pay roll, 2,625,138.08 pesos (\$1,114,634, par); transfer of a pension fund established by the municipal ordinance of January 10, 1920, 1,125,265.07 pesos (\$477,788, par); and interest on bonds (for November and December only), 54,893.09 pesos (\$23,308, par). The administrative expenses amounted to 52,564.05 pesos (\$22,320, par). Twenty companies—tramway, electric, telephone, telegraph, cable, radio, and gas—employing 22,984 persons, were affiliated to the fund at the close of 1921.

Minors Employed in Argentina in 1921.²

DURING the year 1921 the Argentine Department of Labor issued 10,091 work permits to minors 16 years of age for employment in industry and commerce. This number is somewhat smaller than in 1920 but much larger than in earlier years. The table showing the number of permits issued annually, 1914 to 1921, is reproduced below:

WORK PERMITS ISSUED TO MINORS 16 YEARS OF AGE, 1914 TO 1921.

Year.	Number of permits.	Year.	Number of permits.
1914.....	5, 586	1918.....	8, 686
1915.....	4, 093	1919.....	8, 603
1916.....	5, 215	1920.....	10, 776
1917.....	6, 625	1921.....	10, 091

¹ For an account of this law see the MONTHLY LABOR REVIEW for July, 1921, pp. 212, 213.

² *Crónica Mensual del Departamento Nacional del Trabajo*, Buenos Aires, February, 1922, p. 816.

Cost of Labor and Material in Shanghai Building Industry.

THE following report from the American consul general in Shanghai, China, in regard to the wages paid to building laborers and the cost of building material in Shanghai appears in Commerce Reports, June 5, 1922 (p. 643):

The present wages paid in the various lines of construction work at Shanghai are as follows: Common labor, 45 to 50 cents per day; carpenters and bricklayers, 60 to 75 cents per day; pipe fitters, \$20 to \$30 per month; and electricians, \$20 to \$25 per month. In addition all trades have apprentices who are paid from 25 to 45 cents per day. While Chinese labor is cheap it is also slow and inefficient, and in the long run almost as expensive as American labor.

Present material prices were given as follows: Portland cement, \$4.25 to \$5 per barrel; sand, 9 to 10 taels per fong (100 cubic feet); crushed stone, 12 to 15 taels per fong; lime, \$1.80 per picul (133½ pounds); common brick, \$11.50 to \$13 per thousand face brick, 10 to 17 taels per thousand; lumber, \$67 per thousand.

(The above prices are given in Mexican currency or Shanghai taels. On the date quoted the exchange value of the Shanghai tael was \$0.73½ United States currency and \$1 United States currency equaled \$1.8557 Mexican.)

Labor Magazine (New Organ of British Labor Movement).

THE Labor Magazine, incorporating the British Trades Union Review and the Labor Party Bulletin, made its initial appearance in May, 1922. An editorial in the first issue (p. 24) states that the magazine is "frankly and avowedly the official monthly journal of the labor movement." It aims to be the organ of the whole movement not of a minority, and to present "adequately and impartially" the activities and opinions of organizations and of men who are a part of the trade-union and labor movement in England and in foreign countries, or are associated with them.

Reduction of Employees in Japanese Shipyard.

A NOVEL method of reducing the number of employees without causing friction or unpleasantness of any kind has been adopted with marked success by a Japanese shipbuilding firm at Nagasaki, according to a recent consular report. Owing to the international agreement in regard to the limitation of armaments and the very decided decrease in the demand for merchant vessels, the number of workmen in the employ of this company at the beginning of the present year was very much in excess of the number needed for the year's construction program. Realizing that the necessary reductions could not be effected without serious labor troubles unless some steps were taken to avoid them, the Mitsubishi Co. announced that any workman of the company who voluntarily tendered his resignation within 10 days from the date of the announcement would be given a special bonus, in addition to the usual bonus given by many Japanese firms upon dismissal or resignation, consisting of a cash payment of from 60 to 120 day's extra pay and traveling expenses of these workmen and their families back to their native cities or villages. In addition to this special bonus the workmen who re-

signed voluntarily received the regular allowance worked out on the following scale:

- 10 days' extra wages for 1 year of service.
- 20 days' extra wages for 2 years of service.
- 30 days' extra wages for 3 years of service.
- 40 days' extra wages for 4 years of service.
- 50 days' extra wages for 5 years of service.
- 150 days' extra wages for 10 years of service.
- 275 days' extra wages for 15 years of service.
- 420 days' extra wages for 20 years of service.
- 610 days' extra wages for 25 years of service.
- 860 days' extra wages for 30 years of service.
- 1,060 days' extra wages for 35 years of service.
- 1,520 days' extra wages for 40 years of service.

There were approximately 16,950 employees at the Nagasaki works of this company at the time the proposal was made and by reason of the special bonus 3,732 workmen voluntarily resigned, the payments involving an expenditure on the part of the company of more than \$800,000.

Creation of an Institute for Occupational Retraining in Spain.¹

THE revised and amended Spanish workmen's compensation law of January 10, 1922,² provided that the Ministry of Labor should organize an institute for the retraining of those disabled in industry. This was effected by royal decree of March 4, 1922.

The funds of the institute will be derived from State, provincial, and municipal grants, private legacies and gifts, sums received in payment for treatment given to persons who are able to pay for it, and the proceeds from the sale of the publications of the institute.

The three special functions of the institute are functional readaptation, occupational retraining, and the protection of those retrained. If possible the injured person will be returned to his former occupation; but if the nature of the injury is such as to preclude this, he will be trained for work suited to his capacity. The work will be carried on in suitable workshops, special shops being provided for woman workers. In addition to the clinic and workshops, which are to be provided with all necessary therapeutical and surgical equipment, there will be a free consulting service, in which all who desire to obtain the assistance of the institute will be examined.

All those being trained in the shops are paid for their work, part of the remuneration going to pay the expense of retraining and the remainder being paid to the worker in a form to be provided in the regulations of the decree. Furthermore, the institute will find employment for those who are retrained and will have special follow-up work to look after the welfare of those so trained and placed in employment.

The administration of the institute is vested in a council consisting of a president and 12 members—the undersecretary of the Ministry of Labor, Commerce, and Industry, the director general of local administration, two representatives from the Institute of Social

¹ Boletín Oficial del Ministerio de Trabajo, Comercio e Industria, Madrid, March, 1922, pp. 42-45.

² For a summary of this law see p. 164.

Reform (one employer and one worker), one representative each from the Royal Academy of Medicine and the committee for engineers and workmen holding scholarships, and six appointed by the Government from among those of recognized competence in the work undertaken by the institute. The head of the education and scientific investigation section of the department of industry of the ministry will be ex officio secretary of the council, and a director will be appointed as a permanent delegate of the council, all departments of the institute to be under his control. The council members are to be chosen at once and will proceed to draw up regulations for the institute, such regulations to be submitted to the ministry within two months after the promulgation of the decree in question.

Reorganization of the Spanish Ministry of Labor.

IN THE May, 1922, issue of the MONTHLY LABOR REVIEW (p. 233) brief mention was made of the decree of February 20, 1922, by which certain divisions of the Spanish Ministry of Public Works were transferred to the Ministry of Labor, which then became the Ministry of Labor, Commerce, and Industry (*Ministerio de Trabajo, Comercio e Industria*). A royal decree of March, 4, 1922,¹ prescribes the organization of the new ministry and provides for a secretary general and central division, an undersecretary, departments of labor, commerce, and industry, and other divisions. The secretary's office has six divisions, as follows: (1) The section of social and economic policy, which will study proposed social and economic legislation and industrial disputes, and keep statistics of strikes and a register of labor and employers' organizations; (2) information and publicity; (3) international affairs; (4) personnel; (5) document registry and archives; and (6) disbursing office.

The department of labor has six sections, as follows: (1) Labor and labor statistics; (2) social insurance and labor exchanges; (3) cheap houses; (4) cooperation; (5) emigration; and (6) colonization. It is the duty of the first of these sections to administer the laws concerning labor inspection, hours of work, weekly rest, home work, woman and child labor, industrial accidents, constitution and functioning of the local boards of social reform (*juntas locales de reformas sociales*), and relations with the Institute of Social Reform (*Instituto de Reformas Sociales*). Inspection of factories and workshops, vocational education, and occupational retraining are under the department of industries.

The organization and activities of the Institute of Social Reform, which is closely associated with the Ministry of Labor, Commerce, and Industry, are described in *Industrial and Labor Information* (Geneva, February 24, 1922, p. 12).²

By the decree of October 14, 1919, effecting its reorganization, the number of employers' and workers' representatives was increased from 12 each to 32 each. These, with the 18 representatives appointed by decree, 2 nominated by the Chamber of Deputies and 2 by the Senate, and 12 representing various organizations, make a total of 98

¹ Boletín del Ministerio de Trabajo, Comercio e Industria, Madrid, March, 1922, pp. 1-12.

² Based on an article in *El Socialista*, January 21, 1922.

representatives. The employers' and workers' representatives are selected from organizations previously registered at the institute. The institute holds at least two plenary sessions each year; the council, however, meets regularly every two weeks and at other times at the discretion of the president.

During 1921 the council dealt with such matters as the housing act, elections of the local committees of social reform, creation of industrial tribunals, application of the 8-hour day to railways, and questionnaires of the international labor office concerning items on the agenda of the Geneva conference. It also drafted a bill concerning labor agreements, which will be discussed at the next plenary session.

DIRECTORY OF LABOR OFFICIALS IN UNITED STATES AND CANADA.

(Bureaus of Labor, Employment Offices, Industrial Commissions, State Compensation Insurance Funds, Compensation Commissions, Minimum Wage Boards, Factory Inspection Bureaus, and Arbitration and Conciliation Boards.)

UNITED STATES.

[Omission of salary paid and of explanatory note indicates that the bureau has received no information.]

