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

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IN MEMORIAM

Hon. Roscoe A. Eddy, Commissioner of Labor of Maine, died June 27, 1924.

Mr. Eddy had been head of the Department of Labor and Industry of Maine for the past 10 years.

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Labor Productivity and Costs in Certain Building Trades

By ETHELBERT STEWART, UNITED STATES COMMISSIONER OF LABOR STATISTICS

EARLY in 1923 the United States Bureau of Labor Statistics began an investigation of labor productivity or efficiency in certain occupations in the building trades. Preparatory to this survey a conference of large building contractors and construction engineers from various cities of the United States was called. Elaborate questionnaires were devised as the result of the conference, covering a large number of specific occupations and types of work.

The field investigation was conducted principally by Special Agent Paul H. Moncure, of the United States Bureau of Labor Statistics, assisted occasionally by others of the bureau's staff.

The investigation was started in Atlanta, Ga., with the idea that it could be begun early in the year in a southern city. Atlanta was therefore the "try-out" city. This explains the large number of schedules from there as compared with other localities. The conference agreement was that not less than five schedules should be secured from each city on each of the sections of the study.

This being pioneer work, it was not expected that all the details called for by the conference questionnaire could be readily secured from every building contractor, but making all allowances for this the try-out was discouraging. Only new work was considered. At the very outset carpentry work on frame buildings had to be abandoned as there was no well-defined unit of production.

As the investigation progressed from city to city it was found that in almost every line local styles and types of materials used made it necessary entirely to abandon certain points of inquiry. For instance, while bricklaying was covered in 15 cities, roofing was scheduled in only 10 localities and painting in only 4. Painting was abandoned because it became more and more difficult to follow up new work and because the various color schemes on the same house prevented the agents from getting adequate samples of straight-away work. Composition roofing was found to be prevalent in some cities and almost unknown in others, with the result that it was necessary to confine the study practically to bricklaying and pick up such other information from time to time and place to place as could be obtained.

Notwithstanding the persistence of articles and interviews in newspapers and trade journals about the relative inefficiency of labor as compared with former years, this bureau was unable to find a single building contractor, superintendent, or foreman who had a record of work done per man hour on the jobs in progress or upon any former job. It was necessary, therefore, for the agents of the bureau to locate building projects just begun or just about to begin and then to make arrangements with the responsible con-

tractor to have the actual time of the men kept for the purposes of this report, and not only that but to follow up each job day by day to see that the record was being kept.

Whatever interest the subject may have for interviewing purposes it must be stated that the men coming in direct contact with building work have very little interest in the time cost by occupations or trades in the building industry. I am publishing the material collected by the bureau for what it is worth as representing the pioneer attempt to secure the actual facts through impartial sources.

Bricklaying

THE instruction to the agent was to secure the bricklayer time and labor cost per 1,000 common bricks laid in a straightaway wall without opening. This would seem to be a simple matter, but it was found that brick houses, so common a generation ago, are very difficult to find. Structures of hollow tile, of cement and framework, and of steel are being faced with "face brick," but obviously these are so particularized in their plans, particularly as to the brick-finishing part, that this work can not be considered as ordinary bricklaying; and solid brick walls are very difficult to locate. In other words, the bricklaying to-day is for the most part very different from that of 20 years ago or even 15 years ago.

However, it was possible to find at least five new jobs in each city visited where common brick was being laid in straightaway walls of sufficient dimension to justify schedules being taken for them. The original questionnaire covered the question as to whether the bricklayer had to build his own scaffold, but as this was not found to be true in any case it has been eliminated from the tabulation. Another question referred to the placing of the brick and mortar for the bricklayer as, for instance, foot level, waist level, etc. As the bricklayer was required to pick up the brick from his own foot level in every case scheduled except two, this has also been eliminated.

The detailed figures for bricklaying, as well as for the other trades covered, will be found at the end of this article. Summary figures showing averages by cities are shown in the following table:

LABOR PRODUCTIVITY AND COST IN BRICKLAYING, BY CITIES

City	Number of schedules	Average rate of pay per hour	Number of bricks laid		Cost of laying 1,000 bricks
			Per hour	Per day of 8 hours	
Atlanta, Ga.	23	\$1.05	185.3	1,482.4	\$6.30
Birmingham, Ala.	8	1.16	241.0	1,928.0	4.82
Chattanooga, Tenn.	11	1.46	226.1	1,808.8	6.85
New Orleans, La.	7	1.01	203.5	1,628.0	5.11
Norfolk, Va.	10	1.37½	231.8	1,854.4	6.38
Boston, Mass.	5	1.25	97.7	781.6	12.94
New York, N. Y.	12	1.76	157.6	1,260.8	11.69
Philadelphia, Pa.	14	1.53	123.3	986.4	12.65
Chicago, Ill.	24	1.57	156.8	1,254.4	10.60
Cincinnati, Ohio.	10	1.43	131.5	1,052.0	11.47
Cleveland, Ohio.	14	1.50	147.8	1,182.4	10.55
Denver, Colo.	18	1.50	212.4	1,699.2	7.58
Detroit, Mich.	15	1.54½	154.0	1,232.0	10.44
Indianapolis, Ind.	10	1.36½	95.7	765.6	14.47
Minneapolis and St. Paul, Minn.	21	1.21½	193.2	1,545.6	6.84

The highest labor cost per 1,000 bricks in the wall (\$14.47) was found in Indianapolis, where an average rate of \$1.37 per hour resulted in a labor productivity of 95.7 bricks per man per hour. It should be understood that this money cost is for the bricklayer only.

The lowest average cost per 1,000 bricks in the wall was found in Birmingham, Ala., where an average pay of \$1.16 an hour resulted in a productivity of 241 bricks per man per hour.

The matter of trade-union application of the workmen is shown, where such conditions were found, in the detailed table. Unionism appears to have had very little influence in a given trade in a given locality so far as bricklaying is concerned. For instance, 8 of the establishments covered in Atlanta used union labor only. The average rate per hour was \$1.20, the average productivity on these 8 jobs was 243.9 bricks per hour, with a money cost of \$5.50 per thousand bricks in the wall. There were 9 nonunion jobs, with an average of 97 cents an hour, a productivity of 142.9 bricks per hour per man, and a labor cost of \$6.90 per thousand bricks in the wall. There were 6 mixed groups—that is to say, both union and nonunion men on the same job—at an average hourly rate of \$1.05 per man, a productivity of 169.4 bricks per man per hour, and a labor cost of \$6.44 per thousand bricks in the wall.

In Chattanooga, Tenn., 9 union and 2 nonunion jobs were scheduled. The union plants had an average rate of \$1.50 per hour, a productivity of 214 bricks per man per hour, and a labor cost of \$7.30 per thousand bricks in the wall. The 2 nonunion jobs paid an average of \$1.32 per hour and had a labor productivity of 280.8 bricks per man hour and a labor cost of \$4.81 per thousand bricks in the wall.

In Norfolk, Va., the 8 union jobs scheduled paid an average of \$1.37½ an hour and had a productivity of 219 bricks in the wall per man hour and a labor cost of \$6.38 per thousand. In the case of the nonunion jobs the rate per hour was not obtainable and hence the cost per thousand bricks in the wall could not be derived. The productivity per man hour was 282.4 bricks.

In Chicago 10 union jobs were scheduled, paying an average of \$1.56 per hour, with a productivity of an average of 161.9 bricks per man hour and a labor cost of \$10.28 per thousand bricks in the wall. Three strictly nonunion plants were scheduled, paying \$1.52 per hour and having a productivity of 128.6 bricks per man hour and a labor cost for bricklayers of \$12.15 per thousand bricks in the wall. There were 11 jobs scheduled operating under the Landis award, which permits the employment of either union or nonunion men. The average pay was \$1.60 per hour, the productivity was 159.7 brick per man hour and the labor cost was \$10.48 per thousand bricks in the wall.

Plastering

THE schedule called for screeded and commercial plastering, two-coat work, the time to be shown on gross and net area. In the following summary by cities the distinction between commercial and screeded work is not considered, as there is no uniform difference in the output per man per hour.

The net area per man hour as between union and nonunion plasterers did not vary greatly in the same locality. Twelve schedules

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taken from union firms in Atlanta give a net area output per man hour of 5 square yards. Seven nonunion jobs have an average of 5½ square yards. The nonunion plasterer's cost per square yard was 19 cents and the union plasterer's cost 25 cents, but this difference is accounted for in the difference in the wages paid to union and non-union men.

LABOR PRODUCTIVITY AND COST IN PLASTERING, BY CITIES

City	Number of schedules	Rate of pay per hour	Square yards plastered				Cost of plastering per square yard	
			Per hour		Per day of 8 hours		Gross area	Net area
			Gross area	Net area	Gross area	Net area		
Atlanta, Ga.....	19	\$1.040	5.7	5.2	45.8	41.4	\$0.21	\$0.23
Birmingham, Ala.....	7	.957	7.2	5.9	57.5	47.1	.14	.17
Chattanooga, Tenn.....	10	1.134	7.4	6.4	59.0	51.4	.17	.19
New Orleans, La.....	8	1.000	5.5	4.6	44.0	36.4	.20	.24
Norfolk, Va.....	7	1.283	7.1	6.0	57.1	47.8	.18	.22
Boston, Mass.....	6	1.438	5.1	4.5	40.8	36.3	.29	.33
New York, N. Y.....	9	1.875	6.4	5.4	51.5	43.4	.34	.39
Philadelphia, Pa.....	7	1.643	9.0	7.8	72.1	62.4	.18	.21
Chicago, Ill.....	13	1.792	7.0	6.1	55.6	49.2	.27	.30
Cincinnati, Ohio.....	8	1.578	8.6	7.2	68.8	57.5	.20	.23
Cleveland, Ohio.....	10	1.500	6.8	6.1	54.6	49.0	.24	.27
Denver, Colo.....	11	1.500	7.5	6.6	59.6	52.9	.20	.23
Detroit, Mich.....	11	1.563	7.2	6.4	57.3	51.2	.23	.26
Indianapolis, Ind.....	7	1.322	6.9	6.0	55.0	47.7	.20	.23
Minneapolis, Minn.....	11	1.170	8.5	7.3	67.9	58.6	.15	.18

Painting

PAINTING is shown for only four cities. Five schedules on three-coat work were obtained in Atlanta and four schedules on three-coat work were obtained in New Orleans. For the other two cities data are shown for two-coat work. In most cases the work was done by a so-called bucket painter, a man working for himself who may or may not employ assistants. The schedule called for straight-away work on new buildings. To obtain this information it was necessary for an agent to locate the jobs and watch them until first and second coats had been put on and had time to dry. This required entirely too much time. Painting contractors employing large numbers of men rarely do this plain house painting and were unwilling to keep the record of time cost per 10-foot square on such work.

LABOR PRODUCTIVITY AND COST IN PAINTING, BY CITIES

City	Number of schedules	Number of coats	Rate of pay per hour	Number of squares painted		Cost of painting per square
				Per hour	Per day of 8 hours	
Atlanta, Ga.....	5	3	\$0.68	0.34	2.72	\$2.29
Birmingham, Ala.....	4	2	.63	.57	4.56	1.12
Chattanooga, Tenn.....	3	2	.75	.48	3.84	1.57
New Orleans, La.....	4	3	.83	.25	2.00	3.84

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Roofing

AN ATTEMPT was made to secure time and labor cost for roofing, new work, with composition shingles whether individual or strip.

Only 10 cities were covered. The variation in productivity per man per hour in this case is believed by the special agent doing the field work to be largely a question of method of doing the work. The shingles are constructed with a view to attaching them to the roof with a certain number of nails, and while some workmen put in the full number specified, there are others who put in only one nail to the shingle. Since the nails in one row of shingles are all covered by the next row of shingles it is impossible to tell how the work is done without undoing it. The agent so persistently reported that he did not believe any fair comparisons could be made because of the lack of uniformity in doing the work that he was finally instructed to abandon the subject.

The tabulation on productivity per man hour in roofing is therefore submitted only for what it is worth and with an idea that it may be helpful for comparative purposes should future investigations along these lines be made.

LABOR PRODUCTIVITY AND COST IN ROOFING, BY CITIES

City	Number of schedules	Rate of pay per hour	Number of squares covered		Cost of covering per square
			Per hour	Per day of 8 hours	
Atlanta, Ga.....	14	\$0.90	0.78	6.24	\$1.16
Birmingham, Ala.....	9	(1)	1.00	8.00	1.00
Chattanooga, Tenn.....	10	.68	.31	2.48	2.21
New Orleans, La.....	22	.92	.62	4.96	1.49
Norfolk, Va.....	12	.81	.40	3.20	2.04
Boston, Mass.....	5	1.10	.53	4.24	2.09
New York, N. Y.....	10	1.15	.49	3.92	2.72
Philadelphia, Pa.....	7	.87	.66	5.28	1.38
Cincinnati, Ohio.....	7	.89	.33	2.64	2.81
Indianapolis, Ind.....	7	.92	.77	6.16	1.23

¹\$1 per square.

The detailed table follows:

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES

BRICKLAYING

City, and schedule No.	Hours		Union, nonunion, or mixed	Length of wall	Height of wall	Thick-ness of wall	Num-ber of brick laid	Total hours worked	Rate per hour	Num-ber of brick laid per hour	Cost of laying 1,000 brick
	Per day	Per week									
<i>Atlanta, Ga.</i>											
1.....	8	44	Union.....	Feet 60 ⁵ / ₁₆	Feet 4	Inches 13	4,200	26	\$1.125	161.5	\$6.97
2.....	8	44	do.....	23	4	13	1,600	13	1.250	123.1	10.15
3.....	8	44	do.....	60	4	13	4,320	14	1.250	308.6	4.05
4.....	8	44	do.....	62 ¹ / ₂	4	13	4,368	14 ¹ / ₂	1.250	292.2	4.18
5.....	9	50	Nonunion.....	20	5 ¹ / ₄	13	2,400	15	.900	160.0	5.63
6.....	9	50	do.....	20	5 ¹ / ₄	13	2,395	15	.900	159.7	5.64
7.....	9	50	do.....	20	5 ¹ / ₄	13	2,390	15	.900	159.3	5.65
8.....	8	44	Mixed.....	178 ¹ / ₂	4 ¹ / ₂	13	16,000	64	1.000	250.0	4.00

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LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

BRICKLAYING—Continued

City, and schedule No.	Hours		Union, nonunion, or mixed	Length of wall	Height of wall	Thick- ness of wall	Number of brick laid	Total hours worked	Rate per hour	Number of brick laid per hour	Cost of laying 1,000 brick
	Per day	Per week									
<i>Atlanta, Ga.—</i>											
<i>Concluded</i>											
9	8	44	Mixed	70	4	13	4,920	34	\$1.000	144.7	\$6.91
10	8	44	do	16 $\frac{1}{2}$	3	8	552	4	1.000	138.0	7.25
11	8	44	Nonunion	46	4	13	3,864	24	1.000	161.0	6.21
12	8	44	do	88	3	8	3,196	32	1.000	99.9	10.01
13	8	44	do	16	11	8	2,264	18	1.000	125.8	7.95
14	8	44	do	46	4	13	3,874	26	1.000	149.0	6.71
15	8	44	do	16 $\frac{1}{2}$	3	8	556	4 $\frac{1}{4}$	1.000	129.3	7.73
16	9	50	Mixed	162	2	17	4,000	27	{ 1.800 1.850	148.1	5.54
17	8	44	Union	20	13	13	4,900	20 $\frac{3}{4}$	1.125	235.6	4.78
18	8	44	do	60	12	13	13,600	41 $\frac{1}{2}$	1.125	328.5	3.42
19	8	44	do	97	4 $\frac{1}{2}$	13	7,533	25 $\frac{1}{2}$	1.250	293.1	4.26
20	8	44	do	69	4	13	4,104	20 $\frac{3}{4}$	1.250	201.2	6.21
21	9	50	Mixed	30	4	13	1,920	12	1.250	160.0	7.81
22	9	50	do	50	4	13	3,600	20 $\frac{1}{2}$	1.250	175.6	7.12
23	10	55	Nonunion	80	7	13	10,600	70	1.000	151.4	6.61
23 establishments.							107,156	556 $\frac{7}{12}$	1.050	185.3	6.30
<i>Birmingham, Ala.</i>											
1	8	44	Union	85	5	13	8,000	32	1.125	250.0	4.50
2	8	44	do	32 $\frac{1}{2}$	5	13	2,925	12	1.250	243.8	5.13
3	8	44	do	140	5	13	13,020	51	1.125	255.3	4.41
4	8	44	do	140	5	17	17,640	77	1.125	229.1	4.91
5	8	44	do	140	5	13	13,020	64	1.125	203.4	5.53
6	8	44	do	26 $\frac{1}{2}$	4 $\frac{1}{2}$	13	1,988	8	1.125	248.5	4.53
7	8	44	do	32	4 $\frac{1}{2}$	13	2,400	10	1.125	240.0	4.69
8	8	44	do	185	5 $\frac{1}{2}$	17	21,752	84 $\frac{1}{2}$	1.250	258.0	4.84
8 establishments.							80,745	338 $\frac{1}{2}$	1.160	241.0	4.82
<i>Chattanooga, Tenn.</i>											
1	8	44	Nonunion	62	8	13	8,928	28	1.250	318.9	3.92
2	8	44	Union	84	10	13	15,120	63 $\frac{1}{2}$	1.500	237.0	6.33
3	8	44	do	80	10	13	14,400	66	1.500	218.2	6.87
4	8	44	do	51	6	13	5,508	22	1.500	250.4	5.99
5	8	44	Nonunion	62	5	13	5,580	23	{ 1.250 1.500	242.6	5.69
6	8	44	Union	43	9 $\frac{1}{2}$	13	14,454	98	1.500	147.5	10.17
7	8	44	do	15	10 $\frac{1}{2}$	13	2,880	19	1.500	161.6	9.89
8	8	44	do	60	5 $\frac{1}{2}$	13	6,888	28	1.500	246.0	6.10
9	8	44	do	60	5 $\frac{1}{2}$	17	12,936	64	1.500	202.1	7.42
10	8	44	do	51	5	13	4,590	17	1.500	270.0	5.56
11	8	44	do	145	7	13	18,270	90	1.500	203.0	7.39
11 establishments.							109,554	518 $\frac{1}{5}$	1.460	226.1	6.85
<i>New Orleans, La.</i>											
1	8	44	Union	127 $\frac{1}{8}$	36	17	137,520	960	1.100	143.3	7.68
2	8	44	do	60	5 $\frac{1}{2}$	13	6,300	29 $\frac{1}{4}$	1.000	215.0	4.65
3	8	44	do	110	5 $\frac{1}{2}$	13	11,550	55	1.000	210.0	4.76
4	8	44	do	120	5	17	16,990	77	1.000	220.6	4.53
5	8	44	do	120	5	17	16,990	78	1.000	217.8	4.59
6	8	44	do	60	5 $\frac{1}{2}$	13	6,300	30	1.000	210.0	4.76
7	8	44	do	110	5 $\frac{1}{2}$	13	11,550	55 $\frac{1}{2}$	1.000	207.7	4.81
7 establishments.							207,200	1,284 $\frac{1}{6}$	1.010	203.5	5.11
<i>Norfolk, Va.</i>											
1	8	44	Nonunion	59 $\frac{1}{2}$	7 $\frac{1}{2}$	17	11,600	34	(1)	341.2	(1)
2	8	44	do	59 $\frac{1}{2}$	5	13	5,366	24	(1)	223.6	(1)
3	8	44	Union	70	20	13	28,000	144	1.375	194.4	7.07
4	8	44	do	38	10 $\frac{1}{2}$	13	7,182	31	1.375	231.7	5.93
5	8	44	do	46	10 $\frac{1}{2}$	17	12,558	54 $\frac{1}{2}$	1.375	230.4	5.97
6	8	44	do	290	---	13	19,800	100	1.375	198.0	6.94
7	8	44	do	297	14	17	106,500	372	1.375	286.3	4.80
8	8	44	do	290	4 $\frac{1}{4}$	13	22,440	120	1.375	187.0	7.35
9	8	44	do	50	3	13	2,700	12	1.375	225.0	6.11
10	8	44	do	50	3	13	2,700	13 $\frac{1}{2}$	1.375	200.0	6.88
10 establishments.							218,846	905	² 1.375	231.8	² 6.38

¹ Not reported.² Not including two jobs not reported.

[950]

LABOR PRODUCTIVITY IN CERTAIN BUILDING TRADES

7

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

BRICKLAYING—Continued

City, and schedule No.	Hours		Union, nonunion, or mixed	Length of wall	Height of wall	Thick- ness of wall	Num- ber of brick laid	Total hours worked	Rate per hour	Num- ber of brick laid per hour	Cost of laying 1,000 brick
	Per day	Per week									
<i>Boston, Mass.</i>											
1.....	8	44	Union	<i>Feet</i> 132½	<i>Feet</i> 16	<i>Inches</i> 13	42,200	420	\$1.250	100.5	\$12.44
2.....	8	44	do	26½	12	13	6,330	68	1.250	93.1	13.43
3.....	8	44	do	92½	10¾	9	13,100	111	1.250	118.0	10.56
4.....	8	44	do	24¾	8½	9	2,780	32	1.250	86.9	14.38
5.....	8	44	do	28½	12	13	6,850	76	1.250	90.1	13.87
5 establishments.....							71,260	707	1.250	97.7	12.94
<i>New York, N. Y.</i>											
1.....	8	44	Union	40	4	13	3,360	23	1.875	146.1	12.83
2.....	8	44	do	60	10	13	10,800	72	1.875	150.0	12.51
3.....	8	44	do	100	34	30	167,000	792	1.500	210.1	7.14
4.....	8	44	do	70¾	12½	9	12,678	122	1.750	103.9	16.84
5.....	8	44	do	19½	10½	17	4,100	28	1.875	146.4	12.81
6.....	8	44	do	25	11	21	9,000	60	1.750	150.0	11.67
7.....	8	44	do	50	11	21	18,000	118½	1.750	151.9	11.52
8.....	8	44	do	35	5	21	6,100	33½	1.750	181.2	9.66
9.....	8	44	do	96½	12½	13	28,700	249	1.750	115.3	15.17
10.....	8	44	do	40	9½	13	7,700	40½	1.750	190.9	9.17
11.....	8	44	do	26	11	9	4,576	32	1.750	143.0	12.24
12.....	8	44	do	84	5½	9	6,468	32	1.750	202.1	8.66
12 establishments.....							278,482	1,602½	1.760	157.6	11.69
<i>Philadelphia, Pa.</i>											
1.....	8	44	Union	60	5	17	6,014	47	1.500	128.0	11.72
2.....	8	44	do	126¾	17	13	51,500	498	1.500	103.4	14.51
3.....	8	44	do	26	10½	17	6,192	40½	1.500	152.9	9.81
4.....	8	44	do	50	10	13	8,694	75	1.500	115.9	12.94
5.....	8	44	do	48	11¼	9	6,204	64½	1.500	96.2	15.50
6.....	8	44	do	17	12	13	2,652	24	1.500	110.5	13.57
7.....	8	44	do	17	12	13	2,652	22½	1.500	117.9	12.72
8.....	8	44	do	17	2½	13	825	7	1.500	117.9	12.72
9.....	8	44	do	14½	6	13	1,600	11	1.500	145.5	10.31
10.....	8	44	do	50½	5½	13	5,555	37	1.500	150.1	9.99
11.....	8	44	do	18	3	13	1,100	9	1.600	122.2	13.09
12.....	8	44	do	18	3	13	1,100	9	1.600	122.2	13.09
13.....	8	44	do	20	20	13	7,200	64	1.750	112.5	15.56
14.....	8	44	do	14	15	13	4,200	32	1.500	131.3	11.42
14 establishments.....							105,488	940½	1.530	123.3	12.65
<i>Chicago, Ill.</i>											
1.....	8	44	Nonunion	25	11	13	5,500	36¼	1.500	151.7	9.89
2.....	8	44	do	50	8	13	8,000	80	1.500	100.0	15.00
3.....	8	44	do	120	32	17	117,000	872¾	1.550	134.1	11.56
4.....	8	44	Union	60	12	13	13,680	91	1.500	150.3	9.98
5.....	8	44	do. ³	19½	12	13	4,156	24	1.500	173.2	8.66
6.....	8	44	do. ³	39¼	9½	13	4,563	37½	1.600	122.7	13.04
7.....	8	44	do	60	12	13	12,960	103¾	1.500	125.0	12.00
8.....	8	44	do	48	5	13	4,320	32	1.500	135.0	11.11
9.....	8	44	do	22	5	9	1,120	8	1.500	140.0	10.71
10.....	8	44	do	205	15	17	73,800	355¾	1.580	207.4	7.62
11.....	8	44	do	14	10	9	1,720	12	1.650	143.3	11.51
12.....	8	44	do	23	6	13	2,412	10	1.650	241.2	6.84
13.....	8	44	do	18	8	13	2,592	26	1.630	99.7	16.35
14.....	8	44	do	131	12	13	31,400	228	1.650	137.7	11.98
15.....	8	44	do	32¾	6	13	3,375	17	1.500	198.5	7.56
16.....	8	44	Nonunion ³	40	12	17	10,800	72	1.650	150.0	11.00
17.....	8	44	Union	26½	4¾	17	3,040	15	1.500	202.7	7.40
18.....	8	44	Nonunion ³	88	2½	13	4,125	16	1.500	257.8	5.82
19.....	8	44	do. ³	20	9	13	3,240	22½	1.600	144.0	11.11
20.....	8	44	do. ³	70	3½	17	6,125	32	1.680	191.4	8.78
21.....	8	44	do. ³	32	7½	13	4,300	30	1.600	143.3	11.16
22.....	8	44	do. ³	150	15	13	42,750	283	1.630	151.1	10.79
23.....	8	44	do. ³	32	12	17	9,274	74¾	1.700	124.2	13.69
24.....	8	44	do. ³	182	11½	9	28,000	201	1.500	139.3	10.77
24 establishments.....							398,252	2,679½	1.570	156.8	10.60

³Landis award, mixed.

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

BRICKLAYING—Continued

City, and schedule No	Hours		Union, nonunion, or mixed	Length of wall	Height of wall	Thick- ness of wall	Number of brick laid	Total hours worked	Rate per hour	Number of brick laid per hour	Cost of laying 1,000 brick
	Per day	Per week									
<i>Cincinnati, Ohio</i>											
1	8	45	Union	35	11	13	6,930	56	\$1.500	123.8	\$12.12
2	8	45	do	60	7 $\frac{1}{2}$	13	7,740	51 $\frac{1}{2}$	1.500	150.3	9.98
3	8	45	do	90	14	13	22,680	113 $\frac{1}{2}$	1.500	199.8	7.52
4	8	45	do	15	20	13	5,000	33 $\frac{1}{2}$	1.250	150.0	8.34
5	8	45	do	15	20	13	5,000	33	1.250	151.5	8.25
6	8	45	do	90	13	9	13,200	105	1.250	125.7	9.95
7	8	45	do	210	8	13	30,240	253 $\frac{1}{2}$	1.500	119.3	12.57
8	8	45	do	40	8	17	7,680	82	1.500	93.7	16.01
9	8	45	do	46	8	13	6,624	66	1.500	100.4	14.94
10	8	45	do	32	5	13	2,150	21 $\frac{1}{2}$	1.500	100.0	15.00
10 establishments.							107,244	815 $\frac{1}{2}$	1.430	131.5	11.47
<i>Cleveland, Ohio</i>											
1	8	44	Union	63	6 $\frac{1}{2}$	13	7,365	48	1.500	153.4	9.78
2	8	44	do	75	17 $\frac{1}{2}$	13	24,000	261	1.500	92.0	16.31
3	8	44	do	82	13 $\frac{1}{2}$	13	20,100	123	1.500	163.4	9.18
4	8	44	do	36 $\frac{1}{2}$	10	13	6,675	32	1.500	208.6	7.19
5	8	44	do	200	10	17	50,990	291 $\frac{1}{2}$	1.500	174.9	8.58
6	8	44	do	48	32	13	25,340	211 $\frac{1}{2}$	1.500	119.9	12.51
7	8	44	do	90 $\frac{1}{2}$	14	17	26,600	157 $\frac{1}{2}$	1.500	168.9	8.88
8	8	44	do	58	8 $\frac{1}{2}$	17	10,353	68 $\frac{1}{2}$	1.500	150.8	9.95
9	8	44	do	50	4	9	2,800	20	1.500	140.0	10.71
10	8	44	do	70	5	13	6,300	48	1.500	131.3	11.43
11	8	44	do	44 $\frac{3}{4}$	9 $\frac{1}{2}$	17	8,900	61	1.500	145.9	10.29
12	8	44	do	66	10 $\frac{1}{2}$	13	12,470	94 $\frac{1}{2}$	1.500	132.0	11.37
13	8	44	do	220	42 $\frac{1}{2}$	13	168,300	1,005	1.500	167.5	8.96
14	8	44	do	50	3	13	2,700	22 $\frac{1}{2}$	1.500	120.0	12.50
14 establishments.							372,893	2,444	1.500	147.8	10.55
<i>Denver, Colo.</i>											
1	8	44	Union	80	10	13	14,387	54	1.500	266.4	5.63
2	8	44	do	120	10	13	21,600	78 $\frac{1}{2}$	1.500	275.2	5.45
3	8	44	do	44	5	9	2,640	17	1.500	155.3	9.66
4	8	44	do	44	7	13	4,900	28	1.500	175.0	8.57
5	8	44	do	90	16	13	27,500	168 $\frac{1}{2}$	1.500	163.2	9.19
6	8	44	do	77 $\frac{1}{2}$	4	17	7,500	27	1.500	277.8	5.40
7	8	44	do	12 $\frac{1}{2}$	8	13	1,800	12 $\frac{1}{2}$	1.500	145.0	10.28
8	8	44	do	25 $\frac{3}{4}$	5 $\frac{1}{2}$	17	3,358	11 $\frac{1}{2}$	1.500	300.7	4.99
9	8	44	do	61	5	9	3,260	16	1.500	203.8	7.36
10	8	44	do	125	12	17	33,000	164 $\frac{3}{4}$	1.500	200.3	7.49
11	8	44	do	30	6 $\frac{1}{2}$	13	3,510	18	1.500	195.0	7.69
12	8	44	do	50	2	17	7,464	23	1.500	324.5	4.65
				14	5 $\frac{1}{2}$	13					
				32	3 $\frac{3}{4}$	13					
13	8	44	do	11	9	9	1,600	7 $\frac{1}{2}$	1.500	213.3	7.03
14	8	44	do	62	18	9	12,000	78	1.500	153.8	9.75
15	8	44	do	185	15	13	49,000	245	1.500	200.0	7.50
16	8	44	do	188	3 $\frac{1}{2}$	17	10,818	39	1.500	277.4	5.41
17	8	44	do	100	4	13	7,200	46	1.500	156.5	9.58
18	8	44	do	100	6	9	7,200	52	1.500	138.5	10.83
18 establishments.							218,737	1,085 $\frac{3}{4}$	1.500	212.4	7.58
<i>Detroit, Mich.</i>											
1	8	44	Union	550	9	13	90,000	728	1.600	123.6	12.94
2	8	44	do	420	9	17	91,000	472	1.510	192.8	7.83
3	8	44	do	230	6	13	25,000	192	1.510	130.2	11.60
4	8	44	do	380	6	13	41,000	274	1.600	149.0	10.69
5	8	44	do	500	3 $\frac{1}{2}$	13	31,560	230 $\frac{1}{2}$	1.500	137.0	10.95
6	8	44	do	116	40 $\frac{1}{8}$	9	84,420	792	1.520	106.6	14.26
7	8	44	do	40	8	17	7,700	40	1.560	192.5	8.10
8	8	44	do	60	9	17	12,900	72	1.520	179.2	8.48
9	8	44	do	50	25	13	28,132	261	1.610	107.8	14.94
10	8	44	do	112	7 $\frac{1}{2}$	9	11,836	80	1.520	148.0	10.27
11	8	44	do	224	6 $\frac{3}{4}$	17	34,436	168	1.520	205.0	7.42
12	8	44	do	224	9 $\frac{1}{2}$	13	38,304	240	1.520	159.6	9.52
13	8	44	do	170	25	13	76,556	471	1.520	162.5	9.35
14	8	44	do	55	17	17	22,400	129	1.600	173.6	9.21
15	8	44	do	180	11 $\frac{1}{2}$	13	37,200	263	1.570	141.4	11.10
15 establishments.							632,444	4,412 $\frac{1}{2}$	1.545	154.0	10.44

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

BRICKLAYING—Concluded

City, and schedule No.	Hours		Union, nonunion, or mixed	Length of wall	Height of wall	Thick- ness of wall	Number of brick laid	Total hours worked	Rate per hour	Number of brick laid per hour	Cost of laying 1,000 brick
	Per day	Per week									
<i>Indianapolis, Ind.</i>											
1	8	44	Union	308	8½	13	47, 124	528	\$1.350	89.3	\$15.13
2	8	44	do	32	12	13	7, 680	90	1.350	85.3	15.82
3	8	44	do	26	16	17	10, 400	98	1.350	106.1	12.72
4	8	44	do	36	12	13	8, 860	84	1.375	105.5	13.04
5	8	44	do	32	18	13	12, 096	152	1.375	79.6	17.28
6	8	44	do	16	16	13	5, 376	50	1.375	107.5	12.79
7	8	44	do	46	16	17	21, 168	188	1.375	112.6	12.21
8	8	44	do	26	12	13	6, 496	72	1.375	90.2	15.24
9	8	44	do	26	12	13	6, 496	72	1.375	90.2	15.24
10	8	44	do	26	12	13	6, 496	72	1.375	90.2	15.24
10 establishments							132, 192	1, 406	1.368	95.7	14.47
<i>Minneapolis St. Paul, Minn.</i>											
1	8	44	Union	47	4¾	13	3, 700	25¾	1.125	143.7	7.83
2	8	48	Nonunion	11½	11½	13	2, 376	15¾	1.125	155.0	7.26
3	8	48	do	11½	11½	13	2, 376	15	1.125	158.4	7.10
4	9	50	Mixed	150	11	9	43, 000	416½	1.125	103.2	10.90
5	9	50	do	54	11¼	13	10, 846	48	1.125	226.0	4.98
6	8	44	Union	164	16½	13	45, 738	312	1.250	146.6	8.53
7	8	44	do	198	5½	13	20, 100	120	1.500	167.5	8.96
8	8	44	Mixed	56	5½	13	5, 200	32	1.500	162.5	7.69
9	8	44	do	25	8	13	3, 600	16	1.250	225.0	5.56
10	8	44	do	25	8	13	3, 600	15½	1.250	232.3	5.38
11	8	44	Union	150	12	13	32, 000	181	1.250	171.3	7.07
12	9	50	Mixed	34	6	13	4, 080	20¼	1.125	201.5	5.58
13	9	50	do	34	6	13	4, 080	20¼	1.125	201.5	5.58
14	8	44	do	12¾	4¾	13	925	3¼	1.375	300.0	4.58
15	8	44	Union	10½	8½	13	1, 620	10½	1.250	154.3	8.10
16	8	44	do	20	12	13	5, 880	20½	1.250	286.8	4.36
17	9	49½	Mixed	21	10	13	3, 850	44	1.188	87.5	13.68
18	8	44	Union	100	11	13	19, 458	81½	1.250	238.7	5.24
19	8	44	do	12	16	24	4, 400	16	1.250	275.0	4.55
20	9	54	Mixed	48	5½	17	6, 336	31¾	1.125	200.0	5.65
21	8	44	Union	50	4	13	3, 520	16	1.125	220.0	5.11
21 establishments							226, 685	1, 461	1.211	193.2	6.84

PLASTERING

City, and schedule No.	Hours		Union or nonunion	Gross area of surface plastered	Area of open- ings	Net area of surface plastered	Total hours worked	Rate per hour	Square yards plastered per hour		Cost of plastering per square yard	
	Per day	Per week							Gross area	Net area	Gross area	Net area
<i>Atlanta, Ga.</i>												
1	8	44	Nonunion	107.6		107.6	50.0	\$1.000	2.2	2.2	\$0.45	\$0.45
2	8.5	47.5	do	40.4		40.4	6.3	1.000	6.4	6.4	.16	.16
3	8.5	47.5	do	38.2		38.2	6.3	1.000	6.1	6.1	.16	.16
4	9	50	do	70.7	6.7	64.0	12.3	.800	5.7	5.2	.14	.15
5	9	50	do	70.7	6.7	64.0	11.1	.800	6.4	5.8	.13	.14
6	9	50	do	70.7	6.7	64.0	11.8	.800	6.0	5.4	.13	.15
7	8	44	do	73.6	12.0	61.6	8.0	.900	9.2	7.7	.10	.12
8	8	44	Union	146.0		146.0	38.0	1.100	3.8	3.8	.29	.29
9	8	44	do	77.0		77.0	22.0	1.100	3.5	3.5	.31	.31
10	8	44	do	123.0		123.0	22.0	1.100	5.6	5.6	.20	.20
11	8	44	do	29.0		29.0	7.8	1.100	3.7	3.7	.30	.30
12	8	44	do	84.9	6.9	78.0	17.0	1.250	5.0	4.6	.25	.27
13	8	44	do	91.7	13.6	78.1	22.0	1.000	4.2	3.6	.24	.28
14	8	44	do	60.6	12.9	47.7	19.0	1.000	3.2	2.5	.31	.40
15	8	44	do	83.1	13.4	69.7	24.5	1.000	3.4	2.8	.29	.35
16	8	44	do	84.9	11.0	73.9	8.5	1.250	10.0	8.7	.13	.14
17	8	44	do	81.3	11.0	70.3	8.0	1.250	10.2	8.8	.12	.14

[953]

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

PLASTERING—Continued

City, and schedule No.	Hours		Union or nonunion	Gross area of surface plastered	Area of open- ings	Net area of surface plastered	Total hours worked	Rate per hour	Square yards plastered per hour		Cost of plastering per square yard	
	Per day	Per week							Gross area	Net area	Gross area	Net area
<i>Atlanta, Ga.—Con.</i>				<i>Square yards</i>	<i>Square yards</i>	<i>Square yards</i>						
18.....	8	44	Union.....	80.3	10.1	70.2	12.0	\$1.250 1.000	6.7	5.9	\$0.16	\$0.18
19.....	8	44	do.....	77.3	14.8	62.5	10.3	1.000 1.250	7.5	6.1	.15	.19
19 establish- ments.....								1.040	5.7	5.2	.21	.23
<i>Birmingham, Ala.</i>												
1.....	8	44	Nonunion	239.3	41.9	197.4	27.7	.850	8.6	7.1	.10	.12
2.....	8	44	do.....	269.9	4.2	225.7	33.5	.850	8.1	6.7	.11	.13
3.....	8	44	do.....	210.0	39.7	170.3	23.6	.850	8.9	7.2	.10	.12
4.....	8	44	Union.....	350.8	74.4	276.4	48.0	1.000	7.3	5.8	.14	.17
5.....	8	44	do.....	618.3	129.3	489.0	100.0	1.000	6.2	4.9	.16	.20
6.....	8	44	do.....	227.4	60.7	166.7	35.8	(⁴)	6.4	4.7	.17	.23
7.....	8	44	do.....	266.6	2.6	264.0	55.0	(⁶)	4.8	4.8	.22	.22
7 establish- ments.....								.957	7.2	5.9	.14	.17
<i>Chattanooga, Tenn.</i>												
1.....	8	44	Union.....	1,206.0	181.0	1,025.0	225.3	1.250	5.4	4.5	.23	.27
2.....	8	44.5	do.....	612.1	101.9	510.2	58.5	1.100 1.000	10.5	8.7	.10	.12
3.....	8	44.5	do.....	325.0	51.8	273.2	37.5	1.100 1.000	8.7	7.3	.12	.14
4.....	8	44.5	do.....	325.0	51.8	273.2	35.5	1.100 1.000	9.2	7.7	.11	.14
5.....	8	44.5	do.....	325.0	51.8	273.2	40.0	1.100 1.000	8.1	6.8	.13	.15
6.....	8	44	do.....	1,148.5	177.2	971.3	150.0	1.000 1.250	7.7	6.5	.15	.18
7.....	8	44	do.....	375.0	14.0	361.0	54.0	1.250	6.9	6.7	.18	.19
8.....	8	44	Nonunion	297.0		297.0	55.5	1.250	5.4	5.4	.23	.23
9.....	8	44	do.....	450.0	25.0	425.0	88.0	1.250	5.1	4.8	.24	.26
10.....	8	44	Union.....	655.2	84.4	570.7	96.0	1.250	6.8	5.9	.18	.21
10 establish- ments.....								1.134	7.4	6.4	.17	.19
<i>New Orleans, La.</i>												
1.....	8	45	Union.....	840.0	168.0	672.0	104.0	1.000	8.1	6.5	.12	.15
2.....	8	45	do.....	840.0	168.0	672.0	101.5	1.000	8.3	6.6	.12	.15
3.....	8	45	do.....	411.0	61.0	350.0	90.0	1.000	4.6	3.9	.22	.26
4.....	8	45	do.....	357.0	50.0	307.0	88.0	1.000	4.1	3.5	.25	.29
5.....	8	45	do.....	2,240.0	355.0	1,885.0	400.0	1.000	5.6	4.7	.18	.21
6.....	8	45	do.....	1,966.0	197.0	1,769.0	666.0	1.000	3.0	2.7	.34	.38
7.....	8	45	do.....	936.0	125.0	811.0	217.0	1.000	4.3	3.7	.23	.27
8.....	8	44	do.....	1,092.8	224.4	868.4	181.0	1.000	6.0	4.8	.17	.21
8 establish- ments.....								1.000	5.5	4.6	.20	.24
<i>Norfolk, Va.</i>												
1.....	8	44	Union.....	700.0	105.0	595.0	90.0	1.250	7.8	6.6	.16	.19
2.....	8	44	do.....	680.0	116.0	564.0	78.0	1.250	8.7	7.2	.14	.17
3.....	8	44	Nonunion	526.7	109.9	416.8	72.0	(⁵)	7.3	5.8	.22	.28
4.....	8	44	do.....	563.1	112.0	451.1	76.0	(⁵)	7.4	5.9	.22	.27
5.....	8	44	do.....	538.0	91.0	447.0	80.0	1.000	6.7	5.6	.15	.18
6.....	8	44	do.....	670.6	26.2	644.4	120.0	1.250	5.6	5.4	.22	.23
7.....	8	44	do.....	457.7	87.0	370.7	70.0	1.000	6.5	5.3	.15	.19
7 establish- ments.....								1.283	7.1	6.0	.18	.22

⁴ 17 cents per square yard.⁶ 22 cents per square yard.