Designation of office and name and address of official.	Salary per annum.
Department of Labor:	
Hon. James J. Davis, Secretary	\$12,000
Hon. Edward J. Henning, Assistant Secretary	5,000
Hon. Robe Carl White, Second Assistant Secretary	5,000
Address: 1712 G Street NW., Washington, D. C.	
Bureau of Labor Statistics—	
Ethelbert Stewart, commissioner	5,000
Address: 1712 G Street NW., Washington, D. C.	
Bureau of Immigration—	
W. W. Husband, commissioner general	5,000
Address: 1712 G Street NW., Washington, D. C.	
Bureau of Naturalization—	
Richard K. Campbell, commissioner	4,000
Address: 1712 G Street NW., Washington, D. C.	
Children's Bureau—	
Miss Grace Abbott, chief	5,000
Address: Twentieth Street and Virginia Avenue NW., Washington, D. C.	
Employment Service—	
Francis I. Jones, director general	5,000
Address: Twentieth Street and Virginia Avenue NW., Washington, D. C.	
Division of Conciliation—	
Hugh L. Kerwin, director	5,000
Address: 1712 G Street NW., Washington, D. C.	
Women's Bureau—	
Miss Mary Anderson, director	5,000
Address: Twentieth Street and Virginia Avenue NW., Washington, D. C.	
United States Housing Corporation—	
Robert Watson, director	5,000
Address: Homer Building, 1330 F Street NW., Washington, D. C.	
United States Employees' Compensation Commission:	
Mrs. Bessie P. Brueggeman, chairman	4,000
John J. Keegan	4,000
Charles H. Verrill	4,000
S. R. Golibart, jr., secretary	3,000
Edw. C. Ernst, acting medical director	(1)
S. D. Slentz, attorney	4,000
Robert J. Hoage, chief statistician	3,500
Address of commission: "F" Building, Seventh and B Streets NW., Washington, D. C.	
United States Railroad Labor Board:	
Ben W. Hooper, chairman	10,000
G. W. W. Hanger, vice chairman	10,000
Horace Baker	10,000
R. M. Barton	10,000
J. H. Elliott	10,000

¹ Medical officer of U. S. Public Health Service and receives no compensation from the U. S. Employees, Compensation Commission.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
United States Railroad Labor Board—Concluded.	
Samuel Higgins.....	\$10,000
W. L. McMenimen.....	10,000
Albert Phillips.....	10,000
A. O. Wharton.....	10,000
L. M. Parker, secretary.....	5,000
Address of board: Transportation Building, 608 South Dearborn Street, Chicago, Ill.	
<i>Alabama.</i>	
Child Welfare Commission:	
Thomas E. Kilby, ex officio chairman, governor.....	
Child welfare department—	
Mrs. L. B. Bush, director.....	3,000
Child labor division—	
Esther Lee Rider, chief inspector.....	2,400
Address of commission: Montgomery.	
Compensation Commissioner:	
Mrs. Marie B. Owen, ex officio director, department of archives and history, Montgomery.....	
United States Employment Service:	
H. E. Oliver, Federal director for State, Birmingham.....	15.60
<i>Alaska.</i>	
Territorial Mine Inspector and Ex Officio Labor Commissioner:	
B. D. Stewart, Juneau.....	3,000
<i>Arizona.</i>	
State Mine Inspector:	
John F. White, Phoenix.....	3,000
United States Employment Service:	
John D. Patty, Federal director for State, 121 North Second Avenue, Phoenix.....	2.60
<i>Arkansas.</i>	
Bureau of Labor and Statistics:	
T. A. Wilson, commissioner, State Capitol, Little Rock.....	\$2,400
Industrial Welfare Commission:	
T. A. Wilson, ex officio chairman, commissioner, Bureau of Labor Statistics.....	(3)
Mrs. M. A. P. McCrary.....	(3)
Mrs. J. G. Spurgeon, secretary, 712 Parker Avenue, North Little Rock.....	(3)
F. E. Bayless.....	(3)
I. H. Nakdimen.....	(3)
Address of commission: Room 129, State Capitol, Little Rock.	
Federal-State Employment Service:	
T. A. Wilson, Federal director for State, Little Rock.....	1
<i>California.</i>	
Department of Labor and Industrial Relations: ⁴	
Will J. French, chairman, 525 Market Street, San Francisco.....	(3)
Simon J. Lubin.....	(3)
Walter G. Mathewson.....	(3)
Mrs. Katherine Philips Edson, secretary, 870 Market Street, San Francisco.....	(3)

² The State adds \$4,940.³ No salary.⁴ Organized October 26, 1921, having jurisdiction over the Bureau of Labor Statistics, Industrial Accident Commission, Industrial Welfare Commission, and the Commission of Immigration and Housing.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>California—Concluded.</i>	
Department of Labor and Industrial Relations—Concluded.	
Bureau of labor statistics—	
Walter G. Mathewson, commissioner, 948 Market Street, San Francisco.....	\$4, 000
Public employment bureaus—	
C. B. Sexton, director, 771 Howard Street, San Francisco.....	2, 700
Industrial accident commission—	
Will J. French, chairman.....	5, 000
A. J. Pillsbury.....	5, 000
A. H. Naftzger.....	5, 000
H. L. White, secretary.....	3, 600
H. M. Wolfin, superintendent of safety.....	5, 000
M. R. Gibbons, medical director.....	⁵ 3, 600
A. E. Graupner, attorney.....	4, 000
F. B. Lord, manager, compensation department.....	3, 600
State compensation insurance fund—	
C. W. Fellows, manager.....	10, 000
Address of commission: 525 Market Street, San Francisco.	
Industrial welfare commission—	
A. B. C. Dohrmann, chairman.....	⁶ 10
Walter G. Mathewson.....	⁶ 10
Henry W. Louis.....	⁶ 10
Mrs. Katherine Philips Edson, executive commissioner.....	⁶ 10
Address of commission: 870 Market Street, San Francisco.	
Commission of immigration and housing—	
Simon J. Lubin, president.....	(7)
Most Rev. E. J. Hanna, D. D., vice president.....	(7)
Mrs. Frank A. Gibson.....	(7)
J. H. McBride, M. D.....	(7)
Paul Scharrenberg, secretary.....	(7)
R. W. Kearney, attorney and executive officer.....	4, 000
Address of commission: 525 Market Street, San Francisco.	
United States Employment Service:	
Walter G. Mathewson, Federal director for State, 771 Howard Street, San Francisco.....	1
<i>Colorado.</i>	
Bureau of Labor Statistics:	
Carl S. Milliken, secretary of State and ex officio labor commissioner.....	
Carl DeLochte, deputy State labor commissioner and chief factory inspector.....	
State free employment offices—	
Carl DeLochte, deputy State labor commissioner and chief factory inspector.....	2, 500
Address of bureau: Denver.	
Industrial Commission:	
Joseph C. Bell, chairman.....	4, 000
Hiram E. Hilts.....	4, 000
William I. Reilly.....	4, 000
H. E. Curran, secretary.....	3, 000
William F. Mowry, chief of claim department.....	3, 000
State compensation insurance fund—	
Thomas P. Kearney, manager.....	3, 000

⁵ Part time.

⁶ Per diem and travelling expenses.

⁷ No salary, but allowed expenses incurred while commission is in session.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Colorado—Concluded.</i>	
Industrial Commission—Concluded.	
Minimum wage commission—	
(According to an act passed by the 1917 legislature and effective July 20, 1917, the State industrial commission performs the duties of the minimum wage commission.)	
Address of commission: State capitol building, Denver.	
United States Employment Service:	
Carl DeLochte, Federal director for State, Room 3, State Capitol, Denver.....	\$1, 320
<i>Connecticut.</i>	
Department of Labor and Factory Inspection:	
William S. Hyde, commissioner, Hartford.....	} 3, 500
State employment offices—	
William S. Hyde, commissioner, Hartford.....	
Board of Compensation Commissioners:	
Frederic M. Williams, chairman, Room 4, County Courthouse, Waterbury.....	4, 500
George E. Beers, 42 Church Street, New Haven.....	4, 500
Edward T. Buckingham, 1024 Main Street, Bridgeport.....	4, 500
George B. Chandler, 54 Church street, Hartford.....	4, 500
Dr. James J. Donohue, Central Building, Norwich.....	4, 500
State Board of Mediation and Arbitration:	
Edward W. Broder, Hartford.....	(3)
George L. Fox, New Haven.....	(3)
Patrick F. O'Mara, New Haven.....	(3)
United States Employment Service:	
William S. Hyde, Federal director for State, Hartford.....	1
<i>Delaware.</i>	
Labor Commission:	
Irving Warner, chairman.....	(3)
John H. Hickey.....	(3)
Thomas C. Frame, jr.....	(3)
George A. Hill.....	(3)
Miss Helen S. Garrett.....	(3)
Miss Helen E. Brinton, secretary.....	100
Address of commission: Wilmington.	
Child-labor division—	
Charles A. Hagner, chief, Industrial Trust Building, Wilmington..	1, 800
Women's labor division—	
Miss Helen E. Brinton, assistant, Industrial Trust Building, Wilmington.....	1, 000
Inspector of canneries—	
Dr. William R. Messick, Lewes.....	8 1, 000
Industrial Accident Board:	
Volley M. Murray, president.....	2, 500
Walter O. Stack.....	2, 500
Robert K. Jones.....	2, 500
Charles H. Grantland, secretary.....	2, 500
Address of board: State House, Dover, and Ford Building, Wilmington.	
United States Employment Service:	
Joseph H. Odell, Federal director for State, Sixth and Market Streets, Wilmington.....	1

³ No salary.

⁸ And \$500 for upkeep of automobile.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>District of Columbia.</i>	
Minimum Wage Board:	
Jesse C. Adkins, chairman.....	(3)
John L. Newbold.....	(3)
Miss Ethel M. Smith.....	(3)
Miss Elizabeth Brandeis, secretary.....	\$2, 500
Address of board: District Building, Washington, D. C.	
<i>Florida.</i>	
State Labor Inspector:	
Lewis W. Zim, St. Augustine.....	1, 800
<i>Georgia.</i>	
Department of Commerce and Labor:	
H. M. Stanley, commissioner, Atlanta.....	3, 600
I. L. Griffin, factory inspector, Atlanta.....	1, 200
Address of Department: Atlanta.	
Industrial Commission:	
H. M. Stanley, chairman, ex officio.....	
George M. Napier, attorney general (ex officio).....	
S. J. Slate, representing employers.....	4, 000
L. J. Kilburn, representing employees.....	4, 000
Address of commission: Atlanta.	
United States Employment Service:	
H. M. Stanley, Federal director for State, 318 State Capitol, Atlanta.....	1
<i>Hawaii.</i>	
CITY AND COUNTY OF HONOLULU.	
Industrial Accident Board:	
F. E. Steere, chairman.....	(9)
A. J. Campbell.....	(9)
A. J. Wirtz.....	(9)
M. MacIntyre.....	(9)
H. W. Laws.....	(9)
F. Mason, inspector.....	(9)
A. W. Nexsen, secretary.....	(9)
Address of board: 314-317 James Campbell Building, Honolulu.	
COUNTY OF MAUI.	
Industrial Accident Board:	
George Freeland, chairman, Lahaina, Maui.....	(3)
George Weight.....	(3)
W. H. Field.....	(3)
J. H. Gray.....	(3)
W. O. Aiken.....	(3)
Mrs. Frances S. Wadsworth, inspector and secretary, Wailuku, Maui.....	10 100
COUNTY OF HAWAII.	
Industrial Accident Board:	
W. J. Stone, chairman.....	(3)
David Ewaliko.....	(3)
Byron K. Baird.....	(3)
James Webster.....	(3)
Dr. H. B. Elliot.....	(3)
J. W. Bains, secretary.....	
Address of board: Hilo.	