[1954]

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

PLASTERING—Continued

City, and schedule No.	Hours		Union or nonunion	Gross area of surface plastered	Area of open- ings	Net area of surface plastered	Total hours worked	Rate per hour	Square yards plastered per hour		Cost of plastering per square yard	
	Per day	Per week							Gross area	Net area	Gross area	Net area
<i>Boston, Mass.</i>												
1	8	44	Union	570.0	80.0	490.0	182.0	\$1.250	3.1	2.7	\$0.40	\$0.46
2	8	44	do	1,400.0	175.0	1,225.0	260.0	1.625	4.7	4.7	.30	.35
3	8	44	do	526.0	36.0	490.0	112.0	1.625	4.7	4.4	.35	.37
4	8	44	do	710.0	86.0	624.0	132.0	1.250	5.4	4.7	.23	.27
5	8	44	do	710.0	86.0	624.0	132.0	1.250	5.4	4.7	.23	.27
6	8	44	do	1,980.0	180.0	1,800.0	300.0	1.625	6.6	6.0	.25	.27
6 establishments								1.438	5.1	4.5	.29	.33
<i>New York, N. Y.</i>												
1	8	44	Union	6,069.0	126.0	5,943.0	2,169.0	1.750	2.8	2.7	.63	.65
2	8	44	do	584.0	48.0	536.0	144.0	2.000	4.1	3.7	.49	.54
3	8	44	do	940.0	112.5	827.5	188.0	1.875	5.0	4.4	.38	.43
4	8	44	do	712.0	128.0	584.0	136.0	2.000	5.2	4.3	.38	.47
5	8	44	do	849.0	110.3	728.7	112.0	1.875	7.6	6.5	.25	.29
6	8	44	do	1,053.0	185.0	868.0	108.0	1.875	9.8	8.0	.19	.23
7	8	44	do	1,053.0	185.0	868.0	111.0	1.875	9.5	7.8	.20	.24
8	8	44	do	1,053.0	185.0	868.0	115.5	1.875	9.1	7.5	.21	.25
9	8	44	do	596.5	106.5	490.0	124.5	1.750	4.8	3.9	.36	.45
9 establishments								1.875	6.4	5.4	.34	.39
<i>Philadel- phia, Pa.</i>												
1	8	44	Union	569.9	64.5	505.4	64.0	1.750	8.9	7.9	.20	.22
2	8	44	do	569.9	64.5	505.4	56.0	1.750	10.2	9.0	.17	.19
3	8	44	do	508.7	86.4	422.3	48.0	1.750	10.6	8.8	.17	.20
4	9	49	Nonunion	800.0	110.0	690.0	106.0	1.500	7.5	6.5	.20	.23
5	9	49	do	720.0	110.0	610.0	94.0	1.500	7.7	6.5	.19	.23
6	9	49	do	910.0	136.0	774.0	108.0	1.500	8.4	7.2	.18	.21
7	8	44	Union	569.9	64.5	505.4	58.0	1.750	9.8	8.7	.18	.20
7 establishments								1.643	9.0	7.8	.18	.21
<i>Chicago, Ill.</i>												
1	8	44	Union	5,623.0	843.0	4,780.0	712.0	1.875	7.9	6.7	.24	.28
2	8	44	do	17,730.0	516.0	17,214.0	4,843.0	1.750	3.7	3.6	.48	.49
3	8	44	do	3,882.0	294.0	3,588.0	549.0	1.875	7.1	6.5	.27	.29
4	8	44	do	1,275.0	90.0	1,185.0	178.0	1.875	7.2	6.7	.26	.28
5	8	44	do	416.0	32.0	384.0	48.0	1.875	8.7	8.0	.22	.23
6	8	44	do	2,630.0	184.0	2,446.0	434.0	1.550	6.1	5.6	.25	.28
7	8	44	do	11,971.0	1,207.0	10,764.0	1,812.0	1.875	6.6	5.9	.25	.27
8	8	44	do	890.0	133.5	756.5	114.0	1.875	7.8	6.6	.24	.28
9	8	44	do	1,434.0	215.0	1,219.0	192.0	1.875	7.5	6.3	.25	.30
10	8	44	do	1,008.0	150.0	858.0	124.0	1.875	8.1	6.9	.23	.27
11	8	44	do	1,156.0	139.5	1,016.5	219.0	1.750	5.3	4.6	.33	.38
12	8	44	do	8,500.0	1,275.0	7,225.0	1,040.0	1.875	8.2	6.9	.23	.27
13	8	44	do	11,396.0	1,139.0	10,257.0	1,844.0	1.625	6.2	5.6	.26	.29
13 establishments								1.792	7.0	6.1	.27	.30
<i>Cincinnati, Ohio</i>												
1	8	45	Nonunion	605.0	97.0	508.0	60.5	1.500	10.0	8.4	.15	.18
2	8	45	do	1,150.0	184.0	966.0	129.0	1.500	8.9	7.5	.17	.20
3	8	45	do	1,150.0	184.0	966.0	135.0	1.500	8.5	7.2	.18	.21
4	8	45	Union	888.0	106.0	782.0	141.0	1.625	6.3	5.5	.26	.30
5	8	45	do	495.0	62.0	433.0	46.0	1.625	10.8	9.4	.15	.17
6	8	44	do	360.0	70.0	290.0	40.0	1.625	9.0	7.3	.18	.22
7	8	44	do	1,164.0	234.0	930.0	119.0	1.625	9.8	7.8	.17	.21
8	8	44	do	480.0	96.0	384.0	87.0	1.625	5.5	4.4	.30	.37
8 establishments								1.578	8.6	7.2	.20	.23

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued
PLASTERING—Concluded

City, and schedule No.	Hours		Union or nonunion	Gross area of surface plastered	Area of open- ings	Net area of surface plastered	Total hours worked	Rate per hour	Square yards plastered per hour		Cost of plastering per square yard	
	Per day	Per week							Gross area	Net area	Gross area	Net area
<i>Cleveland, Ohio</i>												
1	8	44	Union	7,520.0	557.0	6,963.0	1,082.5	\$1.500	6.9	6.4	\$0.22	\$0.23
2	8	44	do	19,511.3	1,445.3	18,066.0	4,607.0	1.500	4.2	3.9	.35	.38
3	8	44	do	1,197.7	88.7	1,109.0	244.5	1.500	4.9	4.5	.31	.33
4	8	44	do	3,179.5	235.5	2,944.0	675.3	1.500	4.7	4.4	.32	.34
5	8	44	do	9,106.9	1,011.9	8,095.0	1,030.0	1.500	8.8	7.9	.17	.19
6	8	44	do	1,023.5	133.5	890.0	158.0	1.500	6.5	5.6	.23	.27
7	8	44	do	1,288.0	138.0	1,150.0	132.0	1.500	9.8	8.7	.15	.17
8	8	44	do	1,388.8	148.8	1,240.0	136.0	1.500	10.2	9.1	.15	.16
9	8	44	do	1,292.5	138.5	1,154.0	289.0	1.500	4.5	4.0	.33	.38
10	8	44	do	1,006.3	131.3	875.0	129.0	1.500	7.8	6.8	.19	.22
10 establish- ments								1.500	6.8	6.1	.24	.27
<i>Denver, Colo.</i>												
1	8	44	Union	620.0	75.0	545.0	89.0	1.500	7.0	6.1	.21	.24
2	8	44	do	700.0	85.0	615.0	92.0	1.500	7.6	6.7	.20	.22
3	8	44	do	1,300.0	160.0	1,140.0	152.0	1.500	7.5	7.5	.17	.20
4	8	44	do	1,100.0	130.0	970.0	140.0	1.500	7.9	6.9	.19	.22
5	8	44	do	580.0	60.0	520.0	72.0	1.500	8.1	7.2	.19	.21
6	8	44	do	505.0	51.0	454.0	64.0	1.500	7.9	7.1	.19	.21
7	8	44	do	1,823.0	180.0	1,643.0	314.0	1.500	5.8	5.2	.26	.29
8	8	44	do	800.0	80.0	720.0	96.0	1.500	8.3	7.5	.18	.20
9	8	44	do	6,420.0	645.0	5,775.0	1,047.0	1.500	6.1	5.5	.24	.27
10	8	44	do	500.0	48.0	452.0	62.75	1.500	8.0	7.2	.19	.21
11	8	44	do	854.0	102.0	752.0	128.0	1.500	6.7	5.9	.22	.26
11 establish- ments								1.500	7.5	6.6	.20	.23
<i>Detroit, Mich.</i>												
1	8	44	Union	1,647.0	247.0	1,400.0	224.0	1.563	7.4	6.3	.21	.25
2	8	44	do	681.0	81.0	600.0	70.0	1.563	9.7	8.6	.16	.18
3	8	44	do	647.0	77.0	570.0	65.0	1.563	10.0	8.8	.16	.18
4	8	44	do	2,062.0	412.0	1,650.0	410.0	1.563	5.0	4.0	.31	.39
5	8	44	do	8,960.0	400.0	8,500.0	1,512.0	1.563	5.9	5.6	.26	.28
6	8	44	do	1,300.0	150.0	1,150.0	248.0	1.563	5.2	4.6	.30	.34
7	8	44	do	40,000.0	3,000.0	37,000.0	5,750.0	1.563	7.0	6.4	.23	.24
8	8	44	do	4,766.0	18.0	4,748.0	881.5	1.563	5.4	5.4	.29	.29
9	8	44	do	4,845.0	6.0	4,842.0	883.0	1.563	5.5	5.5	.28	.29
10	8	44	do	600.0	90.0	510.0	60.0	1.563	10.0	8.5	.16	.18
11	8	44	do	400.0	50.0	350.0	52.0	1.563	7.7	6.7	.20	.23
11 establish- ments								1.563	7.2	6.4	.23	.26
<i>Indianapolis, Ind.</i>												
1	8	44	Nonunion	618.0	68.0	550.0	70.0	1.250	8.8	7.9	.14	.16
2	8	44	do	618.0	68.0	550.0	70.0	1.250	8.8	7.9	.14	.16
3	8	44	Union	784.0	122.0	662.0	112.0	1.350	7.0	5.9	.19	.23
4	8	44	do	723.0	130.0	593.0	117.0	1.350	6.2	5.1	.22	.27
5	8	44	do	640.0	106.0	534.0	120.0	1.350	5.3	4.5	.25	.30
6	8	44	do	530.0	55.0	475.0	92.0	1.350	5.8	5.2	.23	.26
7	8	44	do	768.0	123.0	645.0	124.0	1.350	6.2	5.2	.22	.26
7 establish- ments								1.322	6.9	6.0	.20	.23
<i>Minneapolis, Minn.</i>												
1	8	44	Union	7,584.0	468.0	7,116.0	720.0	1.125	10.5	9.9	.11	.11
2	8	44	do	1,800.0	255.0	1,545.0	176.0	1.125	10.2	8.8	.11	.13
3	8	44	do	966.0	85.0	881.0	93.0	1.125	10.1	9.2	.11	.12
4	8	44	do	5,256.0	525.0	4,731.0	725.0	1.125	7.2	6.5	.16	.17
5	8	44	do	2,240.0	486.0	2,754.0	438.0	1.125	7.4	6.3	.15	.18
6	8	44	do	559.0	84.0	475.0	67.0	1.250	8.3	7.1	.15	.18
7	8	44	do	512.0	77.0	435.0	69.5	1.250	7.4	6.3	.17	.20
8	8	44	do	589.0	110.0	479.0	49.0	1.250	12.0	9.8	.10	.13
9	8	44	do	1,006.0	195.0	811.0	90.0	1.250	11.2	9.0	.11	.14
10	8	44	do	650.0	98.0	552.0	150.0	1.125	4.3	3.7	.26	.31
11	8	44	do	539.0	80.0	459.0	115.0	1.125	4.7	4.0	.24	.28
11 establish- ments								1.170	8.5	7.3	.15	.18

LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

PAINTING

City, and schedule No.	Hours		Union, nonunion, or mixed	Quarts of paint per square			Squares painted	Total hours worked	Rate per hour	Num- ber of squares painted per hour	Cost of paint- ing per square
	Per day	Per week		First coat	Second coat	Third coat					
<i>Atlanta, Ga.</i>											
1	8	44	Mixed	1.00	1.00	1.00	60.00	176	\$0.80 .85 .50	0.34	\$2.43
2	8	44	Nonunion	2.00	2.00	1.33	14.50	64			
3	8	44	do	2.00	2.00	1.33	14.50	64			
4	8	44	Mixed	1.00	1.00	1.00	70.00	207	.80 .85 .70	.34	2.43
5	9	50	Nonunion	3.00	3.00	3.00	24.00	42			
5 establishments											
<i>Birmingham, Ala.</i>											
1	8	44	Nonunion	.79	1.14		63.00	97.00	.60	.65	.92
2	8	44	do	.79	1.05		76.00	156.00	.60	.49	1.22
3	8	44	do	.58	.71		45.00	69.50	.60	.65	.92
4	8	44	do	.87	.64		69.00	140.00	.70	.49	1.41
5	8	44	do	1.06	.75	.60	53.00	210.00	.70	.25	2.80
5 establishments									7.63	7.57	* 1.12
<i>Chattanooga, Tenn.</i>											
1	8	44	Union	.68	1.36		25.00	49.00	.75	.51	1.47
2	8	44	do	.80	1.33		45.00	98.00	.75	.48	1.56
3	8	44	do	.85	1.40		40.00	88.00	.75	.45	1.67
3 establishments									7.75	7.48	* 1.57
<i>New Orleans, La.</i>											
1	8	44	Union	1.60	1.20	1.20	30.33	193.00	.80	.16	5.00
2	8	44	do	1.50	1.20	1.20	27.00	179.00	.80	.15	5.33
3	8	44	Nonunion	1.00	.50	.50	25.44	73.25	.85	.35	2.43
4	8	44	do	1.00	.50	.50	9.60	29.00	.85	.33	2.58
4 establishments									6.83	6.25	* 3.84

ROOFING

City, and schedule No.	Hours		Union, non- union, or mixed	Shingle		Area covered, squares	Num- ber of shin- gles laid	Total hours worked	Rate per hour	Num- ber of squares covered per hour	Cost of cover- ing per square
	Per day	Per week		Dimen- sions	Inches to weather						
<i>Atlanta, Ga.</i>											
1	8	44	Nonunion	Inches 8 by 12	4	24.0	10,176	16.0	(⁹)	1.50	\$1.25
2	8	44	do	8 by 12	4	24.0	10,176	30.0	(⁹)	.80	1.25
3	8	44	do	8 by 12	4	22.0	9,328	26.0	(⁹)	.85	1.25
4	8	44	Mixed	8 by 12	4	22.0	9,328	40.0	(⁹)	.55	1.25
5	8	44	Nonunion	8 by 12	4	24.0	10,176	16.0	(⁹)	1.50	1.25
6	8	44	do	8 by 12	4	28.0	11,872	34.0	(⁹)	.82	1.25
7	9	54	do	8 by 12	4	27.0	11,448	33.0	(⁹)	.82	1.00
8	8	44	do	8 by 12	4	21.0	8,904	45.0	\$0.65	.47	1.39
9	8	44	Mixed	10 by 32	4	21.0	6,300	32.0	.50	.66	.76
10	8	44	Nonunion	10 by 32	4	20.0	2,160	11.0	(⁹)	1.82	1.25
11	8	44	do	10 by 32	4	29.0	3,190	40.0	.75	.73	1.03
12	9	54	do	10 by 32	4	22.0	2,464	38.0	(⁹)	.58	1.25
13	8	44	do	10 by 14	5	16.0	4,450	24.0	(⁹)	.67	1.00
14	8	44	do	10 by 14	5	15.0	4,200	21.0	(⁹)	.71	1.00
14 establishments						315.0		406.0	.90	.78	1.16

⁶ 3 coats.

⁷ 2 coats only.

⁸ \$1.25 per square.

⁹ \$1 per square.

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LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Continued

ROOFING—Continued

City, and schedule No.	Hours		Union, non- union, or mixed	Shingle		Area covered, squares	Number of shin- gles laid	Total hours worked	Rate per hour	Number of squares covered per hour	Cost of cover- ing per square
	Per day	Per week		Dimen- sions	Inches to weather						
<i>Birmingham, Ala.</i>											
1	9	50	Nonunion	Inches 8 by 12 $\frac{3}{4}$	4	13.5	5,724	17.0	(9)	0.79	\$1.00
2	9	50	do	8 by 12 $\frac{3}{4}$	4	24.0	10,176	25.0	(9)	.96	1.00
3	9	50	do	8 by 12 $\frac{3}{4}$	4	54.0	22,896	28.0	(9)	1.93	1.00
4	9	50	do	8 by 12	4	13.0	5,512	11.0	(9)	1.18	1.00
5	9	50	do	8 by 12	4	14.0	5,936	15.8	(9)	.89	1.00
6	8	44	do	8 by 12	4	26.0	11,024	31.0	(9)	.84	1.00
7	8	44	do	8 by 12	4	34.0	14,416	40.0	(9)	.85	1.00
8	8	44	do	8 by 12	4	28.0	11,872	33.0	(9)	.85	1.00
9	8	44	do	8 by 12	4	25.0	10,600	30.0	(9)	.83	1.00
9 establishments									(9)	1.00	1.00
<i>Chattanooga, Tenn.</i>											
1	8	44	Union	8 by 12 $\frac{3}{4}$	4	40.5	17,172	64.3	\$0.80	.63	1.27
2	8	44	Nonunion	8 by 12 $\frac{3}{4}$	4	24.0	10,176	53.0	.80	.45	1.71
3	8	44	do	8 by 12 $\frac{3}{4}$	4	34.0	14,416	72.5	.80	.47	1.71
4	10	55	do	8 by 12 $\frac{3}{4}$	4	28.0	11,872	160.0	.70	.18	3.71
5	10	55	do	8 by 12 $\frac{3}{4}$	4	39.0	16,536	160.0	.60	.24	2.67
6	10	55	do	8 by 12 $\frac{3}{4}$	4	52.0	22,048	104.5	.60	.50	1.31
7	10	55	do	8 by 12 $\frac{3}{4}$	4	22.0	9,328	120.0	.70	.18	3.82
8	10	55	do	8 by 12 $\frac{3}{4}$	4	36.0	15,264	210.0	.70	.17	4.08
9	9	50	do	8 by 12 $\frac{3}{4}$	4	22.0	9,328	42.0	.50	.52	.95
10	9	50	do	8 by 12 $\frac{3}{4}$	4	18.5	7,844	36.0	.50	.51	.97
10 establishments										.31	2.21
<i>New Orleans, La.</i>											
1	8	44	Nonunion	10 by 32	4	23.0	2,576	24.0	.67	.96	1.70
2	8	44	do	10 by 32	4	18.0	2,016	24.0	.67	.75	.89
3	8	44	do	10 by 32	4	18.0	2,016	15.0	.67	1.20	.56
4	9	50	do	10 by 32	4	24.0	2,688	45.0	.60	.53	1.13
5	9	50	do	10 by 32	4	28.0	3,136	72.0	.60	.39	1.54
6	9	50	do	10 by 32	4	25.0	2,800	46.0	.60	.54	1.10
7	9	50	do	8 by 12 $\frac{3}{4}$	4	30.0	12,720	80.0	.60	.38	1.60
8	9	50	do	8 by 12 $\frac{3}{4}$	4	31.0	13,144	81.0	.60	.38	1.57
9	9	50	do	10 by 20	4	16.0	2,880	14.0	.75	1.14	.66
10	9	50	do	10 by 20	4	24.0	4,320	27.0	.75	.89	.84
11	9	50	do	10 by 20	4	20.0	3,600	22.0	.75	.91	.83
12	8	44	Union	9 by 14	4	22.0	5,280	43.5	1.00	.51	1.98
13	8	44	do	9 by 14	4	20.0	4,800	38.0	1.00	.53	1.90
14	8	44	do	9 by 14	4	42.0	10,080	85.0	1.00	.49	2.02
15	8	44	do	9 by 14	4	22.0	5,220	48.0	1.00	.46	2.18
16	8	44	do	9 by 14	4	18.0	4,320	43.0	1.00	.42	2.39
17	8	44	do	10 by 32	4	26.5	2,968	17.0	(10)	1.56	1.50
18	8	44	do	8 by 12	4	27.5	11,660	26.5	(11)	1.04	1.80
19	8	44	do	8 by 12	4	13.5	5,724	11.8	(11)	1.14	1.80
20	8	44	do	8 by 12	4	20.0	8,480	25.5	(11)	.78	1.80
21	8	44	do	8 by 12	4	21.0	8,904	26.5	(11)	.79	1.80
22	8	44	do	10 by 32	4	25.0	2,800	18.5	(10)	1.35	1.50
22 establishments										.62	1.49
<i>Norfolk, Va.</i>											
1	8	44	Nonunion	8 by 12 $\frac{3}{4}$	4	20.00	8,480	40.0	(12)	.50	2.00
2	8	44	do	10 by 32	4	20.00	2,240	32.0	(12)	.63	2.00
3	9	50	do	8 by 12 $\frac{3}{4}$	4	20.00	8,480	63.0	.80	.32	2.52
4	9	50	do	8 by 12 $\frac{3}{4}$	4	16.50	6,996	60.5	.80	.27	2.93
5	8	44	do	10 by 32	4	17.00	1,904	41.0	.75	.41	1.80
6	8	44	do	10 by 32	4	17.00	1,904	43.0	.75	.40	1.90
7	8	44	do	10 by 32	4	21.00	2,352	56.5	.75	.37	2.02
8	8	44	do	8 by 12	4	12.00	5,088	32.0	.75	.38	2.00
9	8	44	do	8 by 12	4	16.00	6,784	38.0	.75	.42	1.78
10	8	44	do	8 by 12	4	16.00	6,784	38.0	.75	.42	1.78
11	8	44	do	8 by 12	4	16.00	6,784	39.0	.75	.41	1.83
12	8	44	do	8 by 12	4	18.00	7,632	44.0	.75	.41	1.83
12 establishments										.40	2.04

⁹ \$1 per square.¹⁰ \$1.50 per square.¹¹ \$1.80 per square.¹² \$2 per square.

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LABOR PRODUCTIVITY AND COST IN SPECIFIED BUILDING TRADES, BY CITIES—
Concluded

ROOFING—Concluded

City, and schedule No.	Hours		Union, non- union, or mixed	Shingle		Area covered, squares	Num- ber of shin- gles laid	Total hours worked	Rate per hour	Number of squares covered per hour	Cost of cover- ing per square
	Per day	Per week		Dimen- sions	Inches to weather						
<i>Boston, Mass.</i>											
1.....	8	44	Union.....	10 by 32	4	20.00	2,240	44.0	\$1.10	0.45	\$2.44
2.....	8	44	do.....	10 by 32	4	8.25	980	16.0	1.10	.52	2.12
3.....	8	44	do.....	10 by 32	4	18.00	2,016	32.0	1.10	.56	1.96
4.....	8	44	do.....	10 by 32	4	18.00	2,016	32.0	1.10	.56	1.96
5.....	8	44	do.....	10 by 32	4	18.00	2,016	32.0	1.10	.56	1.96
5 establish- ments.....						82.25		156.0	1.10	.53	2.09
<i>Philadelphia, Pa.</i>											
1.....	8	44	Nonunion	8 by 12	4	24.00	10,176	34.0	.90	.71	1.27
2.....	8	44	do.....	8 by 12	4	8.00	3,392	10.0	.90	.80	1.13
3.....	8	44	do.....	8 by 12	4	8.00	3,392	10.0	.90	.80	1.13
4.....	8	44	do.....	8 by 12	4	20.00	8,480	25.5	.90	.78	1.15
5.....	8	44	do.....	8 by 12	4	21.00	8,904	41.0	.90	.51	1.76
6.....	8	44	do.....	8 by 12	4	18.00	7,632	33.0	.90	.55	1.62
7.....	9	50	do.....	8 by 12	4	22.00	9,328	50.0	.70	.44	1.59
7 establish- ments.....						121.00		203.5	.87	.66	1.38
<i>New York, N. Y.</i>											
1.....	8	44	Union.....	8 by 12	4	16.00	6,784	33.0	1.25	.49	2.55
2.....	8	44	do.....	8 by 12	4	11.00	4,664	40.0	1.25	.28	4.46
3.....	8	44	do.....	8 by 12	4	20.00	8,480	41.0	1.25	.49	2.55
4.....	8	44	do.....	8 by 12	4	8.00	3,392	16.0	1.25	.50	2.50
5.....	8	44	do.....	8 by 12	4	11.00	4,664	20.0	1.25	.55	2.27
6.....	8	44	do.....	8 by 12	4	20.00	8,480	100.0	1.00	.20	6.25
7.....	10	55	Nonunion	8 by 10	4	24.00	10,176	40.0	1.00	.60	1.67
8.....	10	55	do.....	8 by 10	4	36.00	15,264	54.0	1.00	.67	1.49
9.....	10	55	do.....	8 by 10	4	62.00	46,640	110.0	1.00	.56	1.79
10.....	10	55	do.....	8 by 10	4	24.00	10,176	40.0	1.00	.60	1.67
10 establish- ments.....						232.00		494.0	1.15	.49	2.72
<i>Cincinnati, Ohio</i>											
1.....	8	44	Union.....	8 by 12	4	21.00	8,804	54.0	1.00	.39	2.56
2.....	8	44	do.....	8 by 12	4	15.00	6,360	48.0	1.00	.31	3.23
3.....	8	44	do.....	8 by 12	4	15.00	6,360	49.0	1.00	.31	3.25
4.....	8	44	do.....	8 by 12	4	19.00	8,056	76.0	1.00	.25	4.00
5.....	8	45	Nonunion	8 by 12	4	21.00	8,904	56.0	.75	.38	1.97
6.....	8	45	do.....	8 by 12	4	11.00	4,664	40.0	.75	.28	2.68
7.....	8	45	do.....	8 by 12	4	9.00	3,816	24.0	.75	.38	1.97
7 establish- ments.....						101.00		347.0	.89	.33	2.81
<i>Indianapolis, Ind.</i>											
1.....	8	44	Union.....	8 by 12	4	14.50	6,575	15.0	.95	.97	.98
2.....	8	44	do.....	8 by 12	4	16.00	7,200	16.0	.95	1.00	.95
3.....	8	44	do.....	8 by 12	4	16.00	7,200	22.0	.95	.73	1.30
4.....	8	44	do.....	8 by 12	4	24.00	10,800	36.0	.95	.67	1.42
5.....	8	44	do.....	8 by 12	4	24.00	10,800	34.0	.95	.71	1.34
6.....	8	44	Nonunion	8 by 12	4	18.00	8,100	28.0	.85	.64	1.33
7.....	8	44	do.....	8 by 12	4	19.50	8,736	30.0	.85	.65	1.31
7 establish- ments.....						132.00		181.0	.92	.77	1.23

Development and Operation of Pilots' Associations at Representative Ports

By FLORENCE E. PARKER, OF THE U. S. BUREAU OF LABOR STATISTICS

IN MOST American ports all vessels, both of domestic and of foreign registry, engaged in the foreign trade, must in entering or leaving port be in the charge of a licensed pilot of the port. Ships engaged in any kind of domestic trade may avail themselves of such pilotage service but this is not usually compulsory.

The associations of pilots engaged in this work in certain representative ports in the United States have been the subject of a recent study made by the United States Bureau of Labor Statistics, of which the present article is a summary. The study covered the ports of Boston, New York, Philadelphia, Baltimore, Savannah, New Orleans, Houston, Galveston, San Francisco, Astoria (Oreg.), and Seattle. Through these 11 ports, in 1923, according to recent reports made by the United States Shipping Board,¹ passed 58.3 per cent of the water-borne foreign commerce of ports handling 100,000 long tons or more and 63.4 per cent of all the water-borne commerce of the United States. The following table, compiled from the reports, shows the amount of foreign commerce and of all water-borne commerce handled by each of these ports in 1923 and the rank of each port among the 67 ports which handled 100,000 long tons or more of foreign commerce in that year:

FOREIGN AND ALL WATER-BORNE COMMERCE HANDLED BY SPECIFIED PORTS
IN 1923, AND RANK OF PORT
[Tonnage given in tons of 2,240 pounds]

Port	Tons handled in water-borne commerce of all kinds	Foreign water-borne commerce	
		Tons handled	Rank of port in tonnage handled
All ports.....	107,371,040	190,684,954	.....
Boston.....	3,604,190	3,024,811	6
New York.....	27,615,448	21,275,288	1
Philadelphia.....	7,870,339	6,242,662	4
Baltimore.....	8,341,435	6,617,605	3
Savannah.....	727,757	698,367	31
New Orleans.....	8,290,350	7,216,287	2
Houston.....	865,247	846,956	23
Galveston.....	2,893,178	2,823,497	8
San Francisco.....	5,740,421	3,012,857	7
Astoria.....	129,332	108,161	64
Seattle.....	1,949,665	990,128	18
Total.....	68,027,362	52,856,649	.....

¹Tonnage of ports handling 100,000 long tons or more each.

Since the study disclosed the fact that the pilots in San Francisco, Astoria (Oreg.), and Seattle were not organized as associations and since this study was one primarily of the associations, these three ports are omitted from the general discussion and comparison. A description of the situation at these ports is, however, included in the final section of this report.

¹United States. Shipping Board. Bureau of Research. Division of Statistics. Special reports Nos. 205, 214, and 215. Washington, 1924. (Mimeographed.)

Development of Pilots' Associations

EARLY in the history of the shipping industry each pilot worked alone, although he often cooperated with several other pilots to the extent of participating with them in the ownership of a pilot boat. Cutthroat competition and unsatisfactory service resulted. For, in order to be the first to speak a vessel it was customary for the pilots to cruise out to sea, so that sometimes in their quest of business they went so far out that they missed incoming ships, which were thus put to inconvenience and delay in securing pilot service.² Also, this condition meant uncertain earnings, a large sum being earned one month, and little or nothing the next.

The pilots themselves were the first to see the disadvantages of this situation and the remedy for it. Thus gradually in one port after another they formed associations through which to handle the pilotage of the port. In practically all of the larger ports and in all of the ports visited, except those of the Pacific coast, such associations have been formed. By the formation of these associations the previous rivalry and intense competition among the pilots were eliminated and the shipping facilitated because of the better organization of the pilot business. A central, downtown office is maintained through which all business is transacted and to which each pilot must report after bringing in a ship and on each day thereafter until his turn comes to take another vessel to sea. In place of the many little pilot boats that used to cruise here and there outside of port there are one or two large steam vessels designed especially to withstand wind and weather. Regular pilotage grounds have been established, usually at the bar. The pilot ship is stationed there so that incoming ships may know where to find it and may rest assured of pilot service into the port.

General Characteristics of Pilots' Associations

THESE pilots' associations are unconsciously cooperative. Without, apparently, any idea of so doing, these men have formed what are almost perfect examples of cooperative skilled-labor associations. As regards obligations (contributions to the association's capital, expenses, etc.), labor, voting power, and earnings, all are on an equal footing. Only one criticism can be brought against them from a cooperative standpoint—restriction of membership. That will be discussed later in this article. Only members are engaged in the pilotage work and only working pilots are members.

Regular meetings of all the members are held, usually once a year (twice a year in Baltimore and every three months in Galveston); special meetings may be called at any time. At all meetings each man has one vote. The officers (usually president, treasurer, and secretary) are elected from among the members. All property—in pilot boats, tender, supplies, etc.—is owned jointly by the members.

In most of the ports visited the associations are unincorporated, the only exceptions being the New York association, the Savannah Bar Pilots, and the New Orleans River Port Pilots' Association.

² United States. Department of Commerce. Bureau of Foreign and Domestic Commerce. Special agents series No. 136: Pilotage in the United States, by Grosvenor M. Jones. Washington, 1917, p. 28.

Duties of the Pilot

THE work to be done is divided among all the members, the ships being taken out by the men in regular turn. A pilot taking a ship to sea conducts her to a given point outside of the port, where he leaves her and proceeds in a small boat to the pilot ship. Quarters are provided on the pilot ship for a certain number of men, and the pilot stays aboard, with the men who have preceded him, until one by one they leave to conduct arriving vessels into port, and his turn comes again.

Few landsmen appreciate just how interesting, hazardous, and necessary the work of the pilot is, and probably few ships' passengers even suspect the identity of the man who boards the ship outside the entrance to the harbor, often in storm and at risk of life and limb, to bring her safe into her berth in port.

The work of the pilot and the hazards he encounters are thus described by one of his number:

Lying in the path of incoming vessels, the pilot boats keep watch, buffeted about by gales. Maintaining a ceaseless vigil is but a part of the duty of these "watch dogs of the sea," the guardians of the port. A cry is heard from the lookout, singing out, "Blue light to the east'ard, sir." * * *

A signal is given the engineer, the wheel brought hard over, and with increased plunging and lurching under headway, the staunch craft comes up head to wind and sea and steers for the ship which one of the sleepers below is to board and pilot into port.

Roused from his slumber and with a few minutes' notice * * * the first man "on turn" reaches the deck, clad in rubber boots, oilskin, and sou'wester. A brief wait until within a short distance of the vessel, which has now slowed down, and the hail of the pilot in charge of watch is heard. * * * Then comes the maneuvering for position for boarding the vessel. By this time the crew is standing by the small boat, with the pilot all ready for transfer to the ship. The best position possible having been gotten, the order to "lower away" is given, the crew and pilot scramble into the cockleshell of a boat (and this must be done quickly and just at the right moment for fear of having boat and limbs crushed against the side of the ship) and the short but often hazardous voyage to the vessel begins—the small boat with the pilot reaching her side frequently drenched to the skin, caused by the salt spray dashing over his frail craft. Now the pilot is alongside the ship. There is another ordeal through which he has to go with a weight of wet garments. A rope ladder dangles in the air. This he must securely grasp (failure has often proven fatal) and then a laborious climb up the ship's side to her deck, with every roll of the vessel throwing ladder and pilot clear of the side, only to return again with a crash against iron and steel—a strong grip and cool head come in handy.

Arrived on the bridge, there is a hearty handshake from the captain. The pilot receives a most generous welcome, especially in bad weather, for it is he who takes the load off the captain's shoulders and assumes full responsibility for the safety of ship and passengers.

If it is dark, the weather thick and dirty, he will need every faculty, quickness to think and to judge well, for the burden is his and he realizes that the responsibility is great. Remember that the captain of a vessel, though a perfect stranger to the pilot who boards his ship, at once turns over to him, without question, full authority to navigate and handle his ship, though she may have on board hundreds of lives and a very valuable cargo.³

Membership

ALL of the associations studied had in their membership the entire number of licensed pilots in the port, varying in number from 8 in Houston, a comparatively new port, to 87 in New York City.

³ From address of Capt. Frank W. Spencer, master pilot of the Savannah Pilots' Association, before the Savannah Rotary Club, Nov. 16, 1915.

Recruitment of New Members

New pilots are nearly everywhere recruited through the apprenticeship system, the number of years of apprenticeship varying from port to port. This period of probation ranges, in the ports studied, from 6 months for river pilots in New Orleans and 1 year for bar pilots in New Orleans, Houston, and Galveston to 6 years in Baltimore. In nearly all ports, in order to become a licensed pilot, the candidate must also pass a rigid examination as to his knowledge of shoals, soundings, tides, courses, etc., and as to eyesight, hearing, and color blindness. In many ports there are also requirements as to his morals, sobriety, trustworthiness, etc. Generally, also he must give bond, varying from \$500 in New York and Philadelphia to \$5,000 in Houston and Galveston, for the faithful performance of his duties.

Licenses are granted for varying terms, running from one year in New York (Sandy Hook pilots), Philadelphia, and Baltimore to life in Savannah. In all ports they may be revoked for cause.

At the time the associations were visited (June, July, and August, 1924), there were 13 apprentices in training at Philadelphia, 5 at New York, 3 at the branch pilots' association of New Orleans, and 4 at Houston; at Boston there were 8 young men serving as boat keepers. There were no apprentices in training at Savannah, Galveston, or the river pilots' association at New Orleans.

Restriction of Membership

In some instances a minimum or maximum limit is set either by law or by order of the pilot commissioners as to the number of pilots allowed to operate in a port. In some instances also, the number of pilots is quite frankly restricted by the men themselves. At Philadelphia, when the association was formed in 1896, there were 95 pilots working in and out of the port, all of whom became members of the association; at present there are only 58 members, due to the policy of the association itself. Likewise, at Savannah, where the association already contains the full number (20) allowed by the State law, there are no apprentices in training and it is the avowed policy of the association to reduce the present number by leaving unfilled any vacancies that may occur. The causes for this policy of the associations were explained by one master pilot as follows: "The association is top-heavy. We don't need so many members. It isn't that the business of the port is decreasing. It isn't; it increases from year to year. But along with the increase in shipping there has been a more than compensating increase in the carrying capacity of the ships, so that the increased volume of business is now carried in fewer ships than before." Fewer pilots are therefore necessary.

The very nature of the work makes some restriction of membership necessary, since, unlike most business, volume of business done is entirely outside the control of the association. The pilots handle the ships that arrive, but are powerless to increase their number.

Retirement of Superannuated Members

In nearly all instances the associations studied make provision for their old or disabled members, the Texas associations being the only exceptions to this rule. The Savannah, New Orleans (branch pilots), and Boston associations are now caring for 2 retired members each, the Baltimore organization for 3, the Philadelphia association for 8, the river pilots' association at New Orleans for 4, and the New York pilots for 15. The amount of the monthly pension granted to retired members ranges from about \$33 (\$400 a year) in Boston to \$125 in New York City, and to two-thirds pay (about \$165) in Savannah. (The Boston pilots also provide pensions of \$480 a year for widows of members.) In Philadelphia and New Orleans there is no age limit for retirement, in Savannah pilots retire from active service at 65 years of age, and at New York retirement is optional at 65 and compulsory at 70.

In the Texas associations, which do not pension their old members, some provision is made for disablement from sickness or injury. The Galveston association provides that any member disabled in the discharge of his duties by the breaking of a limb shall receive his full share of the earnings of the association for not to exceed four months. In case of sickness he receives his share of the earnings for not to exceed 30 days in any calendar year. In Houston a member incapacitated by age or disablement may be carried by the association for one year.

Capital and Property

CONSIDERABLE capital is required, since boats filling the requirements as to construction and quarters of pilot boats are expensive. A \$50,000 expenditure for a steam pilot boat was found to be common. One of the boats owned by the New York association cost \$90,000 in 1897 and would be very much more expensive to-day. The associations at Baltimore and Savannah each own one steam pilot boat, the Galveston association owns one and is building another, the Philadelphia and Boston associations own two each, the New York association owns two large steam pilot boats and one motor boat used as an auxiliary boat, while the New Orleans branch pilots own six large boats and two small ones. Two of the associations, both of 30 years' standing, are now worth \$200,000 and \$275,000, respectively.

The pilots' associations are capital-stock associations, each member subscribing for his share of stock. Each apprentice, also, upon receiving his license as a branch pilot, joins the association and takes a share of stock, the value of which varies from \$2,000 in Boston to \$10,000 in the branch pilots' association at New Orleans.

It is worthy of note that none except members are allowed to hold stock in the associations. Some associations go to great pains to assure that no stock shall be held by nonmembers. Thus the by-laws of the Galveston association provide:

Article 7

SECTION 2. In the event of the death of a pilot, his share shall remain in the boats for a period of one year for the benefit of his family unless they wish to sell sooner. At the expiration of one year they must sell to the association, and the signing of these by-laws will bind his heirs and assigns to this agreement.

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SEC. 3. In event of the resignation of a member he must sell all his interests in the association to the association as a whole and guarantee the same by signing.

At Savannah a retired member may hold his share until his death, at which time it must be sold back to the association.

In all cases the shares are bought back by the association at their par value. Here again the pilots are unconsciously observing the cooperative tenet that there must be no speculative value put upon cooperative stock, but it must always remain at par.

Length and Time of Pilotage

THE time required to conduct a vessel out of port varies from port to port according to the distance to be traveled, the local conditions, etc., and also within the same port according to the draft or speed of the vessel, tide, weather conditions, etc. A trip that could ordinarily be made in 3 hours may require up to 24 or even more in case of storm, fog, etc. In ports of entry, also, detention at quarantine may cause delay in bringing a ship into her berth. In the ports studied the length of the pilotage varies from 8 miles (from some parts of New York harbor) to 150 miles (from the port of Baltimore).

Likewise the average number of trips made by each pilot varies from month to month according to business of the port and therefore to the number of ships to be handled. The largest average number of ships handled (one-way trips) per man per month in the association studied was 20 (in Houston), while the smallest number of trips per month was 7 (in New Orleans). The large number of ships handled per man in Houston is probably due to the small number of pilots to do the work.

The table below shows for the various ports studied at which the pilots are organized, the approximate number of miles the ship has to be piloted, the average time the pilot spends on board each ship, and the average number of trips each man makes per month.

LENGTH AND TIME OF PILOTAGE AND AVERAGE NUMBER OF TRIPS PER MAN PER MONTH, BY PORTS

Port	Number of pilots	Average number of ships requiring pilotage per month	Approximate number of miles of pilotage.	Time of pilot on each ship (hours)	Average number of ships handled (one-way trip) per man per month
Boston	25	124	10	2	10
New York	87	348	18-10	12-4	8
Philadelphia	58	184	100	7-18	8
Baltimore	48	200	150	16-18	8
Savannah	20	80	30	3-24	8
New Orleans:					
River	41	212	106	8-16	7
Bar	33				
Houston	8	76	58	7-24	20
Galveston	19	266	15	2½	37

¹ According to starting point in port.

² Includes only ships for which pilotage is compulsory. Many coastwise vessels also use pilotage service but the average monthly number of these is not available.

³ Ships subject to compulsory pilotage only.

Fees for Pilot Service

PILOTS do not in most cases set their own fees. In practically all ports pilotage is regarded as a public service and, as such, is subject to public control and regulation of rates. The fees of the pilots are usually fixed, either by statute or by the pilotage commission of the port or State, on the basis of the draft of the vessel to be handled or the net registered tonnage or both. At all of the association ports studied, except Boston and Galveston, where both tonnage and draft are considered in the rate, the pilotage fee is based upon the draft of the vessel. And in all cases studied, except Savannah and the Texas ports, the rates are set by law. The range of fees charged at each port is shown in the statement below. Detailed rates for each port are given in the discussion of that port, later in this article.

	Rate per foot of draft
Boston.....	⁴ \$3. 00-\$5. 00
New York.....	2. 78- 3. 56
Philadelphia.....	5. 00
Baltimore.....	3. 50- 5. 50
Savannah.....	⁵ 2. 50
New Orleans:	
River.....	2. 00
Bar.....	3. 50- 4. 00
Houston.....	2. 50
Galveston.....	⁴ 3. 00- 4. 00

Earnings of Pilots

IN EVERY case all earnings of individual pilots are turned in to the association, which pays all the expenses of operation. These expenses include office expenses, supplies and upkeep of boats, the percentage of earnings that must be paid over to the pilotage commission,⁶ any sums set aside for depreciation, pensions of retired members, etc. The overhead expense in the case of some of the larger ports where more than one pilot boat is maintained is considerable, in one instance running as high as \$150,000 per year.

The remainder is then divided equally each month among the working pilots in Baltimore, Philadelphia, and Houston. In Boston, New York, New Orleans, and Galveston the earnings are pro rated among the men according to the number of days worked, a man being considered as on duty and working every day that he reports to the central office, even though he is not actually engaged in handling a boat.

The data secured as to the earnings of the pilots in the several ports are admittedly unsatisfactory, as, with the exception of Savannah, only approximate figures could be obtained, and in some instances information was refused altogether.

⁴ According to tonnage.

⁵ Minimum rate; applies to vessels of 10 feet of draft. For explanation of calculation of pilotage charge in Savannah, see p. 30.

⁶ In general, boards of pilot commissioners serve without compensation, but are often allowed to assess the pilots under their control a certain percentage of their gross earnings to cover their own office expense.

Comparative Statement for the Several Ports

IN ORDER that the reader may compare one port with another the following table is given showing for each of the various associations the year of organization, present worth, membership statistics, and average earnings per year:

ASSETS, MEMBERSHIP, AND EARNINGS OF PILOTS' ASSOCIATIONS

Association	Year of organization	Present worth	Membership				Approximate average annual earnings of active pilots
			Number of active members	Number of apprentices	Retired members		
					Number	Amount of monthly pension	
Boston	1901	\$40,000	25	18	2	\$400	\$8,000
New York	1895	200,000	87	5	15	125	5,000
Philadelphia	1896	275,000	58	13	8	100	5,000
Baltimore	1852	(³)	48	-----	3	75	4,000
Savannah: ⁴							
Pilots' association	⁵ 1894	-----	20	-----	} 2	(⁶)	3,000
Bar pilots	1921	50,000	19	-----			
New Orleans:							
River pilots	1918	25,000	41	-----	4	75	3,500
Bar pilots	⁷ 1878	(³)	33	3	2	100	(³)
Houston	1922	(³)	8	4	-----	-----	(³)
Galveston	1854	(³)	19	-----	-----	-----	(³)

¹ Boat keepers.

² Per year; widows receive \$480 per year.

³ Information not available.

⁴ For explanation of organization of pilots at Savannah, see p. 29.

⁵ Reorganized about 1921.

⁶ Two-thirds pay.

⁷ Reorganized about 1900.

Pilots' Associations of the Several Ports

Boston ⁷

ALL MATTERS relating to pilotage at the port of Boston are in the hands of two commissioners of pilots for the port, experienced in maritime and nautical affairs, appointed by the governor, with the advice and consent of the council, for terms of three years. These commissioners issue pilots' licenses, enforce the pilotage laws, formulate regulations for pilotage, and "hear and determine complaints, by and against pilots."

A pilot may for "misconduct, carelessness, or neglect of duty" be suspended at any time by the board of commissioners until the next meeting of the board of trustees of the Boston Marine Society, when if the trustees so decide, his license may be revoked.

Membership of association.—The 25 pilots working in the port of Boston are banded into an unincorporated association, formed in 1901, known as the Boston Pilots. This is a very loose and informal organization having no constitution, but operating merely under a few working rules.

⁷ Legal provisions cited in this section are from Massachusetts General Laws, 1921, ch. 103.

There is no legal restriction upon the number of pilots, this being left to the judgment of the commissioners of pilots. New members are recruited under the apprenticeship system. There are now 8 apprentices serving as boat keepers on the pilot boats of the Boston Pilots. An apprentice must serve first as boat keeper on the pilot boat and then for two years as a "warrant pilot" before becoming a full-fledged pilot. Before receiving his commission as pilot he must satisfy the commissioners of pilots and the trustees of the Boston Marine Society of his competence and give bond for \$1,000 "for the faithful performance of the duties of his office and for the payment of all damages accruing from his negligence, unskillfulness, or unfaithfulness."

Upon receiving his commission as branch pilot and entering the membership of the Boston Pilots, the new pilot contributes his share, \$2,000, toward the capital of the association.

Superannuated members are retired on a pension of \$400 per year. There are now two retired members receiving the pension. In case of the death of a member, the association grants his widow a yearly pension of \$480.

Pilotage service.—Pilotage is compulsory in Massachusetts for all vessels except—

* * * coastwise steam vessels not sailing under register, national vessels, vessels bound in or out of any port other than their ports of departure and destination, vessels regularly employed in the coasting trade, fishing vessels other than whalers, vessels of less than seven feet draught of water, vessels otherwise liable to pilotage bound into the harbor of Boston and arriving within a line drawn from Hardings Ledge to the Graves and thence to Nahant Head before the services of a pilot have been offered, and vessels under 350 tons register bound out of the port of Boston.

Each ship must be piloted about 10 miles, requiring the pilot's presence, on the outward trip, for about two hours if conditions are favorable. Incoming trips require a longer time, since the ship must stop at the quarantine station, where it may be detained.

Ships entering and clearing the port and requiring pilotage service average about 124 per month. Thus, the number of vessels handled by the Boston pilots averages about 10 per man per month, each man making the round trip to sea and return five times.

Fees.—Fees for pilot service are fixed by law on the basis of both the draft and the net registered tonnage of the vessel, those in force at present being as follows: \$3 per foot of draft for vessels of 500 tons or less, \$3.50 per foot for vessels of 501 to 1,000 tons, \$4 per foot for vessels of 1,001 to 1,500 tons, \$4.50 per foot for vessels of 1,501 to 2,000 tons, and \$5 per foot for all vessels of over 2,000 tons.

A pilot carried to sea "without fault or negligence of his own or of his associates" is entitled to compensation of \$5 per day while detained from home.

Earnings of pilots.—The earnings of individual members of the association go into a common fund out of which expenses of operation including office expense, supplies and upkeep of pilot boats, pensions for retired members or their widows, etc., are paid. The remainder is then divided among the members according to the number of days worked by each during the month.

Earnings of pilots at the port of Boston average about \$8,000 per year. The 1923 average earnings were higher than ordinary, reach-

ing approximately \$10,000 per man (one pilot earned \$11,000 during the year), but this was said to be due to the increased volume of goods passing through the port because of the coal strike.

Each pilot is required by law to make a quarterly report to the commissioners of pilots of his net earnings, and to pay to them 4 per cent of the amount so reported. Falsification of the report carries a fine of not more than \$50.

Present worth of the association.—The Boston Pilots own two steam pilot boats stationed at Boston Light. The association is worth about \$40,000.

New York ⁸

Matters relating to pilotage in the port of New York are within the jurisdiction of the port board of five unpaid pilot commissioners appointed for two years, three of whom are selected by the New York City chamber of commerce and the other two by the presidents and vice presidents of the marine insurance companies of the city. The duties of these commissioners include "the examination and licensing of all pilots, the hearing of complaints against pilots, the regulation of pilot boats, and the preparation of other necessary rules concerning pilotage matters." The commissioners also have the power to suspend or revoke the license of any pilot found guilty of misconduct or of using abusive language while on duty or of intoxication or unbecoming conduct while on or off duty.

Membership of association.—There are 87 pilots working in the port of New York and belonging to the United New York Sandy Hook Pilots' Benevolent Association, an incorporated association formed in 1895. The commissioners are permitted by the law to license as many pilots for the port as they see fit, and have fixed 130 as the maximum number. The men themselves, it was found, restrict their number, "and this is done openly and frankly and with the approval" of the commissioners.⁹

The prospective pilot must serve four months as "spare boy," then for about three years as apprentice, and finally as boat keeper for about five years. He then becomes a deputy pilot of the lowest grade and must work up through the grades, year by year, until he finally becomes a full-fledged, or branch, pilot. Before receiving his full branch license he must satisfy the commissioners of his good moral character, temperate habits, and of his "skill, ability, and experience." He must also pass an examination as to his eyesight, ability to distinguish colors, and hearing. He must give bond for \$500 for the faithful performance of his duties and the observance of the commissioners' regulations. His license must be renewed every year.

There are five apprentices now in training with the Sandy Hook pilots. Each of these upon receiving his license and becoming a member of the association must pay into the general capital fund his share, amounting to about \$2,800. If he is unable to pay the whole sum at once, he is allowed to turn in 20 per cent of his earnings until the full amount is paid.

⁸Legal provisions cited in this section are from New York Acts of 1909, ch. 42, sec. 56; and U. S. Dept. of Commerce, Bureau of Foreign and Domestic Commerce, Special agents series No. 136: Pilotage in the United States, pp. 43-46.

⁹United States Department of Commerce. Bureau of Foreign and Domestic Commerce. Special agents series No. 136: Pilotage in the United States. Washington, 1917, p. 44.

Superannuated members are retired on a pension of \$125 per month. Retirement is optional at 65 years and compulsory at 70. There are now 15 members on the retired roll.

Pilotage service.—Foreign vessels, vessels from foreign ports, and all vessels sailing under register by way of Sandy Hook are required to secure the services of a pilot or pay the regular pilotage rate in case of refusal to do so. Coastwise vessels sailing under enrollment and license are exempt.

The distance the vessel must be taken varies from 20 to 30 miles according to the point within the harbor to which or from which the ship is conducted. Ordinarily a trip outward requires from two to four hours, but the inward pilotage may consume more time, due to the vessel having to stop at quarantine.

Since an average of 348 vessels requiring pilotage service arrive at the port each month, this means that each man handles eight ships, averaging four trips to Sandy Hook and return, each month.

Fees.—The fees for pilotage by way of Sandy Hook are set by law. Those now in force are based upon the draft of the vessel, as follows:

	Rate per foot of draft	
	Inward pilotage	Outward pilotage
6 to 13½ feet of draft.....	\$2. 78	\$2. 02
14 to 17½ feet of draft.....	3. 38	2. 33
18 to 20½ feet of draft.....	4. 13	3. 08
21 feet of draft and over.....	4. 88	3. 56

During the winter season (November 1 to April 1), \$4 is added to the pilotage charge.

For detention on board the vessel the pilot is entitled to compensation at the rate of \$3 per day.

Earnings of pilots.—The fees collected by the individual pilots are pooled, and from this fund are paid expenses of operation, including office expense, supplies and upkeep of the pilot boats, annuities of retired members, and (in this port) assessments made by the board of pilot commissioners to cover their own office expense. The remainder is then divided each month among the 87 pilot members on the basis of the number of days each has worked.

Individual net earnings of the Sandy Hook branch pilots average about \$5,000 per year.

Present worth of the association.—The association, in conjunction with the New Jersey Sandy Hook Pilots' Association, owns two steam pilot boats and a motor boat. One of the pilot boats is used by the pilots taking ships out of the harbor and the other by those bringing them in. The motor boat is used as a tender and auxiliary vessel to the regular pilot boats. Including the value of the boats, the association is now worth about \$200,000.

Philadelphia ¹⁰

In the port of Philadelphia the pilots are under the jurisdiction of the port board of commissioners of navigation, composed of five members who serve without compensation. This board has the power to grant licenses to pilots, make pilotage rules and regulations,

¹⁰ Legal provisions cited in this section are from Pennsylvania Statutes, secs. 21678 to 21712.

and decide any differences that may arise between shipmasters and pilots. The board may also dismiss any pilot found guilty of refusing or neglecting to perform his duties or may suspend for a period of not less than one year any pilot found guilty of being intoxicated while on duty.

Membership of the association.—The 58 pilots working on the Delaware River and Bay belong to the Pilots' Association for the Bay and River Delaware, which has its headquarters in Philadelphia. The association, which is unincorporated, was formed in 1896 by the 95 pilots operating at that time.

As is seen from the above, the number of pilots has declined from 95 to 58 since the formation of the association. The president of the association states, however, that this was a gradual decline brought about deliberately by the association itself, there having been too many pilots for the ships to be handled.

New members are recruited through the apprenticeship system, the number being, by the law of 1913, "wholly within the discretion of the board of commissioners of navigation." In actual practice, however, the number of apprentices is restricted by the further provisions of the law that no person shall receive a license as first-class pilot until the number of first and second-class pilots is reduced to less than 42, and that the number of third-class pilots shall not exceed 10.

An apprentice must serve four years on board a pilot boat before receiving his license as third-class pilot. After serving for one year each as third-class and then second-class pilot, during which time he must make 42 trips a year up or down the river with a pilot, he is finally entitled, after demonstrating to the board of commissioners his fitness to perform the pilot's duties, to his license as a full-branch or first-class pilot.

Each pilot must give bond of not less than \$300 nor more than \$500 for the "true and faithful performance" of his duties.

The Pilots' Association for the Bay and River Delaware has at present 8 apprentices in training. Each of these on becoming a member will subscribe for his share of capital. The original members contributed \$1,128 each; as these die or resign this amount is returned.

There is no age limit for retirement from active duty, that being determined individually for each case. One pilot still at work is over 80 years of age, and, according to the president, performs his work as efficiently as the younger members. Eight retired members receive pensions of \$100 per month each from the association.

Pilotage service.—All vessels entering or leaving the port of Philadelphia must take a pilot except vessels in the coastwise trade not bound for Pacific coast ports and vessels whose sole cargo is coal mined in the United States.

Ships leaving the port of Philadelphia are taken about 100 miles—to Cape May, where the pilot boats are stationed—the time required for the trip varying, according to tide, weather conditions, speed of the boat, etc., from 7 to 18 hours. Some 184 ships requiring pilotage service enter and leave the port of Philadelphia per month. This means that each pilot handles on the average about 8 ships per month, making the round trip to the cape and return about 4 times.

Fees.—The pilotage fees are fixed by a law of March 30, 1899, at \$4 per foot of draft for all vessels of less than 12-foot draft and \$5 per foot for all vessels drawing 12 feet or more.

The pilot is entitled to \$3 per day for every day he is detained on board a vessel, if the detention is due to no fault of his own. If carried to sea he is to receive the same wages as the master of the vessel while he is detained away from home.

Earnings.—At Philadelphia, as in the other ports, all earnings are pooled, and after expenses (including pensions of retired members) are paid, are divided equally among the active pilots. Earnings per man average about \$5,000 per year.

Present worth of association.—The association owns two pilot boats and is worth nearly \$275,000.

Baltimore ¹¹

Baltimore pilots are under the jurisdiction of the Board of Examiners of Maryland Pilots, composed of the presidents of the Baltimore Board of Trade, the Corn and Flour Exchange, and the pilots' association. The duties of this board include the issuance of pilots' licenses ("warrants" in Maryland), the formulation of "rules and orders for the government and regulation" of the pilots, and the revocation or suspension, for infraction of or failure to observe these rules, of licenses already issued.

Membership of association.—The Association of Maryland Pilots, to which all the 48 pilots working out of the port of Baltimore belong, is probably the oldest pilots' association in this country, having been organized June 1, 1852. The association claims also to have owned the first steam pilot boat put into service in the United States. At the time of the organization there were 12 or 14 pilots in the port of Baltimore, among whom there was cutthroat competition. In order to relieve the situation, the men decided, by mutual agreement, to form an association and divide the available work equally among the members.

A candidate for the first-class pilot's license or warrant must serve an apprenticeship of six years and must then satisfy the board of examiners of his "sufficient ability, skill, or experience," first producing a court certificate certifying to his honesty and good behavior. This warrant must be renewed every year.

There is no legal restriction on the number of pilots who may be licensed, the board being specifically authorized to increase or decrease the number as it sees fit.

There are at present 12 apprentices in training with the association. Each of these on receiving his pilot's warrant and joining the association will take a share of stock in the organization.

Sick and old or disabled members are cared for by the association, as part of the regular expenses. There are at present three members on pensions of \$75 per month each.

Pilotage service.—Pilotage is compulsory for all vessels except vessels licensed for coastwise trade and vessels laden wholly or partly with coke or coal mined in the United States.

¹¹ Legal provisions cited in this section are from Maryland Annotated Code, sec. 16; Maryland Annotated Statutes, Art. LXXIV; and Maryland Annotated Statutes, Art. LXXIV as amended by Acts of 1918, ch. 90, and Acts of 1921, ch. 175.

The number of ships requiring pilotage entering and leaving the port per month averages 200, each pilot handling about 8 ships per month and making 4 trips from Baltimore to Cape Henry—a distance of 150 miles—and return. Each trip requires from 16 to 18 hours each way.

Fees.—The rates for pilotage are fixed by law and vary according to the draft of the vessel. Those charged at present are as follows: Ships drawing less than 10 feet of water pay \$3.50 per foot; those drawing 10 and under 13 feet, \$4 per foot; and those drawing 13 feet or more, \$5.50 per foot. If the pilot is detained at quarantine or on the ship an extra charge of \$5 per day is made. If carried to sea he must be paid a wage varying from \$80 to \$100 per month, according to the draft of the vessel, until his return home.

Earnings.—All earnings go into a common fund, which, after the office, pilot-boat, and other operating expense is paid, is divided equally among the men each month. The association also pays to the board of examiners, for its expenses, \$1,000 per year. Earnings per man average about \$4,000 a year.

Present worth of association.—No data could be obtained as to the present worth of the organization, except that it owns a very fine steam pilot boat stationed at Cape Henry.

Savannah¹²

Jurisdiction over pilotage matters in the port of Savannah is vested in seven unpaid commissioners of pilotage for the port, appointed by the city council for seven years from among the "ship agents, exporters, merchants, pilots, or others who are engaged in or familiar with maritime shipping." These commissioners are given the power to license pilots; remove or suspend any of them "for want of skillfulness or for negligently or carelessly losing or injuring any vessel in his charge or when he is laboring under mental derangement, or is so addicted to habits of intoxication as to unfit him, in their judgment, to be intrusted with the charge of a vessel"; formulate rules; and set the fees to be charged.

Membership of association.—The pilots of the port of Savannah are organized somewhat differently from those of the other ports included in the study, being associated in two separate bodies, the Savannah Pilots' Association and the Savannah Bar Pilots. The former is an unincorporated body. The latter, however, is an incorporated company.

The Savannah Pilots' Association was organized about 30 years ago. At that time there were some six or eight tugs doing pilot work to and from the port, each owned by a separate group of pilots. These groups of pilots became convinced of the advantage of association, formed an organization, sold their small boats, and bought a big steam pilot boat valued at about \$50,000, all the members contributing equal amounts for its purchase. The association disbanded in 1918 but resumed operations after peace was declared. At the time of reorganizing, about three years ago, the members also formed the Savannah Bar Pilots. The property and pilot boat are owned by

¹² Legal provisions cited in this section are from Code of Georgia, ch. 6; and Code of Georgia, ch. 6, secs. 1897 and 1898 as amended by Acts of 1914 No. 380.

the latter company. The association owns no property, but simply leases the pilot boat from the company.

The membership of the Bar Pilots is limited to 20.¹³ All but 1 of the 20 members of the Savannah Pilots' Association are members of the Bar Pilots; he will join as soon as there is a vacancy. At present, one retired member still holds his share of stock in the company, as he is entitled to do until his death, when it will revert to the company and can be sold to the member mentioned above.

The association holds no meetings of members. The Bar Pilots, however, has regular meetings, at which each man has one vote.

Although the apprentice system is used and strict rules are laid down therefor, there are no apprentices in training at present, as the association, according to the master pilot, is top-heavy and the men are desirous of reducing, not augmenting, the membership.

An apprentice must serve two years on board the pilot boat,¹⁴ and must give satisfactory evidence of his character and skill, before becoming entitled to a license. He must then serve 18 months in each grade of pilots. Before receiving his license he must give bond for \$2,000. In case of vacancy among the branch pilots the commissioners give preference to the apprentice who has served the longest time.

Savannah pilots retire at 65 years of age, on two-thirds pay. Two members are now on the retired list.

Pilotage service.—Pilotage at Savannah is compulsory for both river and bar for all vessels except steamers in coastwise trade.

Approximately 80 vessels taking a pilot enter and clear from the port each month. This means that each pilot handles 8 ships and makes the 30-mile trip to sea and return about 4 times a month. The time required to cover the 30-mile pilotage ranges from 3 to 24 hours, depending on the tide.

Fees.—Fees are set by the pilot commissioners. The rates now in force, which were approved by the city council January 16, 1923, are as follows: For vessels drawing up to 10 feet of water \$2.50 per foot is charged, making a total pilotage charge of \$25 for a ship of 10 feet of draft. Vessels of 10½ feet of draft pay \$27.50 and those of 11 feet \$30. Vessels of greater draft pay \$30 plus \$5 for each additional 6 inches of draft. Thus vessels drawing 11½ feet of water pay \$35, those drawing 12 feet \$40, etc. Vessels entering port for bunkers or repairs are charged half the above rates. If the pilot is detained, an additional charge of \$4.32 per day is made.

Earnings.—One-third of the pooled earnings goes to the Savannah Bar Pilots, which out of this amount pays the operating expenses (\$300 to \$400 per month) and the sum of \$1,000 per month which is being used to retire a bond issue of \$40,000. Any surplus over expenses would be divided among the 20 members. At present, however, there is no surplus; in fact, "often the owners have to be assessed to make up a deficit." The remaining two-thirds of the earnings are divided each month among the 20 members of the Savannah Pilots' Association. Earnings in 1923 averaged \$250.06 per man per month, or \$3,000.72 for the year. In 1922 they were

¹³ As a result of the legal restriction on the number of pilots in the port (Code of Georgia, ch. 6, sec. 1899).

¹⁴ A rule (No. 24, as amended) passed by the Savannah city council, Apr. 5, 1911, makes this requirement three years.

slightly higher, averaging \$251.27 per month and \$3,015.24 for the year.

Present worth of association.—As already stated, the Savannah Pilots' Association has no assets. The Savannah Bar Pilots, however, is worth about \$50,000.

New Orleans ¹⁵

Bar pilotage at the port of New Orleans is regulated by a board of three unpaid examiners appointed from among the branch pilots, but with powers only of recommendation to the governor of the State. The latter takes action upon the board's recommendation as to the issuance or revocation of pilot's licenses.

River pilotage is regulated by a board of three river port pilot commissioners appointed from among the river pilots. They likewise have recommendatory powers only.

Membership of association.—Ships leaving the port of New Orleans are piloted down the river by members of the Crescent River Port Pilots, and thence across the bar by members of the Associated Branch Pilots of the Port of New Orleans.

The Crescent River Port Pilots, with headquarters at New Orleans, is an incorporated organization formed in 1918 and has in its membership the 41 active river port pilots. The Associated Branch Pilots of the Port of New Orleans, an unincorporated body, also with headquarters in New Orleans, was organized about 1878 and reorganized about 1900, each member contributing \$10,000. Its membership now numbers 33 working branch pilots. The laws provide that the number of river pilots shall not fall below 20 nor that of bar pilots below 30.

Although pilots are recruited by apprenticeship there are no apprentices with the river pilots at present. When an apprentice becomes a full-fledged river pilot he pays into the association \$3,500 as his share of the capital. The branch (or bar) pilots, however, have three young men in training, each of whom will upon becoming a certified pilot, and therefore a member, contribute \$10,000. Candidates for the river pilot's license must serve an apprenticeship of six months; for the bar pilot's license, of one year. Bar pilots must at time of securing their licenses give bond for \$2,000.

Superannuated members are retired by both associations, the pension granted by the river pilots being \$75 per month and that granted by the bar pilots \$100 per month. There are now 4 and 2 aged members, respectively, drawing retired pay.

Pilotage service.—River pilotage is compulsory for "every vessel subject to pilotage entering or leaving the port of New Orleans, except sailing vessels and barges in tow of river or harbor towboats."¹⁶ Bar pilotage is compulsory for both domestic and foreign vessels entering the mouth of the river, with the exception of steam vessels and vessels of 100 tons or less engaged in the coastwise trade.

¹⁵ Legal provisions cited in this section are from Louisiana Revised Laws, secs. 2701-2711; Acts of 1908, No. 54; Acts of 1908 No. 54, as amended by Acts of 1914 No. 148 and Acts of 1918 No. 9; and Acts of 1880 No. 99, sec. 2, as amended by Acts of 1910 No. 26.

¹⁶ United States. Department of Commerce. Bureau of Foreign and Domestic Commerce. Special agents series No. 136: Pilotage in the United States, by Grosvenor M. Jones. Washington, 1917, p. 84.

The river pilotage requires from 8 to 16 hours, depending on weather conditions, tide, etc. The 18-mile bar pilotage requires the pilot's services for from 3 to 8 hours, but in fog or bad weather may take up to 14 hours. About 212 ships requiring pilotage service enter and clear from the port of New Orleans each month. Thus each river and port pilot handles about 7 ships per month.

Fees.—River pilotage rates are those fixed by law and vary according to the ship's draft, \$2 per foot being charged. For bar pilotage a rate of \$3.50 per foot is charged for vessels of 10 feet of draft and under and of \$4 per foot for vessels of over 10 feet of draft.

For detention at quarantine an additional charge of \$5 per day is made.

Earnings.—In both associations all earnings are pooled, and, after expenses are paid, are divided among the men in accordance with the number of days worked by each.

River pilots' net earnings at the port average about \$3,500 per year. No data could be obtained as to the net earnings of branch pilots of the port.

Present worth of association.—The Crescent River Port Pilots is worth about \$25,000. No data concerning the Associated Branch Pilots could be secured on this point except that the association owns six large pilot boats and two small ones. A report,¹⁷ issued by the Bureau of Foreign and Domestic Commerce in 1917, states that—

An investigation made by a committee appointed by the State in 1908 showed that the net earnings of the bar pilots at the port of New Orleans were then approximately \$3,300 per year. It is reported that net earnings are about 20 per cent higher now than then, the war in Europe having greatly increased the number of vessels calling at the port.

Texas¹⁸

In each of the ports visited in Texas, pilotage matters are under the jurisdiction of local pilot boards, whose members are the navigation and canal commissioners of the navigation district. These boards have the power to appoint, suspend, or dismiss pilots (but only after proof of "misconduct, inefficiency, or inebriety on duty"), fix the rates of pilotage, and make rules and regulations governing the pilotage work of the port.

Each branch pilot is allowed by law to appoint, "subject to examination and approval by the board of commissioners," two apprentices, or "deputies" as they are called in Texas, for whose acts the branch pilot is held responsible. All deputies must have resided in the State for two years and have served an apprenticeship of one year and must pass an examination by the board of pilot commissioners.

Every pilot receiving his license must give bond for \$5,000.

Pilotage service is compulsory, except for vessels of 20 tons or under, vessels owned, registered and licensed in the State, and vessels in coastwise trade.

Houston

Membership of the association.—Ships bearing the cargo passing through the port of Houston are piloted down to the Gulf of Mexico

¹⁷ United States. Department of Commerce. Bureau of Foreign and Domestic Commerce. Special agents series No. 136: Pilotage in the United States, by Grosvenor M. Jones. Washington, 1917, p. 85.

¹⁸ Legal provisions cited in this section are from Texas Revised Civil Statutes, arts. 6299-6319; Acts of 1920, ch. 3; and Acts of 1923, ch. 25.

by the members of the Houston Pilots' Association. This is a very young association, since it is only within the past few years that Houston has attained any importance in shipping. In 1915 there was only 1 pilot in the port; there were 3 in 1920; and by 1922, 6 pilots were at work. These 6 pilots formed the present association in 1922. There are now 8 active members and 4 deputies who will become pilots this fall.

On becoming a member, each pilot takes a share of stock in the association. This he sells back to the organization when he leaves it.

No provision is made for superannuated pilots, except that sick or infirm members may be carried by the association for one year, after which time they are left to shift for themselves.

Pilotage service.—Ships requiring pilotage service into and out of the port average about 76 per month. Thus each pilot handles some 20 ships in that time, making the trip down to the Gulf and return usually about 10 times. Under favorable conditions the trip can be made in about 7 hours, but in time of storm, fog, etc., the passage may require as long as 24 hours.

Fees.—The fees set by the Houston pilot board vary with the draft of the vessel, being \$2.50 per foot of draft.

Earnings.—The individual earnings are pooled, and, after paying expenses, are divided among the men, no account being taken of time off for sickness, etc. No data as to net earnings per man could be obtained.

Galveston

Membership of the association.—Ships entering or leaving the port of Galveston are piloted by members of the Galveston-Texas City Pilots' Association, whose headquarters are at Galveston. This association, which is unincorporated and was organized about 1854, has in membership 19 working pilots.

The apprenticeship or deputyship system is used for recruiting members, but there are no deputies in training at present, as it was stated that for the past few years the business of the port has been gradually falling off and the present number of pilots is sufficient to handle all the ships entering port. When a new member is taken into membership he subscribes for his share of stock in the association. This stock is withdrawable only on his resignation or death. In case of resignation, he must resell his stock to the association; in the event of death his share remains in the association for one year "for the benefit of his family" unless they prefer to return the stock to the association before that time; at the expiration of one year the stock must be sold to the organization. It is the practice of the association to drop any member as soon as he becomes too old to work. The association, however, provides in its by-laws that any member disabled in the discharge of his duties by the breaking of a limb shall receive his "full working share for a period not exceeding four months." In case of sickness he receives his working share for a period of 30 days in any calendar year.

Pilotage service.—There is a pilotage of 15 miles from the port, a distance requiring from 2½ to 24 hours or even more to go, depending on weather conditions, tide, etc. Some 66 vessels subject to compulsory pilotage enter and clear from the port each month; no

data are available as to the number of ships which are not required to take a pilot, but do so voluntarily. Each pilot therefore handles at least 7 ships per month.

Fees.—The rates for pilotage service fixed by the port pilot board vary according to the net tonnage of the vessel, \$3 being charged for the first 500 tons, \$3.50 for ships of over 500 and up to 1,000 tons, \$3.75 for ships of over 1,000 and up to 1,500 tons, and \$4 for ships of over 1,500 tons.

Earnings.—Earnings are pooled and, after the expenses are paid, are divided equally among the men according to the days worked by each. As, however, the association is repairing one boat and building another, the net earnings are stated to be small at present.

Pilotage Situation on the Pacific Coast

DATA were secured as to the pilots of San Francisco, Astoria, and Seattle, but, as stated before, at none of these ports are the pilots formally organized. As will be seen, however, in both San Francisco and Astoria the procedure is almost identically the same as in the ports where the pilots have formed a regular association. Seattle alone is without any combined action on the part of the pilots.

San Francisco ¹⁹

Three pilot commissioners, "experienced and competent shipmasters or nautical men," appointed by the governor for terms of four years, have control of matters pertaining to pilotage in San Francisco Harbor. These commissioners have the power to issue, suspend, or revoke licenses, and to make rules for the government of the pilots appointed.

Nothing is said in the pilotage laws as to the serving of any period of apprenticeship by candidates for the pilot's license and the apprenticeship system is not used in the port. Only experienced shipmasters familiar with local conditions are appointed and no person can become a pilot until he has been carefully examined by the commissioners as to his practical knowledge of navigation, of the harbor, tides, etc., and as to his good morals and temperate habits, and has satisfied them that he possesses the skill and ability necessary to discharge the duties of a pilot. Before securing his license, which must be renewed each year, he is obliged to give bond for \$5,000.

The number of pilots licensed for the port must not fall below 15 nor exceed 20, according to law.

Pilotage is compulsory except for vessels in tow of steam tugs and enrolled vessels engaged in coastwise trade. Ships are piloted a distance of from 16 to 50 miles according to the point inside the harbor to or from which they are conducted. The time required therefor varies from 5 hours to 3 days. The rates for this service now in effect are those set by law in 1915. They vary according to both draft and tonnage of the vessel, as follows: For vessels of less than 500 tons, \$2 per foot of draft; and for all vessels of over 500 tons, \$2 per foot and "2 cents per ton for each and every ton registered

¹⁹ Legal provisions cited in this section are from California Political Code, secs. 2429-2470, and Acts of 1915, ch. 139.

measurement." Incoming vessels spoken inside the bar pay only 50 per cent of the above rates.

As regards the pilots themselves, the organization at San Francisco is different from that at the other ports studied, although the procedure closely resembles that in Savannah. The 20 bar pilots licensed to work in the port have no formal pilots' association through which the pilotage work is conducted. In 1912, these 20 pilots formed the San Francisco Bar Pilots' Benevolent Association, each pilot taking a \$3,500 share of stock in the association, on which he pays 10 per cent of his earnings each month. This association owns two pilot boats which it rents to the pilots. The men emphasize the fact that the association has "nothing to do with pilotage, except the ownership of the boats."

The actual pilotage business is conducted through a port agent, the men taking out the boats in rotation, as in the other ports. The fees collected by the individual pilots are turned over to the agent. He then deducts from the receipts each month the 5 per cent which the law requires to be paid to the pilot commissioners, the operating expenses of office and pilot boats, and the amount paid to the Benevolent Association for the use of the boats. The remainder is divided among the 20 pilots according to the number of days worked by each. Earnings per man average \$5,260.22 per year.

Astoria²⁰

At the port of Astoria, all matters relating to Columbia River bar pilotage are under the jurisdiction of a board of pilot commissioners appointed by the governor for terms of two years. These commissioners are given the authority to examine and license bar and Columbia River pilots, decide complaints against them, make regulations "for the government of such pilots and the maintenance of an efficient pilot service," and suspend, remove, or fine any pilot for the violation of the regulations or for refusing to make or falsifying his monthly reports to the commission.

In order to obtain a pilot's license the candidate must satisfy the commissioners, in a "careful examination," as to his skill and experience as navigator and pilot, his temperate habits, and good moral character, and give bond for \$3,000 for the faithful and diligent performance of his duties. Nothing is said in the laws as to the serving of a period of apprenticeship. Licenses must be renewed annually.

No limit is set by law as to the number of pilots licensed, the commission being charged merely with the duty of maintaining a sufficient number of pilots "to meet the demands of commerce."²¹ There are now six Columbia River bar pilots. These pilots are not formally organized, but they maintain an office through which the pilotage work is handled, and they own a pilot boat. Annual meetings are held at which each pilot has one vote.

The taking of a pilot is optional with the master of the vessel. Ships must be piloted a distance of 18 miles. Each pilot makes this trip an average of 15 times each month.

Fees for river bar pilotage service are fixed by law. The rate is fixed on the basis of both the draft and tonnage of the

²⁰ Legal provisions cited in this section are from Olson's Oregon Laws, 1920, secs. 7702-7737.

vessel, being 1 cent for each net registered ton and \$1.50 per foot of draft.

Individual earnings are pooled, the operating expenses are paid, and the remainder is divided equally among the six pilots. No data are available as to the actual earnings per man.

Seattle ²¹

Pilotage on Puget Sound is not compulsory and there is no legal provision for administration of pilotage matters by commission or otherwise. The legislation is scanty and the provisions very general. Neither are the pilotage fees set, these being apparently left to individual bargaining. Practically the only legal provisions, for present purposes, are that in order to qualify as a pilot on Puget Sound waters a person must hold a United States Government pilot license for Puget Sound, must not pilot a vessel of greater tonnage than so authorized, and must have had at least one year's experience as pilot of oversea or coasting vessels of at least 1,500 gross tons.

The pilotage situation in Seattle is about that existing 30 years ago in the other ports studied. There is no association of pilots in Seattle; each pilot is absolutely independent of the others and collects his own fees. Thirteen of the pilots have a common telephone and these have agreed on common rates for their services. Each, however, carries on his business independently.

Labor Conditions in China

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CHINA has been undergoing various economic and social changes since the World War, indications of which are seen in the present labor situation. In the cities the evils of industrialism are already in evidence, while in the rural communities, the farm workers are laboring under the disabilities of usury and long hours. The rising cost of living and the changing standards are causing maladjustments of various sorts to be felt by the Chinese workmen. To ameliorate their general condition, efforts are now being made to promulgate and enforce protective labor laws. On the part of the workers themselves, means of adjustment are also sought in the reorganization of the ancient guild system and in the adoption of western practices such as the labor union, consumers' cooperation, and industrial hygiene. The labor movement in China to-day is opening up hopes for a new social order whose advent is earnestly awaited by all classes of people.

Urban Labor

AS INDICATIVE of the general labor situation in Chinese cities, the conditions in certain of the industries will be described, first of all the rug industry of Peking. Tientsin is China's largest rug-producing center, while Peking ranks second. In 1912, rugs

²¹ Legal provisions cited in this section are from Remington & Ballinger's Code, secs. 8241-8245.

exported from Peking were valued at 57,109 Haikwan taels.¹ By 1922 exports had increased to 3,299,729 Haikwan taels. Tientsin has over 400 rug factories while Peking has 206, with employees ranging in number from 20 to 300 each. While the small workshops have only one weaving frame each, the larger ones have as many as 24 or 36 frames per shop. According to the latest figures² there are now 6,834 workmen in the rug industry of Peking, of whom 1,768 are masters and journeymen and 5,066 are apprentices. In all but three establishments, which work 10 hours per day, the working hours range from 12 to 14 hours. All but two establishments give their workers one holiday in each month, and seven shops suspend operations on Sundays. All the employers give holidays at the Chinese New Year and at festivals in various seasons, the total of such holidays not exceeding three weeks in the year.

The apprentices are usually bound children from 10 to 17 years of age, from the poor families in the vicinity of Peking. Their term of indenture is ordinarily three years and six months. During apprenticeship, the child usually receives board, lodging, instruction, and medical care, but no wages. In a few cases, he receives a nominal wage towards the closing days of his apprenticeship.

The monthly wages of the masters range from \$15 to \$25³ with board and lodging and those of the journeymen from \$6 to \$12 with board and lodging. But 1,058 craftsmen, some being masters and many being journeymen, receive less than \$9 a month with board and lodging. Many workers not only receive wages too low to cover the rising cost of living but also are working under insanitary conditions. About two-thirds of the establishments have 10 rooms each and the remainder 5 rooms each. On the average, four persons herd together in one small room which is poorly ventilated and lighted, and in which they work, eat, and sleep. On account of these unsatisfactory conditions, the workers declared a strike last year which was the first one in the history of the industry in Peking.

The cotton mills of China also illustrate the situation of city labor. The Chinese Republic is the third greatest cotton-producing country in the world, yielding 7,000,000 to 10,000,000 piculs⁴ of cotton per year. Yet China has been importing cotton goods every year, and for the last decade these imports amounted to \$150,000,000, or about 30 per cent of her total imports from all foreign countries for that period. Chiefly because of this financial importance to the nation, enterprising business men have recently tried their utmost to develop the industry. During the World War, cotton manufacturing boomed and enormous profits were made by a few Chinese-owned mills, some declaring annual dividends of over 100 per cent. Now, however, due to low rates of exchange, the inexperience of Chinese engineers, the low price of cotton yarn, and the relatively higher cost of raw cotton, many Chinese cotton corporations are on the verge of dissolution. Still, if the Chinese mills can pass through this stormy season, they will soon see a bright day in the life of the industry. For this is the first time in the development of cotton manufacturing that

¹ Haikwan tael, at par=82.99 cents; exchange rate varies.

² The Life Monthly, Peking, March, 1924, pp. 1-60: "A study of the rug industry in Peking."

³ The Mexican dollar used in China, at par=54.04 cents; exchange rate varies.

⁴ Picul=133½ pounds.

the Chinese have shown initiative and independent management. In 1888, when Marquis Li Hung Chang established the "foreign cloth factory" in Shanghai, he and those who followed his example by erecting mills elsewhere relied upon foreign assistance in technique and administration, and bought most of their machinery from English manufacturers. To-day the situation is materially different. Chinese technically trained experts are managing factories. American machinery is rapidly replacing the British, but most of it is run by Chinese engineers without foreign help. What the Chinese lack to-day is practical experience in factory management and labor administration.

The keen competition among the cotton-mill owners to-day is bound to stimulate the Chinese proprietors to improve their business methods. At present, the British have five mills in Shanghai with 260,000 spindles, the Japanese have 32 mills with 630,000 spindles, and the Chinese have 76 mills with 1,600,000 spindles. The British were among the first in the field, beginning in 1895. They employ the contract-labor system. Their general policy is conservative and their reputation in the business is undisputed. The Japanese cotton manufacturers have had considerable experience in cotton spinning and weaving, but have had the disadvantage of having just gone through a business depression in Japan. They have recently transferred some of their mills to Chinese cities in order to compete with Chinese owners by employing cheap labor. The Japanese have invested a considerable amount of money in the vicinity of Tsingtao, Shantung Province, and they have established seven mills there, with 140,000 spindles and 14,000 workmen. About 40 per cent of the workers are Chinese children between 13 and 16 years of age, earning from 12 to 28 cents a day.

Facing international competition like this, the Chinese employers must work hard in order to maintain their present status and expand their influence in the industry. One experienced mill owner makes a plea for the production of more raw cotton in China. This is a move in the right direction, for in the year 1922 only 65 per cent of the raw cotton was produced from Chinese soil; the remainder, totaling 1,632,000 piculs, came from foreign countries.⁵ Another Chinese mill owner is making an experiment in scientific management in his factories which will probably result in improved relations with the employees. Furthermore, the cotton-seed improvement work done by the Southeastern University, Nanking University, and the Cotton-mill Owners' Association is progressing. American as well as the native cotton has been improved, and the former is said to have gone through a successful stage of acclimatization.

The attitude and treatment of the employees in the cotton industry also deserves attention. Cotton manufacturing is a modernized industry, and many employers have certain conceptions of humane treatment of labor. Although the general situation of the workers in general and of the woman and child workers in particular is still unsatisfactory, working conditions in this industry are relatively better than those in many other trades in the country. Several mills in Shanghai have a bonus system, with certain benefit features, and some factories

⁵ Chinese Economic Bulletin, Peking, Nov. 3, 1923, pp. 3-4.

provide for elementary education both for employees and their children. Evening schools of some of the mills provide instruction in the simplified Chinese language, sanitation, social ethics, and letter writing, and elementary courses in natural sciences.

Some cotton factories in Shanghai have rather modern lodging houses for their workmen. These houses are fairly well lighted and ventilated. A few are equipped with crude shower bath, reading room, and recreation grounds. The unmarried and the married workmen usually have separate quarters. Merely a nominal rent is paid for the use of the rooms. The houses erected for the employees of three cotton factories which the writer recently visited are arranged in rows, and all are built in the same style. The sight must be familiar to those who have seen the "compound" of Chinese contract laborers in British or Dutch colonies in the Orient, except that the houses in Shanghai are somewhat better as regards light, ventilation, and sanitation. A number of houses, similarly arranged, have just been built by the Dah Shing Cotton Mills in Shih Kia Chuang, Chihli Province, for its employees.

In the cotton mills, the working conditions are generally unsatisfactory. The temperature is considerably above the normal, a great deal of dust and raw cotton flies freely in the air, sanitary equipment is defective, and the working hours are too long.

The employment of children in the cotton mills and other work places of Shanghai has recently been investigated by the Child Labor Commission of that city, whose findings and recommendations are summarized on pages 132 to 135 of this issue of the MONTHLY LABOR REVIEW.

Movement for Labor Legislation

ALTHOUGH much agitation has been going on in recent years for the workers' health and protection, the first vigorous protest against the existing conditions seems to have been the resolution of the China Continuation Committee adopted at its annual meeting in 1919. Soon the Christian Church in China took a sympathetic interest in the matter, and appointed the Commission on the Relations of the Church to China's Economic and Industrial Problems. In 1922, a joint committee of women's clubs of British, American, Japanese, and Chinese nationalities in Shanghai publicly declared their opposition to the employment of the very young children in the factories. In May of the following year, when the National Christian Conference met, three resolutions relating to labor were passed in the hope of conforming to the standard set up at the International Congress of Labor held in Washington, D. C., in October, 1919. These resolutions advocated (1) the prohibition of employment of children under 12 years of age, (2) one day of rest in seven, and (3) the safeguarding of the health of the workers, i. e., limitation of working hours, employment of sanitary conditions, and the installation of safety devices.

The laborers themselves have also been working for the improvement of labor conditions. Throughout the rank and file of labor, heated discussions on matters have been going on. On September 4, 1922, the labor unions of Wuhan, in the Province of Hupeh, sent a

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petition to the National Parliament in Peking setting forth 19 demands, which were afterwards indorsed by the labor unions throughout the nation. Although some demands were, under present conditions, too idealistic for immediate realization, labor's earnest desire for protection is obvious. The workers' demands include freedom to hold meetings and to declare strikes, an 8-hour day and a 42-hour week, Government regulation of farm products, abolition of usury and high rent in rural communities, prohibition of night work of women and children in the factories, a minimum wage law, the establishment of labor adjustment boards, Government insurance, and Government education.

In February, 1923, when the Peking Hankow Railway Union declared a strike which was suppressed by the Government troops, the union pointed out that the right to organize and hold meetings was stipulated in the provisional constitution of the Republic and was inviolable.

The Government also has aided in the promotion of labor legislation in China. The Government of Hongkong is credited with having promulgated the first child labor act in China. Its ordinance governing the industrial employment of children, which was promulgated January 1, 1923, is in effect in the British colony of Hongkong. On March 29, 1923, the Ministry of Agriculture and Commerce of the Chinese Government promulgated provisional factory regulations⁶ and, later, draft regulations governing labor unions.⁷ The factory regulations are only tentative and have not the force of law. Their scope is national. On July 9, 1924, the Child Labor Commission of Shanghai made a report to the municipal council of Shanghai on its study of the child-labor situation in the foreign settlement of Shanghai, containing its recommendations.

A comparative statement of the provisions of the Government regulations and of the Hongkong ordinance and of the recommendations of the Shanghai Child Labor Committee is shown below:

PROVISIONS OF GOVERNMENT REGULATIONS, HONGKONG ORDINANCE, AND SHANGHAI RECOMMENDATIONS

Item	Government factory regulations	Hongkong ordinance	Recommendations of Shanghai Commission
Minimum age.....	Boys, 10 years; girls, 12 years.	10 years; but no child of 12 years allowed to carry coal, building material, or debris.	10 years, rising to 12 four years after promulgation of regulations.
Proof of age.....	No provision.....	Child assumed to be under age if so appears to the judge.	Some measure for proof should be adopted.
Hours of labor.....	8, exclusive of recess.....	9, but no child to work more than 5 hours continuously.	Children 14 years and over; 12 including rest of 1 hour.
Night work.....	None between 8 p. m. and 4 a. m.	None between 7 p. m. and 7 a. m.	Night work permitted now; to be reconsidered after 4 years.
Rest days.....	Not less than 3 full days per month.	1 day in every 7.....	1 day in every 14 days.