³ No salary. ¹⁰ Per month, with necessary traveling expenses.
⁹ No salary, but allowed necessary traveling expenses.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Hawaii</i> —Concluded.	
COUNTY OF KAUAI.	
Industrial Accident Board: J. M. Lydgate, chairman, Lihue.....	(9)
<i>Idaho.</i>	
Commissioner of Immigration, Labor and Statistics: O. H. Barber, Boise.....	\$3, 600
Board for the Adjustment of Labor Disputes: W. J. McVety, chairman, Boise.....	(11)
Industrial Accident Board: Geo. H. Fisher, chairman.....	3, 000
Lawrence E. Worstell.....	3, 000
C. E. Duffy.....	3, 000
John D. Case, secretary.....	2, 100
Address of board: Boise.	
State Insurance Fund: Geo. D. Aiken, manager, Boise.....	3, 600
<i>Illinois.</i>	
Department of Labor: George P. Arnold, director, State Capitol, Springfield.....	5, 000
Division of factory inspection— R. L. Dye, chief inspector, 1543 Transportation Building, Chicago.	3, 000
Division of labor statistics— W. C. Lewman, State superintendent of free employment offices, State Capitol, Springfield.....	3, 000
Division of private employment agencies— John J. McKenna, chief inspector, 608 South Dearborn Street, Chicago.....	3, 000
Industrial commission— Ernest E. Withall, chairman.....	5, 000
C. H. Kunneman (representing employers).....	5, 000
Robert Eadie (representing employees).....	5, 000
Philip Q. Rohm, secretary.....	3, 300
Dr. S. W. Latham, medical director.....	(12)
Address of commission: 303-318 City Hall Square Building, Chicago.....	
United States Employment Service: W. C. Lewman, Federal director for State, Chicago.....	1
<i>Indiana.</i>	
Industrial Board: Samuel R. Artman, chairman.....	4, 000
Kenneth L. Dresser.....	4, 000
Charles Fox.....	4, 000
Thos. A. Riley.....	4, 000
Thomas Roberts.....	4, 000
Edward J. Boleman, secretary.....	2, 500
Address of board: Room 431, Statehouse, Indianapolis.	
Department of factories, buildings, and workshops— Jas. E. Reagin, chief inspector.....	2, 000
Address of department: Room 413, Statehouse, Indianapolis.	
Department of boilers— Wm. V. Griffer, chief inspector.....	2, 000
Address of department: Room 413, Statehouse, Indianapolis.	

⁹ No salary, but allowed necessary traveling expenses.

¹¹ \$6 a day and necessary expenses when employed in labor adjustments.

¹² General fund for medical assistance, \$10,000.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Indiana—Concluded.</i>	
Industrial Board—Concluded.	
Department of mines and mining—	
Cairy Littlejohn, chief inspector.....	\$2, 000
Address of department: Room 413, Statehouse, Indianapolis.	
Department of women and children—	
Mrs. Arthur T. Cox, director.....	2, 000
Address of department: Room 416, Statehouse, Indianapolis.	
United States Employment Service:	
Thos. A. Riley, Federal-State director, 412 Statehouse, Indianapolis.....	1
<i>Iowa.</i>	
Bureau of Labor Statistics:	
A. L. Urick, commissioner, Des Moines.....	3, 000
Free employment bureau—	
George B. Albert, clerk, Des Moines.....	1, 800
Workmen's Compensation Service:	
A. B. Funk, industrial commissioner.....	3, 600
Ralph Young, deputy commissioner.....	2, 700
Ray M. Spangler, secretary.....	2, 000
Dr. Oliver J. Fay, medical counsel.....	⁵ 1, 200
Address: Statehouse, Des Moines.	
United States Employment Service:	
A. L. Urick, Federal director for State, 123 Courthouse, Des Moines.....	1
<i>Kansas.</i>	
Court of Industrial Relations: ¹³	
W. L. Huggins, presiding judge.....	4, 500
Judge J. A. McDermott.....	4, 500
Judge J. H. Crawford.....	4, 500
Will F. Wilkerson, clerk.....	2, 400
Address: Statehouse, Topeka.	
Free employment office, Statehouse, Topeka.	
Mine inspection department—	
James Sherwood, chief mine inspector, Statehouse, Topeka.....	2, 700
Industrial welfare commission—	
Miss Alice McFarland, director women's work, Topeka.....	2, 000
United States Employment Service:	
J. H. Crawford, Federal director for State, Statehouse, Topeka.....	1
<i>Kentucky.</i>	
Department of Agriculture, Labor, and Statistics:	
W. C. Hanna, commissioner, Frankfort.....	4, 000
T. R. Stults, State labor inspector, Columbia.....	1, 200
Mrs. Nick Denunzio, State labor woman inspector, 219 South Sixth Street, Louisville.....	1, 200
Workmen's Compensation Board:	
Clyde R. Levi, chairman.....	3, 500
Alvis S. Bennett.....	3, 500
Felix S. Dumas.....	3, 500
V. C. McDonald, secretary.....	2, 500
Address of board: Frankfort.	
United States Employment Service:	
W. C. Hanna, Federal director for State, Frankfort.....	1

⁵ Part time.

¹³ The Department of Labor and Industry, which included the Free Employment Bureau and the Industrial Welfare Commission, was consolidated Feb. 28, 1921, and now functions under the Court of Industrial Relations.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Louisiana.</i>	
Bureau of Labor and Industrial Statistics: Frank E. Wood, commissioner, suite 626, Maison Blanche Annex, New Orleans.....	¹⁴ \$3, 000
Office Factories Inspector of Orleans Parish: Mrs. Martha D. Gould, Room 28 City Hall, New Orleans	1, 200
United States Employment Service: Frank E. Wood, Federal director for State, New Orleans.....	1
<i>Maine.</i>	
Department of Labor and Industry: Roscoe A. Eddy, commissioner, Statehouse, Augusta.....	2, 000
Industrial Accident Commission: Arthur L. Thayer, chairman.....	3, 500
Donald D. Garcelon, associate legal member.....	3, 000
G. Waldon Smith, (ex officio) insurance commissioner.....	500
Roscoe A. Eddy, (ex officio) labor commissioner.....	1, 000
Annie M. Chase, clerk.....	1, 500
Address of commission: Augusta.	
State Board of Arbitration and Conciliation: Frank H. Ingraham, chairman, Rockland.....	⁶ 5
John S. Harlow, Dixfield.....	⁶ 5
William T. Hinckley, secretary, 5 Broadway, Bangor.....	⁶ 5
<i>Maryland.</i>	
State Board of Labor and Statistics: ¹⁵ J. Knox Insley, M. D., chairman.....	3, 000
Aquila T. Robinson.....	500
Louis Setlen.....	500
Address of board: St. Paul and Saratoga Streets, Baltimore.	
State Industrial Accident Commission: Robert E. Lee, chairman.....	6, 000
Joseph B. Harrington.....	5, 000
Geo. Louis Eppler.....	5, 000
A. E. Brown, secretary.....	3, 000
Miss R. O. Harrison, director of claims.....	2, 000
Dr. Robert P. Bay, chief medical examiner.....	⁵ 2, 000
State accident fund— James E. Green, superintendent.....	3, 000
Address of commission: 741 Equitable Building, Baltimore.	
United States Employment Service: H. F. Baker, Federal director for State, Hoen Building, Baltimore..	1
<i>Massachusetts.</i>	
Department of Labor and Industries: E. Leroy Sweetser, commissioner.....	7, 500
Miss Ethel M. Johnson, assistant commissioner.....	3, 000
Associate commissioners (exercising also the functions formerly vested in the Board of Conciliation and Arbitration and the Minimum Wage Commission):	
Edward Fisher, chairman.....	4, 000
Herbert P. Wascatt.....	3, 000
Samuel Ross.....	3, 000

⁵ Part time.⁶ Per diem and traveling expenses.¹⁴ And traveling expenses.¹⁵ After Jan. 1, 1923, will be under control of a commissioner of labor and statistics.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Massachusetts—Concluded.</i>	
Department of Labor and Industries—Concluded.	
Division of industrial safety—	
John P. Meade, director.....	\$3, 000
Division of statistics—	
Roswell F. Phelps, director.....	3, 000
Division of standards—	
Francis Meredith, director.....	3, 000
Address of department: Room 473, Statehouse, Boston.	
Industrial Accident Board:	
William W. Kennard, chairman.....	5, 500
Frank J. Donahue.....	5, 000
David T. Dickinson.....	5, 000
Joseph A. Parks.....	5, 000
Chester E. Gleason.....	5, 000
John H. Cogswell.....	5, 000
Robert E. Grandfield, secretary.....	4, 500
Francis D. Donoghue, M. D., medical adviser.....	4, 500
Address of board: Room 272, Statehouse, Boston.	
United States Employment Service:	
E. Leroy Sweetser, Federal director for State, 473 Statehouse, Boston.....	1
<i>Michigan.</i>	
Department of Labor and Industry: ¹⁶	
James A. Kennedy, chairman.....	4, 000
Thomas B. Gloster.....	4, 000
Carl Young.....	4, 000
Fred S. Johnson, secretary.....	3, 500
Address of department: Lansing.	
Department of Insurance:	
L. T. Hands, commissioner, Lansing.....	5, 000
State Accident Fund:	
William T. Shaw, manager, Lansing.....	5, 000
United States Employment Service:	
Perry J. Ward, Federal director for State, 306 Owen Building, Detroit.....	900
<i>Minnesota.</i>	
Industrial Commission: ¹⁷	
F. A. Duxbury, chairman.....	4, 500
J. D. Williams.....	4, 500
Henry McColl.....	4, 500
John P. Gardiner, secretary.....	3, 500
Address of Commission: St. Paul.	
Division of accident prevention—	
F. E. Hoffman, chief, St. Paul.....	2, 400
Division of women and children—	
Louise Schutz, chief, St. Paul.....	1, 800
Division of boiler inspection—	
George Wilcox, chief, St. Paul.....	2, 400
United States Employment Service:	
J. D. Williams, Federal director for State, St. Paul.....	1

¹⁶ Inaugurated July 1, 1921; composed of what was formerly the Industrial Accident Board, Labor Department, Industrial Relations Commission, and Board of Boiler Rules.

¹⁷ Former Board of Arbitration, Minimum Wage Commission, and Department of Labor and Industries merged in industrial Commission June 1, 1921.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Mississippi.</i>	
Department of State Factory Inspection:	
A. B. Hobbs, factory inspector, Jackson.....	\$2, 400
United States Employment Service:	
H. M. Quin, Federal director for State, K. of P. Building, Meridian.....	1
<i>Missouri.</i>	
Bureau of Labor Statistics:	
William H. Lewis, commissioner, Jefferson City.....	3, 500
Department of industrial inspection—	
Lee Dunlap, chief inspector, 326 Sheidley Building, Kansas City..	2, 500
Workmen's Compensation Commission. ¹⁸	
United States Employment Service:	
William H. Lewis, Federal director for State, 11 North Seventh Street, St. Louis.....	1
<i>Montana.</i>	
Department of Agriculture, Labor, and Industry:	
Chester C. Davis, commissioner, Helena.....	5, 000
Industrial Accident Board:	
Jerome G. Locke, chairman.....	5, 000
G. P. Porter, State auditor and (ex officio) commissioner of insurance.....	
Chester C. Davis, commissioner of agriculture, labor, and industry, and (ex officio) treasurer of board.....	
G. G. Watt, secretary.....	2, 700
Address of board: Helena.	
Bureau of safety inspection—	
J. R. Hartley, boiler and safety inspector, Billings.....	2, 700
J. H. Bondy, boiler and safety inspector, Great Falls.....	2, 700
Floyd F. Johnson, boiler and safety inspector, Butte.....	2, 700
William Maxwell, quartz mine and safety inspector, Butte.....	2, 700
George N. Griffin, coal mine and safety inspector, Helena.....	2, 700
United States Employment Service:	
C. D. Greenfield, jr., Federal director for State, Department of Agriculture, Labor, and Industry, Helena.....	1
<i>Nebraska.</i>	
Department of Labor:	
Frank A. Kennedy, secretary of labor and compensation commissioner, State Capitol, Lincoln.....	5, 000
Board of Mediation and Investigation:	
Wm. H. Pitzer, Nebraska City.....	(3)
C. B. Towle, Lincoln.....	(3)
Benjamin Green, Lincoln.....	(3)
Bureau of Child Welfare:	
Mrs. Emily P. Hornberger, director, Lincoln.....	2, 500
United States Employment Service:	
Frank A. Kennedy, Federal director for State, State Capitol, Lincoln.....	1
<i>Nevada.</i>	
Office of Labor Commissioner:	
Frank W. Ingram, labor commissioner, Carson City.....	1, 500

³ No salary.¹⁸ Workmen's compensation has been referred to the voters for ratification at the general election, November, 1922.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Nevada—Concluded.</i>	
Industrial Commission:	
George D. Smith, chairman.....	⁵ \$3,000
John M. Gray.....	⁵ 1,800
Frank W. Ingram.....	⁵ 1,800
Dr. Donald Maclean, chief medical adviser.....	⁵ 1,800
Address of commission: Carson City.	
Inspector of mines:	
A. J. Stinson, Carson City.....	3,600
<i>New Hampshire.</i>	
Bureau of Labor:	
John S. B. Davie, commissioner, Concord.....	2,750
Bion L. Nutting, factory inspector, Concord.....	2,200
Herbert O. Prime, factory inspector, Laconia.....	2,200
Mary R. Chagnon, factory inspector, Manchester.....	1,800
State Board of Conciliation and Arbitration:	
Dr. A. W. Mitchell (representing public), Epping.....	19 8
George A. Tenney (representing manufacturers), Claremont.....	19 8
Michael F. Connolly (representing labor), Manchester.....	19 8
<i>New Jersey.</i>	
Department of Labor: ²⁰	
Lewis T. Bryant, commissioner.....	6,000
Charles H. Weeks, deputy commissioner.....	4,500
John Roach, deputy commissioner.....	4,500
Bureau of general and structural inspection—	
Charles H. Weeks, chief.....	(²¹)
Bureau of hygiene, sanitation, and mine inspection—	
John Roach, chief.....	(²¹)
Bureau of electrical and mechanical equipment—	
Rowland H. Leveridge, chief.....	3,600
Bureau of industrial statistics—	
Lillian Erskine, chief.....	2,760
Bureau of engineers' license, steam roller, and refrigerating plant inspection—	
Joseph F. Scott, chief.....	3,600
Bureau of workmen's compensation—	
Lewis T. Bryant, commissioner.....	1,500
William E. Stubbs, deputy commissioner and secretary.....	3,900
Bureau of employment—	
Russell J. Eldridge, director.....	2,500
Address of department: State Capitol, Trenton.	
United States Employment Service:	
Lewis T. Bryant, Federal director for State, Trenton.....	1
<i>New Mexico.</i>	
Mine Inspector:	
W. W. Risdon, Albuquerque.....	²² 2,400
<i>New York.</i>	
Department of Labor:	
Henry D. Sayer, industrial commissioner.....	8,000
Martin H. Christopherson, deputy commissioner.....	7,000
Address of department: 124 East Twenty-eighth Street, New York.	

⁵ Part time.

¹⁹ Per diem and necessary expenses when actually engaged in work of the board.

²⁰ Reorganized by bill enacted Mar. 16, 1922.

²¹ Salary included in that of deputy commissioner.

²² And actual and necessary transportation and traveling expenses.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>New York—Concluded.</i>	
Department of Labor—Concluded.	
Industrial Board—	
John D. Higgins, chairman.....	\$8,000
Rosalie Leew Whitney.....	8,000
Richard H. Curran.....	8,000
Clarence A. Meeker, secretary.....	4,500
Address of board: 124 East Twenty-eighth Street, New York.	
Bureau of workmen's compensation—	
Robert F. Coleman, director.....	5,000
Dr. Raphael Lewy, chief medical examiner.....	6,000
Address of bureau: 124 East Twenty-eighth Street, New York.	
State insurance fund—	
Leonard W. Hatch, manager, 124 East Twenty-eighth Street, New York.....	8,000
Division of employment—	
Mrs. Myrta K. Hanford, chief, 124 East Twenty-eighth Street, New York.....	4,250
Bureau of statistics and information—	
E. B. Patton, chief statistician, Albany.....	4,500
Bureau of industrial relations—	
Seaman F. Northrup, director, Albany.....	5,000
Division of aliens—	
Mrs. Marion K. Clark, chief, 124 East Twenty-eighth Street, New York.....	3,500
Bureau of inspection—	
James L. Gernon, director, 124 East Twenty-eighth Street, New York.....	6,000
Division of women in industry—	
Miss Nellie Swartz, chief, 124 East Twenty-eighth Street, New York.....	3,000
Bureau of industrial code—	
Richard J. Cullen, industrial code referee.....	4,000
Thomas C. Eipper, industrial code referee.....	4,000
Address of bureau: 124 East Twenty-eighth Street, New York.	
United States Employment Service:	
Henry D. Sayer, Federal director for State, 124 East Twenty-eighth Street, New York.....	1
<i>North Carolina.</i>	
Department of Labor and Printing:	
M. L. Shipman, commissioner, Raleigh.....	4,500
United States Employment Service:	
M. L. Shipman, Federal director for State, Raleigh.....	1
<i>North Dakota.</i>	
Department of Agriculture and Labor:	
Joseph A. Kitchen, commissioner, Bismarck.....	3,000
Workmen's Compensation Bureau:	
Joseph A. Kitchen, chairman.....	(3)
S. S. McDonald.....	2,500
S. A. Olsness (ex officio).....	2,500
L. J. Wehe.....	2,500
Philip Elliott.....	2,500
C. A. Marr, secretary.....	2,400
Address of bureau: Bismarck.	
Minimum wage commission.....	1,800
(vacancy), secretary, Bismarck.....	
State-Federal Employment Service:	
Joseph A. Kitchen, Federal director for State, Bismarck.....	1

³ No salary.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Ohio.</i>	
Department of Industrial Relations:	
Percy Tetlow, director.....	\$6, 500
Industrial commission—	
T. J. Duffy, chairman.....	5, 000
J. D. Clark.....	5, 000
Rose Moriarty.....	5, 000
Percy Tetlow, secretary.....	.....
Division of workmen's compensation—	
Stanley S. Stewart, chief.....	2, 600
Evan I. Evans, supervisor of actuarial division.....	3, 000
Nathan Vigran, auditor and statistician.....	3, 000
Dr. T. R. Fletcher, chief medical examiner.....	3, 500
Division of labor statistics (including free employment service)—	
W. J. Biebesheimer, chief.....	3, 000
Division of factory inspection—	
E. U. Whitacre, chief.....	3, 600
Division of boiler inspection and examiner of steam engineers—	
Henry F. Stehmeyer.....	3, 600
Division of mines—	
William Robinett.....	3, 600
Address of department: Columbus.	
United States Employment Service:	
W. J. Biebesheimer, Federal director for State, Columbus.....	1
<i>Oklahoma.</i>	
Department of Labor:	
C. E. Connally, commissioner, Oklahoma City.....	} 2, 000
Board of Arbitration and Conciliation:	
C. E. Connally, commissioner of labor, chairman.....	}
(Vacancies on this board not yet filled.)	
Industrial Commission:	
Judge Baxter Taylor, chairman.....	3, 000
H. C. Myers.....	3, 000
Mrs. F. L. Roblin.....	3, 000
Fay L. Riggins, secretary.....	1, 800
Address of commission: State capitol, Oklahoma City.	
United States Employment Service:	
C. E. Connally, Federal director for State, State capitol, Oklahoma City.....	1
<i>Oregon.</i>	
Bureau of Labor:	
C. H. Gram, commissioner and factory inspector, Salem.....	3, 000
W. H. Fitzgerald, deputy commissioner, 501 Courthouse, Portland..	2, 400
Board of Inspectors of Child Labor:	
Stephen G. Smith, chairman, 65-67 Broadway, Portland.....	(3)
Mrs. Sarah A. Evans, Portland.....	(3)
Miss Pauline Kline, Corvallis.....	(3)
Mrs. A. M. Grilley, Portland.....	(3)
Mrs. Millie R. Trumbull, secretary, 646-648 Courthouse, Portland..	23 125
Industrial Welfare Commission:	
W. L. Brewster, chairman.....	(3)
Mrs. Eunice L. Rubottom.....	(3)
Amedee M. Smith.....	(3)
Mrs. Millie R. Trumbull, secretary and inspector.....	5 50
Address of commission: 646-648 Courthouse, Portland.	

³ No salary.

⁵ Part time.