⁶ MONTHLY LABOR REVIEW, March, 1924, pp. 185-186.

⁷ *Idem*, pp. 186-187. But these rules are not yet passed by the Chinese Parliament. At this writing, the Kuomintang in Canton is just in the process of drafting regulations to govern the local unions.

PROVISIONS OF GOVERNMENT REGULATIONS, HONGKONG ORDINANCE, AND SHANGHAI RECOMMENDATIONS—Concluded

Item	Government factory regulations	Hongkong ordinance	Recommendations of Shanghai Commission
Prohibition of certain work.	Women and children; Scavenging, oiling, or repairing in engine rooms, or places having moving machinery. Children; Work in connection with handling of explosives or obnoxious drugs, or in unhealthful or dusty places.	Carrying weight exceeding 40 cattiees and at dangerous trades, i. e., boiler chipping, and fireworks, and glass manufacturing.	Children 14 years: Work at dangerous, unguarded machines, hazardous places, or places likely to injure body or health.
Compulsory education.	At employer's expense-----	No provision-----	Outside commission's power, but commission favors it.
Record keeping-----	No provision-----	Employer to keep current record of children employed.	No provision.
Inspection and penalties.	Inspection, but no provision for penalties.	Inspection; also imposition of fines or imprisonment for violation.	Inspection and penalties.

Rural Labor

THE industrial age in China, however, is just beginning and rural labor far outranks urban labor both in importance and in magnitude. In Japan, the farmers are already organizing to carry on a campaign for the reduction of rent and interest, for agricultural cooperative buying and selling, for social and educational improvement, and for the redistribution of land. In China the farmers are not at all organized, and consequently their voice is not yet heard and their misery not generally known. But judging from the bits of information gathered here and there, the small farmer and the farm worker are living under extremely unsatisfactory conditions. If the socioeconomic situation in the rural communities is not immediately improved, there will soon be signs of an agricultural revolt in China.

As local conditions show considerable variation, no general statements can be made, but certain rural districts about which there is fairly reliable information will be discussed.

With a view to ascertaining certain agricultural conditions, the China International Famine Relief Commission in 1922 undertook an investigation of 248 villages, comprising 6,482 families, mostly in the Province of Chihli and the remainder in the Provinces of Shantung, Kiangsu, and Chekiang. This investigation disclosed that (1) the average size of these families is 5.2 persons, (2) the average size of the land holdings is 19.5 mow⁸ in Kiangso, and 23 mow in Chihli, (3) 11.11 per cent of the families in Chihli hold no land whatever, (4) the monthly rate of interest ranges from 2 to 5 or 6 per cent, and (5) more than half of the population in the Kiangsu villages and more than 80 per cent in the Chihli villages are below the "poverty line," the investigators having here fixed a standard of poverty to suit local conditions.⁹ It is of course not claimed that an absolutely accurate portrayal of Chinese rural economy is here presented, but if the findings indicate even roughly the real conditions in these villages, the farmers and the farm workers must be laboring under

⁸ Mow = $\frac{1}{6}$ acre.

⁹ Chinese Social and Political Science Review, Peking, January, 1924, pp. 196-226: "The study of Chinese Rural Economy," by J. B. Taylor.

almost insuperable difficulties. Apparently, they have rather large families, yet many of them own no land and have to depend upon their labor, unskilled or semiskilled, to support their wives and children. That they have a low plane of living is evident. Even the small farmer who supplements by outside work the income from his farming is not making ends meet, chiefly because of high interest rates and the high cost of production due to the small acreage of his farm. It is estimated¹⁰ that tools and equipment cost the Chinese farmer in Wuhu, Anhwei Province, \$2.42 per mow. This greatly reduces the income of the Chinese farmer. Fortunately, the farmer does not always have to pay for the labor he needs. He employs a system of labor exchange whereby he gets help from his neighbors and returns the service when his neighbor needs it. Thus, among 102 farms near Wuhu, Anhwei Province, 42 farmers exchange labor on an average of 10 days per farm, and 49 farms exchange animals and implements for an average period of 11 days.

Agricultural Wages

In 1922 the civil governor of Kiangsu Province made an appropriation for the study of the agricultural situation in the Province, the work being intrusted to the Department of Agriculture of the Southeastern University, Nanking. In January, 1923, the first report¹¹ was published, covering the circuit of Chin Ling, which comprises 11 districts (*hsien*) and 99 villages (*hsiang*). The second report¹² came out in August, 1923, covering the circuit of Soo Ch'ang, which comprises 12 districts and 111 villages. In January, 1924, the university published its third report,¹³ on the circuit of Woo Hai, which comprises 12 districts and 75 villages. In each of these reports there is a section on wages in the farming communities from which the figures in the table following are taken:

AVERAGE DAILY WAGES OF MALE WORKERS IN SPECIFIED CIRCUITS OF KIANGSU PROVINCE, BY DISTRICTS

Circuit and district	Average daily wage 1923	Circuit and district	Average daily wage 1923	Circuit and district	Average daily wage 1924
Chin Ling Circuit:	<i>Cents</i>	Soo Chang Circuit:	<i>Cents</i>	Woo Hai Circuit:	<i>Cents</i>
Chiang-ning.....	18.0	Ch'ang-su.....	17.5	Chia-ting.....	12.0
Chiang-pu.....	20.8	Chiang-ying.....	17.1	Chin-shan.....	15.6
Chin-t'an.....	16.6	Kun-shan.....	22.5	Chuan-sha.....	29.5
Cu-yung.....	20.5	Nan-tung.....	13.1	Feng-hsien.....	14.3
Kao-shun.....	15.4	Nee-hsien.....	21.8	Hai-meng.....	10.6
Li-sui.....	21.2	T'ai-hsien.....	11.4	Nan-hwei.....	18.5
Li-yang.....	19.6	Tsing-chiang.....	11.4	Pao-shan.....	11.2
Liu-huh.....	38.2	Wu-chiang.....	18.5	Shanghai.....	28.5
Tan-to.....	16.0	Wu-chin.....	19.0	Soong-chiang.....	14.8
Tan-yang.....	10.0	Wu-hsien.....	19.5	T'ai-ch'iang.....	13.6
Yang-chung.....	13.0	Wu-si.....	25.8	Ts'ing-pu.....	21.4
		Yu-kao.....	10.3	Ts'ung-ming.....	10.3
Total.....	209.3	Total.....	207.9	Total.....	200.3
Average.....	19.0	Average.....	17.3	Average.....	16.7

¹⁰ University of Nanking. Agriculture and forestry series, vol. 1, No. 7, December, 1923: An economic and social survey of 102 farms near Wuhu, Anhwei Province, by J. Lossing Buck.

¹¹ Southeastern University. Department of Agriculture. An agricultural survey of Chin Ling Circuit, Kiangsu Province, Nanking, January, 1923. (In Chinese.)

¹² Idem. An agricultural survey of Soo Ch'ang Circuit, Kiangsu Province, Nanking, August, 1923. (In Chinese.)

¹³ Idem. An agricultural survey of Woo Hai Circuit, Kiangsu Province, Nanking, January, 1924. (In Chinese.)

The reports do not specify whether the above wages include board and lodging. Judging from the usual custom in the farming districts in those Provinces, it may be assumed that in many cases the worker gets board and lodging in addition to his pay. The population of the district of Liu-huh in Chin Ling circuit is said to be sparse. The district has been free from flood for about 20 years. About 100,000 mow of new land are now under cultivation. These facts may partially explain the relatively high wage of 38.2 cents per day. As regards Chuan-sha in Woo Hai circuit, 60 per cent of its land is reported to be devoted to the cultivation of cotton, 34 per cent to rice, and the remainder to wheat, barley, and maize. The cost of living is generally high in this district. Since it is near Shanghai district, the farm wages in both districts are approximately the same.

Although the above figures are probably only rough approximations they, together with the results of the famine commission's investigation above outlined, present a pretty dark picture of the farming situation and of farm labor in parts of China.

Labor Problems

TO SKETCH the situation of urban and rural labor in China is really to indicate certain problems and efforts at improving working conditions. Chief among the problems is probably the rising cost of living and the inability on the part of the workers to meet it. In recent years the cost of the necessaries of life has increased steadily, but the wages have not increased in proportion. For instance, the unskilled laborer in Shanghai to-day gets between \$10 and \$15 a month, yet the cost of living for him and his wife is generally estimated at \$16 per month. So he suffers a deficit. In Peking the cost of living is slightly lower. But the prices have gone up so much that it is difficult for most laborers to make ends meet.¹⁴ Thus, flour, which is their staple food, was sold at 13 copper coins per catty¹⁵ last year, but this year it is increased to 17 copper coins. Coal was sold at \$4.80 per 1,000 catties in 1923, but this year it is increased to \$5.20. The best grade of cotton was sold at 65 cents per catty a year ago, but to-day it costs about 80 cents. Both in Peking and Shanghai retail stores sell many of their commodities in copper coins, and the recent depreciation of copper currency works further hardship upon the workingmen. In August, 1923, it took 180 coppers to change a dollar in Shanghai; in August, 1924, it was increased to 200, or an increase of 20 coppers. For the same period in Peking the increase has been from 195 to 229, or an increase of 34 coppers on the dollar.¹⁶

Accidents, Industrial Hazards, and Sweating

IN SEPTEMBER, 1919, the foreign cotton-mill owners of the Yangtzepoo district, Shanghai, established an industrial hospital and dispensary for the benefit of their employees. These mills employ about 15,000 workers, 55 per cent being women, 25 per cent

¹⁴ Chinese Economic Bulletin, Peking, May 17, 1924, p. 3.

¹⁵ Catty = $1\frac{1}{4}$ pounds.

¹⁶ The October, 1924, issue of the MONTHLY LABOR REVIEW contains (pp. 66, 67) a table showing the increase in certain commodities as compared with 1913.

men, and 20 per cent children. According to a recent report¹⁷ the hospital has treated 880 cases, of which 374, or 42 per cent, were due to industrial accidents. Of the injured, 231 were men, 43 were women, and 100 were children. Although twice as many women as children are employed, accidents among the children are much more frequent than among the women, since they are inexperienced, ignorant of the dangers of machinery, and tire easily at continuous employment. Owing to the nature of the cotton industry, most wounds are lacerations, about 75 per cent of which become infected. The lacerations constitute about 59 per cent of the total number of accidents, compound fractures 18 per cent, burns 8 per cent, and simple fractures 5 per cent. The burns are said to be due to the high inflammability of cotton and the large number of steam pipes in the mills. The following statement shows the percentage of cases resulting in permanent disability or death:

	Permanent disability	Death
Men.....	20	1.7
Women.....	44	-----
Children.....	29	3.0
Average	25	1.8

The absence of fatal cases among the women is largely due to the fact that their injuries are usually received from a sharp-pointed instrument used in the weaving room. This instrument sometimes pierces the eye of the woman worker, resulting in the partial or total loss of her sight, but not in death.

Another problem of industrial hazard is the free use of yellow and white phosphorus in the match factories. There are 51 large match companies in the country, with a capital of more than \$6,000,000, transacting an annual business of over \$12,000,000. Yellow phosphorus and sometimes white phosphorus is said to be in common use in these factories. Although the Chinese Government is contemplating the prohibition of this practice, such legislation has not yet appeared.

Sweating is a third industrial evil, common in such industrial cities as Tientsin, Hankow, and Shanghai. The practice is reported to be rather prevalent in the printing, textile, knitting, silk filatures, match-box, and other industries where subcontracting is of some importance. In many cases the women and children employed by the subcontractors are members of the workingmen's families who live in the neighborhood of factories. Sometimes young children are recruited from farming districts and brought to the factories as apprentices, the subcontractor paying the children's parents a much smaller sum than he receives for this service. These children occasionally do "out-work" for the factory, and the contractor also makes profit from their extra labor.

Trade-Unionism

FACING an industrial situation like this, the workers gradually become class-conscious, and are thinking of getting together for general well-being. Sporadically, the unionization movement is

¹⁷ China Medical Journal, Shanghai, March, 1924: "Review of 880 cases from the cotton mills," by H. W. Decker.

going on. In some industries where primitive industrial conditions still exist, the workers are satisfied with the old guild system for the regulation of wages, output of commodities, prices, and hours of labor. In some instances the guild is undergoing a process of modernization either by the adoption of the labor union rules or by differentiating the guild into the employers' associations on the one hand and the workers' unions on the other. Thus, in the Incense and Toilet Articles Guild of Peking the employers and employees, though belonging to the same organization, hold separate meetings. In the same city, the Shoemakers' Guild has entirely separate organizations for the employers and employees. The chamber of commerce which is an organization common to most cities and towns in China, is really an outgrowth of the old-fashioned guild with features resembling the employers' association in the Occident.

The gradual differentiation of organization between the employers and employees tends to aggravate the struggle between capital and labor. In some strikes, the employers conciliated the workers by inviting some of them to join the organization of the employers, which was bitterly resented by the other workers who did not join. In other cases where the organization of the laborers has considerable influence, the employers have sought the power of the police authorities or even of the army to suppress the workers' activities. These high-handed methods have intensified the industrial unrest and hastened the movement of trade-unionism in the country.

Owing to outside pressure, such as competition with foreigners, some guilds have been reorganized along modern lines. For instance, the Lu Pan Industrial Union of Peking is an amalgamated organization of several crafts formerly organized in independent guilds, including carpenters, bricklayers, blacksmiths, masons, and painters. Before the reorganization, the craft line between the guilds was very rigid, so that members of one guild could not handle the jobs of those of another guild. To-day these distinctions are gradually disappearing and better cooperation is secured among the craftsmen. As in the old days, this industrial union regulates wages and working hours, has established a school, gives charity and financial aid to the poor, sick, aged, and unemployed. In addition it strives to secure building contracts from the Government and distributes these to various members by lot. If a member loses money on the contract so secured, he may be reimbursed by the union by showing good cause. If a member has difficulty in collecting debts or is involved in lawsuits, he may appeal to the union for assistance. If he is in need of money, the union may advance him a certain amount for a nominal rate of interest. But the most important function of the union is to secure the building contracts for the members, although in recent years this has been made difficult by the keen competition of foreign builders in the capital.¹⁸

The unionist movement of a really national character dates from the first National Labor Conference held at Canton, May 1-6, 1922. During that conference 162 delegates from 200 unions in 12 cities, representing about 400,000 workers, were present. They passed a number of resolutions, including those favoring an eight-hour day,

¹⁸ Gamble, Sydney: Peking—A social survey. New York, Doran, 1921, pp. 202-204; 447-448.

mutual aid to strikers, a permanent national organization of trade-unions, and the organization of unions on an industrial rather than craft basis. The conference adopted the general policy of promoting the economic and industrial welfare of the workers, and of refraining from political activity.

As an example of the industrial union, the Metal Workers' Union of Canton may be cited. Its membership, of about 160,000, includes all the metal workers of Canton and the neighboring towns. The organization has 10 departments, i. e., those for machinists, electricians, stokers, founders, turners, draftsmen, molders, steel workers, modelers, and copper workers. The program of the organization is very broad, aiming at the industrial, economic, social, and educational improvement of the members. Among other things, it provides for the publication of a monthly and a weekly paper, the erection of a technical school, a sanitarium for tubercular workers, a convalescent home for the aged workmen, a general hospital, a savings bank, a model factory for mechanics, and a kindergarten for the children of the workers. Owing to unsettled conditions in Canton and vicinity, part of the program is now held in abeyance.

Strikes

IN SOME industries where the workers are fairly well organized they employ direct means to obtain social justice, by declaring strikes. The Peking Hankow Railway Union chose February 1, 1923, for the official opening of the union and the adoption of its constitution and by-laws, and 130 representatives from 35 local unions were to attend the meeting in Chengchow, Honan Province, in addition to 65 representatives of the unions of other railways, and 30 representatives from newspapers and schools in other cities. But on February 1 martial law was suddenly declared in Chengchow. The union's headquarters were guarded by the armed police, and the hotels and restaurants in the city were forbidden to accommodate the union delegates. In protest the union men in the city walked out on February 4 and were soon joined by the railway workers on other sections of the same railway. Since this interfered with the operation of the railway, the police authorities forced the strikers to resume their work, killing 3 and wounding 40 in so doing. Indignation was aroused among the rank and file of labor, and telegrams of sympathy were received from about 100 unions throughout the nation. The National Parliament in Peking moved to impeach the military authorities, and at a session on "labor unrest" held in the house of representatives four resolutions were adopted stating (1) that in accordance with the provisional constitution of the Republic, the Government now recognize the right to hold meetings by the workers, (2) that the Government release those laborers who were under arrest, (3) that the Government give money to the families of the deceased or wounded, (4) that the Government remove troops and police from railway stations.

In Shameen a strike was called in protest against foreign aggressions and oppression. Shameen is a little island on the Pearl River, on the southwestern side of the city of Canton. On it is a foreign settle-

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ment, although the island is still under the jurisdiction of Canton. Much commercial and industrial activity is carried on there, as Canton has been a treaty port since the treaty of Nanking in 1842. Recently, the British and French consulates in Shameen passed some new police regulations requiring every Chinese in the settlement to secure a pass with his photograph on it, and prohibiting the Chinese from leaving or entering Shameen later than 9 a. m. without a pass. The Chinese resented these regulations, mainly on two grounds: (1) That these are regulations by foreigners who are living in Chinese territory, and (2) that they are discriminatory, as no such restrictions are imposed upon the other nationals in the settlement. On July 15, the day on which the regulations were supposed to take effect, all the Chinese workmen in Shameen declared a strike, which affected the office workers, secretaries, servants, nurses, cooks, dock hands, seamen, laborers, etc. At present about 5,000 men are involved in the strike, exclusive of sympathetic strikers in other cities, and no settlement has been reached.

The Cooperative Movement

ANOTHER way of improving the workers' conditions is through the cooperative movement. The idea of cooperation, particularly cooperative credit, is an old one among the middle-class Chinese. When a man is in financial difficulties, or if he needs money for a wedding ceremony, he usually invites 8, 10, or 12 of his relatives and friends to make him a loan, each contributing a small sum. Suppose 10 persons contribute toward a cooperative loan of \$100, and suppose the loan is to be paid in 5 years. The contributors and the borrower will constitute an informal cooperative credit society which will ordinarily have 10 meetings, held semiannually. At each meeting, 1 of the 10 persons will receive the sum of \$100 and the remaining 9 will each contribute a sum of money. Theoretically, this sum will be about \$11.11 per person. But allowing a nominal interest for those who by lot will receive the amount of \$100 on some late date in the 5-year period, the individual semiannual contributions show some variation. This is a very satisfactory practice, because of the ease of raising a loan and of the avoidance of excessive rates of interest. It prevails generally in the farming districts to-day.

Recently, cooperative societies of the western type have been introduced into certain sections of the country. The China International Famine Relief Commission has drawn up rules for the use of cooperative societies. Farming villages near Peking welcome this sort of organization and 9 societies, with 449 members, have already been organized. These societies have been indorsed by the famine commission and have received from the commission loans totaling \$1,815.

Cooperative banking on a modern basis is carried on in several centers but without much success as yet. In 1922 teachers, students, and residents in the immediate neighborhood of Fu Tan University, Shanghai, started a cooperative bank which soon became successful. They began to publish a weekly magazine to popularize the idea of cooperation. A series of cooperative stores were gradually organized

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in the suburbs of Shanghai, and some of them had some connections with the cooperative bank. Similar instances exist in a few other cities.

Consumers' cooperation seems to have taken root in and near Canton. Cantonese farmers, especially, find it to their advantage to buy goods at the cooperative stores instead of at the city stores, whose rent is high and where commodities are usually sold at higher prices.

Present Social Conditions

LABOR'S most serious problem is to strive with other classes for a new social order. There is a general revolt against the oppression of politics, militarism, and the landed aristocracy. The courage with which the fight is carried on is commendable, but the mistakes have been many.

Economically many farmers and workmen in the country favor an experiment in socialism, holding that such ideas can be applied in the Chinese rural life, the village community being small and its population homogeneous. They favor the single tax and the reduction of taxation, whose burden they have largely borne up to the present. In Canton certain features of guild socialism are now being experimented on with some success. In Peking these ideas receive some support from the intelligentsia, as the teachers and students of certain educational institutions have recently formed the Marxian Society and the New Thought Club.

The main hope of this general movement lies in the attempt to rejuvenate the nation through economic improvement. For centuries the pressure of population has tended to outstrip the food supply of the country, and the people have found it difficult to maintain a decent standard of living. To millions the struggle for existence is too severe. Under these circumstances, the Chinese mind to-day is quite receptive to advanced ideas.

In carrying on the fight the Chinese liberals have not always shown sound judgment, but their faith is unswerving and their motives pure. At times they are overenthusiastic, and their enthusiasm has caused them to advocate measures too advanced for existing conditions. Mainly for this reason a reaction has now set in and attempts are made to discredit their views by citing, among other things, the failure of socialism in Wang An-shih's time in the eleventh century, when phases of state socialism were in practice. The Government undertook to manage commerce, industry, and agriculture, so as to prevent the rich from crushing the poor. It measured the land, divided it into equal areas to be cultivated by the farmers, and taxed the land according to fertility. The farmers could borrow money from the Government in the spring but must return it at harvest time, in money or in kind, with a reasonable amount of interest. Agricultural, commercial, and manufactured goods were purchased and distributed by Government agents at fixed rates. The unsold commodities were stored in the Government treasury for such emergencies as famine and war. Owing to strong opposition from many sides, however, the whole scheme was abandoned within a space of 10 or more years.

Politically the liberal movement has made little headway. Efforts to form a national labor party have failed. Except in Canton, where several officials of the Government are wholeheartedly in sympathy with labor, the labor element in the politics of other sections of the country is negligible. As has been stated, the general policy of the trade-unions is to keep labor out of politics. It is not too much to say that Chinese labor to-day has very limited influence in political circles.

The social phase presents a more complicated situation. Under the influence of the present-day revolution in literature a considerable amount of the current literature is written in the vulgate, which makes it easily accessible to and understandable by many workers. Many a laborer to-day can carry on a conversation on current topics with some intelligence, which could not be generally expected of the common laborer two decades ago. Then, too, the worker is usually free from certain social discriminations. For instance, under the Manchu régime the children of artisan and servant classes generally suffered civil and educational disabilities. To-day such bias is not commonly tolerated. The family bond is also loosening. A farmer's daughter may leave the home in a wayside village to enter a trade school, a hair-net factory, or a silk filature. When the family has set the date of her wedding, she may pay no attention to such arrangement and insist upon her own choice of the husband. Workingmen's luxuries have also increased. It is not uncommon to see a railway fireman smoke a "Chesterfield" cigarette or a dock stevedore drink "Liverpool" cocoa. All these help to increase the worker's expenditures, and the slow rise of their wages is responsible for various kinds of social maladjustment among them.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

Labor Relations in the Fairmont, W. Va., Bituminous Coal Field

A STUDY of the relations between the coal operators and miners in the Fairmont bituminous coal field is presented in Bulletin No. 361 of the U. S. Bureau of Labor Statistics, recently issued. The labor question in the coal industry is of paramount social interest because of the periodic interruptions in the production of coal occasioned by national and regional strikes. The Fairmont field was chosen for an analysis of the labor policies in the soft-coal industry because of the variety of systems practiced in the handling of labor.

The larger part of the field operates under a collective agreement between the employers, organized as the Northern West Virginia Coal Operators' Association, and the employees, as members of the United Mine Workers of America. A small but important group of mines is working under the company union system, and the remaining small part of the field under the individual bargaining system. In 1922, according to a mining census, there were in the Fairmont field 540 mines, employing between 28,000 and 30,000 men.

The agreement with the United Mine Workers of America, which controls about four-fifths of the field, prescribes wages and working conditions and provides for the following adjustment machinery. In the first instance a grievance is handled by an employees' mine committee of three men conjointly with the foreman or superintendent. In case of disagreement the controversy goes to the labor commissioner for the operators and the subdistrict president of the union for adjustment. If they are unable to agree, the case is referred to the joint board of the district, consisting of an equal number of representatives from each side. If the members of the joint board fail to agree, an umpire is chosen by mutual consent, whose decision is to be final. On the whole this adjustment machinery works well, though the lack of permanent arbitration machinery for the handling of cases coming to a deadlock in the joint board is a serious weakness. A detailed analysis of all cases handled by the labor commissioner for the operators in conjunction with the union subdistrict officials, and of those which were referred to the joint board—about 5 per cent—is presented in the bulletin.

The main complaint of the men working under the union agreement is the lack of employment, the average working-days per week during 1922-23 being about three. This unemployment is due largely to overdevelopment of the industry in the district and to railroad car shortage, occasioned by the fact that the serving railroads are obliged to scatter their equipment over a great number of small mines, and by general strikes as in 1922.

The operators complain of the attempt of the international union in 1922 to force a national agreement, which resulted in the calling of strikes in districts having no difficulties with the union, as was

the case in the Fairmont field. They also object to the check-off, with special reference to fines and special assessments, as they are often forced to collect union funds to be used against themselves, and charge that it results in lack of effective control by the international officers over local situations, the actual contact between the local unions and their district and national officers being thereby greatly reduced. Local stoppages are frequent and the inability of the union to eliminate or diminish the extent of such local stoppages indicates lack of union discipline.

The operators' claim that under the agreement they are unable to get rid of undesirable employees is only partly justified. Discharges in cases which involve specific contract obligations do take place with the union's consent, but the miner is invariably given the benefit of the doubt.

Individual productivity as affected by the war and by unionization was the subject of a special study in a group of mines. An analysis of the data procured showed that the average output of pieceworkers was not seriously affected either by the war or by unionization. The average productivity of time workers, however, was greatly reduced during the war, but with its termination and the consequent reduction in the scarcity of labor their output increased, until in 1921-22 it exceeded somewhat the pre-war figure. The group of mines studied were unionized in 1920, but this did not result in any serious curtailment of average productivity, the output per employee in 1921-22 equaling that of 1914-15; this, however, was due, to a great extent, to more efficient management since unionization.

Labor turnover in the Fairmont field is somewhat higher than in most of the other unionized districts, only two having a higher turnover, but the shifting of labor is much less rapid in this field than in most of the nonunion districts.

About 15 mines in the Fairmont field which are owned by one company are operated under a collective agreement between the company and its employees, without any participation by the United Mine Workers of America, the employees being represented by committees selected by themselves. The agreement provides for the following:

1. Collective bargaining in all matters pertaining to wages, hours, and working and living conditions.
2. Professional representation for the employees through a labor commissioner selected by them.
3. Joint board of conciliation.
4. An umpire to adjudicate cases coming to a deadlock in the joint board.
5. Employees' checkweighman.

The working of this agreement, according to both sides, is more satisfactory than that of the union agreement, although there is the same complaint as to frequent unemployment. As wages and working conditions are on a par with those in the union mines there is no complaint thereof among the miners. Because of the nature of the plan, the national agreement problem is nonexistent. While the check-off practically exists under this agreement as under the union agreement, unlike the latter it is causing no friction. The operator has no complaint to make as to local stoppages, the extent of which

is negligible. The adjustment machinery is similar to that under the union agreement but provides for the very thing the latter lacks—permanent impartial arbitration machinery. The local administrative machinery works well on both sides.

As to the individual bargaining part of the field, little can be said. Under this system a specific contract is entered into between the company and the individual miner, prohibiting the latter from joining any union. Wage rates and grievances are settled between individual miners and the management. The rates of wages in effect are, however, the same as those in the unionized district.

Labor Situation in Haiti

Local Labor Supply and Demand

A CONSULAR report, dated June 7, 1924, states that the consular district of Cape Haitien and the Republic of Haiti generally, have a relatively large and constant labor supply. This fact may be largely ascribed to the low educational and general living standard of the mass of the population, it being estimated that over 90 per cent of the population are illiterate.

In fact the supply is larger than the demand, this being true of even the more skilled labor. Even during the height of the sugar season workers leave Haiti in relatively large numbers for Cuba and the adjacent Republic of Santo Domingo to work on the sugar plantations.

While the present demand for both skilled and unskilled labor is amply met by the supply it is undoubtedly true that were a greater economic development of the country to take place there would soon be a relatively great demand for the more skilled type of labor which at present is limited.

Source of Imported Labor

LABOR is not imported or does not immigrate to Haiti in such numbers as to make this a factor in considering the migration of labor in the West Indies. Such labor as immigrates into Haiti is of the artisan or skilled type and comes largely from Jamaica, the Turks Islands, and other adjacent British island possessions. These workers do the best carpentry and cabinet work and in general have a higher standard of craftsmanship than Haitians engaged in similar labor. Their number is, however, quite restricted.

Wage Rates

HAITIAN labor of the unskilled kind is very poorly paid. While accurate wage schedules do not exist, the following rates indicate the average wages received by various types of labor during the last calendar year. They are approximately the same at the present time.

Male unskilled labor of the most primitive type.....	Per day	\$0. 20
Male unskilled labor of slightly better type.....		. 30
Shoemakers, woodworkers, tailors' helpers, etc., piecework.....	Per month	\$5 to \$25
Messengers, typists, clerks.....		20 to 50
Bank tellers.....		70
Administrative employees.....		50 to 100
Domestic servants, male or female.....		3 to 6
Cooks.....		8 to 15

Women and children earn between 10 and 30 cents a day on piece-work.

The Haitian laborer feeds himself on about 10 cents per day. He usually eats only two meals per day, omitting lunch. Ten hours constitute a day's work.

Methods and Terms of Employment

MOST day labor is employed in a rather haphazard manner, the men being paid at the end of each day's work. Certain work is paid for on a piece basis; for example, the coffee industry employs a large number of women and children in the "trriage" hand picking over of the coffee after it is received in the store. These workers are paid, on the average, one-fifth cent per pound. A good worker can pick over 100 pounds per day.

Stevedores are usually hired on a contract basis through a "boss," who undertakes the job of handling the cargo at a certain figure and supplies his own labor.

A large pineapple company located near Cape Haitien and employing about 600 men is able to maintain a fairly permanent working force. The labor turnover is small enough to permit the payment of wages on a weekly basis.

There is no fixed rule for payment of wages, and contracts between employers and workers are usually made in the form of verbal agreements.

Asiatic Labor

THE question of Asiatic labor is at present more of a theoretical than practical interest. Properly speaking there are practically no Asiatic laborers in the consular district of Cape Haitien. Orientals who have settled in Haiti are nearly all engaged in trade, such as small merchandising, hotel keeping, managing of Chinese restaurants, laundries, etc. There are only a few dozen Asiatic residents in the entire consular district of Cape Haitien.

Among certain influential Haitians the question of encouraging Asiatic agricultural labor to immigrate to Haiti to improve the present unsatisfactory agricultural situation has often been agitated, but it is doubtful if it will ever be put into practice in view of the many difficulties involved in such an undertaking.

Negro Migrants in Philadelphia in 1923

PHILADELPHIA is one of the cities to which negro migrants from the South have been attracted, and in which they have arrived in numbers greater than the city could conveniently accommodate. According to the annual report of the Philadelphia Housing Association, there was for a time some uneasiness over the extent of the influx. There were rumors that the immigrants were arriving at the rate of 5,000 or more each month, and in view of the housing shortage already existing there was ground for concern as to the effect of such additions to the population. The association undertook an inquiry into the situation and gives a summary of its findings in its annual report for 1923.¹ There was considerable misunderstanding, it was found, both as to the numbers and the character of the newcomers.

Negroes did not come in droves, as alleged. They were of a better grade than in previous migrations, a high percentage being church attendants, and many of the men belonging to fraternal organizations. They seemed well supplied with funds, many were able to buy homes, and many were an industrial asset to Philadelphia. The significant part of the survey as it affected the work of the association was the housing of the newcomers. * * * It was estimated that the population increment above the normal negro increment approximated 10,500. The normal annual negro growth in Philadelphia for the decade between 1910 and 1920 was 4,977. This influx, therefore, added to the normal growth, might conservatively be said to have increased the negro population of the city about 15,500 for 1923.

A considerable proportion of the migrants seem to have come from the nearer parts of the South. Of some 500 giving information on the subject, approximately 200 came from Georgia, 171 from South Carolina, 43 from North Carolina, 33 from Virginia, and 27 from Maryland. The principal reason assigned for their coming was that they had friends in the North who encouraged them to do so, although specific reasons were also given, such as the boll weevil, the desire to escape prevailing conditions, lack of work, and the desire to join relatives.

Like all immigrants, the newcomers tended to drift to the older centers of their own race, thereby causing a very serious degree of congestion. A study of families, taken without selection, showed that 50 were occupying one-room apartments, 23 had 2 rooms each, and 15 had 3 rooms, "indicating that 77 per cent of the families were living in 3 or less rooms each." Such accommodations, however, did not mean low rents. Only 10 families paid less than \$5 a month per room, and from this the rents ran up to \$20 or over per room. Sanitary conditions were bad.

The worst aspect of the Philadelphia houses was their insanitary condition. On the 87 properties there were 374 violations of the housing and sanitation law. There were 39 cases of overcrowding. In one house the rooms were used day and night for sleeping purposes. Nine windowless but occupied rooms were found, 39 cases of defective plumbing, 29 badly leaking roofs, 54 cases of inadequate fire protection, and other conditions of filth and disrepair.

In the South the families thus housed had been occupying small houses, most of them ranging from 3 to 6 rooms in size, and usually

¹ Philadelphia Housing Association annual report for 1923: *Housing in Philadelphia*, by Bernard J. Newman. Philadelphia [1924], 50 pp.

having abundant light and ventilation. Many of the negroes, too, had worked in the open and were not accustomed to the conditions of a crowded tenement quarter and of indoor employment. As a natural consequence, their health suffered. As an instance of this, with its attendant consequences to the city, the report cites the smallpox history of 1923.

The department of public health reports 79 cases of smallpox in Philadelphia between December 13, 1922, and December 27, 1923. All were negro cases, and were either imported from the South or were the result of contact with negroes who had recently come from the South. In one house of 38 occupants 8 cases were found. Two houses had 7 cases each and 3 had 4 cases each. According to the chief medical inspector, those ill with smallpox were normal, intelligent, and thrifty. To control these cases the city was forced to quarantine a total of 303 city blocks and vaccinate 28,000 persons.

Apart from smallpox, a number of cases of illness, of which 48 were of a communicable character, were found in the group of families covered in the special survey.

Summing up the results of the inquiry, the association finds that the negro migrant of 1923 was of a high type as contrasted with immigrant groups, that he was welcomed by industry, but that he was not able to obtain decent and adequate housing, and that this constituted a serious obstacle to his physical welfare. "Better negro housing is one of the outstanding racial needs in Philadelphia to-day."

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, September 15, 1923, and August 15 and September 15, 1924, as well as the percentage changes in the year and in the month. For example, the price per pound of butter was 55 cents in September, 1923; 48.3 cents in August, 1924, and 48.5 cents in September, 1924. These figures show a decrease of 12 per cent in the year and an increase of four-tenths of 1 per cent in the month.

The cost of the various articles of food² combined show a decrease of 1.7 per cent September 15, 1924, as compared with September 15, 1923, and an increase of 1.8 per cent September 15, 1924, as compared with August 15, 1924.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, SEPTEMBER 15, 1924, COMPARED WITH AUGUST 15, 1924, AND SEPTEMBER 15, 1923

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

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (—) Sept. 15, 1924, compared with—	
		Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak.....	Pound.....	41.1	40.7	40.2	-2	-1
Round steak.....	do.....	35.5	34.8	34.3	-3	-1
Rib roast.....	do.....	29.4	29.1	29.0	-1	-0.3
Chuck roast.....	do.....	21.0	21.0	20.9	-0.4	-0.4
Plate beef.....	do.....	13.1	13.1	13.2	+1	+1
Pork chops.....	do.....	36.7	34.8	35.8	-2	+3
Bacon.....	do.....	39.4	38.3	39.3	-0.3	+3
Ham.....	do.....	46.6	46.6	46.9	+1	+1
Lamb, leg of.....	do.....	37.5	37.3	37.0	-1	-1
Hens.....	do.....	35.0	34.8	35.3	+1	+1
Salmon, canned, red.....	do.....	31.3	31.2	31.3	0	+0.3
Milk, fresh.....	Quart.....	14.0	13.7	13.9	-1	+1
Milk, evaporated.....	15-16 oz. can.....	12.2	11.1	11.1	-9	0
Butter.....	Pound.....	55.0	48.3	48.5	-12	+0.4
Oleomargarine.....	do.....	29.3	30.5	30.7	+5	+1
Nut margarine.....	do.....	27.7	28.8	29.0	+5	+1
Cheese.....	do.....	37.0	34.4	34.6	-6	+1
Lard.....	do.....	17.9	19.3	20.0	+12	+4
Vegetable lard substitute.....	do.....	23.0	25.1	25.5	+11	+2
Eggs, strictly fresh.....	Dozen.....	48.6	44.6	51.9	+7	+16
Bread.....	Pound.....	8.7	8.8	8.8	+1	0

¹In addition to monthly retail prices of food and coal, the bureau secures prices of gas and electricity from each of 51 cities. These prices are published at quarterly intervals in the MONTHLY LABOR REVIEW. Retail prices of dry goods were published quarterly until November, 1923.

²The 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, SEPTEMBER 15, 1924, COMPARED WITH AUGUST 15, 1924, AND SEPTEMBER 15, 1923—Concluded

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (—) Sept. 15, 1924, compared with—	
		Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924
		Cents	Cents	Cents		
Flour.....	Pound.....	4.5	5.1	5.1	+13	0
Corn meal.....	do.....	4.2	4.7	4.8	+14	+2
Rolled oats.....	do.....	8.8	8.8	8.9	+1	+1
Corn flakes.....	8-oz. pkg.....	9.7	9.7	10.1	+5	+5
Wheat cereal.....	28. oz. pkg.....	24.4	24.3	24.2	-1	-0.4
Macaroni.....	Pound.....	19.7	19.6	19.6	-1	0
Rice.....	do.....	9.5	10.2	10.3	+8	+1
Beans, navy.....	do.....	10.9	9.7	9.9	-9	+2
Potatoes.....	do.....	3.4	2.6	2.6	-24	0
Onions.....	do.....	6.2	6.5	5.8	-6	-11
Cabbage.....	do.....	4.6	4.3	4.2	-9	-2
Beans, baked.....	No. 2 can.....	12.9	12.6	12.6	-2	0
Corn, canned.....	do.....	15.5	15.8	16.0	+3	+1
Peas, canned.....	do.....	17.6	18.2	18.2	+3	0
Tomatoes, canned.....	do.....	12.9	13.3	13.4	+4	+1
Sugar, granulated.....	Pound.....	9.6	8.2	8.6	-10	+5
Tea.....	do.....	69.7	70.9	71.0	+2	+0.1
Coffee.....	do.....	37.6	43.4	44.3	+18	+2
Prunes.....	do.....	18.8	17.3	17.3	-8	0
Raisins.....	do.....	17.1	15.4	15.2	-11	-1
Bananas.....	Dozen.....	37.8	35.4	35.1	-7	-1
Oranges.....	do.....	31.0	46.1	48.9	-4	+6
All articles combined ¹					-1.7	+1.8

¹See note 2, p. 56.

Table 2 shows for the United States average retail prices of specified food articles on September 15, 1913, and on September 15 of each year from 1918 to 1924, together with percentage changes in September of each of these specified years, compared with September, 1913. For example, the price per pound of pork chops was 22.8 cents in September, 1913; 46.1 cents in September, 1918; 46 cents in September, 1919; 50 cents in September, 1920; 37.6 cents in September, 1921; 36.4 cents in September, 1922; 36.7 cents in September, 1923; and 35.8 cents in September, 1924.

As compared with the average cost in September, 1913, these figures show the following percentage increases: 102 per cent in September, 1918 and 1919; 119 per cent in September, 1920; 65 per cent in September, 1921; 60 per cent in September, 1922; 61 per cent in September, 1923, and 57 per cent in September, 1924.

The cost of the various articles of food combined showed an increase of 43.3 per cent in September, 1924, as compared with September, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE SEPTEMBER 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH SEPTEMBER 15, 1923

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

Article	Unit	Average retail price on September 15—								Per cent of increase September 15 of each specified year compared with September 15, 1923							
		1913	1918	1919	1920	1921	1922	1923	1924	1918	1919	1920	1921	1922	1923	1924	
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.								
Sirloin steak	Pound	26.3	41.7	40.9	46.8	38.9	38.7	41.1	40.2	59	56	78	48	47	56	53	
Round steak	do.	23.2	39.8	37.9	43.1	34.4	33.6	35.5	34.3	72	63	86	48	45	53	48	
Rib roast	do.	20.1	32.7	31.2	34.5	28.6	28.1	29.4	29.0	63	55	72	42	40	46	44	
Chuck roast	do.	16.4	28.4	25.3	27.1	20.5	20.0	21.0	20.9	73	54	65	25	22	28	27	
Plate beef	do.	12.3	21.9	18.2	18.4	13.3	12.6	13.1	13.2	78	48	50	8	2	7	7	
Pork chops	do.	28.1	46.1	46.0	50.0	37.6	36.4	36.7	35.8	102	102	119	65	60	61	57	
Bacon	do.	28.1	56.2	55.6	54.5	43.0	40.4	39.4	39.3	100	98	94	53	44	40	40	
Ham	do.	28.1	51.9	55.2	60.4	45.1	44.8	44.6	44.9	85	96	115	83	72	66	67	
Lamb, leg of	do.	18.7	36.9	34.6	39.1	32.8	35.9	37.5	37.0	97	85	109	75	92	101	98	
Hens	do.	21.5	39.4	41.4	45.6	38.2	34.9	35.0	35.3	83	93	112	78	62	63	64	
Salmon, canned, red	do.	130.5	133.6	139.0	135.4	131.7	131.3	131.3	131.3								
Milk, fresh	Quart.	8.9	14.3	15.7	17.2	14.1	13.1	14.0	13.9	61	76	93	58	47	57	56	
Milk, evaporated	(?)			16.5	15.7	13.5	10.8	12.2	11.1								
Butter	Pound	37.7	59.2	65.7	68.6	50.6	46.7	55.0	48.5	57	74	82	34	24	46	29	
Oleomargarine	do.			42.8	41.9	29.9	27.8	29.3	30.7								
Nut margarine	do.			35.8	36.3	28.1	26.8	27.7	29.0								
Cheese	do.	22.1	36.0	43.0	40.6	32.6	32.1	37.0	34.6	63	95	84	48	45	67	57	
Lard	do.	16.1	33.6	38.2	27.9	17.9	17.2	17.9	20.0	109	137	73	11	7	11	24	
Vegetable lard substitute	do.			39.5	33.1	21.3	23.0	23.0	25.5								
Eggs, strictly fresh	Dozen	37.7	58.6	63.2	71.1	50.4	44.8	48.6	51.9	55	68	89	34	19	29	38	
Bread	Pound	5.6	9.9	10.1	11.9	9.6	8.7	8.7	8.8	77	80	113	71	55	55	57	
Flour	do.	3.3	6.8	7.3	8.3	5.6	4.9	4.5	5.1	106	121	152	70	48	36	55	
Corn meal	do.	3.1	6.9	6.7	6.8	4.4	3.9	4.2	4.8	123	116	119	42	26	35	55	
Roll'd oats	do.			9.1	11.5	9.9	8.7	8.8	8.9								
Corn flakes	(?)			14.0	14.5	12.0	8.8	9.7	10.1								
Wheat cereal	(?)			25.1	30.4	29.7	25.6	24.4	24.2								
Macaroni	Pound	19.4	22.0	20.6	19.9	19.7	19.6										
Rice	do.	8.7	13.7	16.5	17.6	9.0	9.6	9.5	10.3	57	90	102	3	10	9	18	
Beans, navy	do.	16.9	12.4	11.6	8.1	10.8	10.9	9.9									
Potatoes	do.	1.9	3.9	4.3	4.0	4.0	2.3	3.4	2.6	105	126	111	111	21	79	37	
Onions	do.		5.0	6.5	5.3	5.7	5.1	6.2	5.8								
Cabbage	do.			4.9	3.8	5.4	3.7	4.6	4.2								
Beans, baked	(5)			17.1	16.8	14.1	13.4	12.9	12.6								
Corn, canned	(5)			19.2	18.7	16.1	15.3	15.5	16.0								
Peas, canned	(5)			19.2	19.3	17.7	17.5	17.6	18.2								
Tomatoes, canned	(5)			16.0	15.0	12.5	13.1	12.9	13.4								
Sugar, granulated	Pound	5.7	9.6	11.0	18.3	7.3	7.9	9.6	8.6	68	93	221	28	39	68	51	
Tea	do.	54.5	66.4	70.7	74.6	69.2	68.2	69.7	71.0	22	30	37	27	25	28	30	
Coffee	do.	29.8	30.3	48.8	46.6	35.6	36.2	37.6	44.3	2	64	56	19	21	26	49	
Prunes	do.		17.4	28.0	28.4	18.9	20.9	18.8	17.3								
Raisins	do.		15.4	19.4	30.8	29.1	22.1	17.1	15.2								
Bananas	Dozen			38.4	47.8	37.7	34.0	37.8	35.1								
Oranges	do.			53.9	70.8	53.1	64.8	51.0	48.9								
All articles combined ⁶										73.6	83.8	98.9	49.4	36.3	45.7	43.3	

¹ Both pink and red.