²³ Per month.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Oregon—Concluded.</i>	
State Industrial Accident Commission:	
J. W. Ferguson, chairman.....	\$3,600
Will T. Kirk.....	3,600
William A. Marshall.....	3,600
Dr. F. H. Thompson, medical adviser.....	3,000
Dr. Frank H. Shepherd, director of vocational rehabilitation.....	3,600
Address of commission: Salem.	
State Board of Conciliation—	
William F. Woodward, chairman, Wood-Lark Building, Portland..	19 5
John K. Flynn.....	19 5
Otto R. Hartwig, secretary, 413 Stock Exchange Building, Portland.	19 5
United States Employment Service:	
W. H. Fitzgerald, Federal director and zone clearance officer, 501 Courthouse, Portland.....	1
<i>Pennsylvania.</i>	
Department of Labor and Industry:	
Clifford B. Connelley, commissioner.....	10,000
Address of department: Keystone Building, Harrisburg.	
Industrial Board—	
Clifford B. Connelley, chairman.....	24 10
Mrs. Samuel Semple.....	24 10
Otto T. Mallery.....	24 10
James C. Cronin.....	
_____ (vacancy).	
Fred J. Hartman, secretary.....	4,000
Address of board: Keystone Building, Harrisburg.	
Bureau of inspection—	
John H. Walker, chief, Keystone Building, Harrisburg.....	5,000
Division of hygiene and engineering—	
F. D. Patterson, M. D., chief, Third and North Streets, Harrisburg..	5,000
Bureau of workmen's compensation—	
W. H. Horner, director, Keystone Building, Harrisburg.....	5,000
Bureau of mediation and arbitration—	
William J. Tracy, chief, Keystone Building, Harrisburg.....	4,000
Bureau of employment—	
R. J. Peters, director, Third and North Streets, Harrisburg.....	5,000
Bureau of rehabilitation—	
S. S. Riddle, chief, Keystone Building, Harrisburg.....	5,000
Workmen's Compensation Board—	
Harry A. Mackey, chairman.....	9,000
Paul W. Houck.....	8,500
Benjamin Jarrett.....	8,500
Lee Solomon, secretary.....	5,000
Address of board: Keystone Building, Harrisburg.	
State Workmen's Insurance Fund:	
William J. Roney, manager, Harrisburg.....	7,500
United States Employment Service:	
Robert J. Peters, Federal director for State, Harrisburg.....	1
<i>Philippine Islands.</i>	
Bureau of Labor (under Department of Commerce and Communications):	
Faustino Aguilar, director, Manila.....	2,500

¹⁹ Per diem and necessary expenses when actually engaged in work of the board.

²⁴ Per day.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Porto Rico.</i>	
Department of Agriculture and Labor:	
Manuel Camuñas, commissioner.....	\$5, 000
Bureau of Labor—	
Carmelo Honoré, chief.....	2, 777. 25
Address of department: San Juan.	
Workmen's Relief Commission:	
L. Santiago Carmona, chairman, attorney at law.....	3, 500
Luis Villaronga, permanent commissioner.....	2, 600
José Coll Vidal.....	25 10
Joaquin A. Becerril.....	25 10
P. Rivera Martínez.....	25 10
Address of commission: San Juan.	
<i>Rhode Island.</i>	
Bureau of Labor:	
George H. Webb, commissioner, Statehouse, Providence.....	5, 000
Office of Factory Inspectors:	
J. Ellery Hudson, chief inspector, Statehouse, Providence.....	3, 000
Board of Labor (for the adjustment of labor disputes):	
George H. Webb, commissioner of labor, chairman.....	(3)
William T. Murphy (representing employers).....	(3)
William C. Fisher (representing employers).....	(3)
Albert E. Hohler (representing employees).....	(3)
John H. Powers (representing employees).....	(3)
Christopher M. Dunn, deputy commissioner of labor, secretary....	2, 300
Address of board: Providence.	
United States Employment Service:	
George H. Webb, Federal director for State, Statehouse, Providence.....	1
<i>South Carolina.</i>	
Department of Agriculture, Commerce and Industries:	
B. Harris, commissioner.....	2, 500
A. H. Gibert, chief inspector.....	14 2, 400
Address of department; Columbia.	
Board of Conciliation and Arbitration:	
B. E. Geer, chairman, Greenville.....	26 10
W. H. McNairy, Chester.....	26 10
H. E. Thompson, Batesburg.....	26 10
<i>South Dakota.</i>	
Department of Immigration:	
Irwin D. Aldrich, commissioner, Pierre.....	3, 000
United States Employment Service:	
Charles McCaffree, Federal director for State, Sioux Falls.....	1
<i>Tennessee.</i>	
Bureau of Workshops and Factory Inspection:	
M. F. Nicholson, chief inspector, 303 Sixth Avenue North, Nashville.....	2, 500

³ No salary.

¹⁴ And traveling expenses.

²⁵ Per session.

²⁶ Per day when in attendance, and traveling expenses.

UNITED STATES—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Texas.</i>	
Bureau of Labor Statistics:	
Joseph S. Myers, commissioner.....	\$3, 000
Women's division—	
Mrs. J. D. Turner, director.....	2, 000
Address of bureau: Austin.	
Industrial Accident Board:	
J. H. Fowler, chairman.....	4, 000
J. M. Pitillo.....	3, 000
J. E. Proctor.....	3, 000
Miss Mamie Edmonson, secretary.....	2, 500
Address of board: Austin.	
<i>Utah.</i>	
Industrial Commission:	
P. A. Thatcher, chairman.....	4, 000
O. F. McShane.....	4, 000
William M. Knerr.....	4, 000
Carolyn I. Smith, secretary.....	2, 100
State Insurance Fund—	
C. A. Caine, manager.....	3, 300
Address of commission: State Capitol, Salt Lake City.	
<i>Vermont.</i>	
Office of Commissioner of Industries:	
John S. Buttles, commissioner.....	3, 000
State Board of Conciliation and Arbitration:	
Henry C. Brislin, Rutland.....	(3)
George O. Gridley, Windsor.....	(3)
Ashley J. Goss, Danville.....	(3)
<i>Virginia.</i>	
Bureau of Labor and Industrial Statistics:	
John Hopkins Hall, jr., commissioner.....	3, 600
Division of Women and Children—	
Mrs. Ethel Scott, director.....	1, 800
Address of Bureau: Richmond.	
Industrial Commission:	
C. A. McHugh, chairman (representing employers).....	4, 200
Richard F. Beirne (representing State at large).....	4, 000
C. G. Kizer (representing employees).....	4, 000
A. C. Smith, secretary.....	3, 000
Address of commission: Box 1794, Richmond..	
United States Employment Service:	
E. J. Conway, Federal director for State, room 5, City Hall, Richmond.....	1
<i>Washington.</i>	
Department of Labor and Industries:	
Edward Clifford, director.....	6, 000
E. S. Gill, supervisor of industrial insurance and medical aid.....	4, 200
H. L. Hughes, supervisor of safety.....	4, 200
Mrs. Delphine M. Johnson, supervisor of women in industry.....	3, 000
F. A. Bird, M. D., chief medical adviser.....	6, 000
F. W. Harris, industrial statistician and supervisor of industrial aid to the adult blind.....	2, 700
Frances L. Whiting, secretary.....	

³ No salary.

UNITED STATES—Concluded.

Designation of office and name and address of official.	Salary per annum.
<i>Washington—Concluded.</i>	
Department of Labor and Industries—Concluded.	
Industrial welfare committee:	
Edward Clifford, chairman, director of labor and industries.....	(³)
E. S. Gill, supervisor of industrial insurance and medical aid.....	(³)
F. W. Harris, industrial statistician.....	(³)
Mrs. Delphine M. Johnson, executive secretary, supervisor of women in industry.....	(³)
Address of department: Olympia.	
United States Employment Service:	
William C. Carpenter, Federal director for State, 326 Federal Building, Spokane.....	\$2, 400
<i>West Virginia.</i>	
Bureau of Labor:	
George E. Daugherty, commissioner, Charleston.....	3, 600
State compensation commissioner:	
Lee Ott, commissioner.....	6, 000
F. J. McAndrews, secretary.....	²³ 310
R. H. Walker, chief medical examiner.....	²³ 210
Address: Charleston.	
<i>Wisconsin.</i>	
Industrial commission:	
Fred M. Wilcox, chairman.....	5, 000
R. G. Knutson.....	5, 000
L. A. Tarrell.....	5, 000
A. J. Altmeyer, secretary.....	3, 500
Safety and sanitation department—	
R. McA. Keown, engineer.....	4, 250
Workmen's compensation department—	
F. T. McCormick, chief examiner.....	3, 750
Employment department—	
Mary E. Hulburt, director.....	1, 860
Apprenticeship department—	
Walter F. Simon, supervisor.....	2, 200
Women's department—	
Miss Maud Swett, director, room 809, Manufacturers' Home Building, Milwaukee.....	2, 750
Child labor department—	
Taylor Frye, director.....	3, 000
Statistical department—	
Orrin A. Fried, statistician.....	3, 250
Address of commission: Madison.	
United States Employment Service:	
R. G. Knutson, Federal director for State, State capitol, Madison..	1
<i>Wyoming.</i>	
Commissioner of labor and statistics:	
Harry C. Hoffman, Cheyenne.....	2, 500
Workmen's compensation department (under State treasurer's office):	
A. D. Hoskins, State treasurer.....	3, 000
C. B. Morgan, deputy treasurer.....	2, 700
Arthur Calverley, assistant deputy and department manager....	2, 400
Address of department: Cheyenne.	
United States Employment Service:	
Harry C. Hoffman, Federal director for State, Cheyenne.....	1

³ No salary.
²³ Per month.

CANADA.

Designation of office and name and address of official.	Salary per annum.
Department of Labor:	
Hon. James Murdock, minister.....	\$10,000
F. A. Acland, deputy minister and editor of Labor Gazette.....	6,000
Gerald H. Brown, assistant deputy minister.....	4,250
Bryce M. Stewart, director of employment service.....	4,200
F. W. Giddens, secretary.....	3,240
Address of department: Ottawa, Ontario.	
<i>Alberta.</i>	
Director of Labor:	
John W. Mitchell, Calgary.....	2,700
Government employment bureau:	
William Carnill, Calgary, superintendent.....	²³ 135
W. G. Paterson, Edmonton, superintendent.....	²³ 135
Thos. Longworth, Lethbridge, superintendent.....	²³ 135
J. W. Wright, Medicine Hat, superintendent.....	²³ 135
A. A. Colquhoun, Drumheller, superintendent.....	²³ 125
Factory inspection:	
H. M. Bishop, chief inspector, P. O. Drawer 200, Calgary.....	2,200
Workmen's compensation board:	
John T. Stirling, chairman.....	²⁷ 250
Walter F. McNeill.....	²⁷ 500
James A. Kinney.....	²⁸ 416.66
Frederick D. Noble, secretary.....	²³ 275
Address of board: Qu'Appelle Building, Edmonton.	
Office of mines branch:	
John T. Stirling, chief mine inspector, Qu'Appelle Building, Edmonton.....	3,600
<i>British Columbia.</i>	
Department of Labor:	
Hon. A. M. Manson, minister, Victoria.....	²⁸ \$7,520
J. D. McNiven, deputy minister, Victoria.....	3,720
Robert J. Stewart, chief factories inspector, Vancouver.....	2,700
J. Peck, chief boiler inspector, Vancouver.....	4,200
James McGregor, chief mine inspector, Victoria.....	4,000
J. Muirhead, chief electrical energy inspector, Vancouver.....	3,000
Employment service—	
J. H. McVety, general superintendent, Vancouver.....	2,700
Workmen's compensation board—	
E. S. H. Winn, chairman.....	²⁹ 6,500
Parker Williams.....	5,000
Hugh Gilmore.....	5,000
F. W. Hinsdale, secretary.....	4,200
Address of board: Board of Trade Building, Vancouver.	
Minimum wage board—	
J. D. McNiven, deputy minister of labor, chairman.....	(3)
Mrs. Helen G. McGill.....	(3)
Thomas Mathews.....	(3)
Miss Mabel Agnes Cameron, secretary.....	1,800
Address of board: Parliament Building, Victoria.	

³ No salary.²³ Per month.²⁷ Per month, part time.²⁸ For dual position as attorney general and minister of labor.²⁹ \$1,000 additional for administering mothers' pension act.

CANADA—Continued.

Designation of office and name and address of official.	Salary per annum.
<i>Manitoba.</i>	
Bureau of Labor:	
Hon. C. D. McPherson, minister of public works.....	\$6,000
Edward McGrath, secretary.....	3,480
Arthur MacNamara, chief inspector.....	3,480
Address of bureau: 332 Parliament Building, Winnipeg.	
Fair wage board—	
S. C. Oxtou, chairman, deputy minister of public works.....	(3)
J. W. Morley.....	30 10
J. A. Bonnett.....	30 10
Walter Owens.....	30 10
C. Hardin.....	30 10
Address of board: Winnipeg.	
Minimum wage board—	
(vacancy), chairman.....	30 10
Mrs. Edna M. Nash.....	30 10
James Winning.....	30 10
Address of board: Winnipeg.	
Workmen's compensation board—	
H. G. Wilson, commissioner.....	6,000
R. S. Ward.....	31 1,000
A. R. D. Patterson.....	31 1,000
N. Fletcher, secretary.....	
Address of board: Winnipeg.	
<i>New Brunswick.</i>	
Inspection of factories and hotels:	
John Kenney, St. John.....	
Workmen's compensation board:	
J. A. Sinclair, chairman.....	4,500
F. C. Robinson.....	3,500
J. L. Sugrue.....	3,500
Address of board: P. O. Box 1422, St. John.	
<i>Nova Scotia.</i>	
Department of Public Works and Mines:	
Hon. E. H. Armstrong, minister.....	6,000
Hiram Donkin, deputy minister.....	6,000
Philip Ring, factory inspector.....	1,900
Address of department: Halifax.	
Workmen's compensation board:	
V. J. Paton, K. C., chairman.....	5,000
Fred W. Armstrong, vice chairman.....	5,000
John T. Joy.....	4,500
Address of board: Halifax.	
Employment service:	
C. J. Cotter, superintendent, Halifax.....	1,800
<i>Ontario.</i>	
Department of Labor:	
Hon. W. R. Rollo, minister.....	
Inspectors—	
D. M. Medcalf, chief inspector of steam boilers.....	4,500
James T. Burke, chief inspector factories, shops, and office buildings.....	

³ No salary.

²⁰ For each meeting.

³¹ Part time. Act provides that for meetings in excess of 50 attended by directors in any year the Lieutenant-Governor-in-Council may authorize an additional allowance of \$15 per director for each such additional meeting.

CANADA—Concluded.

Designation of office and name and address of official.	Salary per annum.
<i>Ontario—Concluded.</i>	
Department of Labor—Concluded.	
Employment bureaus—	
H. C. Hudson, general superintendent.....	
Address of department: Toronto.	
Minimum wage board:	
Dr. J. W. Macmillan, chairman.....	
H. G. Fester.....	
Mrs. Lydia Parsons.....	
Miss M. Stephens.....	
R. A. Stapells.....	
Address of board: Toronto.	
Workmen's compensation board:	
Samuel Price, chairman.....	\$10,000
Henry J. Halford, vice chairman.....	8,500
George A. Kingston, commissioner.....	7,500
N. B. Wormith, secretary.....	4,800
T. Norman Dean, statistician.....	4,300
W. N. Hancock, claims officer.....	4,800
W. E. Struthers, medical officer.....	5,050
Dr. D. E. Bell, medical officer.....	4,550
Address of board: 66 Temperance Street, Toronto.	
<i>Quebec.</i>	
Department of Public Works and Labor:	
Hon. Antonin Galipeault, minister, Quebec.....	
Inspection of industrial establishments and public buildings—	
Louis Guyon, deputy minister and chief inspector, 63 Notre Dame	
Street East, Montreal.....	
Registrar of boards of conciliation and arbitration—	
Felix Marios, Quebec.....	
Employment bureaus—	
Joseph Ainey, general superintendent, 10 St. James Street,	
Montreal.....	
<i>Saskatchewan.</i>	
Bureau of Labor and Industries:	
Thomas M. Molloy, commissioner.....	
T. Withy, chief factory inspector.....	
E. B. Webster, chief mine inspector.....	
Address of bureau: Regina.	
Government employment branch—	
G. E. Tomsett, general superintendent, Regina.....	
Minimum wage board—	
W. F. Dunn, chairman, Moose Jaw.....	
Mrs. Austin Bothwell, Regina.....	
H. Perry.....	
Mrs. M. I. Robertson.....	
J. F. Cairns.....	
Thomas M. Molloy, commissioner of labor, secretary, Regina.....	

OFFICIAL PUBLICATIONS RELATING TO LABOR.

United States.

INDIANA.—*Legislative Reference Bureau. Yearbook, 1921. Indianapolis, 1922. vii, 1213 pp.*

The report of the industrial board, which forms one section of the yearbook (pp. 456-582), includes reports of the compensation department, factory and building inspector, boiler department, department of mines and mining, department of women and children, and free employment service. The reports of the compensation department and the department of women and children were reviewed on page 156 and pages 115 to 117, respectively, of the June, 1922, issue of the MONTHLY LABOR REVIEW.

LOUISIANA.—*Department of Commissioner of Labor and Industrial Statistics. Eleventh biennial report, 1921-1922. New Orleans, 1922. 193 pp.*

A summary of this report is given on pages 192 to 195 of this issue of the MONTHLY LABOR REVIEW.

NEW YORK.—*Department of Labor. Division of women in industry. Bureau of research and codes. Women who work. [New York], April, 1922. 40 pp. Special bulletin No. 110.*

This report is summarized on pages 120 to 123 of this issue of the MONTHLY LABOR REVIEW.

PENNSYLVANIA.—*Department of Labor and Industry. Labor and Industry. Monthly bulletin, May, 1922, vol. 1, No. 1. Harrisburg, 1922. 36 pp.*

Extracts from this new publication are given on pages 195 to 197 of this issue of the MONTHLY LABOR REVIEW.

— — — *Bureau of employment. Annual report, 1921. Harrisburg, 1922. 72 pp.*

Extracts from this report are given on pages 132 to 134 of this issue of the MONTHLY LABOR REVIEW.

— (PHILADELPHIA).—*Board of Public Education. Bureau of Compulsory Education. Report for the year ending June 30, 1921. Philadelphia, 1922. 86 pp.*

The junior employment service conducted by the Philadelphia Bureau of Compulsory Education has two principal activities: The certification of employed minors and placement, counseling, and supervision of minors from 14 to 21 years of age.

During the year covered by the report 15,220 general employment certificates were issued, approximately three-fourths of the number issued the previous year. Of this number 7,470 were first certificates, issued to children just leaving school. During the same period only 2,992 vacation employment certificates were issued as compared with 6,068 during the previous year.

Positions were found for 1,027 young people, and the counselors held 7,053 interviews at the placement office, with the parents present in 506 instances.

TENNESSEE.—*Bureau of Workshop and Factory Inspection. Ninth annual report, January 1, 1921, to December 31, 1921, inclusive. Nashville, 1922. 104 pp.*

This publication is reviewed on pages 197 to 199 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—Congress. House of Representatives. Committee on Labor. *Investigation of wages and working conditions in the coal-mining industry. Hearings on H. R. 11022, a bill to establish a commission to inquire into labor conditions in the coal industry, March 30, 31, April 1, 3, 4, 20, 24, and 25, 1922. 2 parts. Washington, 1922. 561 pp. 67th Congress, 2d session.*

— Department of Labor. Bureau of Labor Statistics. *Proceedings of the eighth annual convention of the Association of Governmental Labor Officials of the United States and Canada, held at New Orleans, La., May 2-6, 1921. Washington, 1922. 74 pp. Bulletin No. 307. Miscellaneous series.*

An account of this convention was given in the MONTHLY LABOR REVIEW for June, 1921, pages 6 to 9.

— — Children's Bureau. *Child labor and the work of mothers in oyster and shrimp canning communities on the Gulf coast, by Viola I. Paradise. Washington, 1922. 114 pp. Bureau publication No. 98.*

A brief summary of this report is given on pages 118 and 119 of this issue of the MONTHLY LABOR REVIEW.

— — — Children of wage-earning mothers. *A study of a selected group in Chicago, by Helen Russell Wright. Washington, 1922. 92 pp. Bureau publication No. 102.*

A summary of this publication is given on pages 119 and 120 of this issue of the MONTHLY LABOR REVIEW.

Foreign Countries.

AUSTRIA.—Statistische Zentralkommission. *Ergebnisse der ausserordentlichen Volkszählung vom 31. Jänner 1920. Heft 6: Alter und Familienstand, Wohnparteien. 35*, 54 pp. 2 charts; Heft 7: Endgültige Ergebnisse samt Nachtragszählungen, und Anhang: Beruf und Arbeitslosigkeit. Vienna, 1921. 32 pp.*

These two bulletins contain part of the results of the general census taken in Austria on January 31, 1920. Bulletin No. 6 shows the number of households and the age and conjugal condition of the population. Bulletin No. 7 deals with occupational and unemployment statistics. In this bulletin the total population of Austria is given as 6,131,445. Of this number, 3,124,369 were engaged in gainful occupations, 594,483 independently, and 2,529,886 as wage earners. Housewives attending to their household work were separately enumerated, their number being given as 1,059,578. This leaves 1,947,498 persons without any gainful occupation. Of the 2,529,886 wage earners, 84,349 were unemployed on January 31, 1920, the date of the census, owing to inability to secure employment, and 45,486 were unemployed owing to sickness.

BELGIUM.—Ministère de l'Industrie et du Travail. *Secrétariat général, Section de la Statistique. Recensement de l'industrie et du commerce (31 Décembre 1910). Exposé général des résultats. Vol. VIII. Deuxième partie. Brussels, 1921. 569 pp.*

This volume contains the results of the census of industry and commerce made in 1910 by the Belgian Ministry of Industry and Labor.

CANADA.—Department of Labor. *Eleventh Annual Report on Labor Organization in Canada (for the calendar year 1921). Ottawa, 1922. 302 pp.*

Extracts from this report are given on pages 170 and 171 of this issue of the MONTHLY LABOR REVIEW.