² 15-16 ounce can.

³ 8-ounce package.

⁴ 28-ounce package.

⁵ No. 2 can.

⁶ See note 2, page 56.

Table 3 shows the changes in the retail prices of each of 22 articles of food³ as well as the changes in the amounts of these articles that could be purchased for \$1, each year, 1913 to 1923, and in September, 1924.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1 IN EACH YEAR, 1913 TO 1923, AND IN SEPTEMBER, 1924

Year	Sirloin steak		Round steak		Rib roast		Chuck roast		Plate beef		Pork chops	
	Average retail price	Amt. for \$1										
1913	<i>Per lb.</i>	<i>Lbs.</i>	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913	\$0.254	3.9	\$0.223	4.5	\$0.198	5.1	\$0.160	6.3	\$0.121	8.3	\$0.210	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	.374	2.7	.323	3.1	.276	3.6	.197	5.1	.128	7.8	.330	3.0
1923	.391	2.6	.335	3.0	.284	3.5	.202	5.0	.129	7.8	.304	3.3
1924: September	.402	2.5	.343	2.9	.290	3.4	.209	4.8	.132	7.6	.358	2.8

Year	Bacon		Ham		Lard		Hens		Eggs		Butter	
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per doz.</i>	<i>Dozs.</i>	<i>Per lb.</i>	<i>Lbs.</i>						
1913	\$0.270	3.7	\$0.269	3.7	\$0.168	6.3	\$0.213	4.7	\$0.345	2.9	\$0.383	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	.534	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	.398	2.5	.458	2.0	.170	5.9	.360	2.8	.444	2.3	.479	2.1
1923	.391	2.6	.455	2.2	.177	5.6	.350	2.9	.465	2.2	.554	1.8
1924: September	.393	2.5	.469	2.1	.200	5.0	.353	2.8	.419	1.9	.485	2.1

Year	Cheese		Milk		Bread		Flour		Corn meal		Rice	
	<i>Per lb.</i>	<i>Lbs.</i>	<i>Per qt.</i>	<i>Qts.</i>	<i>Per lb.</i>	<i>Lbs.</i>	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913	\$0.221	4.5	\$0.089	11.2	\$0.056	17.9	\$0.033	30.3	\$0.030	33.3	\$0.087	11.5
1914	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.085	11.4
1915	.233	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	.329	3.0	.131	7.6	.087	11.5	.051	19.6	.039	25.6	.095	10.5
1923	.369	2.7	.138	7.2	.087	11.5	.047	21.3	.041	24.4	.095	10.5
1924: September	.346	2.9	.139	7.2	.088	11.4	.051	19.6	.048	20.8	.103	9.7

Year	Potatoes		Sugar		Coffee		Tea	
	<i>Per lb.</i>	<i>Lbs.</i>	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913	\$0.017	58.8	\$0.055	18.2	\$0.298	3.4	\$0.544	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	.028	35.7	.073	13.7	.361	2.8	.681	1.5
1923	.029	34.5	.101	9.9	.377	2.7	.695	1.4
1924: September	.026	38.5	.086	11.6	.443	2.3	.710	1.4

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

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 1923, and by months for 1923⁵ and for January through September, 1924. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1923 was 143.4, which means that the average money price for the year 1923 was 43.4 per cent higher than the average money price for the year 1913. The relative price of rib roast for the year 1922 was 139.4, which figures show an increase of 4 points but an increase of slightly less than 3 per cent in the year.

In the last column of Table 4 are given index numbers showing 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 62 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table. The chart has been drawn on the logarithmic scale, because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

⁴See note 2, p. 56.

⁵For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19-21, and for each month of 1921 and 1922 see MONTHLY LABOR REVIEW of February, 1923, p. 69.

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS 1907 TO 1923, AND BY MONTHS FOR 1923 AND JANUARY TO SEPTEMBER, 1924

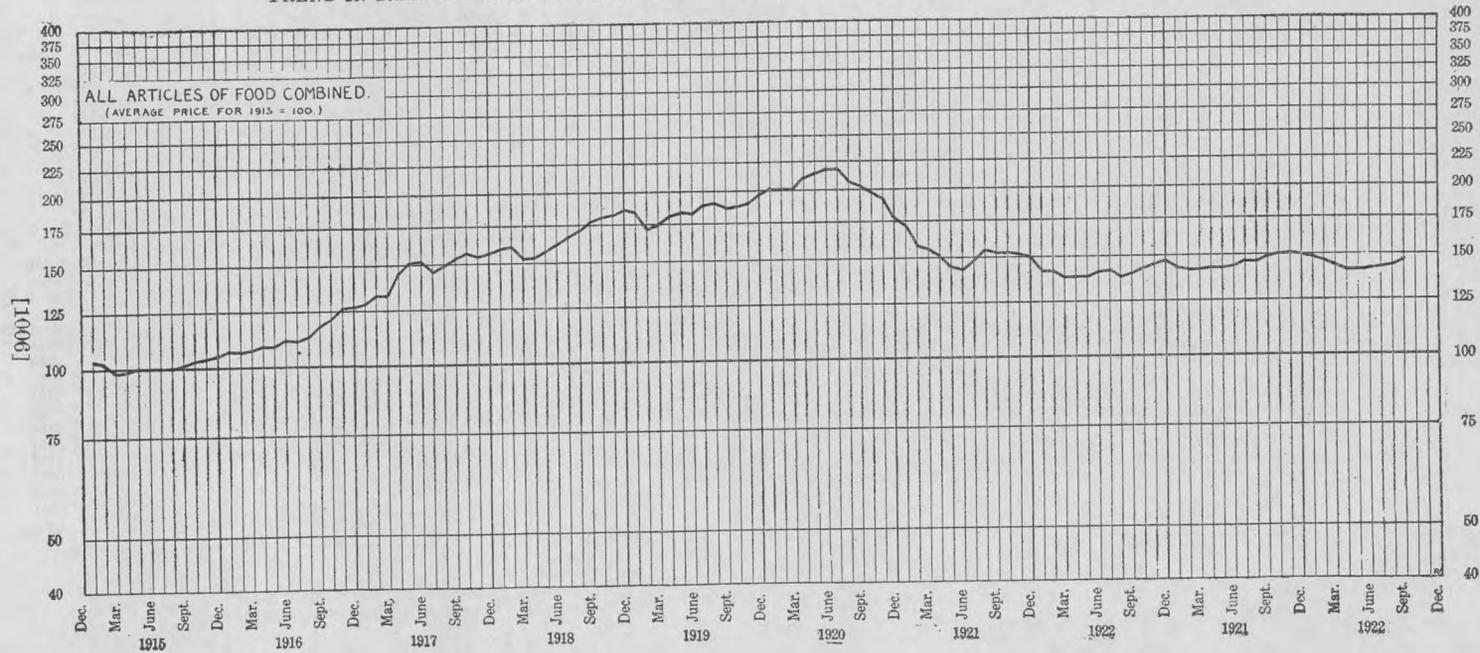
[Average for year 1913=100]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Lard	Hens	Eggs	Butter	Cheese	Milk	Bread	Flour	Corn meal	Rice	Potatoes	Sugar	Coffee	Tea	All articles combined	
1907	71.5	68.0	76.1			74.3	74.4	75.7	80.7	81.4	84.1	85.3			87.2									
1908	73.3	71.2	78.1			76.1	76.9	77.6	80.5	83.0	86.1	85.5			89.6				101.5	105.3				82.0
1909	76.6	73.5	81.3			82.7	82.9	82.0	90.1	88.5	92.6	90.1			91.3				111.2	107.7				84.3
1910	80.3	77.9	84.6			91.6	94.5	91.4	103.8	93.6	97.7	93.8			94.6				112.3	106.6				88.7
1911	80.6	78.7	84.8			85.1	91.3	89.3	88.4	91.0	93.5	87.9			95.5				101.0	109.3				93.0
1912	91.0	89.3	93.6			91.2	90.6	90.6	93.5	93.5	98.9	97.7			97.4				130.5	111.4				92.0
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6
1914	102.0	105.8	103.0	104.4	104.1	104.6	101.8	101.7	98.6	102.2	103.0	94.4	103.6	100.5	112.5	103.9	105.1	101.2	108.3	108.2	99.7	100.4	100.0	102.4
1915	101.1	103.0	101.4	100.6	100.0	96.4	99.8	97.2	93.4	97.5	98.7	93.4	105.0	99.2	125.0	125.8	108.4	104.3	88.9	120.1	100.6	100.2	101.3	
1916	107.5	109.7	107.4	106.9	106.0	108.3	106.4	109.2	111.0	110.7	108.8	103.0	116.7	102.2	130.4	134.6	112.6	104.6	158.8	146.4	100.3	100.4	100.4	
1917	124.0	129.8	125.5	130.6	129.8	151.7	151.9	142.2	174.9	134.5	139.4	127.2	150.4	125.4	164.3	211.2	192.2	119.0	252.7	169.3	101.4	106.9	116.7	
1918	153.2	165.5	155.1	166.3	170.2	185.7	195.9	178.1	210.8	177.0	164.9	150.7	162.4	156.2	175.0	203.0	226.7	148.3	188.2	176.4	102.4	119.1	168.3	
1919	164.2	174.4	164.1	168.8	166.9	201.4	205.2	198.5	233.5	193.0	182.0	177.0	192.8	174.2	173.6	218.2	213.3	173.6	223.5	205.5	145.3	128.9	185.9	
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	186.7	209.9	197.4	183.0	188.2	187.6	205.4	245.5	216.7	200.0	370.6	352.7	157.7	134.7	203.4	
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	113.9	186.4	147.5	135.0	153.9	164.0	176.8	175.8	150.0	109.2	182.4	145.5	121.8	128.1	153.3	
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	107.6	169.0	128.7	125.1	143.9	147.2	155.4	154.5	130.0	109.2	164.7	132.7	121.1	125.2	141.6	
1923: Average for year	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	112.0	164.3	134.8	144.7	167.0	155.1	155.4	142.4	136.7	109.2	170.6	183.6	126.5	127.8	146.2	
1923: January	146.5	141.7	138.9	122.5	106.6	139.5	147.4	167.7	110.1	162.0	161.4	154.3	168.8	153.9	155.4	148.5	133.3	109.2	123.5	150.9	124.2	126.3	144.4	
1923: February	146.1	141.3	138.9	121.9	105.8	136.7	145.9	167.3	110.1	166.7	133.9	150.7	169.7	153.9	155.4	148.5	133.3	108.1	123.5	150.2	125.8	126.7	142.3	
1923: March	146.9	142.2	139.4	121.9	105.8	134.8	145.2	167.3	110.1	168.1	111.6	150.4	167.9	152.8	155.4	145.5	133.3	108.1	129.4	155.5	127.2	126.7	141.9	
1923: April	149.2	144.8	140.4	123.1	105.0	135.2	144.8	167.7	110.8	169.5	99.7	149.6	164.3	152.8	155.4	148.5	133.3	108.1	147.1	192.7	127.5	127.2	143.1	
1923: May	152.4	148.0	142.4	124.4	105.0	142.9	144.8	168.4	109.5	170.0	101.7	136.0	160.6	151.7	155.4	145.5	133.3	108.1	158.8	203.6	127.5	127.4	143.4	
1923: June	157.9	154.7	145.5	127.5	104.1	142.4	144.4	168.8	108.9	166.2	102.6	130.6	193.4	151.7	155.4	145.5	133.3	108.1	188.2	201.8	126.9	127.8	144.3	
1923: July	161.4	159.2	148.0	130.0	105.8	148.6	144.8	171.0	108.2	163.4	107.6	136.0	183.4	151.7	155.4	145.5	133.3	108.1	247.1	190.9	126.5	127.6	147.2	
1923: August	161.8	159.2	147.5	130.0	105.0	152.9	145.2	172.1	108.2	162.0	120.3	135.3	163.8	152.8	157.1	142.4	136.7	108.1	217.7	174.6	126.2	128.1	146.4	
1923: September	161.8	159.2	148.5	131.3	108.3	174.8	145.9	173.2	113.3	164.3	140.9	143.6	167.4	157.3	155.4	136.4	136.7	108.1	247.1	190.9	126.5	127.6	147.2	
1923: October	157.9	154.3	146.0	130.0	108.3	162.9	145.6	172.5	117.7	163.4	158.3	146.7	174.2	158.4	155.4	139.4	143.3	110.3	170.6	174.6	126.2	128.1	149.3	
1923: November	153.2	148.4	142.9	127.5	107.4	137.6	142.6	169.1	119.6	158.2	192.2	153.8	167.4	157.3	155.4	139.4	143.3	110.3	170.6	174.6	126.2	128.1	149.8	
1923: December	152.0	147.5	142.9	127.5	107.4	126.2	138.9	169.1	119.6	158.2	192.2	153.8	167.4	157.3	155.4	139.4	143.3	110.3	170.6	174.6	126.2	128.1	149.8	
1924: January	153.9	149.3	144.4	129.4	109.9	130.5	137.8	166.2	118.4	162.0	158.3	160.1	169.2	159.6	155.4	136.4	146.7	111.5	152.9	187.3	126.9	129.4	151.1	
1924: February	152.4	148.0	142.9	127.5	109.9	127.1	135.6	165.1	113.9	164.8	144.3	157.2	168.3	157.3	155.4	139.4	146.7	112.6	164.7	185.5	123.2	130.5	149.1	
1924: March	153.1	148.4	144.4	128.8	109.9	128.1	134.4	163.6	110.8	168.5	100.9	151.4	166.1	156.2	155.4	139.4	146.7	111.5	152.9	187.3	126.9	129.0	150.3	
1924: April	155.9	160.7	146.5	130.6	109.9	136.7	134.1	164.7	108.2	171.8	95.1	120.4	161.1	156.2	155.4	139.4	146.7	111.5	152.9	187.3	126.9	129.0	150.3	
1924: May	159.8	155.2	148.5	133.1	110.7	142.4	133.7	164.7	107.0	168.5	104.6	126.9	155.7	151.7	155.4	139.4	146.7	112.6	164.7	180.0	140.3	130.5	141.3	
1924: June	160.2	156.1	148.5	132.5	109.3	143.8	134.1	165.8	107.0	168.5	104.6	126.9	155.7	151.7	155.4	139.4	146.7	113.8	170.6	167.3	141.6	130.7	141.0	
1924: July	160.2	155.2	147.0	131.3	108.3	144.3	134.8	166.2	108.2	165.7	114.2	129.2	155.7	151.7	155.4	145.5	150.0	114.9	194.1	152.7	142.3	130.1	143.3	
1924: August	160.2	156.1	147.0	131.3	108.3	165.7	141.9	173.2	122.2	163.4	129.3	126.1	155.7	153.9	167.1	154.5	156.7	117.2	152.9	149.1	145.6	130.3	144.2	
1924: September	158.3	153.8	146.5	130.6	109.1	170.5	145.6	174.3	126.6	165.7	150.4	126.6	156.6	156.2	157.1	154.5	160.0	118.4	152.9	156.4	148.7	130.5	146.8	

RETAIL PRICES OF FOOD

[1005]

TREND IN RETAIL PRICES OF FOOD IN THE UNITED STATES, JANUARY, 1915, TO AUGUST, 1924



Retail Prices of Food in

AVERAGE retail food prices are shown in Table 5 for 40 cities for 1924. For 11 other cities prices are shown for the same dates, scheduled by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

[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.			
		Sept. 15—		Aug.	Sept.	Sept. 15—		Aug.	Sept.	Sept. 15—		Aug.	Sept.
		1913	1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924
Sirloin steak.....	Pound.....	24.0	35.7	35.3	34.7	25.0	40.5	40.2	40.0	28.1	38.0	37.9	37.4
Round steak.....	do.....	21.5	32.2	31.9	31.6	23.0	37.6	36.2	35.7	22.5	33.7	33.1	32.9
Rib roast.....	do.....	19.6	27.9	26.8	26.7	19.0	31.3	31.1	30.6	20.6	27.8	27.8	26.8
Chuck roast.....	do.....	16.0	20.5	20.7	20.7	16.0	20.6	20.9	20.8	16.3	22.4	21.4	21.6
Plate beef.....	do.....	9.5	12.1	12.7	12.5	12.6	13.5	13.3	13.3	10.5	13.9	13.8	13.3
Pork chops.....	do.....	24.0	33.6	33.4	32.8	22.0	36.8	33.6	37.0	21.4	33.2	32.2	32.5
Bacon, sliced.....	do.....	33.1	36.8	36.4	38.0	26.5	34.9	35.3	35.5	35.0	39.7	38.5	39.8
Ham, sliced.....	do.....	31.0	46.3	46.6	46.6	32.0	51.9	52.0	51.7	32.5	47.5	46.0	45.8
Lamb, leg of.....	do.....	20.0	36.7	35.7	35.6	19.3	37.2	37.2	37.4	23.3	39.5	36.4	37.9
Hens.....	do.....	20.5	31.0	31.2	31.2	21.8	37.0	37.1	36.6	18.0	30.7	30.6	31.9
Salmon, canned, red.....	do.....		29.9	29.9	30.4		26.2	26.4	27.2		30.0	30.2	30.1
Milk, fresh.....	Quart.....	10.0	16.7	16.0	16.0	8.7	14.0	13.0	13.0	10.3	13.5	18.5	19.0
Milk, evaporated.....	15-16 oz. can.....		14.4	13.2	13.1		12.1	11.0	11.1		13.2	12.5	12.4
Butter.....	Pound.....	39.7	56.9	52.1	52.5	38.6	58.9	53.7	53.7	38.8	56.2	51.8	51.7
Oleomargarine.....	do.....		32.4	34.0	34.2		27.9	29.3	29.6		34.2	35.1	35.3
Nut margarine.....	do.....		26.7	26.5	27.0		27.7	26.8	27.0		31.6	33.2	33.1
Cheese.....	do.....	25.0	36.2	32.1	33.1	22.5	37.2	34.3	34.5	23.0	37.6	33.5	33.3
Lard.....	do.....	15.8	18.8	19.2	20.0	15.3	17.9	20.0	20.2	15.3	18.2	19.8	20.3
Vegetable lard substitute.....	do.....		21.6	24.2	24.9		22.4	24.7	24.8		20.1	21.6	21.8
Eggs, strictly fresh.....	Dozen.....	33.7	42.2	40.1	45.3	34.7	47.3	39.6	47.2	32.6	46.3	42.4	47.5
Bread.....	Pound.....	5.9	9.1	9.1	9.1	5.5	8.7	8.9	8.9	5.4	8.8	8.8	9.3
Flour.....	do.....	3.4	5.0	5.9	5.9	3.2	4.3	4.8	5.0	3.5	5.5	5.8	6.0
Corn meal.....	do.....	2.7	3.8	4.1	4.3	2.5	3.4	3.8	4.0	2.5	3.4	4.1	4.3
Rolled oats.....	do.....		9.1	9.0	9.2		8.5	8.3	8.4		9.3	9.3	9.4
Corn flakes.....	8-oz. pkg.....		9.8	9.8	10.3		8.8	8.9	9.6		10.0	10.1	10.9
Wheat cereal.....	28-oz. pkg.....		26.6	25.5	25.5		22.3	22.6	22.4		26.4	25.6	25.6
Macaroni.....	Pound.....		21.1	21.1	21.1		18.8	18.0	18.7		18.9	19.4	19.5
Rice.....	do.....	8.6	8.8	9.7	10.0	9.0	9.2	9.8	10.1	8.2	9.2	10.4	10.8
Beans, navy.....	do.....		13.1	12.1	12.2		10.4	9.3	9.6		11.9	11.3	11.5
Potatoes.....	do.....	2.3	4.9	3.5	3.5	1.8	4.0	2.3	2.4	2.2	4.5	3.9	3.7
Onions.....	do.....		7.8	8.2	7.9		6.4	6.6	5.9		6.8	7.6	7.0
Cabbage.....	do.....		5.7	5.2	5.1		4.7	4.9	4.4		5.8	5.6	5.3
Beans, baked.....	No. 2 can.....		13.6	12.1	12.1		11.5	11.3	11.4		14.0	13.3	13.6
Corn, canned.....	do.....		15.6	15.8	15.8		14.7	14.8	14.8		16.9	15.9	15.9
Peas, canned.....	do.....		17.6	18.8	18.8		16.7	17.?	17.1		20.6	21.5	21.3
Tomatoes, canned.....	do.....		13.3	13.6	13.5		12.1	12.4	12.3		11.9	12.4	12.5
Sugar, granulated.....	Pound.....	5.9	9.8	8.9	9.2	5.2	8.9	7.5	8.0	5.8	9.0	8.7	9.0
Tea.....	do.....	60.0	93.7	93.3	92.6	56.0	68.0	69.0	69.8	61.3	85.9	85.5	85.8
Coffee.....	do.....	32.0	37.5	42.9	43.3	24.8	32.7	41.1	41.4	28.8	39.1	42.2	42.6
Prunes.....	do.....		18.5	17.6	17.4		17.4	16.0	16.2		20.9	20.6	20.6
Raisins.....	do.....		18.8	16.8	16.4		14.6	13.7	13.6		19.2	17.0	17.1
Bananas.....	Dozen.....		28.3	23.1	23.1		27.7	26.4	26.7		38.1	37.4	35.6
Oranges.....	do.....		45.2	44.4	44.4		57.7	48.7	48.5		51.0	44.5	49.2

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.

51 Cities on Specified Dates

September 15, 1913 and 1923, and for August 15 and September 15, with the exception of September, 1913, as these cities were not

ARTICLES OF FOOD IN 51 CITIES ON 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.				
Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	
1913	1923						1913	1923						1913	1923			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
135.8	164.9	164.5	164.8	49.7	48.3	48.1	23.3	40.1	40.5	39.9	29.6	30.5	28.4	21.4	35.6	33.3	32.8	
35.6	56.2	53.6	52.4	43.0	40.5	40.7	19.8	33.8	34.1	33.4	24.8	25.9	24.0	20.4	31.9	30.0	30.0	
25.6	40.2	38.5	37.9	38.5	35.7	35.5	17.0	28.5	28.8	28.7	23.0	23.0	23.0	20.4	28.8	25.0	26.1	
18.7	26.3	25.1	24.5	27.5	25.4	26.1	15.5	21.1	21.5	21.3	16.6	16.2	15.7	15.0	21.3	19.2	19.4	
-----	17.2	16.2	16.8	11.9	10.7	10.6	11.5	12.1	11.7	12.0	10.5	10.8	10.4	12.1	14.1	13.3	13.8	
25.0	39.4	37.7	38.8	39.2	37.5	38.7	23.0	39.7	37.3	78.7	34.0	33.2	31.1	25.0	33.8	31.7	31.7	
25.8	37.4	38.4	38.8	44.7	43.1	43.2	23.3	33.4	32.0	32.7	48.2	46.8	47.3	27.0	35.3	33.9	35.0	
32.0	52.7	53.1	53.3	54.4	52.3	52.4	28.0	46.6	47.2	46.9	51.8	52.0	53.0	28.8	40.8	43.5	43.1	
20.5	40.8	39.9	38.6	40.9	39.1	38.8	15.3	33.2	32.0	31.6	33.5	37.2	34.7	22.5	41.7	39.4	39.3	
26.2	39.2	38.9	40.2	39.0	38.1	38.7	21.0	35.0	34.9	35.0	30.1	30.3	31.1	21.9	36.6	35.2	35.1	
-----	29.2	29.6	29.8	29.9	29.9	29.9	-----	27.2	27.1	27.6	38.5	37.2	37.2	-----	25.8	26.5	26.9	
8.9	14.9	13.9	14.9	15.0	14.0	15.0	8.0	13.3	12.0	13.0	14.3	14.3	14.3	12.0	18.0	18.5	18.5	
-----	12.8	11.6	11.6	12.5	11.4	11.4	-----	11.8	10.5	10.5	12.5	10.6	10.6	-----	12.0	10.6	10.6	
37.4	55.0	49.7	49.0	55.7	50.8	50.7	35.8	55.1	46.9	47.2	55.5	46.8	47.3	37.0	53.1	48.1	47.3	
-----	30.7	32.3	31.8	28.3	30.0	30.3	-----	28.4	29.6	29.5	-----	-----	-----	-----	29.0	30.6	30.8	
-----	26.4	28.1	28.9	26.3	28.0	28.0	-----	27.1	27.6	27.6	32.7	33.6	33.6	-----	28.5	31.5	31.5	
22.4	38.6	36.5	36.3	39.0	38.7	38.1	19.5	36.7	35.2	35.1	38.3	37.3	37.3	20.5	34.9	29.8	30.3	
15.8	18.1	19.4	20.4	17.2	18.5	19.0	14.4	17.0	18.6	19.3	20.2	22.1	22.4	15.3	18.9	19.6	20.9	
-----	24.3	22.0	23.7	23.3	25.1	25.8	-----	22.5	25.0	25.1	26.3	27.3	28.6	-----	22.2	25.6	25.8	
47.1	71.6	69.0	75.7	66.3	58.6	63.9	33.8	50.9	44.8	57.4	54.5	50.5	55.0	33.3	37.5	41.6	49.7	
5.9	8.4	8.5	8.5	8.6	8.4	8.5	5.6	8.4	8.4	8.4	9.6	9.6	9.6	6.4	10.2	10.7	10.7	
3.7	5.0	5.7	5.6	4.5	5.2	5.2	3.0	4.0	4.9	4.9	5.1	5.6	5.6	3.8	5.9	6.1	6.1	
3.5	5.2	5.3	5.4	7.1	7.3	7.0	2.6	3.7	4.4	4.6	4.0	4.5	4.8	2.6	3.1	3.9	4.0	
-----	8.8	9.0	9.1	8.3	8.4	8.4	-----	7.7	7.4	8.0	6.8	7.0	7.1	-----	9.5	9.3	9.3	
-----	9.5	9.4	9.9	9.5	9.2	9.7	-----	9.1	8.9	9.6	11.9	12.3	12.0	-----	10.0	10.0	10.7	
-----	24.6	24.1	24.2	23.5	23.4	23.3	-----	23.9	23.9	23.9	28.3	27.8	28.0	-----	25.0	25.0	25.4	
-----	23.4	23.0	22.9	24.0	23.1	23.0	-----	21.5	20.7	20.8	21.3	20.5	20.2	-----	20.2	20.0	20.0	
9.4	11.1	11.1	11.2	10.1	10.6	10.7	9.3	8.9	9.9	9.8	10.1	10.0	10.8	5.5	6.6	8.0	8.1	
-----	10.4	10.3	10.3	11.4	10.3	10.6	-----	10.9	9.5	9.6	11.0	10.7	10.7	-----	11.8	11.1	10.5	
1.7	3.3	2.4	2.4	3.8	2.3	2.3	2.0	3.7	2.3	2.2	2.6	3.1	2.3	2.3	3.6	2.9	2.8	
-----	7.0	7.2	5.9	6.6	6.6	6.3	-----	6.9	7.1	5.8	4.8	6.1	5.1	-----	5.4	6.5	5.8	
-----	5.0	5.1	4.8	6.1	4.0	4.3	-----	5.4	3.5	2.8	3.5	5.6	4.6	-----	5.7	5.1	4.5	
-----	14.7	14.0	14.0	11.8	12.3	12.3	-----	11.2	10.4	10.5	17.5	15.7	15.7	-----	11.0	10.4	10.5	
-----	19.5	19.2	19.2	18.9	19.1	19.1	-----	14.6	15.9	15.8	15.0	15.7	16.1	-----	14.3	14.8	14.8	
-----	21.4	21.8	21.7	21.5	21.2	21.4	-----	15.6	16.6	16.8	16.0	16.4	16.4	-----	17.9	18.3	18.3	
-----	12.7	12.7	12.6	13.5	14.0	13.8	-----	13.4	14.0	14.0	14.9	14.6	14.3	-----	10.8	10.7	10.8	
5.6	9.5	7.9	8.5	9.5	7.7	8.2	5.6	9.4	7.7	8.3	11.9	10.6	10.6	5.4	9.0	7.7	8.0	
58.6	69.7	68.8	68.8	58.3	58.6	58.4	45.0	62.4	65.0	64.3	82.5	85.0	85.0	50.0	70.7	70.3	70.3	
33.0	43.2	49.7	50.3	35.7	41.7	42.5	29.3	35.2	41.3	42.4	45.4	51.8	53.5	26.3	33.1	36.3	37.1	
-----	18.9	17.2	16.9	18.3	17.3	17.8	-----	18.9	16.8	16.6	20.0	18.9	18.2	-----	18.7	14.6	15.0	
-----	16.0	14.8	14.6	16.7	15.2	15.4	-----	15.0	14.1	13.9	20.0	18.7	17.0	-----	17.0	14.8	14.8	
-----	48.8	47.3	44.1	37.0	35.0	35.0	-----	45.0	39.6	40.0	15.2	15.0	14.7	-----	40.7	39.3	35.7	
-----	54.3	56.8	60.2	64.2	61.2	65.0	-----	54.4	50.6	56.7	50.0	40.8	42.1	-----	46.3	40.0	38.0	

¹ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Chicago, Ill.				Cincinnati, Ohio				Cleveland, Ohio			
		Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924
		1913	1923			1913	1923			1913	1923		
Sirloin steak	Pound	24.3	43.0	41.6	41.5	23.7	36.5	36.1	35.1	25.4	38.2	38.9	39.2
Round steak	do	21.4	32.7	32.8	33.0	21.2	32.8	32.0	31.3	22.9	31.6	32.4	32.6
Rib roast	do	20.3	31.4	31.4	31.6	18.5	28.7	27.9	27.9	18.9	26.4	26.4	26.6
Chuck roast	do	15.9	21.0	20.8	21.1	14.5	18.8	18.6	18.5	16.9	20.7	21.5	21.3
Plate beef	do	11.9	12.0	12.9	12.8	11.7	14.1	13.8	13.9	11.7	11.0	11.5	11.9
Pork chops	do	21.8	34.6	31.9	34.1	22.7	37.3	33.9	35.5	24.4	40.5	38.6	39.5
Bacon, sliced	do	32.6	44.9	43.2	43.1	26.0	33.9	32.5	34.1	29.6	40.3	39.9	40.1
Ham, sliced	do	32.2	48.8	48.7	48.3	29.8	47.9	49.1	49.0	37.3	49.3	51.0	51.2
Lamb, leg of	do	19.9	37.4	36.3	36.3	16.8	32.9	33.1	32.6	18.7	35.4	35.8	35.5
Hens	do	19.2	33.8	33.9	34.7	26.0	36.4	35.2	34.9	21.9	36.6	36.5	35.9
Salmon, canned, red	do		33.5	32.5	32.5		28.0	28.3	28.3		29.3	29.5	29.5
Milk, fresh	Quart	8.0	14.0	14.0	14.0	8.0	12.0	10.0	10.0	8.0	14.0	14.0	14.0
Milk, evaporated	15-16 oz. can		11.5	10.7	10.6		11.6	10.2	10.1		11.7	10.6	10.6
Butter	Pound	35.3	53.1	45.7	45.4	38.0	53.5	46.3	46.9	38.3	57.0	48.0	48.4
Oleomargarine	do		25.9	27.1	27.2		30.5	31.5	31.6		29.6	31.3	31.7
Nut margarine	do		24.7	25.0	25.1		27.8	29.1	29.6		27.6	30.0	30.5
Cheese	do	25.7	40.0	38.8	39.2	21.0	38.6	33.6	34.6	24.0	35.3	32.7	33.1
Lard	do	15.0	17.1	19.0	19.8	14.3	17.4	18.4	18.6	16.4	18.9	20.5	21.0
Vegetable lard substitute	do		24.3	25.7	26.1		23.8	25.1	25.3		24.5	26.8	27.0
Eggs, strictly fresh	Dozen	30.4	46.1	43.8	50.8	30.1	42.2	36.5	45.1	36.8	50.6	48.4	58.6
Bread	Pound	6.1	9.7	9.7	9.9	4.8	8.4	8.4	8.5	5.6	7.9	8.0	8.0
Flour	do	2.9	4.1	4.6	4.7	3.3	4.5	5.0	5.1	3.2	4.6	5.1	5.1
Corn meal	do	2.8	5.5	5.6	5.7	2.7	3.4	4.1	4.2	2.9	3.9	4.5	4.5
Rolled oats	do		8.6	8.4	8.4		8.7	8.4	8.5		8.6	8.7	8.6
Corn flakes	8-oz. pkg.		9.2	9.1	9.6		9.3	9.1	9.5		9.9	9.8	10.6
Wheat cereal	28-oz. pkg.		23.4	23.5	23.5		23.5	23.2	23.3		24.5	24.9	25.1
Macaroni	Pound		18.5	17.8	17.9		16.6	15.9	16.0		19.4	19.4	19.2
Rice	do	9.0	10.2	10.8	10.8	8.8	9.0	10.2	10.5	9.0	9.0	10.4	10.5
Beans, navy	do		10.6	9.7	9.9		10.0	7.8	8.2		10.4	8.5	8.9
Potatoes	do	1.8	3.3	2.8	2.6	2.4	3.0	2.5	2.4	2.0	4.0	2.5	2.6
Onions	do		5.9	6.3	6.1		6.0	5.6	5.4		5.9	6.5	5.9
Cabbage	do		3.8	4.1	3.8		4.7	3.5	4.1		4.6	4.3	4.4
Beans, baked	No. 2 can		12.9	12.8	12.7		11.4	11.1	11.2		12.9	12.5	12.3
Corn, canned	do		15.4	15.9	15.9		13.8	14.4	14.6		15.6	16.1	16.3
Peanut butter	do		16.8	17.8	17.9		16.9	17.1	17.1		16.7	17.3	17.5
Tomatoes, canned	do		14.0	14.3	14.3		12.7	13.2	13.2		13.6	14.2	14.3
Sugar, granulated	Pound	5.2	9.1	8.0	8.2	5.6	9.6	8.0	8.4	5.6	9.5	8.1	8.9
Tea	do	55.0	72.6	72.1	72.8	60.0	72.5	74.2	74.2	50.0	68.1	65.8	65.8
Coffee	do	30.7	38.0	43.9	45.7	25.6	32.9	38.5	39.7	26.5	39.4	46.4	46.8
Prunes	do		20.6	18.6	18.8		18.5	17.4	17.7		18.8	17.7	17.7
Raisins	do		17.3	16.6	16.2		17.1	15.4	15.1		16.7	15.0	15.0
Bananas	Dozen		39.0	40.2	41.0		42.3	37.5	37.1		51.9	44.3	45.7
Oranges	do		52.7	50.0	54.1		50.2	43.7	46.8		52.6	45.8	49.7

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

RETAIL PRICES OF FOOD

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Columbus, Ohio			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924
			1913	1923			1913	1923			1913	1923			1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
37.1	39.1	39.1	23.0	33.9	33.8	33.8	24.3	32.4	33.5	31.0	26.3	40.4	40.5	39.4	35.6	161.3	60.3	59.8
32.6	33.7	33.8	21.3	30.3	29.8	29.8	21.4	28.5	29.6	26.9	21.0	32.3	32.7	32.0	28.4	44.6	43.8	43.9
27.8	29.8	30.0	20.8	26.4	28.0	28.0	17.8	23.3	23.6	22.7	20.0	28.4	28.5	27.9	33.2	30.6	28.5	27.9
21.1	23.3	23.7	16.9	21.1	21.6	22.1	15.8	17.3	18.0	17.1	15.0	21.1	20.7	20.5	18.4	22.1	21.8	21.8
13.0	14.9	15.2	13.2	16.9	15.5	16.5	9.7	10.3	10.3	10.0	11.0	12.0	12.5	12.0	-----	12.7	13.8	13.3
33.1	31.9	33.1	22.0	33.8	32.0	32.5	20.4	36.4	34.2	34.6	22.3	40.4	36.7	38.5	22.2	34.1	32.8	33.9
38.3	39.2	41.3	38.3	37.9	41.5	42.7	29.0	42.9	40.9	41.5	24.7	41.5	37.1	38.7	25.7	36.9	33.3	33.3
46.6	48.3	46.9	32.5	50.0	50.6	50.6	33.3	50.5	49.3	49.5	27.0	51.3	51.0	51.7	33.0	48.1	47.4	47.9
35.3	43.0	41.0	23.3	41.3	40.8	40.0	16.0	35.9	36.1	35.9	16.0	39.0	38.4	37.4	19.2	41.0	40.8	41.1
32.0	34.2	33.6	18.7	28.6	28.2	28.9	19.7	28.9	30.3	28.9	20.5	36.3	35.6	36.6	24.5	42.9	41.8	42.8
31.6	31.6	31.8	-----	30.2	31.4	31.4	-----	33.4	32.6	32.6	-----	30.1	29.4	29.9	-----	31.6	30.8	30.9
13.0	12.0	12.0	10.0	15.0	15.0	15.0	8.4	11.7	11.7	11.7	8.0	15.0	14.0	14.0	9.0	14.0	13.4	14.0
11.8	11.0	10.7	-----	14.0	13.4	13.3	-----	11.7	10.6	10.5	-----	11.8	10.5	10.4	-----	13.4	12.3	12.3
53.3	46.3	45.7	38.3	54.4	49.9	49.3	38.6	50.5	42.1	42.8	35.9	55.5	47.1	47.2	35.3	52.5	48.8	48.5
28.0	30.0	30.3	-----	30.0	35.0	35.0	-----	29.3	32.5	31.4	-----	29.0	30.2	30.2	-----	31.7	31.7	31.3
25.9	29.2	29.1	-----	31.3	33.1	33.1	-----	28.7	29.4	29.5	-----	26.8	27.3	27.5	-----	27.7	30.0	29.7
35.6	33.3	34.4	20.0	35.9	32.8	32.2	26.1	39.2	36.7	37.3	20.7	37.9	35.0	35.1	23.2	38.8	38.4	37.9
15.8	18.1	19.1	16.5	21.4	23.3	23.7	16.5	19.0	20.4	20.6	16.9	18.5	19.2	20.4	15.3	17.6	18.9	19.1
22.6	25.1	25.3	-----	20.3	23.1	23.0	-----	21.5	26.2	26.1	-----	23.7	25.9	25.9	-----	24.6	26.0	26.0
39.7	36.8	42.7	-----	40.9	38.2	46.3	32.1	43.6	40.0	43.7	32.0	48.1	42.8	49.1	46.9	70.2	60.1	74.0
7.7	7.7	7.8	5.3	8.7	8.7	8.7	5.5	7.8	7.7	7.9	5.6	8.6	8.8	8.8	6.2	9.1	8.8	8.8
4.1	4.7	4.9	3.2	4.4	4.9	4.9	2.6	3.7	4.0	4.0	3.1	4.0	4.6	4.7	3.4	4.9	5.2	5.3
3.3	4.0	4.2	3.3	3.7	4.6	5.0	2.6	3.2	3.6	3.8	2.8	4.5	4.8	5.2	3.5	6.1	7.2	7.2
9.1	9.5	9.4	-----	10.7	10.3	10.5	-----	9.1	9.0	9.0	-----	8.8	9.0	9.0	-----	9.7	9.5	9.6
10.6	9.7	9.7	-----	11.0	9.8	10.5	-----	9.9	10.0	10.1	-----	9.1	8.9	9.6	-----	10.0	10.0	10.6
24.2	24.1	24.3	-----	25.1	25.6	25.6	-----	24.7	24.6	24.6	-----	24.3	23.7	23.7	-----	26.7	26.3	26.7
19.4	19.7	20.0	-----	21.1	21.0	21.4	-----	20.6	19.8	20.4	-----	19.1	19.4	19.5	-----	23.3	23.2	23.2
10.2	10.3	11.2	9.3	10.0	11.6	11.6	8.6	9.6	10.2	10.2	8.4	9.4	9.8	10.1	10.0	10.2	10.6	10.4
9.7	8.0	8.9	-----	11.5	11.5	11.9	-----	12.4	10.9	10.8	-----	9.6	7.9	8.3	-----	10.7	9.9	10.1
3.2	2.7	2.6	2.8	4.2	4.7	4.4	1.8	2.9	2.7	2.3	1.9	3.2	2.2	2.1	1.9	3.7	2.2	2.3
7.4	7.5	7.5	-----	7.0	7.4	7.1	-----	4.7	5.9	4.9	-----	6.1	6.4	5.2	-----	6.9	7.2	6.2
4.5	4.9	5.5	-----	5.4	6.3	5.9	-----	2.3	2.3	2.3	-----	5.0	3.4	3.5	-----	4.7	4.9	4.6
13.6	13.5	13.4	-----	14.4	15.0	15.0	-----	14.5	13.8	13.8	-----	11.9	11.6	11.9	-----	13.0	12.6	12.6
12.6	13.6	14.0	-----	16.1	18.1	17.8	-----	14.8	14.8	15.0	-----	14.8	15.7	15.8	-----	16.1	16.4	16.4
14.7	16.0	15.7	-----	21.1	21.8	21.8	-----	16.4	16.9	16.7	-----	16.5	17.3	17.4	-----	17.7	18.8	18.6
13.5	13.8	14.2	-----	14.2	14.5	14.6	-----	13.4	14.6	14.7	-----	12.7	13.0	13.2	-----	13.8	13.8	14.1
9.8	8.3	8.7	5.9	10.2	9.3	9.5	5.9	10.2	9.2	9.5	5.7	9.5	7.9	8.3	5.7	9.8	8.4	8.7
77.5	78.9	80.8	66.7	92.3	98.6	98.6	52.8	66.9	67.6	67.3	43.3	62.4	64.0	64.0	44.2	59.4	59.6	59.6
36.9	43.9	45.0	36.7	42.5	52.0	52.0	29.4	36.2	42.9	43.0	29.3	38.0	43.5	44.5	33.0	39.8	45.2	45.8
19.5	17.9	20.3	-----	20.5	20.0	20.0	-----	20.3	18.0	18.4	-----	18.2	18.0	18.6	-----	17.5	15.5	15.7
15.9	15.4	15.1	-----	18.2	16.9	16.9	-----	18.1	14.8	14.9	-----	16.5	15.3	15.3	-----	18.0	16.1	16.5
39.4	39.0	38.3	-----	33.3	31.3	31.3	-----	12.4	11.8	11.8	-----	36.9	33.0	33.0	-----	11.0	9.6	9.4
50.3	42.3	45.4	-----	53.6	47.1	48.1	-----	50.2	40.7	43.6	-----	51.7	48.6	49.8	-----	48.9	39.3	41.0

² Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924
					1913	1923			1913	1923		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	29.6	28.8	28.5	26.0	38.9	37.7	36.9	25.8	33.8	35.0	34.4
Round steak	do	28.9	28.5	27.3	25.2	38.1	36.1	35.6	21.5	28.8	28.9	27.8
Rib roast	do	23.9	22.9	22.5	17.8	26.3	26.9	26.6	22.5	26.0	27.0	27.0
Church roast	do	18.9	17.9	16.7	16.3	22.7	22.4	22.4	15.0	17.0	18.0	18.0
Plate beef	do	15.3	14.8	14.4	12.5	14.4	14.0	14.3	11.4	10.7	10.4	10.6
Pork chops	do	31.8	31.3	31.5	22.8	35.6	33.4	35.1	23.5	30.0	30.6	30.3
Bacon, sliced	do	44.7	41.8	42.1	30.8	36.9	33.4	35.7	29.0	35.0	33.8	35.1
Ham, sliced	do	45.4	45.0	46.9	31.7	50.0	47.7	47.2	30.3	43.8	43.9	45.0
Lamb, leg of	do	35.0	33.0	33.0	20.7	39.2	39.2	40.0	20.8	35.0	33.8	33.8
Hens	do	33.8	31.4	34.6	21.0	33.3	32.9	33.0	23.5	33.5	33.1	34.9
Salmon, canned, red	do	30.6	29.5	30.0	---	37.0	34.3	34.3	---	30.8	30.5	30.6
Milk, fresh	Quart	15.3	15.3	15.3	8.0	12.0	12.0	12.0	12.3	16.3	18.7	18.7
Milk, evaporated	15-16 oz. can.	12.8	12.2	11.4	---	11.6	10.1	10.1	---	12.7	11.8	12.1
Butter	Pound	54.3	48.1	47.8	36.8	55.1	45.1	45.9	39.8	53.9	50.1	49.2
Oleomargarine	do	32.5	31.4	31.6	---	29.4	31.0	31.9	---	29.4	30.4	29.4
Nut margarine	do	29.3	30.5	31.2	---	27.2	29.8	30.6	---	27.0	28.0	28.5
Cheese	do	34.6	31.1	31.3	21.3	36.5	32.9	33.6	22.5	34.9	30.4	29.3
Lard	do	19.9	20.7	21.0	15.2	15.3	17.5	18.3	15.5	18.0	19.1	20.1
Vegetable lard substitute	do	17.3	19.6	19.7	---	24.0	25.3	25.3	---	23.4	23.6	23.7
Eggs, strictly fresh	Dozen	38.4	37.6	43.7	30.4	40.8	34.8	43.3	36.7	51.5	45.5	50.9
Bread	Pound	7.1	7.5	8.0	---	8.5	8.5	8.5	6.2	10.1	10.2	10.3
Flour	do	4.5	5.0	5.1	3.2	4.4	5.0	5.1	3.8	5.3	5.7	5.7
Corn meal	do	3.8	4.8	5.0	2.6	3.4	4.1	4.2	3.1	3.6	4.1	4.2
Roll'd oats	do	8.7	9.2	9.2	---	7.6	7.7	7.6	---	9.3	9.2	9.2
Corn flakes	8-oz. pkg	9.7	9.8	10.1	---	8.8	9.0	10.2	---	9.7	9.6	10.0
Wheat cereal	28-oz. pkg	23.9	24.3	24.2	---	23.9	24.5	25.0	---	24.4	24.8	25.3
Macaroni	Pound	19.9	19.1	19.3	---	18.5	19.0	19.1	---	19.4	19.5	19.4
Rice	do	7.7	9.4	9.6	9.2	10.2	11.0	11.2	6.6	8.6	9.5	9.5
Beans, navy	do	10.6	10.6	10.5	---	10.0	8.4	9.2	---	11.1	10.9	10.8
Potatoes	do	4.4	4.2	4.0	2.1	3.2	2.3	2.3	2.6	4.4	4.3	3.7
Onions	do	6.3	6.6	6.2	---	7.0	6.5	5.8	---	7.5	7.5	7.3
Cabbage	do	4.9	5.1	5.2	---	4.5	3.9	3.7	---	5.4	5.3	4.9
Beans, baked	No. 2 can.	13.2	13.1	13.2	---	13.2	13.0	12.7	---	11.5	11.5	11.5
Pears, canned	do	13.8	15.4	15.4	---	13.6	14.5	14.8	---	16.4	17.9	17.9
Peanut butter	do	17.8	18.8	18.2	---	16.0	16.0	16.3	---	16.9	19.2	18.8
Tomatoes, canned	do	11.9	12.7	12.9	---	14.0	14.3	14.5	---	11.0	11.3	11.7
Sugar, granulated	Pound	9.1	8.2	8.5	6.0	9.9	8.3	8.8	5.9	9.7	8.7	8.9
Tea	do	70.8	73.7	73.2	60.0	77.1	79.3	79.3	60.0	86.5	92.2	92.2
Coffee	do	32.9	39.3	39.8	30.0	38.2	44.6	45.5	34.5	38.5	44.5	44.8
Prunes	do	17.2	19.0	18.7	---	19.6	20.0	20.0	---	19.6	18.5	18.2
Raisins	do	16.9	16.0	16.1	---	17.8	16.9	16.7	---	18.8	17.0	16.6
Bananas	Dozen	30.5	29.5	30.0	---	31.3	30.0	30.4	---	33.0	26.3	28.8
Oranges	do	45.3	37.5	41.1	---	48.9	40.4	44.0	---	59.7	53.0	60.0

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

RETAIL PRICES OF FOOD

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Kansas City, Mo.			Little Rock, Ark.			Los Angeles, Calif.			Louisville, Ky.			Manchester, N. H.		
Sept. 15—		Aug. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15—		Aug. 15, 1924
1913	1923		1913	1923		1913	1923		1913	1923		1913	1923	
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
24.7	39.2	38.3	37.4	25.0	35.0	33.9	34.2	24.0	33.9	35.2	35.9	23.0	32.8	33.3
22.3	33.8	33.3	32.0	20.0	31.1	30.3	31.1	21.0	27.9	29.1	28.7	20.0	29.7	30.0
17.7	27.0	26.5	26.2	20.0	26.7	25.4	26.0	19.6	27.7	29.3	29.5	18.2	23.2	25.3
15.4	18.2	19.6	18.9	17.5	20.0	18.8	20.6	15.8	17.0	19.3	20.0	15.9	17.7	18.1
12.1	10.8	11.1	11.1	13.0	15.8	14.8	15.8	12.1	12.6	13.2	13.5	13.1	13.4	14.2
22.8	35.3	35.7	35.7	21.5	33.9	33.5	31.9	25.4	37.5	39.5	40.2	22.1	32.5	30.8
31.3	42.6	40.5	41.1	36.7	42.0	39.6	40.0	33.1	49.8	48.2	48.4	29.5	33.5	33.9
30.3	46.9	47.2	47.1	30.0	47.7	47.6	47.8	35.8	57.2	58.9	60.8	29.0	41.3	43.6
18.3	32.3	36.5	34.2	20.0	40.0	38.7	40.0	18.8	33.3	32.8	33.0	17.8	34.6	34.6
16.8	28.9	31.2	30.8	20.0	28.4	27.3	30.1	26.2	38.9	38.1	39.8	21.8	30.9	35.5
---	33.0	33.9	33.6	---	31.4	31.2	31.1	---	37.8	36.8	34.0	---	29.3	29.0
9.3	13.3	13.0	13.0	10.0	15.3	15.7	15.7	10.0	15.0	17.0	17.0	8.8	13.0	12.0
---	12.0	11.6	11.3	---	13.3	12.0	11.7	---	10.7	10.1	10.0	---	12.2	11.9
38.8	54.2	43.6	45.0	42.5	54.5	48.1	48.2	43.5	59.8	51.3	51.7	39.6	55.8	47.6
---	27.2	27.9	27.6	---	31.0	31.6	31.4	---	33.3	35.2	35.2	---	29.3	30.0
---	27.7	28.3	28.6	---	28.7	29.1	29.0	---	29.8	29.3	29.7	---	25.1	30.8
21.8	38.3	34.7	34.9	23.3	37.6	33.3	34.5	19.5	37.5	36.8	37.8	22.5	34.7	31.8
16.4	18.7	19.9	20.1	16.5	19.1	20.9	22.0	17.9	19.2	20.4	20.6	16.3	16.1	18.5
---	26.1	26.5	---	---	21.3	22.2	22.2	---	22.9	25.5	26.0	---	26.7	27.0
28.8	38.8	37.4	42.7	32.5	40.7	38.5	43.4	46.3	54.1	45.5	53.3	30.0	39.3	35.7
---	6.0	7.9	8.4	8.5	6.0	8.1	8.0	8.1	6.0	9.0	8.7	8.8	5.7	8.4
3.0	4.1	4.8	4.9	3.6	4.8	5.3	5.5	3.5	4.6	4.8	4.9	3.5	4.8	5.6
2.8	4.5	5.0	5.4	2.5	3.3	4.3	4.1	3.3	4.3	5.0	5.3	2.5	3.0	4.4
---	8.9	8.9	9.1	---	10.1	9.4	9.7	---	9.7	9.3	9.6	---	8.4	8.7
---	10.2	9.9	10.5	---	9.8	9.5	10.7	---	9.5	9.8	10.1	---	9.1	9.1
---	25.4	25.2	25.2	---	25.1	24.9	24.9	---	23.2	22.8	22.8	---	23.8	24.6
---	21.4	21.7	21.4	---	20.3	19.8	19.8	---	15.6	16.1	17.2	---	16.7	16.7
8.7	9.2	9.9	9.8	8.3	7.8	9.6	9.9	7.7	9.8	10.7	10.6	8.3	9.5	10.3
---	10.5	9.7	9.8	---	11.5	10.2	10.3	---	9.9	9.5	9.6	---	8.8	8.7
2.0	2.7	1.9	2.1	2.4	3.8	3.2	3.1	1.7	3.9	3.5	3.3	2.4	3.6	1.8
---	6.7	6.3	7.0	---	7.0	7.1	6.7	---	5.6	5.2	5.3	---	6.0	5.1
---	4.5	3.0	3.9	---	5.4	4.8	4.5	---	4.1	6.3	6.4	---	4.8	3.8
---	14.3	14.0	14.0	---	13.2	12.6	12.6	---	13.0	12.6	12.4	---	11.3	11.5
---	14.0	14.5	14.7	---	15.3	14.7	14.7	---	16.5	15.5	16.8	---	13.5	15.5
---	15.4	15.9	15.9	---	18.8	18.9	18.9	---	18.4	18.1	18.9	---	15.5	16.8
---	13.8	14.0	14.1	---	12.9	12.9	12.9	---	14.9	14.3	16.0	---	11.7	12.5
5.9	9.8	8.8	9.1	5.7	10.6	8.9	9.4	5.7	9.9	8.2	8.7	5.7	9.5	8.1
54.0	79.6	79.2	77.7	50.0	92.3	88.5	88.5	54.5	69.4	69.1	74.6	65.0	71.5	72.6
29.8	39.4	45.6	46.5	30.8	41.0	46.2	46.6	36.3	38.9	48.3	49.3	27.5	36.3	43.1
---	18.6	18.1	17.2	---	19.8	18.0	19.2	---	18.3	16.5	16.3	---	18.5	16.0
---	18.9	16.4	16.3	---	19.9	18.3	17.7	---	17.1	12.8	12.8	---	16.0	14.8
---	12.9	9.9	10.4	---	10.7	8.8	8.5	---	11.8	10.0	10.2	---	37.9	38.0
---	50.3	45.4	47.3	---	48.3	43.8	47.1	---	38.3	39.4	44.0	---	41.6	39.4

² No. 2½ can.

³ No. 3 can.

⁴ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Sept. 15—		Aug.	Sept.	Sept. 15—		Aug.	Sept.	Sept. 15—		Aug.	Sept.
		1913	1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924
Sirloin steak	Pound	Cts. 24.0	Cts. 34.8	Cts. 32.5	Cts. 32.5	Cts. 23.6	Cts. 39.6	Cts. 39.2	Cts. 38.8	Cts. 24.0	Cts. 32.9	Cts. 33.0	Cts. 30.9
Round steak	do	20.0	31.0	28.6	28.6	21.6	35.1	33.7	33.4	21.3	29.7	29.8	28.1
Rib roast	do	21.0	25.7	24.8	25.3	19.2	28.3	28.1	27.7	19.3	25.0	26.8	24.2
Chuck roast	do	15.0	19.0	17.5	17.8	16.4	23.0	22.8	22.9	17.0	18.9	20.1	18.8
Plate beef	do	11.9	14.5	13.1	13.8	12.0	12.6	12.9	13.0	10.4	10.1	10.4	9.9
Pork chops	do	22.5	31.7	27.8	27.1	21.6	38.3	35.9	36.3	20.8	34.5	32.9	34.3
Bacon, sliced	do	31.0	37.7	33.6	35.0	28.6	41.6	39.9	39.8	27.7	41.8	39.9	40.9
Ham, sliced	do	30.0	45.8	41.7	42.9	29.0	45.1	45.3	46.0	32.7	47.3	45.0	46.3
Lamb, leg of	do	20.6	36.3	36.1	36.6	20.5	37.5	36.9	36.1	14.8	33.7	34.3	34.0
Hens	do	19.5	29.0	28.2	28.5	19.8	32.0	30.1	32.3	19.4	28.4	29.3	30.4
Salmon, canned, red	do	36.0	36.2	36.6	36.6	35.3	34.9	34.2	34.2	36.6	37.2	36.7	36.7
Milk, fresh	Quart	10.0	15.0	14.7	14.7	7.0	11.0	11.0	11.0	7.7	12.0	11.0	11.0
Milk, evaporated	15-16 oz. can	13.0	11.1	11.2	11.2	11.5	10.9	10.9	10.9	12.6	11.1	11.1	11.1
Butter	Pound	38.0	61.9	44.1	44.9	34.8	53.5	44.0	44.3	34.6	50.2	43.1	42.5
Oleomargarine	do	30.0	27.5	26.0	26.0	26.9	28.2	28.6	28.6	27.1	28.4	28.0	28.0
Nut margarine	do	24.2	24.3	24.3	24.3	26.0	27.1	27.1	27.1	25.7	25.9	26.3	26.3
Cheese	do	20.8	35.8	29.2	30.6	21.3	36.2	32.1	32.3	20.8	35.8	31.4	31.8
Lard	do	16.3	17.6	17.5	18.8	15.8	18.3	20.0	20.6	15.7	17.6	18.9	19.0
Vegetable lard substitute	do	22.9	23.6	24.0	24.0	23.5	25.6	25.9	25.9	24.7	27.4	27.4	27.4
Eggs, strictly fresh	Dozen	29.0	40.2	36.4	42.9	30.0	39.0	37.9	44.5	29.6	36.9	35.4	41.2
Bread	Pound	6.0	8.9	9.1	9.1	5.7	8.9	9.2	9.2	5.6	9.0	8.9	8.9
Flour	do	3.5	5.1	5.5	5.6	3.1	4.1	4.7	4.8	3.0	4.3	5.1	5.0
Corn meal	do	2.2	3.4	4.0	4.3	3.3	3.9	4.5	4.9	2.5	3.8	4.4	4.4
Rolled oats	do	9.3	9.2	9.1	9.1	7.5	8.2	8.2	8.2	8.7	8.1	8.2	8.2
Corn flakes	8-oz. pkg.	9.8	9.5	10.3	10.3	9.2	9.2	9.5	9.5	10.2	10.1	10.2	10.2
Wheat cereal	28-oz. pkg.	24.6	24.1	23.8	23.8	24.2	24.1	24.1	24.1	24.4	24.0	24.0	24.0
Macaroni	Pound	17.7	18.3	18.4	18.4	17.6	17.4	17.5	17.5	17.6	17.2	17.2	17.2
Rice	do	7.5	8.0	9.2	9.3	9.0	10.2	10.4	10.7	8.6	9.4	9.9	9.8
Beans, navy	do	10.9	9.2	10.0	10.0	10.5	9.1	9.1	9.1	10.4	9.3	9.4	9.4
Potatoes	do	2.2	3.8	3.0	3.0	1.6	2.6	2.3	2.2	1.4	1.8	1.4	1.4
Onions	do	5.2	5.3	4.8	4.8	6.0	7.1	6.4	6.4	6.0	7.4	5.9	5.9
Cabbage	do	3.9	3.7	3.7	3.7	2.8	3.7	4.2	4.2	3.8	3.0	2.6	2.6
Beans, baked	No. 2 can	13.2	12.4	12.5	12.5	11.7	11.7	11.6	11.6	13.9	13.6	13.6	13.6
Corn, canned	do	15.0	14.4	14.2	14.2	15.4	15.7	15.9	15.9	13.3	13.8	13.8	13.8
Peas, canned	do	17.9	18.2	18.2	18.2	15.6	16.7	16.3	16.3	15.9	16.5	16.8	16.8
Tomatoes, canned	do	13.1	12.8	12.5	12.5	14.0	14.3	14.3	14.3	14.8	14.9	14.9	14.9
Sugar, granulated	do	5.9	9.6	8.3	8.7	5.5	9.4	7.8	8.1	5.8	10.0	8.5	9.0
Tea	do	63.8	84.0	83.9	83.9	50.0	70.4	70.2	70.2	45.0	65.3	64.7	64.7
Coffee	do	27.5	37.9	40.6	43.8	27.5	34.8	39.7	40.2	30.8	42.0	45.8	47.8
Prunes	do	19.8	15.3	15.5	15.5	19.4	17.4	17.7	17.7	20.4	17.4	17.2	17.2
Raisins	do	19.2	16.2	16.1	16.1	16.9	15.2	15.1	15.1	17.7	15.4	15.4	15.4
Bananas	Dozen	35.6	30.0	30.6	30.6	³ 10.9	³ 9.7	³ 9.4	³ 9.4	³ 13.0	³ 10.5	³ 10.5	³ 10.5
Oranges	do	41.4	46.9	50.5	50.5	52.1	46.0	51.3	51.3	52.8	50.2	54.1	54.1

¹ Whole.² No. 3 can.³ Per pound.

RETAIL PRICES OF FOOD

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924
			1913	1923			1913	1923			1913	1923			1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
32.1	29.5	29.5	28.0	48.0	46.5	45.8	32.2	54.2	51.8	51.9	22.5	33.1	33.0	33.0	26.4	45.0	44.0	43.8
31.3	28.6	28.5	28.0	45.6	44.2	43.2	29.6	44.6	42.4	42.7	18.5	29.7	28.8	28.8	25.7	43.5	42.7	42.4
26.5	24.1	23.5	21.2	36.7	35.6	35.2	24.2	36.6	34.8	34.6	17.5	28.9	28.4	28.9	21.5	37.3	37.0	37.6
19.8	20.0	19.1	18.0	25.4	23.8	23.8	20.0	28.6	25.8	25.8	14.3	19.9	19.3	19.8	16.1	23.3	23.5	23.5
15.0	14.7	14.8	12.0	13.3	13.2	13.0	-----	15.4	14.0	14.2	11.2	15.4	14.8	15.9	14.6	18.5	19.1	19.3
38.3	34.1	34.0	25.0	41.0	35.2	36.8	24.0	38.8	36.0	36.8	25.0	37.4	33.6	35.8	23.0	38.5	36.4	37.5
39.5	37.9	39.9	26.2	39.8	37.4	38.4	29.3	40.5	37.8	38.0	32.1	39.7	38.3	39.7	26.2	38.1	37.4	37.8
45.0	41.9	43.6	22.0	29.6	27.8	28.0	32.8	55.2	52.7	52.9	28.8	43.9	45.2	46.7	30.0	52.1	51.1	51.1
35.6	34.0	36.3	20.8	39.9	38.8	37.8	20.5	42.1	39.3	39.1	20.0	40.5	39.4	39.5	15.3	37.1	35.4	36.0
3.30	34.2	35.0	23.6	37.5	37.5	37.8	24.2	39.9	39.8	39.7	22.5	36.6	33.2	34.4	21.8	36.3	37.4	38.3
28.4	28.4	29.2	-----	27.4	28.1	28.1	-----	34.3	31.3	31.4	-----	42.0	40.8	40.5	-----	29.1	28.8	28.8
15.0	20.0	20.0	9.0	16.0	14.5	15.5	9.0	16.0	15.0	16.0	9.5	14.0	14.0	14.0	9.0	15.0	13.2	14.0
13.0	11.0	11.2	-----	11.9	10.6	10.4	-----	12.5	11.5	11.5	-----	12.1	10.4	10.4	-----	11.7	10.3	10.3
56.9	49.1	49.0	39.2	55.1	50.9	50.9	35.2	52.9	48.2	48.7	36.8	53.5	49.9	48.4	37.4	54.9	49.5	49.7
30.3	32.3	32.3	-----	29.7	31.7	32.3	-----	31.0	32.5	33.0	-----	29.9	32.0	32.1	-----	29.3	31.2	31.2
27.5	29.0	29.4	-----	26.9	28.8	29.5	-----	28.0	29.8	30.2	-----	27.6	28.7	28.8	-----	26.7	28.3	28.5
37.5	32.4	32.9	24.8	40.4	38.8	37.4	22.0	36.7	36.3	36.8	21.4	36.1	31.5	31.8	19.6	38.4	36.8	36.3
17.8	19.0	20.2	16.6	17.5	19.1	19.9	15.6	17.8	19.3	19.8	15.1	17.2	18.9	19.4	16.3	17.8	19.5	20.5
19.6	21.3	21.1	-----	23.4	25.2	25.2	-----	22.6	25.1	25.1	-----	22.4	22.1	22.1	-----	23.9	25.6	25.8
43.7	40.3	47.8	49.6	61.4	54.5	64.7	45.7	64.8	55.8	64.9	32.0	39.5	41.5	43.3	44.2	59.7	54.9	61.5
8.9	9.0	9.0	5.6	8.5	8.6	8.6	6.0	8.0	8.1	8.1	5.1	7.6	7.9	7.9	6.0	9.6	9.5	9.5
5.0	5.3	5.5	3.7	4.6	5.0	5.2	3.2	4.4	5.3	5.2	3.8	5.3	5.6	5.7	3.2	4.5	5.3	5.4
3.5	4.2	4.4	3.6	6.1	6.3	6.4	3.2	5.9	5.9	6.0	2.9	3.6	4.1	4.3	3.4	5.3	5.5	5.8
8.5	8.6	8.8	-----	8.3	8.1	8.1	-----	8.7	8.9	9.0	-----	8.7	8.6	8.8	-----	8.2	8.7	8.7
9.3	9.3	10.6	-----	8.9	8.9	8.9	-----	9.5	9.7	9.9	-----	9.4	9.3	9.7	-----	8.8	8.8	9.3
23.5	23.5	23.6	-----	23.8	23.6	23.2	-----	23.4	23.4	23.6	-----	24.0	24.0	23.7	-----	22.9	22.6	22.6
20.1	19.8	19.7	-----	21.0	20.9	20.9	-----	22.7	22.4	22.4	-----	8.8	9.2	8.7	-----	20.3	20.2	20.4
8.8	9.4	9.9	9.0	9.4	9.8	9.8	9.3	9.8	10.6	10.6	7.4	9.1	9.7	9.5	8.0	9.5	9.9	10.1
11.4	10.1	10.2	-----	10.9	9.4	9.7	-----	10.3	9.5	9.6	-----	9.9	9.1	9.4	-----	11.7	10.5	10.5
4.1	2.9	3.3	2.5	4.1	2.8	2.5	1.8	3.8	2.5	2.4	2.3	3.9	3.1	3.2	2.5	3.7	2.9	2.7
6.0	6.9	5.8	-----	6.6	6.7	5.3	-----	6.8	6.4	6.0	-----	5.0	5.9	5.3	-----	6.2	7.0	5.3
4.5	4.5	4.5	-----	6.1	4.3	3.8	-----	6.6	4.1	4.4	-----	4.0	4.3	4.7	-----	5.7	4.0	3.7
12.1	11.6	11.8	-----	11.1	11.4	11.3	-----	12.0	12.1	12.1	-----	12.8	12.2	12.2	-----	11.8	11.8	11.8
15.3	15.2	15.3	-----	14.4	14.9	14.9	-----	18.1	17.7	18.0	-----	13.2	13.8	13.9	-----	15.4	15.9	15.8
15.7	16.8	16.7	-----	17.5	18.2	18.1	-----	20.9	20.5	20.5	-----	17.4	16.9	17.1	-----	17.2	18.0	17.7
12.3	11.6	11.8	-----	11.9	11.8	11.9	-----	21.8	21.9	21.4	-----	11.7	11.5	11.7	-----	11.6	12.8	12.7
9.8	8.3	9.0	5.4	9.0	7.9	8.1	5.5	9.5	8.0	8.1	5.4	9.0	7.6	7.9	5.1	8.9	7.3	7.8
73.9	75.7	77.5	53.8	54.9	57.2	57.2	55.0	56.9	59.9	59.9	62.1	69.9	71.7	71.7	43.3	57.2	6.02	60.3
37.2	42.2	43.0	29.3	35.8	42.2	42.4	33.8	39.8	45.5	45.6	26.1	31.1	37.7	38.4	27.2	34.5	41.2	41.9
22.6	17.7	17.0	-----	16.3	15.1	15.0	-----	17.6	16.1	16.3	-----	19.3	18.0	17.7	-----	16.8	15.8	16.6
18.7	16.3	15.7	-----	15.6	15.1	14.2	-----	15.8	15.0	14.7	-----	17.5	15.1	15.0	-----	15.5	15.7	15.4
31.1	26.3	27.1	-----	39.4	35.6	35.6	-----	32.7	33.2	33.9	-----	20.0	20.0	20.0	-----	42.5	35.9	37.3
50.5	39.4	40.6	-----	56.8	51.7	56.7	-----	49.1	46.9	50.2	-----	53.8	37.2	44.4	-----	55.6	53.8	57.6

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924
					1913	1923					
Sirloin steak	Pound	Cts. 42.7	Cts. 42.6	Cts. 41.7	Cts. 25.6	Cts. 38.7	Cts. 37.6	Cts. 37.9	Cts. 34.3	Cts. 35.7	Cts. 35.0
Round steak	do	36.1	34.8	34.8	22.8	35.6	34.3	34.6	33.4	33.4	32.7
Rib roast	do	33.3	32.9	32.3	19.1	26.1	26.1	26.0	23.6	23.6	22.9
Chuck roast	do	21.6	21.3	21.3	16.7	21.4	20.7	20.9	20.1	20.7	19.8
Plate beef	do	14.6	14.7	14.7	11.4	10.7	10.5	10.8	12.9	12.3	12.6
Pork chops	do	34.9	30.2	32.4	22.0	35.9	33.8	36.0	35.7	32.9	34.1
Bacon, sliced	do	35.0	31.7	33.3	28.6	45.6	41.9	42.4	41.4	41.9	40.9
Ham, sliced	do	41.4	39.3	39.3	29.0	49.1	48.0	49.2	48.9	47.1	46.9
Lamb, leg of	do	40.0	39.0	37.1	17.5	36.9	41.3	41.5	35.1	36.9	36.3
Hens	do	36.9	33.6	33.6	16.9	29.3	30.1	30.8	29.9	31.9	31.4
Salmon, canned, red	do	29.3	29.0	29.0		33.7	32.9	32.9	32.3	31.6	32.2
Milk, fresh	Quart	17.0	17.0	17.0	8.2	12.3	11.5	11.5	11.6	12.0	12.0
Milk, evaporated	15-16 oz. can	11.4	10.2	10.3		12.0	11.2	11.2	12.0	11.3	11.3
Butter	Pound	55.9	50.2	49.8	36.6	50.1	44.3	43.6	52.1	43.9	43.8
Oleomargarine	do	28.3	30.0	25.0		28.9	29.9	30.0	29.5	30.8	31.5
Nut margarine	do	26.8	26.5	26.3		28.4	29.1	29.4	27.4	29.1	29.4
Cheese	do	33.3	31.3	31.0	23.3	35.5	32.8	32.9	36.8	33.2	33.2
Lard	do	17.4	18.4	19.2	17.8	19.6	20.9	21.5	17.9	19.4	19.9
Vegetable lard substitute	do	17.5	20.4	20.6		24.2	26.7	27.2	24.2	27.3	27.3
Eggs, strictly fresh	Dozen	47.9	40.1	49.5	28.3	36.4	35.1	39.6	38.0	32.9	41.2
Bread	Pound	7.8	8.0	8.0	5.2	9.8	9.4	9.4	8.0	8.6	8.6
Flour	do	4.4	4.9	5.0	2.8	3.8	4.3	4.3	4.5	5.1	5.0
Corn meal	do	3.7	4.1	4.5	2.5	3.8	4.3	4.6	3.7	4.5	4.7
Rollod oats	do	8.0	7.8	7.8		10.1	10.0	9.9	9.4	9.0	8.8
Corn flakes	8-oz. pkg.	9.4	9.1	9.3		10.3	10.1	11.0	10.0	10.0	10.8
Wheat cereal	28-oz. pkg.	23.8	23.2	22.9		24.2	24.3	24.4	26.1	25.2	25.2
Macaroni	Pound	20.0	19.7	19.7		20.0	20.2	20.2	19.5	19.5	19.8
Rice	do	9.9	10.4	10.6	8.5	9.2	9.2	9.3	9.5	9.7	10.1
Beans, navy	do	10.8	9.3	9.7		11.8	9.8	10.0	10.9	9.0	9.5
Potatoes	do	3.3	2.6	2.6	1.7	2.4	1.9	1.8	2.6	2.4	2.1
Onions	do	6.4	6.7	5.7		5.3	7.0	5.9	7.3	7.7	6.9
Cabbage	do	4.9	4.3	4.0		3.8	2.7	2.9	4.1	2.8	2.6
Beans, baked	No. 2 can	9.8	9.9	9.9		15.2	14.8	14.8	12.9	12.4	12.5
Corn, canned	do	15.7	15.6	15.6		16.3	15.9	15.9	14.6	14.3	14.3
Peas, canned	do	18.8	18.4	18.2		17.3	17.1	16.9	17.2	18.7	18.7
Tomatoes, canned	do	10.8	12.6	12.4		14.6	15.1	15.1	14.1	14.8	15.0
Sugar, granulated	Pound	8.8	7.6	8.1	6.1	9.9	8.7	9.0	10.1	8.9	9.3
Tea	do	82.1	79.7	78.1	56.0	75.2	77.0	77.0	60.6	62.5	61.8
Coffee	do	37.9	40.7	40.1	30.0	41.1	47.0	46.7	36.6	44.1	44.4
Prunes	do	17.5	14.8	14.8		20.3	18.4	18.8	21.1	20.8	20.0
Raisins	do	16.9	15.0	14.8		19.8	17.6	17.6	18.9	16.7	16.5
Bananas	Dozen	35.4	35.0	34.3		41.2	41.2	41.2	41.8	41.0	41.9
Oranges	do	53.4	48.1	49.4		48.2	38.2	39.7	45.3	41.7	45.9

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.

RETAIL PRICES OF FOOD

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.				
Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	
1913	1923			1913	1923			1923	1924	1924	1913	1923			1913	1923			
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
131.7	151.3	152.9	151.9	27.7	45.0	46.2	46.0	60.8	60.5	59.7	23.9	28.1	28.5	28.0	40.2	69.9	170.5	69.6	
27.1	40.8	41.5	41.2	24.7	36.9	37.6	37.2	47.6	46.9	46.8	21.4	25.1	25.4	25.0	31.6	51.2	47.3	47.9	
22.3	34.6	34.2	34.6	22.2	32.5	33.0	32.7	29.7	30.3	29.6	19.5	24.3	23.7	23.4	24.2	39.2	37.6	37.3	
18.2	21.4	22.0	21.7	17.5	22.3	22.7	22.9	20.4	20.7	20.2	16.9	16.3	16.3	15.9	18.8	29.8	27.6	28.0	
12.5	10.1	11.0	11.3	12.8	11.6	11.5	11.6	15.7	16.0	15.4	13.9	11.9	11.7	11.3	---	17.9	18.4	18.6	
23.2	38.6	38.1	39.3	25.2	40.5	37.8	38.8	36.7	36.2	37.3	24.4	33.5	34.2	34.2	22.0	40.8	40.0	40.7	
28.2	36.6	36.4	36.3	30.4	41.5	42.0	43.0	35.9	36.8	37.5	31.5	46.0	43.6	43.9	22.2	36.7	35.1	35.3	
32.6	52.9	52.7	52.9	31.6	54.3	54.6	54.1	48.4	49.6	50.6	32.5	47.8	48.3	48.9	34.3	53.7	54.9	53.4	
19.7	39.6	39.7	38.7	20.0	39.7	40.5	39.9	39.5	38.9	36.7	16.4	32.4	32.5	31.7	18.0	43.5	40.2	40.6	
22.9	38.1	37.7	38.0	25.8	40.2	41.0	41.0	40.6	40.4	40.0	21.3	30.9	31.4	31.4	25.0	41.5	40.5	41.2	
---	26.3	25.8	27.1	---	28.9	27.8	28.4	28.1	27.7	27.9	---	34.6	38.2	38.2	---	31.0	30.4	30.5	
8.0	13.0	12.0	12.0	8.6	14.0	14.0	14.0	14.0	13.8	14.0	9.7	13.0	11.7	11.7	9.0	15.0	13.8	14.8	
---	12.2	11.4	11.4	---	10.1	10.6	10.4	13.5	12.3	12.3	---	12.0	11.1	10.9	---	12.5	11.4	11.7	
42.5	58.6	52.8	52.4	39.3	56.1	49.1	49.5	57.8	52.4	52.0	42.0	55.8	46.7	50.0	38.2	54.2	48.9	48.6	
---	29.7	31.1	31.7	---	28.0	30.0	30.6	30.8	31.7	30.6	---	29.8	28.8	29.2	---	29.2	30.0	30.3	
---	28.2	29.0	28.8	---	26.5	28.0	28.4	27.5	27.7	27.8	---	27.5	29.5	29.8	---	29.1	29.0	29.2	
25.0	38.0	36.6	37.4	24.5	37.5	36.2	36.2	39.4	35.9	35.9	20.8	37.9	37.1	37.4	22.0	36.0	34.6	34.7	
15.9	17.5	18.6	20.0	15.7	16.4	18.2	19.0	17.9	18.8	20.3	18.3	19.5	20.2	20.5	15.7	17.5	19.2	19.6	
---	23.1	25.2	25.3	---	23.7	25.2	25.2	22.8	23.3	24.2	---	25.0	28.2	28.9	---	23.9	25.8	26.0	
39.7	51.2	44.0	52.3	34.8	46.2	44.9	51.7	61.6	56.6	64.4	40.0	45.9	39.9	48.3	46.0	66.4	63.5	71.2	
4.8	8.4	8.5	8.5	5.5	8.5	8.5	8.5	9.3	9.3	9.3	5.6	9.2	9.5	9.6	5.9	8.8	8.8	8.8	
3.2	4.5	5.1	5.2	3.2	4.4	4.9	5.0	4.5	5.1	5.2	2.9	4.3	4.5	4.7	3.5	4.9	5.7	5.6	
2.7	3.9	4.2	4.5	2.8	4.4	4.9	5.3	4.7	4.9	4.9	3.4	3.6	4.0	4.4	3.1	4.1	4.5	4.7	
---	8.3	8.0	8.2	---	8.9	9.1	9.1	6.9	6.9	7.0	---	9.3	10.2	10.3	---	9.4	9.3	9.2	
---	8.8	8.8	9.0	---	9.5	9.6	9.9	9.7	9.7	10.3	---	11.4	11.2	11.4	---	9.7	9.7	10.2	
---	23.9	23.5	23.5	---	24.9	24.2	24.2	24.5	24.6	24.5	---	25.7	26.4	26.4	---	24.1	24.1	24.2	
---	20.4	20.3	20.3	---	21.8	21.9	21.9	23.4	24.6	24.2	---	18.4	18.5	18.6	---	22.4	23.3	23.3	
9.8	10.2	10.9	10.9	9.2	9.6	10.4	10.8	10.5	10.9	11.0	8.6	9.4	10.4	10.6	9.3	9.4	10.0	10.2	
---	11.2	9.9	10.1	---	10.4	9.1	9.3	10.6	9.9	10.1	---	9.9	9.8	9.9	---	10.6	9.8	9.9	
2.2	4.3	2.5	2.7	2.1	3.9	2.3	2.3	3.0	2.3	2.1	1.3	2.1	3.1	2.6	1.8	3.7	2.4	2.3	
---	6.2	6.2	4.8	---	6.7	7.1	6.2	6.4	6.5	5.6	---	4.6	4.8	4.8	---	6.3	6.4	5.7	
---	5.1	3.5	3.7	---	4.7	4.5	4.3	2.9	4.6	3.0	---	3.1	4.8	5.0	---	4.2	4.4	4.0	
---	11.2	11.2	11.2	---	12.8	13.0	12.8	15.7	15.3	15.3	---	14.8	14.4	14.4	---	12.1	12.1	11.9	
---	14.9	14.9	14.8	---	15.0	15.7	15.8	16.2	17.4	17.6	---	17.4	19.2	19.7	---	16.9	17.7	18.1	
---	16.6	16.2	16.2	---	16.4	17.5	18.2	20.4	20.3	20.5	---	17.0	19.3	19.1	---	20.0	20.2	19.7	
---	12.5	12.4	12.5	---	12.6	13.6	13.7	22.3	14.3	14.5	---	16.4	16.4	16.8	---	13.8	13.0	12.9	
5.0	8.8	7.5	7.9	5.8	9.5	8.4	8.8	9.6	8.1	8.6	6.3	9.9	9.1	9.3	5.3	9.3	7.9	8.3	
54.0	59.1	61.1	61.1	58.0	74.8	78.1	79.0	57.5	61.1	61.1	55.0	65.7	72.2	75.0	48.3	61.1	58.5	58.0	
24.5	31.6	37.8	38.7	30.0	38.0	43.8	44.6	41.4	48.2	48.7	35.0	37.1	45.3	46.3	30.0	41.7	47.3	47.6	
---	16.3	16.2	15.9	---	19.5	18.8	18.6	17.7	16.4	16.8	---	12.3	10.7	10.8	---	19.4	17.6	17.3	
---	16.1	15.0	14.9	---	16.6	14.5	14.5	15.4	13.9	13.9	---	16.4	14.1	14.1	---	16.6	15.1	15.0	
---	32.9	30.0	29.2	---	44.1	37.9	38.0	41.7	39.9	39.8	---	15.4	15.8	15.8	---	36.9	33.6	32.1	
---	49.6	46.8	48.2	---	56.0	49.5	52.1	52.2	50.3	51.8	---	51.8	39.8	45.3	---	60.8	53.4	58.2	

* No. 3 can.

* No. 2½ can.

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article	Unit	Richmond, Va.				Rochester, N. Y.			St. Louis, Mo.			
		Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924
		1913	1923						1913	1923		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.6	40.8	39.8	39.9	41.1	41.4	40.9	26.0	36.0	36.0	36.0
Round steak	do.	20.0	35.1	34.2	34.9	34.5	34.3	34.3	24.3	33.6	33.7	33.4
Rib roast	do.	18.9	30.7	30.2	30.2	30.0	29.8	29.8	19.5	27.6	28.8	28.9
Chuck roast	do.	15.5	21.9	22.1	22.0	23.5	23.3	23.7	15.6	18.2	19.2	19.4
Plate beef	do.	12.5	15.4	15.0	15.0	12.0	11.7	12.2	12.4	12.1	11.9	12.7
Fork chops	do.	22.0	35.8	33.5	36.1	39.3	38.0	38.8	21.0	35.4	32.5	32.1
Bacon, sliced	do.	27.0	33.9	33.5	34.9	34.7	34.8	34.9	27.5	39.0	37.0	37.3
Ham, sliced	do.	26.0	40.0	39.4	38.9	46.8	46.8	46.8	27.3	43.8	44.3	44.1
Lamb, leg of	do.	19.3	42.1	43.8	45.4	38.2	39.0	37.9	18.3	35.0	35.0	35.3
Hens	do.	19.8	33.3	34.2	35.0	38.8	39.5	39.3	17.1	30.2	29.9	30.4
Salmon, canned, red	do.		31.2	32.1	32.8	28.9	29.1	29.3		31.6	32.5	32.3
Milk, fresh	Quart.	10.0	14.0	14.0	14.0	13.0	12.3	12.5	9.0	13.0	13.0	13.0
Milk, evaporated	15-16 oz. can		13.6	12.6	12.5	12.1	11.6	11.6		11.4	9.6	9.8
Butter	Pound	39.6	58.9	55.1	53.9	54.5	48.9	48.7	36.8	56.4	49.1	49.0
Oleomargarine	do.		30.2	30.2	29.6	30.2	31.3	31.7		26.3	27.9	28.1
Nut margarine	do.		28.8	29.8	29.5	28.0	29.0	28.6		24.7	25.4	25.9
Cheese	do.	21.8	37.0	34.2	34.4	37.6	34.5	34.9	19.3	35.1	30.8	31.4
Lard	do.	15.4	17.9	19.4	20.2	17.2	18.6	19.3	14.3	14.6	16.1	16.8
Vegetable lard substitute	do.		23.1	25.9	26.3	19.7	24.3	24.5		23.0	25.8	25.9
Eggs, strictly fresh	Dozen	33.3	43.8	38.7	45.7	47.0	43.3	51.5	27.3	40.9	37.5	43.6
Bread	Pound	5.4	8.7	8.4	8.5	8.0	8.2	8.3	5.5	8.9	9.0	9.0
Flour	do.	3.3	4.6	5.2	5.3	4.4	5.2	5.2	2.9	4.0	4.6	4.6
Corn meal	do.	2.2	4.7	4.6	4.9	4.7	5.0	5.3	2.5	3.4	4.3	4.4
Rolled oats	do.		9.1	9.0	8.9	8.4	8.5	8.4		8.3	8.5	8.5
Corn flakes	8-oz. pkg		9.6	9.6	9.7	9.5	9.5	10.0		8.8	8.8	9.6
Wheat cereal	28-oz. pkg		25.3	25.4	25.4	24.0	24.3	24.2		23.2	23.4	23.5
Macaroni	Pound		21.1	20.4	20.4	18.6	19.7	19.7		19.1	20.8	20.8
Rice	do.	10.0	11.0	11.6	12.0	9.4	9.9	10.1	8.4	8.9	9.6	9.7
Beans, navy	do.		12.4	10.4	10.7	10.8	9.7	9.7		9.9	8.7	8.8
Potatoes	do.	1.9	4.8	3.2	3.3	3.4	2.2	2.2	2.0	3.0	2.3	2.2
Onions	do.		7.9	7.5	7.2	6.1	7.2	5.4		5.9	6.0	5.6
Cabbage	do.		5.7	5.1	4.8	4.6	3.3	3.0		3.6	3.7	4.4
Beans, baked	No. 2 can		11.6	11.0	11.0	11.2	11.2	11.2		11.0	11.1	10.9
Corn, canned	do.		15.0	14.7	14.7	16.5	17.0	17.0		15.2	15.6	15.7
Peas, canned	do.		19.5	19.7	19.6	19.1	19.8	20.0		16.6	17.4	17.3
Tomatoes, canned	do.		12.0	12.2	12.5	12.4	13.9	13.9		11.9	13.5	13.4
Sugar, granulated	Pound	5.4	9.5	8.0	8.4	9.4	7.8	8.0	5.5	9.7	8.1	8.5
Tea	do.	56.0	80.0	82.5	83.3	62.2	63.6	64.0	55.0	66.6	70.1	69.7
Coffee	do.	27.4	38.3	41.7	43.1	35.2	39.0	40.1	24.4	35.5	41.8	42.6
Prunes	do.		21.7	19.0	19.8	20.9	19.6	19.9		21.2	21.1	19.8
Raisins	do.		17.8	15.3	15.1	15.3	14.3	14.3		17.0	15.8	15.4
Bananas	Dozen		39.2	37.3	37.7	42.8	40.4	40.4		33.0	29.6	29.6
Oranges	do.		52.7	46.5	49.6	50.7	48.5	50.1		46.5	42.8	44.7

¹ No. 2½ can.