CHILE.—Oficina Central de Estadística. *Anuario estadístico, año 1920. Volumes I, II, V-IX, XII. Santiago, 1921, 1922. [Various paging.]*

The volume relating to mining and metallurgy contains data on wages, accidents, number of employees, and production during 1920. The data for the nitrate industry are for 1919, as no data were available for 1920.

The volume on manufacturing presents comparative data on number of establishments, number of salaried employees and workers, wages, production, etc., for the years 1916 to 1920. Detailed statistics as to personnel, accidents, strikes, etc., are given by industry for 1920.

GERMANY (FRANKFORT-ON-THE-MAIN).—*Statistisches Amt. Statistische Jahresübersichten, 1917–18, 1918–19. Zwölftes Ergänzungsheft zum statistischen Jahrbuch der Stadt Frankfurt-am-Main. Frankfurt-on-the-Main, 1920. 166 pp.*

The twelfth supplement to the first issue of the statistical yearbook of the city of Frankfort-on-the-Main, containing all kinds of municipal statistics for the fiscal years 1917–18 and 1918–19. Of interest to labor are the statistics on housing, social insurance, and social welfare institutions, and prices.

GREAT BRITAIN.—*Registry of friendly societies. Friendly societies, orders and branches. Statistical summaries showing the operations of friendly societies in the years 1913–1919, and of orders and branches in the years 1910 and 1916–1918. London, 1922. 3 pp.*

INDIA.—*Department of Statistics. Large industrial establishments in India. Calcutta, 1922. xi, 79 pp. No. 1517.*

This is a directory of all large industrial concerns in India, and includes all factories which come under the operation of the Indian factories act and some others not covered by the act. The average number of persons employed daily is shown for each establishment. The cotton-spinning and weaving mills employ the largest number (307,000), the jute mills are next with 276,000, cotton ginning and pressing factories with 141,000, and railway and tramway workshops with 130,000. Other industries are of minor importance, in point of numbers employed, engineering workshops, the next in order, having only 57,000 employees.

NEW ZEALAND.—*Census and Statistics Office. Official yearbook, 1921–22. Wellington, 1922. xi, 616 pp.*

A book of references on New Zealand's activities and phases of her social and economic characteristics and progress. From a labor standpoint statistics regarding the number of employees in certain industries, wages, social insurance, industrial disputes, and prices are especially valuable. Wages paid in two of the most important industries of the country, agricultural and pastoral, are not included.

NORWAY (CHRISTIANIA).—*Statistiske Kontor. Statistisk aarbok, 1920. Christiania, 1922. xv, 221 pp.*

Statistical yearbook for the city of Christiania for the year 1920. Contains statistics on housing, prices, wages, labor conditions, etc.

SWEDEN.—*Socialstyrelsen. Undersökning rörande Blyförgiftning inom Porslins- och Lervaruindustrien i Sverige. Stockholm, 1922. 28 pp.*

Report published by the Swedish Labor Bureau concerning lead poisoning in the pottery industry. Conditions were investigated in six factories employing a total of about 2,000, of whom, however, only 71 were exposed to the injurious effects of lead-containing substances to any mentionable degree.

SWITZERLAND.—*Bureau Fédéral de Statistique: Salaries payés en 1919 aux ouvriers victimes d'accidents comparés à ceux de 1918. Berne, 1921. 18*, 25 pp. Bulletin de statistique suisse.) 1921, Cahier, 2.*

The statistics of the national Swiss accident insurance fund have been used in this study of wages. The report shows an increase of 39 per cent in the hourly wages of women in 1919 as compared with 1918 and of 30 per cent for men and young persons under 18 in the same period, while the daily wages had increased 17 per cent for all classes of workers. A steady reduction in the average hours of labor had also taken place in 1919, the majority of workers being employed nine hours and less, while in the previous year the majority had been employed more than nine hours.

—*Eidgenössisches Statistisches Bureau. Statistisches Jahrbuch der Schweiz, 1920. 28, Jahrgang. Bern, August, 1921. vii, 418 pp.*

The twenty-ninth issue of the official statistical yearbook of Switzerland published by the Swiss Federal Statistical Office, covering the year 1920 and preceding years. Of the wealth of statistical data those of special interest to labor deal with migration, occupation, the labor market, trade-unions, strikes, social insurance, consumers' cooperative societies, prices, cost of living, and wages.

SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS

[The publication of the annual and special reports and of the bimonthly bulletin was discontinued in July, 1912, and since that time a bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These bulletins are numbered consecutively, beginning with No. 101, and up to No. 236 they also carry consecutive numbers under each series. Beginning with No. 237 the serial numbering has been discontinued. A list of the series is given below. Under each is grouped all the bulletins which contain material relating to the subject matter of that series. A list of the reports and bulletins of the Bureau issued prior to July 1, 1912, will be furnished on application. The bulletins marked thus are out of print.]*

Wholesale Prices.

- *Bul. 114. Wholesale prices, 1890 to 1912.
- Bul. 149. Wholesale prices, 1890 to 1913.
- *Bul. 173. Index numbers of wholesale prices in the United States and foreign countries.
- *Bul. 181. Wholesale prices, 1890 to 1914.
- *Bul. 200. Wholesale prices, 1890 to 1915.
- Bul. 226. Wholesale prices, 1890 to 1916.
- Bul. 269. Wholesale prices, 1890 to 1919.
- Bul. 284. Index numbers of wholesale prices in the United States and foreign countries. [Revision of Bulletin No. 173.]
- Bul. 296. Wholesale prices, 1890 to 1920. [In press.]

Retail Prices and Cost of Living.

- *Bul. 105. Retail prices, 1890 to 1911: Part I.
Retail prices, 1890 to 1911: Part II—General tables.
- *Bul. 106. Retail prices, 1890 to June, 1912: Part I.
Retail prices, 1890 to June, 1912: Part II—General tables.
- Bul. 108. Retail prices, 1890 to August, 1912.
- Bul. 110. Retail prices, 1890 to October, 1912.
- Bul. 113. Retail prices, 1890 to December, 1912.
- Bul. 115. Retail prices, 1890 to February, 1913.
- *Bul. 121. Sugar prices, from refiner to consumer.
- Bul. 125. Retail prices, 1890 to April, 1913.
- *Bul. 130. Wheat and flour prices, from farmer to consumer.
- Bul. 132. Retail prices, 1890 to June, 1913.
- Bul. 136. Retail prices, 1890 to August, 1913.
- *Bul. 138. Retail prices, 1890 to October, 1913.
- *Bul. 140. Retail prices, 1890 to December, 1913.
- Bul. 156. Retail prices, 1907 to December, 1914.
- Bul. 164. Butter prices, from producer to consumer.
- Bul. 170. Foreign food prices as affected by the war.
- *Bul. 184. Retail prices, 1907 to June, 1915.
- Bul. 197. Retail prices, 1907 to December, 1915.
- Bul. 228. Retail prices, 1907 to December, 1916.
- Bul. 270. Retail prices, 1913 to 1919.
- Bul. 300. Retail prices, 1913 to 1920.
- Bul. 315. Retail prices, 1913 to 1921. [In press.]

Wages and Hours of Labor.

- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- *Bul. 118. Ten-hour maximum working-day for women and young persons.
- Bul. 119. Working hours of women in the pea canneries of Wisconsin.
- *Bul. 128. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912.
- *Bul. 129. Wages and hours of labor in the lumber, millwork, and furniture industries, 1890 to 1912.
- *Bul. 131. Union scale of wages and hours of labor, 1907 to 1912.
- *Bul. 134. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912.
- *Bul. 135. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912.
- Bul. 137. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912.
- Bul. 143. Union scale of wages and hours of labor, May 15, 1913.
- Bul. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City.
- *Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.

Wages and Hours of Labor—Concluded.

- *Bul. 150. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1913.
- *Bul. 151. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1912.
- Bul. 153. Wages and hours of labor in the lumber, millwork, and furniture industries, 1907 to 1913.
- *Bul. 154. Wages and hours of labor in the boot and shoe and hosiery and underwear industries, 1907 to 1913.
- Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
- Bul. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- Bul. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- Bul. 168. Wages and hours of labor in the iron and steel industry, 1907 to 1918.
- Bul. 171. Union scale of wages and hours of labor, May 1, 1914.
- Bul. 177. Wages and hours of labor in the hosiery and underwear industry, 1907 to 1914.
- Bul. 178. Wages and hours of labor in the boot and shoe industry, 1907 to 1914.
- *Bul. 187. Wages and hours of labor in the men's clothing industry, 1911 to 1914.
- *Bul. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
- *Bul. 194. Union scale of wages and hours of labor, May 1, 1915.
- Bul. 204. Street railway employment in the United States.
- Bul. 214. Union scale of wages and hours of labor, May 15, 1916.
- Bul. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
- Bul. 232. Wages and hours of labor in the boot and shoe industry, 1907 to 1916.
- Bul. 238. Wages and hours of labor in woolen and worsted goods manufacturing, 1916.
- Bul. 239. Wages and hours of labor in cotton goods manufacturing and finishing, 1916.
- Bul. 245. Union scale of wages and hours of labor, May 15, 1917.
- *Bul. 252. Wages and hours of labor in the slaughtering and meat-packing industry, 1917.
- Bul. 259. Union scale of wages and hours of labor, May 15, 1918.
- Bul. 260. Wages and hours of labor in the boot and shoe industry, 1907 to 1918.
- Bul. 261. Wages and hours of labor in woolen and worsted goods manufacturing, 1918.
- Bul. 262. Wages and hours of labor in cotton goods manufacturing and finishing, 1918.
- Bul. 265. Industrial survey in selected industries in the United States, 1919. Preliminary report.
- Bul. 274. Union scale of wages and hours of labor, May 15, 1919.
- Bul. 278. Wages and hours of labor in the boot and shoe industry, 1907-1920.
- Bul. 279. Hours and earnings in anthracite and bituminous coal mining.
- Bul. 286. Union scale of wages and hours of labor, May 15, 1920.
- Bul. 288. Wages and hours of labor in cotton goods manufacturing, 1920.
- Bul. 289. Wages and hours of labor in woolen and worsted goods manufacturing, 1920.
- Bul. 294. Wages and hours of labor in the slaughtering and meat-packing industry in 1921.
- Bul. 297. Wages and hours of labor in the petroleum industry.
- Bul. 302. Union scale of wages and hours of labor, May 15, 1921. [In press.]
- Bul. 305. Wages and hours of labor in the iron and steel industry, 1907 to 1920. [In press.]
- Bul. 316. Hours and earnings in anthracite and bituminous coal mining. [In press.]
- Bul. 317. Wages and hours of labor in lumber manufacturing, 1921. [In press.]

Employment and Unemployment.