RETAIL PRICES OF FOOD

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued

St. Paul, Minn.				Salt Lake City, Utah				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924	Sept. 15, 1923	Aug. 15, 1924	Sept. 15, 1924	Sept. 15—		Aug. 15, 1924	Sept. 15, 1924
1913	1923			1913	1923			1913	1923						1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
27.2	36.8	35.3	34.6	22.6	27.9	28.5	28.0	21.3	30.4	30.5	31.0	31.7	29.8	29.8	26.0	50.7	50.0	49.8
23.6	30.9	30.3	29.9	20.0	24.0	25.6	25.2	19.7	27.6	27.9	28.0	25.8	25.0	25.0	22.5	41.6	40.5	40.5
20.4	28.9	27.7	28.1	19.4	20.8	21.0	20.9	21.1	29.2	29.0	29.9	24.6	23.3	23.9	23.0	36.5	36.3	35.0
16.8	21.6	21.7	21.8	15.0	16.9	17.2	16.7	15.0	17.8	18.5	18.4	15.7	14.7	14.7	17.6	26.7	27.1	27.1
10.6	11.3	11.7	11.8	12.5	11.6	12.0	11.7	13.8	13.8	13.9	14.2	12.7	11.8	11.4	11.9	11.1	10.7	10.5
21.4	34.4	32.8	34.1	23.8	34.3	34.5	35.4	23.7	38.2	39.8	40.1	29.8	28.1	28.1	22.5	41.6	38.4	39.2
26.3	39.6	38.5	38.4	30.0	37.9	37.2	38.3	34.4	50.8	49.2	52.1	35.4	33.3	32.6	27.5	41.8	41.2	41.8
28.8	44.3	44.2	43.2	30.0	42.9	45.4	45.4	33.0	53.5	53.5	55.9	36.5	35.4	35.6	31.7	54.0	54.4	54.0
16.7	33.3	32.8	31.6	17.5	31.8	29.9	30.3	16.5	35.6	34.2	35.2	36.3	42.5	42.5	19.0	46.6	47.6	45.4
19.6	28.6	27.2	28.4	23.3	31.6	30.0	29.8	24.2	39.6	40.3	40.8	32.4	32.9	35.7	22.7	42.3	43.1	43.1
7.8	34.8	36.1	35.5	8.7	34.7	35.0	34.6	27.4	27.6	28.1	35.1	34.1	32.3	8.8	35.1	34.2	33.9	
35.0	12.1	11.9	11.9	10.9	10.0	10.0	9.9	10.9	10.0	10.1	11.5	10.5	10.2	36.4	53.5	50.0	49.8	
27.7	50.3	42.5	42.6	39.0	53.6	46.2	47.0	42.9	60.5	52.2	51.9	56.3	50.7	50.1	31.0	32.5	32.5	
26.3	27.0	28.0	27.3	27.3	28.1	27.8	27.8	28.3	28.8	28.5	33.7	33.9	34.3	24.0	25.0	25.0		
21.0	34.9	33.9	34.1	24.2	31.7	31.1	22.3	19.5	38.4	37.1	37.3	35.6	30.9	30.9	18.3	35.8	34.4	34.4
15.4	17.8	19.2	19.6	19.8	19.5	29.4	29.7	18.7	19.2	20.6	21.3	17.4	19.1	19.6	16.5	17.8	19.2	20.0
28.1	24.0	24.9	25.4	27.4	36.1	41.3	41.3	46.4	25.6	27.8	28.1	18.5	19.9	20.4	22.8	25.7	25.8	
6.0	9.4	9.3	9.3	5.9	9.8	9.8	9.8	5.9	9.2	9.1	9.1	8.5	8.6	8.6	5.6	9.1	9.0	9.0
3.0	4.4	5.1	5.1	2.5	3.2	3.7	3.8	3.4	4.8	5.1	5.3	5.2	5.5	5.7	3.5	5.1	5.5	5.5
2.3	3.6	4.3	4.4	3.4	3.7	4.1	4.5	3.5	4.9	4.9	5.1	3.2	3.7	3.9	5.8	5.8	5.8	
10.0	9.9	9.5	9.6	9.1	9.4	9.6	9.6	9.2	9.2	9.3	9.4	8.8	8.7	8.7	9.6	9.6	9.6	
25.0	10.0	10.4	11.5	10.8	11.2	10.5	10.6	10.8	10.5	10.6	10.8	9.1	8.9	9.3	10.1	9.9	10.0	
18.7	25.0	25.0	24.9	24.9	25.0	23.2	23.5	23.6	24.2	23.6	23.5	24.2	23.6	23.5	25.6	25.5	25.5	
10.0	18.7	18.4	18.4	18.9	18.8	19.3	19.3	14.3	13.9	13.8	17.5	17.2	17.4	22.7	22.9	22.7		
11.4	9.6	10.2	8.2	8.6	9.3	9.6	8.5	9.2	9.6	9.8	8.1	9.2	9.3	8.4	9.4	10.1	10.3	
1.3	11.4	9.3	9.3	10.9	10.4	10.7	9.8	9.8	9.6	10.0	11.8	10.1	10.4	12.6	11.9	11.9		
5.8	1.8	1.5	1.3	2.3	1.9	1.7	1.7	3.5	3.3	3.1	3.3	3.0	2.8	1.8	3.6	2.3	2.3	
2.9	5.8	6.9	5.9	4.9	6.1	4.3	4.1	4.1	3.6	3.7	6.9	6.9	6.0	6.6	6.8	5.9		
14.2	2.9	2.7	2.3	3.0	4.7	4.3	5.1	4.6	4.3	5.1	4.6	4.3	4.3	4.6	3.9	3.3		
14.5	14.2	14.3	14.2	15.5	15.2	14.8	14.7	13.6	13.6	12.3	12.1	11.9	12.1	12.1	12.3	12.3		
16.5	14.5	15.0	14.4	14.4	14.6	15.0	16.6	17.6	18.3	14.6	14.4	14.3	16.2	16.2	16.9	17.1		
14.2	16.5	18.0	15.6	15.7	15.5	17.7	18.4	18.8	17.3	18.2	18.4	18.4	18.4	18.4	18.5	18.6		
5.7	14.2	14.5	14.5	13.4	14.4	15.0	13.8	15.0	15.5	10.6	11.6	11.1	13.0	13.3	13.4			
45.0	10.0	8.9	9.1	6.2	10.5	9.1	9.5	9.6	8.4	8.7	9.2	7.9	8.3	5.8	9.4	7.9	8.3	
30.0	67.1	67.5	67.5	65.7	82.6	84.6	84.6	50.0	58.0	61.4	63.6	68.4	66.5	64.9	52.5	60.7	61.5	61.5
20.8	40.4	47.5	47.9	35.8	44.1	50.6	51.9	32.0	36.1	44.3	45.7	34.9	38.0	38.1	31.3	39.7	43.6	44.6
18.3	20.8	18.9	18.8	17.5	14.9	14.9	16.7	16.6	16.1	18.7	14.7	14.5	17.9	16.6	16.9			
12.9	18.3	15.9	15.3	16.9	13.8	13.8	15.5	13.5	13.8	15.8	14.2	14.6	16.7	14.6	14.5			
56.8	12.9	10.8	10.5	15.2	17.3	17.2	33.6	36.4	33.0	35.9	33.2	30.5	32.4	34.4	33.9			
56.8	56.8	49.6	51.7	44.1	37.8	40.3	50.9	41.4	43.6	48.5	44.8	47.8	52.1	53.2	54.0			

² Per pound.

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

Article	Unit	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Sept. 15—		Aug.	Sept.	Sept.	Aug.	Sept.	Sept. 15—		Aug.	Sept.
		1913	1923	15, 1924	15, 1924	15, 1923	15, 1924	15, 1924	1913	1923	15, 1924	15, 1924
Sirloin steak	Pound	24.0	30.7	31.6	31.4	34.8	35.7	34.8	27.4	47.2	45.3	45.3
Round steak	do	20.7	26.4	26.8	26.4	34.2	34.8	34.0	24.1	41.1	38.4	38.7
Rib roast	do	19.3	24.1	25.5	25.0	23.7	22.9	23.1	21.3	34.8	34.6	33.6
Chuck roast	do	16.0	16.1	16.3	16.2	19.9	20.6	20.2	17.3	23.6	24.5	23.7
Plate beef	do	13.0	12.5	12.9	12.9	13.1	12.7	13.0	12.4	13.1	12.2	12.3
Pork chops	do	24.3	38.6	37.3	36.0	34.5	30.7	32.7	24.1	40.7	38.2	39.0
Bacon, sliced	do	32.5	49.8	47.6	49.1	40.0	39.6	40.0	28.5	37.1	35.8	36.9
Ham, sliced	do	30.0	52.0	52.6	52.8	47.1	45.4	45.0	30.0	55.0	52.8	54.0
Lamb, leg of	do	19.3	32.2	33.0	32.8	38.1	40.0	45.8	19.4	42.1	40.5	40.2
Hens	do	23.3	32.0	32.2	31.3	31.8	31.5	32.0	22.5	40.6	38.4	38.4
Salmon, canned, red	do		31.0	30.7	30.7	34.0	33.5	33.6		28.3	27.8	28.1
Milk, fresh	Quart	8.6	13.0	11.5	11.0	12.5	12.5	12.5	8.2	14.0	14.0	14.0
Milk, evaporated	15-16 oz. can		10.9	10.4	10.3	12.8	11.8	11.8		12.3	11.6	11.6
Butter	Pound	40.0	54.5	48.6	49.9	54.1	46.5	46.4	38.7	57.3	50.8	51.1
Oleomargarine	do		28.8	30.0	30.3	29.0	31.3	31.2		28.4	30.7	30.7
Nut margarine	do		29.0	29.5	29.6	28.1	29.2	30.0		27.6	28.5	28.5
Cheese	do	21.7	36.3	34.7	34.5	38.6	36.6	36.4	23.5	38.0	37.5	36.4
Lard	do	17.6	19.2	19.9	20.4	17.8	19.4	20.2	15.3	18.6	19.8	20.3
Vegetable lard substitute	do		24.8	28.1	28.5	25.1	28.5	28.5		23.8	25.4	25.3
Eggs, strictly fresh	Dozen	43.3	47.8	45.1	52.2	38.9	37.3	43.4	34.5	49.0	44.5	53.9
Bread	Pound	5.2	9.9	9.7	9.7	9.3	10.2	10.2	5.7	9.0	9.0	9.0
Flour	do	2.9	4.3	4.8	4.8	4.7	5.0	5.1	3.6	4.8	5.4	5.5
Corn meal	do	3.2	4.2	4.6	4.8	4.5	5.0	5.2	2.8	3.9	4.5	4.6
Rolled oats	do		8.1	9.0	9.0	10.6	10.7	10.7		9.3	9.2	9.2
Corn flakes	8 oz. pkg.		11.7	11.4	11.5	10.1	10.1	11.4		9.5	9.5	9.7
Wheat cereal	28-oz. pkg.		24.7	24.7	24.7	25.2	25.4	25.4		24.1	23.6	23.4
Macaroni	Pound		18.3	18.1	18.2	19.6	19.5	19.5		20.8	21.5	21.6
Rice	do	7.7	11.1	11.8	12.1	10.1	10.2	10.6	9.4	10.2	10.6	10.9
Beans, navy	do		10.5	10.6	10.5	10.5	9.1	9.4		10.7	9.1	9.0
Potatoes	do	1.4	2.4	2.9	2.6	2.6	2.7	2.4	2.0	4.1	2.6	2.6
Onions	do		4.8	4.9	4.8	7.0	7.9	6.9		7.3	6.9	6.1
Cabbage	do		4.6	5.0	5.1	4.7	2.9	3.4		5.4	4.8	4.5
Beans, baked	No. 2 can		15.2	14.6	14.6	13.2	12.0	12.0		11.6	11.4	11.1
Corn, canned	do		16.5	17.7	17.7	14.8	14.9	14.9		14.9	14.9	14.7
Peas, canned	do		18.6	20.2	20.0	17.8	17.5	17.7		15.5	16.6	16.5
Tomatoes, canned	do		115.4	116.0	116.0	14.9	14.8	15.0		11.7	11.5	11.8
Sugar, granulated	Pound	6.6	10.1	9.1	9.4	10.5	9.2	9.5	5.3	9.1	7.6	8.2
Tea	do	50.0	68.2	75.7	75.7	73.6	74.1	57.5	76.8	78.1	78.3	78.3
Coffee	do	28.0	38.6	45.6	46.0	38.1	42.5	43.5	28.8	35.3	39.6	40.9
Prunes	do		16.1	14.3	14.3	20.2	18.0	16.9		20.1	18.3	18.8
Raisins	do		17.2	15.5	15.5	19.8	16.4	16.6		17.1	14.8	14.9
Bananas	Dozen		15.9	15.0	14.9	12.1	9.3	9.1		38.9	35.6	36.9
Oranges	do		48.2	42.7	44.8	49.2	47.3	45.1		55.3	53.4	57.2

¹ No. 2½ can.² Per pound.

Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food ⁶ in September, 1924, compared with the average cost in the year 1913, in September, 1923, and in August, 1924. 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.⁷

⁶ For list of articles, see note 2, p. 56.⁷ 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 September 99 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 40 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Birmingham, Boston, Bridgeport, Buffalo, Butte, Charleston, Chicago, Cleveland, Dallas, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Philadelphia, Portland, Me., Portland, Oreg., Providence, Richmond, St. Paul, San Francisco, Savannah, Scranton, Springfield, Ill., and Washington.

The following summary shows the promptness with which the merchants responded in September, 1924:

RETAIL PRICE REPORTS RECEIVED DURING SEPTEMBER, 1924

Item	United States	Geographical division				
		North Atlantic	South Atlantic	North Central	South Centra.	Western
Percentage of reports received.....	99	99	98	99	99	99
Number of cities in each section from which every report was received.....	40	12	6	11	7	4

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN SEPTEMBER, 1924, COMPARED WITH THE COST IN AUGUST, 1924, SEPTEMBER, 1923, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase September, 1924, compared with year 1913	Percentage decrease September, 1924, compared with September, 1923	Percentage increase September, 1924, compared with August, 1924	City	Percentage increase September, 1924, compared with year 1913	Percentage decrease September, 1924, compared with September, 1923	Percentage increase September, 1924, compared with August, 1924
Atlanta.....	44.3	1.6	1.2	Minneapolis.....	41.3	2.9	0.5
Baltimore.....	53.4	2.4	2.3	Mobile.....	.....	2.3	2.7
Birmingham.....	51.2	.0	1.8	Newark.....	42.3	4.6	2.1
Boston.....	51.3	2.2	1.9	New Haven.....	46.5	4.0	2.6
Bridgeport.....	.....	4.8	2.5	New Orleans.....	44.9	.1	1.6
Buffalo.....	50.2	3.7	3.4	New York.....	49.5	3.3	2.1
Butte.....	.....	2.4	1.2	Norfolk.....	.....	2.5	2.1
Charleston, S. C.....	48.6	.1	1.3	Omaha.....	41.1	3.0	1.1
Chicago.....	56.0	.4	1.7	Peoria.....	.....	.2	.6
Cincinnati.....	40.7	4.1	2.2	Philadelphia.....	46.3	4.3	2.0
Cleveland.....	48.1	1.7	2.5	Pittsburgh.....	47.3	2.5	1.7
Columbus.....	.....	2.3	2.0	Portland, Me.....	.....	1.9	.9
Dallas.....	48.1	3.2	1.2	Portland, Oreg.....	36.2	2.5	2.0
Denver.....	31.7	3.3	1.4	Providence.....	51.6	3.2	2.0
Detroit.....	52.4	4.1	1.3	Richmond.....	55.0	2.5	2.7
Fall River.....	47.1	3.5	3.1	Rochester.....	.....	2.5	1.8
Houston.....	.....	1.8	1.7	St. Louis.....	46.1	1.3	1.3
Indianapolis.....	43.0	2.6	2.3	St. Paul.....	.....	2.4	.7
Jacksonville.....	40.9	2.6	1.2	Salt Lake City.....	27.3	.5	2.3
Kansas City.....	40.7	1.5	1.9	San Francisco.....	45.8	.6	2.4
Little Rock.....	39.4	.8	1.7	Savannah.....	.....	2.1	1.2
Los Angeles.....	44.6	1.8	2.3	Scranton.....	48.9	4.7	2.2
Louisville.....	39.4	.3	2.4	Seattle.....	40.0	1.1	.6
Manchester.....	47.5	2.7	2.5	Springfield, Ill.....	.....	.1	.4
Memphis.....	37.1	2.6	2.6	Washington, D. C.....	54.5	2.4	2.4
Milwaukee.....	51.2	.4	1.5				

¹ Decrease.

² Increase.

[1021]

Retail Prices of Coal in the United States ^a

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, September 15, 1923, and on August 15 and September 15, 1924, for the United States and for each of the cities from which prices have been obtained. 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 JANUARY 15 AND JULY 15, 1913, SEPTEMBER 15, 1923, AND AUGUST 15 AND SEPTEMBER 15, 1924

City, and kind of coal	1913		1923	1924	
	Jan. 15	July 15	Sept. 15	Aug. 15	Sept. 15
United States:					
Pennsylvania anthracite—					
Stove.....	\$7.89	\$7.46	\$15.26	\$15.20	\$15.36
Chestnut.....	8.15	7.68	15.21	15.13	15.28
Bituminous.....	5.48	5.39	9.99	8.63	8.88
Atlanta, Ga.:					
Bituminous.....	5.88	4.83	8.29	7.11	7.20
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove.....	17.70	17.24	15.92	15.75	16.29
Chestnut.....	17.93	17.49	15.75	15.50	15.79
Bituminous.....			8.20	7.40	7.40
Birmingham, Ala.:					
Bituminous.....	4.22	4.01	8.03	7.68	7.69
Boston, Mass.:					
Pennsylvania anthracite—					
Stove.....	8.25	7.50	15.50	15.75	16.00
Chestnut.....	8.25	7.75	15.50	15.75	16.00
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove.....			16.25	15.38	15.38
Chestnut.....			16.00	15.38	15.38
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove.....	6.75	6.54	13.11	13.53	13.64
Chestnut.....	6.99	6.80	13.11	13.39	13.51
Butte, Mont.:					
Bituminous.....			11.32	10.80	10.91
Charleston, S. C.:					
Pennsylvania anthracite—					
Stove.....	18.38	17.75	17.00	17.00	17.00
Chestnut.....	18.50	18.00	17.05	17.10	17.10
Bituminous.....	16.75	16.75	12.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.80	16.44	16.50	16.50
Chestnut.....	8.25	8.05	16.44	16.50	16.50
Bituminous.....	4.97	4.65	8.73	7.85	7.83
Cincinnati, Ohio:					
Bituminous.....	3.50	3.38	8.58	7.17	7.17
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove.....	7.50	7.25	14.75	14.31	14.38
Chestnut.....	7.75	7.50	14.75	14.31	14.38
Bituminous.....	4.14	4.14	9.56	7.91	8.00
Columbus, Ohio:					
Bituminous.....			7.54	6.36	6.38
Dallas, Tex.:					
Arkansas anthracite—					
Egg.....			16.92	16.38	16.75
Bituminous.....	8.25	7.21	13.79	13.72	13.72

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.

RETAIL PRICES OF COAL

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AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, SEPTEMBER 15, 1923, AND AUGUST 15 AND SEPTEMBER 15, 1924—Continued

City, and kind of coal	1913		1923	1924	
	Jan. 15	July 15	Sept. 15	Aug. 15	Sept. 15
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	\$8.88	\$9.00	\$16.75	\$16.00	\$16.25
Stove, 3 and 5 mixed.....	8.50	8.50	16.75	16.00	16.25
Bituminous.....	5.25	4.88	10.72	9.16	9.29
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.45	16.25	15.13	15.50
Chestnut.....	8.25	7.65	16.19	15.13	15.38
Bituminous.....	5.20	5.20	10.29	9.07	9.07
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove.....	8.25	7.43	15.50	15.33	15.83
Chestnut.....	8.25	7.61	15.42	15.33	15.83
Houston, Tex.:					
Bituminous.....			12.50	11.50	11.67
Indianapolis, Ind.:					
Pennsylvania anthracite—					
Stove.....	8.95	8.00	16.00	16.00	16.00
Chestnut.....	9.15	8.25	16.00	16.00	16.00
Bituminous.....	3.81	3.70	8.13	6.75	6.79
Jacksonville, Fla.:					
Bituminous.....	7.60	7.00	13.00	12.00	12.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace.....			16.14	14.50	14.83
Stove, No. 4.....			17.06	15.81	16.13
Bituminous.....	4.39	3.94	8.40	8.24	8.32
Little Rock, Ark.:					
Arkansas anthracite—					
Egg.....			14.00	14.00	14.00
Bituminous.....	6.00	5.33	10.54	10.21	10.58
Los Angeles, Calif.:					
Bituminous.....	13.62	12.50	15.50	14.80	15.15
Louisville, Ky.:					
Bituminous.....	4.20	4.00	8.62	7.15	7.13
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove.....	10.00	8.50	17.17	17.75	17.75
Chestnut.....	10.00	8.50	17.17	17.00	17.00
Memphis, Tenn.:					
Bituminous.....	4.34	4.22	7.43	7.93	7.93
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.85	16.00	16.70	16.80
Chestnut.....	8.25	8.10	16.00	16.55	16.65
Bituminous.....	6.25	5.71	10.29	9.01	9.00
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.25	9.05	17.50	18.00	18.10
Chestnut.....	9.50	9.30	17.38	17.85	17.93
Bituminous.....	5.89	5.79	11.96	10.49	10.49
Mobile, Ala.:					
Bituminous.....			9.79	9.71	9.93
Newark, N. J.:					
Pennsylvania anthracite—					
Stove.....	6.50	6.25	12.75	13.16	13.33
Chestnut.....	6.75	6.50	12.75	13.16	13.33
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove.....	7.50	6.25	15.75	14.75	14.75
Chestnut.....	7.50	6.25	15.75	14.75	14.75
New Orleans, La.:					
Pennsylvania anthracite—					
Stove.....	10.00	10.00	20.75	19.25	19.25
Chestnut.....	10.50	10.50	20.75	19.50	19.50
Bituminous.....	6.06	6.06	9.72	9.96	9.96
New York, N. Y.:					
Pennsylvania anthracite—					
Stove.....	7.07	6.66	14.50	13.78	14.13
Chestnut.....	7.14	6.80	14.80	13.78	14.13
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove.....			15.00	14.50	15.00
Chestnut.....			15.00	14.50	15.00
Bituminous.....			11.36	8.28	9.00
Omaha, Nebr.:					
Bituminous.....	6.33	6.13	10.85	9.80	9.80

¹ Per 10-barrel lots (1,800 pounds).

[1023]

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, SEPTEMBER 15, 1923, AND AUGUST 15 AND SEPTEMBER 15, 1924—Concluded

City, and kind of coal	1913		1923	1924	
	Jan. 15	July 15	Sept. 15	Aug. 15	Sept. 15
Peoria, Ill.:					
Bituminous.....			\$6.46	\$6.22	\$6.28
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove.....	¹ \$7.16	¹ \$6.89	¹ 15.43	¹ 15.04	¹ 15.21
Chestnut.....	¹ 7.38	¹ 7.14	¹ 15.00	¹ 14.86	¹ 15.00
Pittsburgh, Pa.:					
Pennsylvania anthracite—					
Stove.....	¹ 7.94	¹ 7.38	¹ 17.00	¹ 16.25	¹ 16.25
Chestnut.....	¹ 8.00	¹ 7.44	¹ 17.00	¹ 16.25	¹ 16.25
Bituminous.....	² 3.16	² 3.18	² 7.54	² 7.00	² 7.06
Portland, Me.:					
Pennsylvania anthracite—					
Stove.....			15.84	16.32	16.32
Chestnut.....			15.84	16.32	16.32
Portland, Ore.:					
Bituminous.....	9.79	9.66	13.20	13.49	13.60
Providence, R. I.:					
Pennsylvania anthracite—					
Stove.....	⁴ 8.25	⁴ 7.50	⁴ 15.30	⁴ 15.50	⁴ 16.00
Chestnut.....	⁴ 8.25	⁴ 7.75	⁴ 15.30	⁴ 15.50	⁴ 16.00
Richmond, Va.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.25	16.50	15.50	15.75
Chestnut.....	8.00	7.25	16.50	15.50	15.75
Bituminous.....	5.50	4.94	11.91	8.89	8.92
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove.....			13.45	14.15	14.25
Chestnut.....			13.45	14.05	14.15
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove.....	8.44	7.74	16.38	16.13	16.25
Chestnut.....	8.68	7.99	16.56	16.38	16.50
Bituminous.....	3.36	3.04	7.08	6.29	6.29
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.20	9.05	17.50	17.97	18.10
Chestnut.....	9.45	9.30	17.35	17.82	17.95
Bituminous.....	6.07	6.04	12.39	10.75	10.77
Salt Lake City, Utah:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	11.00	11.50	17.50	17.75	18.00
Stove, 3 and 5 mixed.....	11.00	11.50	17.50	17.75	18.00
Bituminous.....	5.64	5.46	8.30	8.31	8.36
San Francisco, Calif.:					
New Mexico anthracite—					
Cerrillos egg.....	17.00	17.00	26.50	25.00	25.00
Colorado anthracite—					
Egg.....	17.00	17.00	24.50	24.50	24.50
Bituminous.....	12.00	12.00	16.80	15.89	16.94
Savannah, Ga.:					
Pennsylvania anthracite—					
Stove.....			⁵ 17.05	⁵ 17.00	⁵ 17.00
Chestnut.....			⁵ 17.05	⁵ 17.00	⁵ 17.00
Bituminous.....			⁵ 11.72	⁵ 10.58	⁵ 10.58
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove.....	4.25	4.31	9.82	10.42	10.53
Chestnut.....	4.50	4.56	9.82	10.38	10.53
Seattle, Wash.:					
Bituminous.....	⁶ 7.63	⁶ 7.70	⁶ 10.10	⁶ 10.04	⁶ 10.22
Springfield, Ill.:					
Bituminous.....			4.50	4.50	4.48
Washington, D. C.:					
Pennsylvania anthracite—					
Stove.....	¹ 7.50	¹ 7.38	¹ 15.33	¹ 15.43	¹ 15.61
Chestnut.....	¹ 7.65	¹ 7.53	¹ 15.21	¹ 15.07	¹ 15.26
Bituminous.....			¹ 9.77	¹ 8.52	¹ 8.49

¹ Per ton of 2,240 pounds.

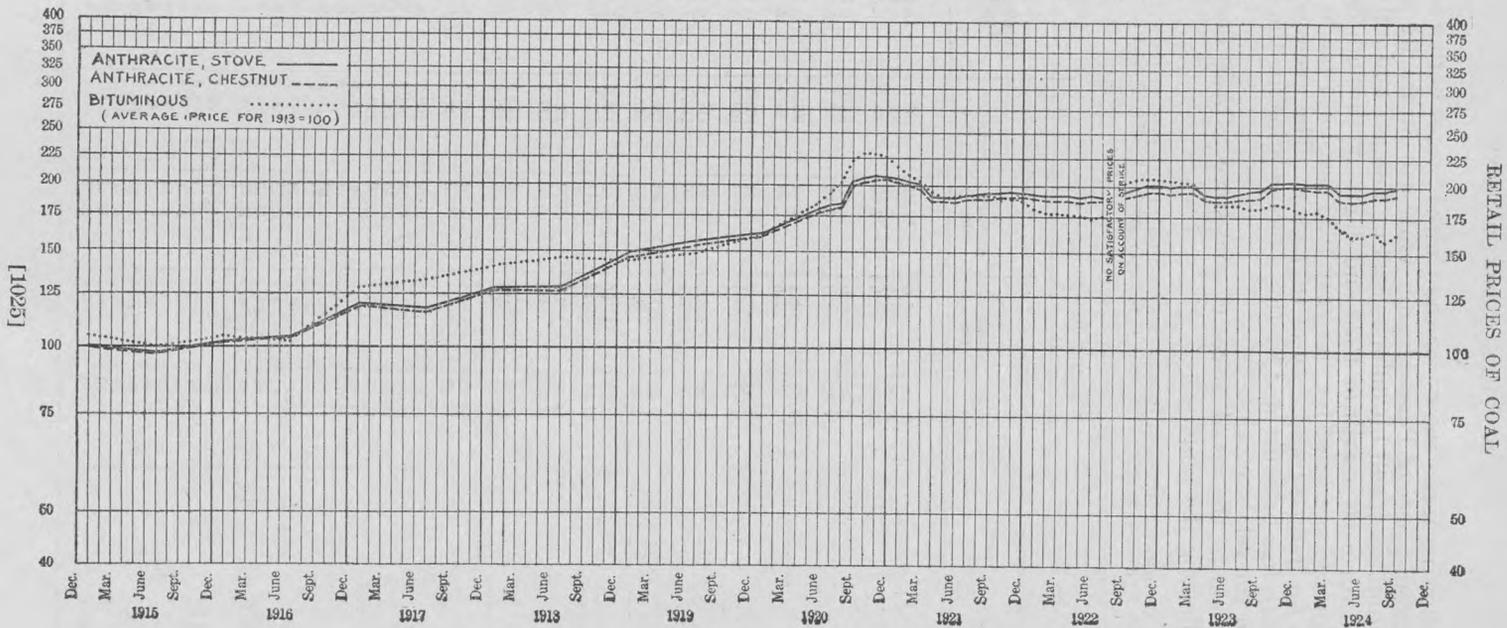
² Per 25-bushel lots (1,900 pounds).

⁴ Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

⁵ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

⁶ Prices in Zone A. The cartage charges in Zone A were as follows: January and July, 1913, \$0.50; July, 1923, and June and July, 1924, \$1.25. These charges have been included in the price.

TREND IN THE RETAIL PRICE OF COAL IN THE UNITED STATES, JANUARY, 1915, TO SEPTEMBER, 1924



The following table shows for the United States both average and relative retail prices of Pennsylvania white ash anthracite coal, stove and chestnut sizes, and bituminous coal in January and July, 1913 to 1922, and for each month of 1923 and January through September 1924. An average price for the year 1913 has been made from the averages for January and July of that year. The average price for each month has been divided by this average price for the year 1913 to obtain the relative price.

The trend in the retail prices of coal since 1915 is shown in the chart following the table.

AVERAGE AND RELATIVE PRICES OF COAL IN TON LOTS FOR THE UNITED STATES ON SPECIFIED DATES FROM JANUARY, 1913, TO SEPTEMBER, 1924

Year and month	Pennsylvania anthracite, white ash				Bituminous	
	Stove		Chestnut		Average price	Relative price
	Average price	Relative price	Average price	Relative price		
1913—						
Average for year.....	\$7.73	100.0	\$7.91	100.0	\$5.43	100.0
January.....	7.99	103.4	8.15	103.0	5.48	100.8
July.....	7.46	96.6	7.68	97.0	5.39	99.2
1914—						
January.....	7.80	100.9	8.00	101.0	5.97	109.9
July.....	7.60	98.3	7.78	98.3	5.46	100.6
1915—						
January.....	7.83	101.4	7.99	101.0	5.71	105.2
July.....	7.54	97.6	7.73	97.7	5.44	100.1
1916—						
January.....	7.93	102.7	8.13	102.7	5.69	104.8
July.....	8.12	105.2	8.28	104.6	5.52	101.6
1917—						
January.....	9.29	120.2	9.40	118.8	6.96	128.1
July.....	9.08	117.5	9.16	115.7	7.21	132.7
1918—						
January.....	9.88	127.9	10.03	126.7	7.68	141.3
July.....	9.96	128.9	10.07	127.3	7.92	145.8
1919—						
January.....	11.51	149.0	11.61	146.7	7.90	145.3
July.....	12.14	157.2	12.17	153.8	8.10	149.1
1920—						
January.....	12.59	162.9	12.77	161.3	8.81	162.1
July.....	14.28	184.9	14.33	181.1	10.55	194.1
1921—						
January.....	15.99	207.0	16.13	203.8	11.82	217.6
July.....	14.90	192.8	14.95	188.9	10.47	192.7
1922—						
January.....	14.98	193.9	15.02	189.8	9.89	182.0
July.....	14.87	192.4	14.92	188.5	9.49	174.6
1923—						
January.....	15.43	199.7	15.46	195.3	11.18	205.7
February.....	15.55	201.2	15.58	196.3	11.14	205.0
March.....	15.52	200.8	15.49	195.7	11.03	203.0
April.....	15.07	195.1	15.07	190.4	10.46	192.4
May.....	14.96	193.7	14.96	189.0	10.08	185.5
June.....	14.98	193.8	14.95	188.9	10.04	184.7
July.....	15.10	195.5	15.05	190.1	10.04	184.7
August.....	15.19	196.7	15.15	191.4	9.94	183.0
September.....	15.26	197.5	15.21	192.2	9.99	183.8
October.....	15.82	204.8	15.78	199.4	10.11	186.1
November.....	15.86	205.2	15.81	199.8	10.05	185.0
December.....	15.83	204.9	15.79	199.6	9.93	182.7
1924—						
January.....	15.77	204.1	15.76	199.1	9.75	179.5
February.....	15.73	203.5	15.71	198.5	9.80	180.3
March.....	15.72	203.5	15.70	198.4	9.63	175.4
April.....	15.10	195.4	15.04	190.1	9.11	167.7
May.....	15.04	194.6	14.96	189.1	8.88	163.5
June.....	15.04	195.0	15.00	189.5	8.84	162.7
July.....	15.24	197.2	15.10	190.7	8.94	164.5
August.....	15.20	196.7	15.13	191.1	8.63	158.8
September.....	15.36	198.8	15.28	193.0	8.88	163.5

Retail Prices of Gas in the United States ^a

THE following table shows for 51 cities the net price for the first 1,000 cubic feet of gas used for household purposes. Prices are, in most cases, for manufactured gas, but prices for natural gas have also been quoted for those cities where it is in general use. For Buffalo and Los Angeles prices are given for natural and manufactured gas, mixed. The prices shown do not include any extra charge for service.

NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS, FOR HOUSEHOLD USE, IN SPECIFIED MONTHS FROM 1913 TO 1924, BY CITIES

City	Apr. 15, 1913	Apr. 15, 1914	Apr. 15, 1915	Apr. 15, 1916	Apr. 15, 1917	Apr. 15, 1918	Apr. 15, 1919	Apr. 15, 1920	May 15, 1921	Mar. 15, 1922	Mar. 15, 1923	Sept. 15, 1923	Dec. 15, 1923	Mar. 15, 1924	June 15, 1924	Sept. 15, 1924
Atlanta	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.15	\$1.15	\$1.90	\$1.65	\$1.65	\$1.65	\$1.55	\$1.55	\$1.55	\$1.55
Baltimore	.90	.80	.80	.75	.75	.75	.75	.75	.75	.92	.92	.85	.85	.85	.85	.85
Birmingham	1.00	.95	.95	.95	.95	.95	.95	.95	.88	.88	.80	.80	.80	.80	.80	.80
Boston	.82	.82	.80	.80	.80	.85	1.02	1.07	1.42	1.34	1.25	1.25	1.25	1.20	1.20	1.20
Bridgeport	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.30	1.60	1.50	1.50	1.50	1.50	1.45	1.45
Buffalo	1.00	1.00	1.00	1.00	1.00	1.00	1.45	1.45	1.45	1.45						
Butte	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Charleston	1.10	1.10	1.10	1.10	1.00	1.10	1.10	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Chicago	.80	.80	.80	.80	.80	.76	.94	.90	1.29	1.20	1.20	1.17	1.17	1.17	1.17	1.17
Cleveland	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	1.25	1.25	1.25	1.25	1.25
Denver	.85	.80	.80	.80	.80	.85	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95
Detroit	.75	.75	.75	.75	.75	.75	.79	.79	.85	.79	.79	.79	.79	.79	.79	.79
Fall River	.80	.80	.80	.80	.80	.95	.95	1.05	1.25	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Houston	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Indianapolis	.60	.55	.55	.55	.55	.55	.60	.60	.90	.90	1.20	1.15	1.15	1.15	1.15	1.15
Jacksonville	1.20	1.20	1.15	1.15	1.15	1.25	1.25	1.50	1.75	1.75	1.65	1.65	2.40	2.40	2.40	2.40
Manchester	1.10	1.10	1.00	1.00	1.00	1.00	1.10	1.10	1.50	1.40	1.40	1.40	1.40	1.30	1.30	1.30
Memphis	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.35	1.35	1.30	1.20	1.20	1.20	1.20	1.20
Milwaukee	.75	.75	.75	.75	.75	.75	.75	.75	.90	.90	.98	.95	.95	.95	.95	.95
Minneapolis	.85	.80	.80	.77	.77	.77	.95	.95	1.28	1.02	1.03	1.01	1.01	1.00	1.01	.98
Mobile	1.10	1.10	1.10	1.10	1.10	1.10	1.35	1.35	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Newark	1.00	.90	.90	.90	.90	.97	.97	1.15	1.40	1.40	1.40	1.25	1.25	1.25	1.20	1.20
New Haven	.90	.90	.90	.90	.90	1.00	1.10	1.10	1.10	1.10	1.45	1.45	1.45	1.45	1.45	1.45
New Orleans	1.10	1.00	1.00	1.00	1.00	1.00	1.30	1.30	1.30	1.45	1.30	1.30	1.30	1.30	1.30	1.30
New York	.84	.84	.83	.83	.83	.83	.85	.87	1.36	1.28	1.21	1.23	1.23	1.23	1.23	1.23
Norfolk	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.60	1.40	1.45	1.40	1.35	1.30	1.40	1.40	1.40
Omaha	1.15	1.15	1.15	1.00	1.00	1.15	1.15	1.15	1.53	1.40	1.40	1.35	1.35	1.35	1.35	1.35
Peoria	.90	.90	.90	.90	.85	.85	.85	.85	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Philadelphia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pittsburg	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Portland, Me.	1.10	1.00	1.00	1.00	1.00	1.00	1.40	1.40	1.85	1.75	1.55	1.55	1.55	1.55	1.55	1.55
Portland, Oreg.	.95	.95	.95	.95	.95	.95	.95	.95	1.67	1.50	1.43	1.43	1.43	1.43	1.43	1.43
Providence	.85	.85	.85	.85	.85	1.00	1.30	1.30	1.25	1.25	1.10	1.05	1.05	1.05	1.05	1.05
Richmond	.90	.90	.90	.80	.80	.80	1.00	1.00	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Rochester	.95	.95	.95	.95	.95	.95	.95	.95	1.05	1.10	1.05	1.00	1.00	1.00	1.00	1.00
St. Louis	.80	.80	.80	.80	.75	.75	.75	.85	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
St. Paul	.95	.90	.90	.85	.85	.85	.85	.85	1.00	1.00	1.00	1.00	.85	.85	.85	.85
Salt Lake City	.90	.90	.90	.90	.90	.90	1.10	1.30	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
San Francisco	.75	.85	.85	.85	.85	.85	.95	.95	1.05	1.04	.92	.92	1.00	1.00	1.00	1.00
Savannah							1.25	1.60	1.60	1.60	1.45	1.45	1.45	1.45	1.45	1.45
Scranton	.95	.95	.95	.95	.95	1.15	1.30	1.30	1.70	1.70	1.60	1.60	1.60	1.50	1.50	1.50
Seattle	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Springfield, Ill.	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.40	1.40	1.40	1.35	1.35	1.35	1.35	1.35
Washington, D.C.	.93	.93	.93	.93	.80	.90	.95	.95	1.25	1.10	1.05	1.05	1.00	1.00	1.00	1.00

¹ Plus 50 cents per month service charge.

² Plus 10 cents per month service charge. Minimum bill \$1 to those using 1,200 cubic feet or less per month.

³ The rate was increased from 90 cents by order of the Federal court and is subject to final decision by the same court. Pending the decision this increase has been impounded.

⁴ Plus 25 cents per month service charge.

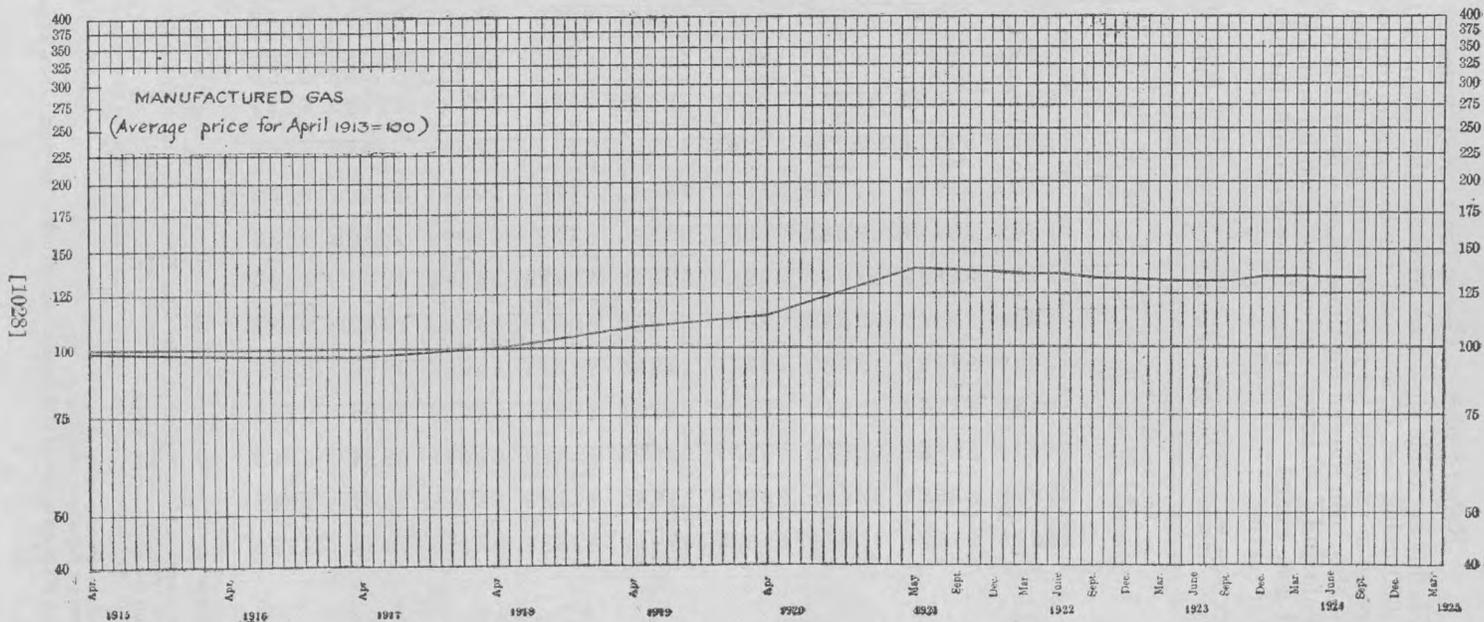
⁵ The prices of two companies included in this average have an additional service charge of 2½ cents per day.

⁶ The price of one company included in this average has an additional service charge of 2½ cents per day.