- *Bul. 109. Statistics of unemployment and the work of employment offices.
- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- Bul. 172. Unemployment in New York City, N. Y.
- *Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
- *Bul. 183. Regularity of employment in the women's ready-to-wear garment industries.
- Bul. 192. Proceedings of the American Association of Public Employment Offices.
- *Bul. 195. Unemployment in the United States.
- Bul. 196. Proceedings of the Employment Managers' Conference held at Minneapolis, January, 1916.
- Bul. 202. Proceedings of the conference of the Employment Managers' Association of Boston, Mass., held May 19, 1916.
- Bul. 206. The British system of labor exchanges.
- Bul. 220. Proceedings of the Fourth Annual Meeting of the American Association of Public Employment Offices, Buffalo, N. Y., July 20 and 21, 1916.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- *Bul. 227. Proceedings of the Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- Bul. 235. Employment system of the Lake Carriers' Association.
- Bul. 241. Public employment offices in the United States.
- Bul. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.
- Bul. 310. Industrial unemployment: A statistical study of its extent and causes. [In press.]
- Bul. 311. Proceedings of the Ninth Annual Meeting of the International Association of Public Employment Services. [In press.]

Women in Industry.

- Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
- *Bul. 117. Prohibition of night work of young persons.
- *Bul. 118. Ten-hour maximum working-day for women and young persons.
- Bul. 119. Working hours of women in the pea canneries of Wisconsin.
- *Bul. 122. Employment of women in power laundries in Milwaukee.
- Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
- *Bul. 167. Minimum-wage legislation in the United States and foreign countries.
- *Bul. 175. Summary of the report on condition of woman and child wage earners in the United States.
- *Bul. 176. Effect of minimum wage determinations in Oregon.
- *Bul. 180. The boot and shoe industry in Massachusetts as a vocation for women.
- Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
- Bul. 193. Dressmaking as a trade for women in Massachusetts.
- Bul. 215. Industrial experience of trade-school girls in Massachusetts.
- *Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- Bul. 253. Women in the lead industry.

Workmen's Insurance and Compensation (including laws relating thereto).

- *Bul. 101. Care of tuberculous wage earners in Germany.
- *Bul. 102. British National Insurance Act, 1911.
- Bul. 103. Sickness and accident insurance law of Switzerland.
- Bul. 107. Law relating to insurance of salaried employees in Germany.
- *Bul. 126. Workmen's compensation laws of the United States and foreign countries.
- *Bul. 155. Compensation for accidents to employees of the United States.
- *Bul. 185. Compensation legislation of 1914 and 1915.
- Bul. 203. Workmen's compensation laws of the United States and foreign countries.
- Bul. 210. Proceedings of the Third Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions.
- *Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
- Bul. 240. Comparison of workmen's compensation laws of the United States.
- Bul. 243. Workmen's compensation legislation in the United States and foreign countries.
- Bul. 248. Proceedings of the Fourth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 264. Proceedings of the Fifth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 272. Workmen's compensation legislation of the United States and Canada, 1919.
- *Bul. 273. Proceedings of the Sixth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 275. Comparison of workmen's compensation laws of the United States and Canada.
- Bul. 281. Proceedings of the Seventh Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
- Bul. 301. Comparison of workmen's compensation insurance and administration.
- Bul. 304. Proceedings of the Eighth Annual Meeting of the International Association of Industrial Accident Boards and Commissions. [In press.]
- Bul. 312. National Health Insurance in Great Britain, 1911 to 1920. [In press.]

Industrial Accidents and Hygiene.

- *Bul. 104. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories.
- Bul. 120. Hygiene of the painters' trade.
- *Bul. 127. Dangers to workers from dust and fumes, and methods of protection.
- Bul. 141. Lead poisoning in the smelting and refining of lead.
- *Bul. 157. Industrial accident statistics.
- Bul. 165. Lead poisoning in the manufacture of storage batteries.
- *Bul. 179. Industrial poisons used in the rubber industry.
- Bul. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings.
- *Bul. 201. Report of committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. [Limited edition.]
- Bul. 205. Anthrax as an occupational disease.
- Bul. 207. Causes of death by occupation.
- Bul. 209. Hygiene of the printing trades.

Industrial Accidents and Hygiene—Concluded.

- *Bul. 216. Accidents and accident prevention in machine building.
- Bul. 219. Industrial poisons used or produced in the manufacture of explosives.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 230. Industrial efficiency and fatigue in British munition factories.
- Bul. 231. Mortality from respiratory diseases in dusty trades.
- *Bul. 234. Safety movement in the iron and steel industry, 1907 to 1917.
- Bul. 236. Effect of the air hammer on the hands of stonecutters.
- Bul. 251. Preventable deaths in the cotton manufacturing industry.
- Bul. 253. Women in the lead industries.
- Bul. 256. Accidents and accident prevention in machine building. Revision of Bul. 216.
- Bul. 267. Anthrax as an occupational disease. [Revised.]
- Bul. 276. Standardization of industrial accident statistics.
- Bul. 280. Industrial poisoning in making coal-tar dyes and dye intermediates.
- Bul. 291. Carbon monoxide poisoning.
- Bul. 293. The problem of dust phthisis in the granite-stone industry.
- Bul. 298. Causes and prevention of accidents in the iron and steel industry, 1910 to 1919. [In press.]
- Bul. 306. Occupation hazards and diagnostic signs: A guide to impairments to be looked for in hazardous occupations.

Conciliation and Arbitration (including strikes and lockouts).

- *Bul. 124. Conciliation and arbitration in the building trades of Greater New York.
- *Bul. 133. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements.
- Bul. 139. Michigan copper district strike.
- Bul. 144. Industrial court of the cloak, suit, and skirt industry of New York City.
- Bul. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City.
- Bul. 191. Collective bargaining in the anthracite coal industry.
- *Bul. 198. Collective agreements in the men's clothing industry.
- Bul. 233. Operation of the Industrial Disputes Investigation Act of Canada.
- Bul. 303. Use of Federal power in the settlement of railway labor disputes.

Labor Laws of the United States (including decisions of courts relating to labor).

- *Bul. 111. Labor legislation of 1912.
- *Bul. 112. Decisions of courts and opinions affecting labor, 1912.
- *Bul. 113. Labor laws of the United States, with decisions of courts relating thereto.
- *Bul. 152. Decisions of courts and opinions affecting labor, 1913.
- *Bul. 166. Labor legislation of 1914.
- *Bul. 169. Decisions of courts affecting labor, 1914.
- *Bul. 183. Labor legislation of 1915.
- *Bul. 189. Decisions of courts affecting labor, 1915.
- Bul. 211. Labor laws and their administration in the Pacific States.
- *Bul. 213. Labor legislation of 1916.
- Bul. 224. Decisions of courts affecting labor, 1916.
- Bul. 229. Wage-payment legislation in the United States.
- *Bul. 244. Labor legislation of 1917.
- Bul. 246. Decisions of courts affecting labor, 1917.
- Bul. 257. Labor legislation of 1918.
- Bul. 258. Decisions of courts and opinions affecting labor, 1918.
- Bul. 277. Labor legislation of 1919.
- Bul. 285. Minimum-wage legislation in the United States.
- Bul. 290. Decisions of courts and opinions affecting labor, 1919-1920.
- Bul. 292. Labor legislation of 1920.
- Bul. 308. Labor legislation of 1921. [In press.]
- Bul. 309. Decisions of courts and opinions affecting labor, 1921. [In press.]

Foreign Labor Laws.

- Bul. 142. Administration of labor laws and factory inspection in certain European countries.

Vocational Education.

- Bul. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City.
- *Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.
- *Bul. 159. Short-unit courses for wage earners, and a factory school experiment.
- Bul. 162. Vocational education survey of Richmond, Va.
- Bul. 199. Vocational education survey of Minneapolis.

Labor as Affected by the War.

- Bul. 170. Foreign food prices as affected by the war.
- Bul. 219. Industrial poisons used or produced in the manufacture of explosives.
- Bul. 221. Hours, fatigue, and health in British munition factories.
- Bul. 222. Welfare work in British munition factories.
- Bul. 223. Employment of women and juveniles in Great Britain during the war.
- Bul. 230. Industrial efficiency and fatigue in British munition factories.
- Bul. 237. Industrial unrest in Great Britain.
- Bul. 249. Industrial health and efficiency. Final report of British Health of Munition Workers Committee.
- Bul. 255. Joint industrial councils in Great Britain.
- Bul. 283. History of the Shipbuilding Labor Adjustment Board, 1917 to 1919.
- Bul. 287. National War Labor Board.

Miscellaneous Series.

- * Bul. 117. Prohibition of night work of young persons.
- * Bul. 118. Ten-hour maximum working-day for women and young persons.
- * Bul. 123. Employers' welfare work.
- * Bul. 158. Government aid to home owning and housing of working people in foreign countries.
- * Bul. 159. Short-unit courses for wage earners, and a factory school experiment.
- * Bul. 167. Minimum-wage legislation in the United States and foreign countries.
- Bul. 170. Foreign food prices as affected by the war.
- Bul. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
- Bul. 208. Profit sharing in the United States.
- Bul. 222. Welfare work in British munition factories.
- Bul. 242. Food situation in Central Europe, 1917.
- Bul. 250. Welfare work for employees in industrial establishments in the United States.
- Bul. 254. International labor legislation and the society of nations.
- Bul. 263. Housing by employers in the United States.
- Bul. 266. Proceedings of Seventh Annual Convention of Governmental Labor Officials of the United States and Canada.
- Bul. 268. Historical survey of international action affecting labor.
- Bul. 271. Adult working-class education in Great Britain and the United States.
- Bul. 282. Mutual relief associations among Government employees in Washington, D. C.
- Bul. 295. Building operations in representative cities in 1920.
- Bul. 299. Personnel research agencies.
- Bul. 307. Proceedings of the Eighth Annual Convention of Governmental Labor Officials of the United States and Canada.
- Bul. 313. Consumers' cooperative associations in the United States. [In press.]
- Bul. 314. Cooperative credit societies in America and foreign countries. [In press.]

110650°—22—16

SPECIAL PUBLICATIONS ISSUED BY THE BUREAU OF LABOR STATISTICS.

Descriptions of occupations, prepared for the United States Employment Service, 1918-19.

- *Boots and shoes, harness and saddlery, and tanning.
- Cane-sugar refining and flour milling.
- Coal and water gas, paint and varnish, paper, printing trades, and rubber goods.
- Electrical manufacturing, distribution, and maintenance.
- Glass.
- Hotels and restaurants.
- Logging camps and sawmills.
- Medicinal manufacturing.
- Metal working, building and general construction, railroad transportation, and shipbuilding.
- Mines and mining.
- *Office employees.
- Slaughtering and meat packing.
- Street railways.
- *Textiles and clothing.
- *Water transportation.