⁷ Plus 40 cents per month service charge.

^a Retail prices of gas are published at quarterly intervals in the MONTHLY LABOR REVIEW.

TREND IN THE RETAIL PRICE OF GAS IN THE UNITED STATES, APRIL, 1915, TO SEPTEMBER, 1924



NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS, FOR HOUSEHOLD USE, IN SPECIFIED MONTHS FROM 1913 TO 1924, BY CITIES—Concluded

Natural gas

City	Apr. 15, 1913	Apr. 15, 1914	Apr. 15, 1915	Apr. 15, 1916	Apr. 15, 1917	Apr. 15, 1918	Apr. 15, 1919	Apr. 15, 1920	May 15, 1921	Mar. 15, 1922	Mar. 15, 1923	Sept. 15, 1923	Dec. 15, 1923	Mar. 15, 1924	June 15, 1924	Sept. 15, 1924
Buffalo.....	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.35	\$0.35	\$0.35	\$0.42						
Cincinnati.....	.30	.30	.30	.30	.30	.35	.35	.35	.35	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Cleveland.....	.30	.30	.30	.30	.30	.30	.30	.35	.35	.40	.40	1.45	1.45	1.45	1.45	1.45
Columbus.....					.30	.30	.30	.30	.30	.45	.45	.45	.45	.45	.45	.45
Dallas.....	.45	.45	.45	.45	.45	.45	.45	.45	.45	.68	.68	.68	.68	.68	.68	.68
Kansas City, Mo.....	.27	.27	.27	.27	.30	.60	.80	.80	1.80	1.80	1.85	1.85	1.85	1.85	1.29	1.29
Little Rock.....	.40	.40	.40	.40	.40	.45	.45	.45	.45	.45	.45	.45	1.55	1.55	1.55	1.55
Louisville.....	.62	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Pittsburgh.....	.28	.28	.28	.28	.28	.35	.35	.45	.50	.50	.50	.50	.53	.53	.53	.53

Manufactured and natural gas, mixed

Los Angeles.....			\$0.68	\$0.68	\$0.68	\$0.68	\$0.75	\$0.75	\$0.75	\$0.76	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68
Buffalo.....											⁹ .62	⁹ .61	⁹ .61	⁹ .62	⁹ .60	⁹ .60

¹ Plus 50 cents per month service charge. ⁸ Minimum bill \$1. ⁹ Price includes a coal charge.

From the prices quoted on manufactured gas average prices have been computed for all of the cities combined and are shown in the next table for April 15 of each year from 1913 to 1920, and for May 15, September 15, and December 15, 1921, and March 15, June 15, September 15, and December 15, 1922, and 1923, and March 15, June 15, and September 15, 1924. Relative prices have been computed by dividing the price of each year by the price in April, 1913.

As may be seen in the table, the price of manufactured gas changed but little until 1921. The price in September, 1924, showed an increase of 34 per cent since April, 1913. From June, 1924, to September, 1924, there was no change in the price of gas.

AVERAGE¹ AND RELATIVE PRICES OF MANUFACTURED GAS, FOR HOUSEHOLD USE, PER 1,000 CUBIC FEET, IN SPECIFIED MONTHS OF EACH YEAR, 1913 TO 1924, FOR ALL CITIES COMBINED

[Average prices in April, 1913=100]

Date	Average price	Relative price	Date	Average price	Relative price	Date	Average price	Relative price
Apr. 15, 1913.....	\$0.95	100.0	May 15, 1921.....	\$1.32	139.0	Mar. 15, 1923.....	\$1.26	132.6
Apr. 15, 1914.....	.94	99.0	Sept. 15, 1921.....	1.31	137.9	June 15, 1923.....	1.26	132.6
Apr. 15, 1915.....	.93	97.9	Dec. 15, 1921.....	1.30	136.8	Sept. 15, 1923.....	1.26	132.6
Apr. 15, 1916.....	.92	96.8	Mar. 15, 1922.....	1.29	135.8	Dec. 15, 1923.....	1.28	134.7
Apr. 15, 1917.....	.92	96.8	June 15, 1922.....	1.29	135.8	Mar. 15, 1924.....	1.27	133.7
Apr. 15, 1918.....	.95	100.0	Sept. 15, 1922.....	1.27	133.7	June 15, 1924.....	1.27	133.7
Apr. 15, 1919.....	1.04	109.5	Dec. 15, 1922.....	1.27	133.7	Sept. 15, 1924.....	1.27	133.7
Apr. 15, 1920.....	1.09	114.7						

¹ Net price.

Retail Prices of Electricity in the United States

THE following table shows for 51 cities the net rates per kilowatt hour of electricity used for household purposes for specified months, from 1913 to 1924.

For the cities having more than one tariff for domestic consumers the rates are shown for the schedule under which most of the residences are served.

The consumption per month is expressed in hours of demand for several of the cities from which prices for electricity have been obtained. Since the demand is determined by a different method in each city, the explanation of these methods is given following the table.

NET PRICE PER KILOWATT HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS, 1913 TO 1924, FOR 51 CITIES

[1030]

City	Measure of consumption, per month	De- cember, 1913	De- cember, 1914	De- cember, 1915	De- cember, 1916	De- cember, 1917	De- cember, 1918	De- cember, 1919	De- cember, 1920	De- cember, 1921	De- cember, 1922	1923			1924		
												June	September	December	March	June	September
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Atlanta.....	First 100 kilowatt hours.....	17.0	17.0	17.0	17.0	17.0	17.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Baltimore.....	First 40 kilowatt hours.....	28.5	28.5	28.5	28.5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	8.0	8.0	8.0	8.0
Birmingham.....	First 100 kilowatt hours.....	28.5	28.5	28.5	27.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Boston:																	
Company A.....	First 1,000 kilowatt hours.....	4 10.0	4 10.0	4 10.0	4 10.0	4 10.0	4 10.0	5 11.2	5 11.4	5 11.8	5 11.0	4 9.5	4 9.5	4 9.5	4 9.5	9.5	9.5
Company B.....	do.....	4 10.0	4 10.0	4 10.0	4 10.0	4 10.0	4 10.0	5 11.5	5 11.4	5 11.8	5 11.0	4 9.5	4 9.5	4 9.5	4 9.5	9.5	9.5
Bridgeport.....	All current.....	9.0	8.0	7.0	7.0	7.0	7.0	8.0	8.0	8.5	8.5	7.5	7.5	7.5	7.5	7.0	7.0
Buffalo 6.....	First 60 hours' use of demand.....	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0
	Next 120 hours' use of demand.....	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Excess.....	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Butte.....	First 25 kilowatt hours.....	7 9.5	7 9.5	7 9.5	7 9.5	7 9.5	7 9.5	7 9.5	7 9.5	7 9.5	7 9.5	7 9.5	8.0	8.0	8.0	8.0	8.0
	Next 25 kilowatt hours.....	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Charleston.....	First 50 kilowatt hours.....	8 10.0	8 10.0	8 10.0	8 10.0	8 10.0	8 10.0	8 10.0	8 10.0	8 10.0	8 10.0	8 10.0	8.0	8.0	8.0	8.0	8.0
	Next 50 kilowatt hours.....	8.0	8.0	8.0	8.0	8.0	8.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0
Chicago 6.....	First 30 hours' use of demand.....	10.0	10.0	10.0	9.0	9.0	9.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Next 30 hours' use of demand.....	5.0	5.0	5.0	5.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Excess.....	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cincinnati 6.....	First 30 hours' use of demand.....	9.5	9.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	Next 30 hours' use of demand.....	6.7	6.7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Excess.....	3.8	3.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cleveland:																	
Company A.....	All current.....	9 10.0	9 10.0	9 10.0	9 10.0	9 10.0	9 10.0	9 10.0	9 10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Excess.....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Company B.....	All current.....	10 8.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Next 600 kilowatt hours.....	5.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Columbus.....	All current.....	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	6.0	6.0	6.0	6.0	6.0
Dallas.....	First 800 kilowatt hours.....	10.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Denver.....	All current.....	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Detroit.....	First 3 kilowatt hours per active room.....	11 12.6	11 12.6	11 12.6	11 12.6	11 12.6	11 12.6	11 12.6	11 12.6	12.6	12.6	10.8	10.8	10.8	10.8	10.8	10.8
	Excess.....	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Fall River.....	First 25 kilowatt hours.....	12 9.5	12 9.5	12 8.6	12 8.6	12 8.6	12 8.6	13 9.5	13 10.5	13 10.5	13 10.5	9.0	9.0	9.0	9.0	9.0	9.0
	Next 975 kilowatt hours.....	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	7.2	7.2	7.2	7.2	7.2	7.2
Houston 6.....	First 30 hours' use of demand.....	12 4.4	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	4.5	4.5	4.5	4.5	4.5	4.5
	Excess.....	7.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Indianapolis:																	
Company A.....	First 50 kilowatt hours.....	15 7.5	15 7.5	16 6.5	16 6.5	16 6.5	16 6.5	16 6.5	16 6.5	16 7.5	16 7.5	7.0	7.0	7.0	7.0	7.0	7.0
	Next 150 kilowatt hours.....	17 5.0	17 5.0	17 5.0	17 5.0	17 5.0	17 5.0	17 6.0	17 6.0	17 7.0	17 7.0	6.5	6.5	6.5	6.5	6.5	6.5
Company B.....	First 50 kilowatt hours.....	12 7.0	12 7.0	16 6.5	16 6.5	16 6.5	16 6.5	16 6.5	16 6.5	16 7.5	16 7.5	7.0	7.0	7.0	7.0	7.0	7.0
	Next 150 kilowatt hours.....	17 5.0	17 5.0	17 5.0	17 5.0	17 5.0	17 5.0	17 5.0	17 5.0	17 7.0	17 7.0	6.5	6.5	6.5	6.5	6.5	6.5
Jacksonville.....	All current.....	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0

Kansas City.....	First 5 kilowatt hours per active room (minimum, 3 rooms).....	19 9.9	19 9.9	19 9.9	19 9.9	19 7.6	20 8.4	20 9.0	19 8.7	19 8.7	19 8.7	19 8.7	19 8.7	7.5	7.5	7.5	7.5
	Next 5 kilowatt hours per room.....													5.0	5.0	5.0	5.0
	Excess.....	4.5	4.5	4.5	4.5	4.8	5.2	5.6	5.4	5.4	5.4	5.4	5.4	2.5	2.5	2.5	2.5
Little Rock.....	First 200 kilowatt hours.....	4 13.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Los Angeles:																	
Company A.....	First 100 kilowatt hours.....	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.2	6.2	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Company B.....	do.....	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.2	6.2	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Louisville.....	One to 149 kilowatt hours.....	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Manchester.....	First 25 kilowatt hours.....	4 11.4	4 11.4	4 11.4	4 11.4	4 11.4	21 12.0	21 12.0	21 12.0	21 12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	Next 50 kilowatt hours.....						21 6.0	21 6.0	21 6.0	21 6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Memphis.....	First 6 kilowatt hours per room.....	4 10.0	4 10.0	4 10.0	4 10.0	22 6.0	22 6.0	22 6.0	2 9.0	2 9.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Excess.....										5.0	5.0	5.0	5.0	5.0	5.0	5.0
Milwaukee.....	First 5 kilowatt hours for each of the first 5 active rooms. ²³	24 11.4	24 10.5	24 10.5	24 9.5	24 9.5	25 10.3	25 10.3	25 10.3	25 10.3	9.5	8.6	8.6	8.6	8.6	8.6	7.6
	Additional energy up to 9 kilowatt hours for each active room.	26 4.8	26 4.8	27 4.8	27 4.8	27 4.8	25 5.6	25 5.6	25 5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	Excess.....	3.8	3.8	1.9	1.9	1.9	25 2.7	25 2.7	25 2.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Minneapolis.....	First 3 kilowatt hours per active room.....	8.6	8.6	8.6	8.1	7.6	9.5	9.5	10.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	Next 3 kilowatt hours per active room.....	17 5.7	17 5.7	17 5.7	5.7	5.7	7.1	7.1	7.8	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Mobile.....	First 50 kilowatt hours.....	7.0	7.0	7.0	7.0	8.0	11.7	9.9	8.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Newark.....	First 20 kilowatt hours.....	13 10.0	13 10.0	13 10.0	13 10.0	13 10.0	13 10.0	13 10.0	13 10.0	13 10.0	13 9.0	13 9.0	13 9.0	13 9.0	13 9.0	13 9.0	9.0
	Next 480 kilowatt hours.....																9.0
New Haven.....	All current.....	9.0	8.0	7.0	7.0	7.0	8.0	8.0	8.5	8.5	8.0	7.5	7.5	7.5	7.0	7.0	8.0
New Orleans.....	First 20 kilowatt hours ²¹	28 13.0	28 12.0	7.0	7.0	7.0	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	Next 30 kilowatt hours.....	17 6.0	17 6.0	6.0	6.0	6.0	7.0	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8

¹ First 150 kilowatt hours.

² First 50 kilowatt hours.

³ The gross rate is 10 cents per kilowatt hour with discounts of 10 per cent for a monthly consumption of 1 to 25 kilowatt hours and 15 per cent for a monthly consumption of 25 to 150 kilowatt hours. The average family used 25 or more kilowatt hours per month.

⁴ All current.

⁵ All current. Price includes a coal charge, and a surcharge of 10 per cent from December, 1918, to June, 1920, and 5 per cent from December, 1920, to December, 1921.

⁶ For determination of demand see p. 90.

⁷ First 100 kilowatt hours.

⁸ First 25 kilowatt hours.

⁹ First 36 hours' use of demand: For determination of demand see p. 90.

¹⁰ First 10 kilowatt hours.

¹¹ First 2 kilowatt hours per active room.

¹² First 200 kilowatt hours.

¹³ First 500 kilowatt hours.

¹⁴ First 2 kilowatt hours per 16 candlepower of installation.

¹⁵ All current. This rate applies to a 5-year contract with a minimum charge of \$1 per month. For a 1-year contract the rates per kilowatt hour are 10 cents without a minimum charge, or 9½ cents with a minimum of \$1 per month.

¹⁶ First 1.5 kilowatt hours per socket for not less than 10 sockets, 1 kilowatt hour per socket for the next 10 sockets, and 0.5 kilowatt hour per socket for excess sockets.

¹⁷ Excess.
¹⁸ Next 1.5 kilowatt hours per socket for not less than 10 sockets, 1 kilowatt hour per socket for the next 10 sockets, and 0.5 kilowatt hour per socket for excess sockets.

¹⁹ First 3 kilowatt hours per active room; minimum, 3 rooms.
²⁰ First 3 kilowatt hours per room, minimum 3 rooms. Price for December, 1918, includes a surcharge of 10 per cent, and December, 1919, a surcharge of 14 per cent.

²¹ Surcharge, 25 cents per month additional.
²² First 80 kilowatt hours. There is an additional charge of 30 cents per month. At the end of the year any amount paid in excess of 7½ cents per kilowatt hour is refunded.

²³ And the first 2½ kilowatt hours for each additional active room.
²⁴ First 4 kilowatt hours for each of the first 4 active rooms and the first 2½ kilowatt hours for each additional active room.

²⁵ Same schedule as in December, 1917, plus a surcharge of 8 mills.

²⁶ Additional energy up to 100 kilowatt hours.

²⁷ Additional energy until a total of 7 kilowatt hours per active room shall have been consumed.

²⁸ First 30 hours' use of connected load.

NET PRICE PER KILOWATT HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS, 1913 TO 1924, FOR 51 CITIES—Concluded

City	Measure of consumption, per month	De-	De-	De-	De-	De-	De-	De-	De-	De-	De-	1923			1924		
		cember, 1913	cember, 1914	cember, 1915	cember, 1916	cember, 1917	cember, 1918	cember, 1919	cember, 1920	cember, 1921	cember, 1922	June	Sept- ember	De- cember	March	June	Sept- ember
New York:		Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Company A	First 1,000 kilowatt hours	²⁸ 10.0	²⁹ 10.0	³⁰ 8.0	³⁰ 8.0	7.0	7.0	7.0	³¹ 7.9	³¹ 7.7	³¹ 7.6	³¹ 7.6	³¹ 7.5	³¹ 7.5	³¹ 7.4	³¹ 7.4	³¹ 7.4
Company B	All currents ³²	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Company C ⁶	First 60 hours' use of demand	11.0	11.0	11.0	11.0	8.0	8.0	8.0	³¹ 9.0	³¹ 8.7	³¹ 8.6	³¹ 8.6	³¹ 8.5	³¹ 8.5	³¹ 8.4	³¹ 8.4	³¹ 8.3
Norfolk	First 100 kilowatt hours	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Omaha	First 150 kilowatt hours	²⁵ 11.4	²⁵ 10.5	⁸ 8.0	⁸ 8.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5
	Next 125 kilowatt hours	17 5.7	17 5.7	6.0	6.0												
Peoria	First 5 kilowatt hours for each of the first 2 rooms. ³³	³⁴ 9.9	³⁴ 9.9	³⁴ 9.9	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Second 5 kilowatt hours for each of the first 2 rooms. ³³				6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Philadelphia:																	
Company A	First 12 kilowatt hours	4 10.0	4 10.0	4 10.0	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 48 kilowatt hours				³⁵ 7.0	³⁵ 7.0	³⁵ 7.0	³⁵ 7.0	^{35} 7.0	^{35} 7.0	^{35} 7.0	^{35} 7.0	^{35} 7.0	³⁵ 7.0	³⁵ 7.0	³⁵ 7.0	³⁵ 7.0
Company B	First 20 kilowatt hours	¹³ 10.0	¹³ 9.0														
	Next 480 kilowatt hours																
Pittsburgh ⁶	First 30 hours' use of demand	4 10.0	4 10.0	4 10.0	4 9.0	4 9.0	4 9.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 60 hours' use of demand							8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	All current	9.0	9.0	8.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Portland, Me.																	
Portland, Oreg.:																	
Company A	First 9 kilowatt hours	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Next kilowatt hours ³⁶	³⁷ 6.7	³⁷ 6.7	³⁷ 6.7	³⁷ 6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
	Next 50 kilowatt hours	³⁸ 5.7	³⁸ 5.7	³⁸ 5.7	³⁸ 5.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Company B	First 13 kilowatt hours	³⁹ 9.0	³⁹ 9.0	³⁹ 9.0	³⁹ 8.6	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	Next kilowatt hours ⁴⁰	⁴¹ 7.0	⁴¹ 7.0	⁴¹ 7.0	⁴¹ 6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
	Next 50 kilowatt hours	⁴⁷ 4.0	⁴⁷ 4.0	⁴⁷ 4.0	⁴⁷ 3.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Providence	All current	10.0	10.0	10.0	10.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Richmond	First 100 kilowatt hours	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Rochester	All current	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
St. Louis:																	
Company A	First 9 kilowatt hours per active room	²⁴ 9.5	²⁴ 9.5	²⁴ 8.6	²⁴ 8.1	²⁴ 7.6	²⁴ 7.6	²⁴ 7.6	²⁴ 7.6	^{24} 7.6	^{24} 7.6	^{24} 7.6	^{24} 7.6	²⁴ 7.6	²⁴ 7.6	²⁴ 7.6	²⁴ 7.6
	Additional energy up to 9 kilowatt hours per room.			²⁷ 5.7	²⁷ 5.7	²⁷ 5.7	²⁷ 5.7	^{27} 5.7	^{27} 5.7	^{27} 5.7	^{27} 5.7	^{27} 5.7	^{27} 5.7	²⁷ 5.7	²⁷ 5.7	²⁷ 5.7	²⁷ 5.7
	Excess	5.7	5.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Company B	First 27 kilowatt hours ⁴⁴	⁴⁵ 9.0	⁴⁵ 9.0	⁴⁵ 8.6	⁴⁷ 6.7	⁴⁷ 6.7	⁴⁷ 6.7	⁴⁷ 6.7	^{47} 6.7	^{47} 6.7	^{47} 6.7	^{47} 6.7	^{47} 6.7	⁴⁷ 6.7	⁴⁷ 6.7	⁴⁷ 6.7	⁴⁷ 6.7
	Next 12 kilowatt hours ⁴⁵			⁴⁶ 5.7	⁴⁷ 5.7	⁴⁷ 5.7	⁴⁷ 5.7	^{47} 5.7	^{47} 5.7	^{47} 5.7	^{47} 5.7	^{47} 5.7	^{47} 5.7	⁴⁷ 5.7	⁴⁷ 5.7	⁴⁷ 5.7	⁴⁷ 5.7
	Excess	5.7	5.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
St. Paul	First 30 kilowatt hours	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
	Excess	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Salt Lake City	First 250 kilowatt hours	9.0	9.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1

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San Francisco:																
Company A	First 10 kilowatt hours	7 7.0	2 7.0	3 7.0	4 7.0	5 7.0	2 8.0	2 8.0	50 9.2	2 8.5	2 8.5	9.0	9.0	9.0	9.0	9.0
	Next 40 kilowatt hours											6.0	6.0	6.0	6.0	6.0
Company B		7 7.0	7 7.0	7 7.0	4 7.0	7 7.0	7 8.0	7 8.0	50 9.2	2 8.5	2 8.5	9.0	9.0	9.0	9.0	9.0
												6.0	6.0	6.0	6.0	6.0
Savannah:																
Company A		51 12.0	10 10.8	10 10.8	10 10.8	9.0	9.0	9.0	9.0	9.0	9.0	9.0				
		6.0	5.4	5.4	5.4											
Company B		10 12.0	10 12.0	10 12.0	14 12.0	2 7.2	2 7.2	2 7.2	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
		6.0	6.0	6.0	6.0											
Scranton:																
First 150 kilowatt hours		4 9.0	4 9.0	4 9.0	8.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Seattle:																
Company A		53 8.0	53 6.0	53 5.5	53 5.5	53 5.5	53 5.5	53 5.5	53 6.0	53 6.0	53 6.0	5.5	5.5	5.5	5.5	5.5
Company B		53 6.0	53 6.0	53 5.5	53 5.5	53 5.5	53 5.5	53 5.5	53 6.0	53 6.0	53 6.0	5.5	5.5	5.5	5.5	5.5
Springfield:																
Company A		54 10.0	54 10.0	54 10.0	54 10.0	54 10.0	54 10.0	54 10.0	54 10.0	54 10.0	54 10.0	6.0	6.0	6.0	6.0	6.0
		55 7.0	55 7.0	55 7.0	55 7.0	55 7.0	55 7.0	55 7.0	55 7.0	55 7.0	55 7.0	3.0	3.0	3.0	3.0	3.0
Company B						6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
						3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Washington, D. C. ⁴		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

² First 50 kilowatt hours.
⁴ All current.
⁶ For determination of demand see p. 90.
⁷ First 100 kilowatt hours.
⁸ First 25 kilowatt hours.
¹⁰ First 10 kilowatt hours.
¹³ First 500 kilowatt hours.
¹⁴ First 2 kilowatt hours per 16 candlepower of installation.
¹⁷ Excess.
²⁴ First 4 kilowatt hours for each of the first 4 active rooms and the first 2½ kilowatt hours for each additional active room.
²⁷ Additional energy until a total of 7 kilowatt hours per active room shall have been consumed.
²⁸ First 30 hours' use of connected load.
²⁹ First 250 kilowatt hours.
³⁰ First 900 kilowatt hours.
³¹ Price includes a coal charge.
³² A discount of 5 per cent is allowed on all bills of \$2 or over when payment is made within 10 days from date of bill.
³³ And 4 kilowatt hours for each additional active room.
³⁴ 1 to 200 kilowatt hours.
³⁶ Next 75 kilowatt hours.
³⁸ The number of kilowatt hours paid for at this rate is that in excess of the first 9 kilowatt hours until 100 hours' use of the demand is reached. After 100 hours of demand have been consumed the lower rate can be applied. For determination of demand see p. 90.
³⁷ Next 70 kilowatt hours.
³⁸ Next 100 kilowatt hours.
³⁹ First 6 per cent of demand. For determination of demand see p. 90.
⁴⁰ For an installation of 600 watts or less 7 kilowatt hours will apply. For each 30 watts of installation in excess of 600 watts 1 additional kilowatt hour will apply.
⁴¹ Next 6 per cent of demand. For determination of demand see p. 90.
⁴² Service charge, 50 cents per month additional. In December, 1922 and 1923, and March, 1923 and 1924, there was a reduction of 1 mill under the fuel clause.
⁴³ First 5 kilowatt hours for each of the first 5 active rooms and the first 2½ kilowatt hours for each additional active room.
⁴⁴ For a house of 5 or 6 rooms. For a house of 4 rooms or less 18 kilowatt hours is paid for at the primary rate. For a house of 7 or 8 rooms 36 kilowatt hours is paid for at the primary rate.
⁴⁵ For a house of 6 rooms or less 15 kilowatt hours; for a house of 7 or 8 rooms 20 kilowatt hours.
⁴⁶ For a house of 6 rooms or less 15 kilowatt hours at the primary rate and 5 at the secondary rate. For a house of 7 or 8 rooms 20 kilowatt hours at the primary rate and 10 at the secondary rate.
⁴⁷ For a house of 4 rooms or less 8 kilowatt hours at the primary rate and 6 at the secondary rate. For a house of 5 or 6 rooms 12 kilowatt hours at the primary rate and 9 at the secondary rate. For a house of 7 or 8 rooms 16 kilowatt hours at the primary rate and 12 at the secondary rate.
⁴⁸ For a house of 4 rooms or less 10 kilowatt hours is paid for at the primary rate. For a house of 5 or 6 rooms 15 kilowatt hours is paid for at the primary rate, and for a house of 7 or 8 rooms 20 kilowatt hours is paid for at the primary rate.
⁴⁹ For a house of 5 or 6 rooms. For a house of 4 rooms or less 8 kilowatt hours is paid for at the secondary rate, and for a house of 7 or 8 rooms 16 kilowatt hours is paid for at the secondary rate.
⁵⁰ First 30 kilowatt hours.
⁵¹ First 15 kilowatt hours.
⁵² First 60 kilowatt hours.
⁵³ First 45 kilowatt hours.
⁵⁴ First 30 hours' use of demand. For determination of demand see p. 90.
⁵⁵ Next 30 hours' use of demand. For determination of demand see p. 90.

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Determination of Demand

IN BUFFALO the demand consists of two parts—lighting, 25 per cent of the total installation, but never less than 250 watts; and power, $2\frac{1}{2}$ per cent of the capacity of any electric range, water heater, or other appliance of 1,000 watts or over and 25 per cent of the rated capacity of motors exceeding one-half horsepower but less than 1 horsepower. The installation is determined by inspection of premises.

In Chicago the equivalent in kilowatt hours to 30 hours' use of demand has been estimated as follows: For a rated capacity of 475 to 574 watts, 11 kilowatt hours; 575 to 674 watts, 12 kilowatt hours; 675 to 774 watts, 13 kilowatt hours; and 775 to 874 watts, 14 kilowatt hours. Although the equivalent in kilowatt hours to 30 hours' use of demand of from 1 to 1,500 watts is given on the printed tariff, the equivalent is here shown only for installations of from 475 to 874 watts; the connected load of the average working-man's home being, as a rule, within this range.

In Cincinnati the demand has been estimated as being 70 per cent of the connected load, excluding appliances.

In Cleveland, from December, 1913, to December, 1919, inclusive, Company A determined the demand by inspection as being 40 per cent of the connected load. From December, 1919, to the present time, there has been a flat rate for all current consumed.

In Houston the demand is estimated as 50 per cent of the connected load, each socket opening being rated at 50 watts.

In New York the demand for Company C, when not determined by meter, has been computed at 50 per cent of total installation in residences, each standard socket being rated at 50 watts and all other outlets being rated at their actual kilowatt capacity.

In Pittsburgh since December, 1919, the demand has been determined by inspection. The first 10 outlets have been rated at 30 watts each, the next 20 outlets at 20 watts each, and each additional outlet at 10 watts. Household utensils and appliances of not over 660 watts each have been excluded.

In Portland, Oreg., the demand for Company A has been estimated as one-third of the connected lighting load. Ranges, heating devices, and small power up to rated capacity of 2 kilowatts are not included.

For Company B the demand, when not based on actual measurement, was estimated at one-third of the connected load. No demand was established at less than 233 watts.

In Springfield, Ill., the demand for Company A from December, 1913, to September, 1922, was the active load predetermined as follows: 80 per cent of the first 500 watts of connected load plus 60 per cent of that part of the connected load in excess of the first 500 watts—minimum active load, 150 watts.

In Washington, D. C., the demand is determined by inspection, and consists of 100 per cent of the connected load, excluding small fans and heating and cooking appliances.

Index Numbers of Wholesale Prices in September, 1924

WHOLESALE prices in September receded somewhat from the August level, according to information gathered in representative markets by the United States Department of Labor through the Bureau of Labor Statistics. The bureau's weighted index number, which includes 404 commodities or price series, declined to 148.8 for September, compared with 149.7 for August, and 153.7 for September, 1923.

Decreases in farm products, clothing materials, fuels, and metals were responsible for the drop in the general price level. Among farm products there were substantial reductions in cattle, sheep, cotton, cotton seed, flaxseed, hay, hops, onions, and potatoes. These decreases, notwithstanding increases in grains, hogs, eggs, hides, and wool, caused the farm products price level to recede 1.5 per cent. In the cloths and clothing group there were large decreases in cotton yarns and certain woven goods, also raw silk, causing a drop of 1.8 per cent in the group level. Fuels, due to declines in gasoline and in crude petroleum in the mid-continent fields, decreased 1 per cent. Metals likewise decreased, due to lower prices for steel billets, steel plates and shapes, iron pipe, ingot copper, and pig tin. In all other commodity groups prices in September averaged higher than in August, foods being conspicuously higher.

Of the 404 commodities or price series for which comparable data for August and September were collected, decreases were shown in 120 instances and increases in 125 instances. In 159 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES

[1913=100]

Group	September, 1923	1924	
		August	September
Farm products.....	143.7	145.3	143.1
Foods.....	147.3	144.0	147.7
Cloths and clothing.....	201.7	189.9	186.5
Fuel and lighting.....	175.8	169.7	168.0
Metals and metal products.....	144.1	130.4	128.2
Building materials.....	181.8	169.2	170.7
Chemicals and drugs.....	127.8	130.1	130.6
House-furnishing goods.....	182.6	171.0	171.1
Miscellaneous.....	120.9	115.0	115.8
All commodities.....	153.7	149.7	148.8

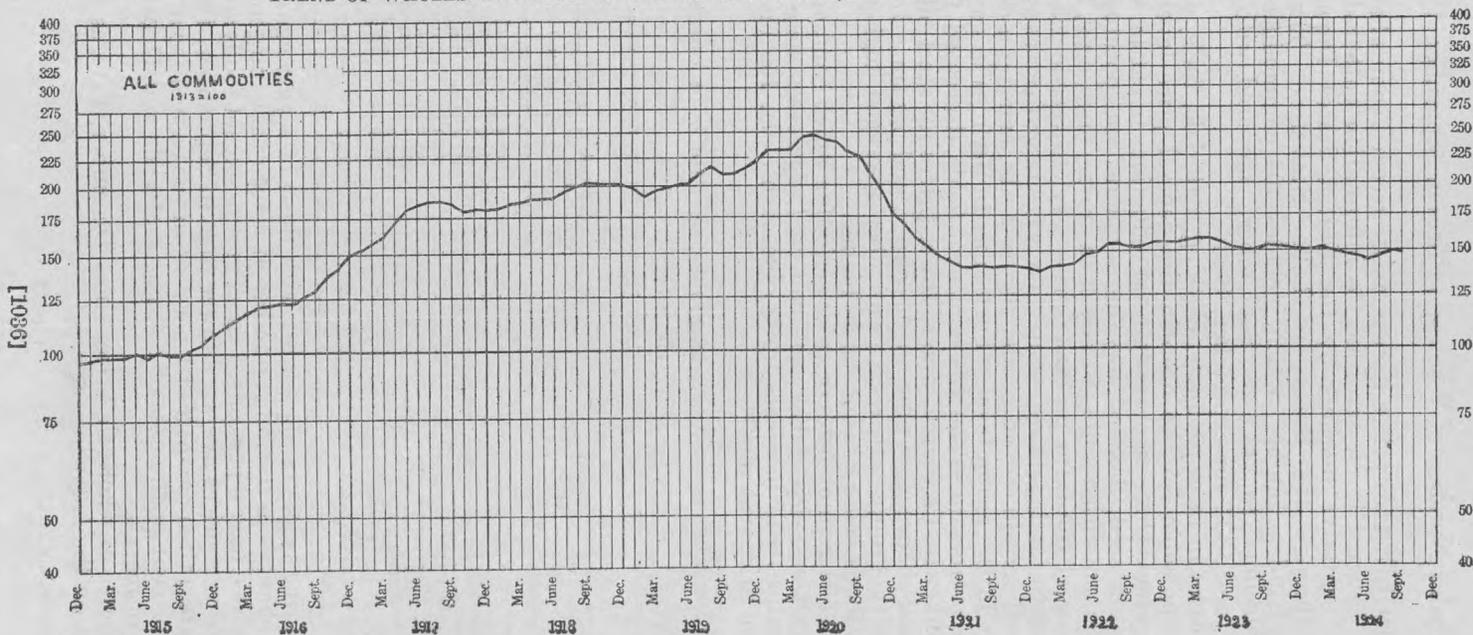
Comparing prices in September with those of a year ago, as measured by changes in the index number, it is seen that the general level has decreased over 3 per cent. In all groups except foods and chemicals and drugs prices averaged lower than in September, 1923, ranging from less than one-half of 1 per cent in the case of farm products to 7½ per cent in the case of clothing materials and 11 per cent in the case of metals.

The course of wholesale prices since December, 1914, is shown in the chart on the following page.

15264°—24†——7

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TREND OF WHOLESALE PRICES IN THE UNITED STATES, DECEMBER, 1914, TO SEPTEMBER, 1924



Average Wholesale Prices of Commodities, July to September, 1924

IN CONTINUATION of information first published in the MONTHLY LABOR REVIEW for May, 1922, there are presented herewith the average prices in July, August, and September, 1924, of the more important commodities for which wholesale prices are collected by the Bureau of Labor Statistics. For convenience of comparison with pre-war prices, index numbers based on average prices in the year 1913 as 100 are shown in addition to the statement of absolute money prices. To show more minutely the fluctuations in prices, all index numbers are here published to the fourth significant figure.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
FARM PRODUCTS						
Grains				140.9	145.3	143.1
Barley, malting, per bushel, Chicago	\$0.829	\$0.853	\$0.866	144.6	150.8	151.6
Corn, per bushel, Chicago—				132.6	136.3	138.5
Contract grades—						
No. 3 mixed	1.055	1.170	1.163	168.7	187.2	186.1
No. 1, northern spring, Chicago	1.049	1.160	1.151	170.3	188.5	187.1
Oats, contract grades, per bushel, Chicago	.563	.528	.497	149.7	140.4	132.2
Rye, No. 2, per bushel, Chicago	.861	.919	1.016	135.3	144.4	159.7
Wheat, per bushel—						
No. 1, northern spring, Chicago	1.397	1.356	1.350	152.9	148.5	147.9
No. 2, red winter, Chicago	1.253	1.315	1.343	127.0	133.3	136.2
No. 2, hard winter, Kansas City	1.203	1.221	1.262	137.2	139.2	144.0
No. 1, northern spring, Minneapolis	1.296	1.318	1.310	148.4	150.8	149.9
No. 1, hard white, Portland, Oreg.	1.392	1.510	1.526	149.8	162.6	164.3
Livestock and poultry				109.4	118.0	116.6
Cattle, steers, per 100 pounds, Chicago—						
Choice to prime	10.675	10.644	10.090	119.6	119.2	113.0
Good to choice	9.563	9.484	9.015	112.4	111.5	106.0
Hogs, per 100 pounds, Chicago—						
Heavy	8.188	9.613	9.855	97.9	114.9	117.8
Light	8.194	9.825	10.055	96.9	116.2	118.9
Sheep, per 100 pounds, Chicago—						
Ewes, native, all grades	4.844	5.969	5.405	103.3	127.4	115.3
Lambs, western, good to choice	13.750	13.281	13.175	176.4	170.4	169.0
Wethers, fed, good to choice	7.281	7.500	6.740	136.2	140.3	126.1
Poultry, live fowls, per pound—						
Chicago	.214	.235	.239	138.9	152.5	155.1
New York	.229	.256	.269	136.8	153.1	160.7
Other farm products				163.8	163.3	163.7
Beans, medium, choice, per 100 pounds, New York	5.380	5.863	6.325	134.8	146.9	158.5
Clover seed, contract grades, per 100 pounds, Chicago	18.782	20.000	22.200	113.7	121.1	134.1
Cotton, middling, per pound—						
New Orleans	.291	.270	.230	229.1	212.2	181.4
New York	.317	.293	.244	247.8	228.9	191.1
Cotton seed, per ton, average price at gin	39.070	38.440	31.740	179.3	176.4	145.7
Eggs, fresh, per dozen—						
Firsts, western, Boston	.277	.321	.366	110.1	127.8	145.6
Firsts, Chicago	.257	.304	.359	113.6	134.5	159.0
Extra firsts, Cincinnati	.275	.298	.390	122.7	133.3	174.3
Candled, New Orleans	.325	.344	.387	138.7	146.7	165.2
Extra firsts, western, Philadelphia	.287	.327	.389	115.1	131.3	156.2
Extra firsts, western, Philadelphia	.308	.368	.455	116.7	139.6	172.6
Flaxseed, No. 1, per bushel, Minneapolis	.313	.353	.410	116.9	131.6	153.1
Hay, per ton—						
Alfalfa, No. 1, Kansas City	19.000	19.900	20.375	133.9	140.3	143.6
Clover mixed, No. 1, Cincinnati	19.850	18.250	17.400	127.4	117.1	111.7
Timothy, No. 1, Chicago	25.000	26.125	23.900	156.0	163.0	149.1
Hides and skins, per pound—						
Calfskins, No. 1, country, Chicago	.180	.194	.198	95.2	102.8	105.0
Goatskins, Brazilian, New York	.610	.638	.763	85.8	89.7	197.2
Hides, heavy, country cows, No. 1, Chicago	.079	.100	.099	52.6	66.3	65.9
Hides, packers', heavy, native steers, Chicago	.131	.156	.161	71.4	85.0	87.3
Hides, packers', heavy, Texas steers, Chicago	.125	.144	.146	69.1	79.5	80.9

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WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
FARM PRODUCTS—Concluded						
Other farm products—Concluded.						
Hops, prime to choice, per pound—						
New York State, New York	\$0.500	\$0.405	\$0.395	187.8	152.1	148.3
Pacifics, Portland, Oreg.	.310	.211	.141	180.4	122.9	82.0
Milk, fluid, per quart—						
Chicago	.068	.069	.069	159.1	162.1	162.1
New York	.057	.061	.073	128.4	137.9	163.9
San Francisco	.068	.068	.068	158.1	158.1	158.1
Onions, fresh, yellow, per 100 pounds, Chicago	3.930	2.769	2.190	250.0	176.0	139.3
Peanuts, No. 1, per pound, Norfolk, Va.	.070	.076	.073	197.5	213.0	205.4
Potatoes—						
White, good to choice, per 100 pounds, Chicago	1.775	1.463	1.220	173.4	142.8	119.2
Sweet, No. 1, per five-eighths bushel, Philadelphia	(¹)	(¹)	(¹)			
Rice, per pound, New Orleans—						
Blue Rose, head, clean	.059	.059	.059	(²)	(²)	(²)
Honduras, head, clean	.059	.059	.058	116.0	116.0	115.2
Tobacco, leaf, per 100 pounds—						
Burley, good leaf, dark red, Louisville, Ky. ³	24.500	24.500	24.500	185.6	185.6	185.6
Average warehouse sales, Kentucky	11.907	13.536	14.550	133.6	151.9	163.3
Wool, Ohio, per pound, Boston—						
Fine clothing, scoured	1.216	1.243	1.351	197.0	201.3	218.9
Fine delaine, scoured	1.286	1.333	1.429	233.9	242.5	259.8
Half blood, scoured	1.130	1.174	1.261	227.3	236.2	253.6
One-fourth and three-eighths grades, scoured	.873	.927	1.000	182.3	193.8	208.8
				188.7	144.0	147.7
FOODS						
				124.1	133.4	135.9
Meats						
Beef, fresh, per pound—						
Carcass, good native steers, Chicago	.165	.165	.165	127.4	127.4	127.4
Sides, native, New York	.147	.141	.146	117.0	112.3	116.2
Beef, salt, extra mess, per barrel (200 pounds), New York	16.500	16.750	17.500	87.2	88.5	92.5
Hams, smoked, per pound, Chicago	.204	.222	.223	122.9	133.5	133.9
Lamb, dressed, per pound, Chicago	.275	.251	.230	184.9	168.8	154.7
Mutton, dressed, per pound, New York	.148	.135	.123	144.4	131.7	120.0
Pork, fresh, per pound—						
Loins, Chicago	.180	.248	.273	121.1	166.9	183.4
Loins, western, New York	.183	.247	.265	119.8	162.2	174.0
Pork, cured—						
Mess, salt, per barrel (200 pounds), New York	26.350	28.688	29.750	117.3	127.7	132.4
Sides, rough, per pound, Chicago	.119	.164	.164	96.1	133.0	132.5
Sides, short, clear, per pound, Chicago	.131	.175	.174	103.1	137.4	136.4
Poultry, dressed, per pound—						
Hens, heavy, Chicago	.235	.254	.261	162.5	175.5	180.5
Fowls, 48-56 pounds to dozen, New York	.270	.258	.285	148.0	141.4	156.3
Veal, dressed, good, per pound, Chicago	.154	.159	.159	165.7	170.9	170.9
				132.8	134.4	140.0
Butter, cheese, and milk						
Butter, creamery, extra, per pound—						
Boston	.401	.383	.381	126.4	120.6	120.2
Chicago	.378	.362	.366	121.8	116.7	118.0
Cincinnati ⁴	.347	.325	.331	(²)	(²)	(²)
New Orleans	.444	.423	.414	132.1	125.7	123.2
New York	.400	.383	.378	124.0	118.7	117.1
Philadelphia	.413	.395	.390	126.6	121.2	119.7
St. Louis	.393	.378	.378	127.0	122.4	122.1
San Francisco	.415	.434	.411	130.9	136.8	129.7
Cheese, whole milk, per pound—						
American, twins, Chicago	.181	.195	.202	127.6	137.5	142.3
State, fresh flats, colored, average, New York	.192	.193	.202	124.3	125.3	131.1
California flats, fancy, San Francisco	.218	.208	.204	136.8	130.2	127.9
Milk, fluid. (See Farm products.)						
Milk, condensed, per case of 48 14-ounce tins, New York	5.630	5.750	5.805	119.8	122.3	123.5
Milk, evaporated, per case of 46 16-ounce tins, New York	3.865	3.875	3.915	109.3	109.6	110.8

¹ No quotation.² No 1913 base price.³ Not included in weighted index.⁴ As to score.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
FOODS—Continued						
Other foods -----				148.6	152.9	156.6
Beans, medium, choice. (See Farm products.)						
Bread, per pound before baking—						
Chicago-----	\$0.075	\$0.075	\$0.074	174.5	174.5	172.1
Cincinnati-----	.062	.062	.062	174.7	174.7	174.7
New Orleans-----	.060	.064	.064	196.7	209.8	209.8
New York-----	.070	.070	.070	165.1	165.1	165.1
San Francisco-----	.069	.069	.069	173.0	173.0	173.0
Cocoa beans, Arriba, per pound, New York-----	.130	.138	.150	84.9	90.4	98.2
Coffee, Rio, No. 7, per pound, New York-----	.165	.166	.177	148.2	149.4	158.8
Copra, South Sea, sun dried, per pound, New York-----	.052	.058	.059	49.5	55.7	56.4
Eggs, fresh, per dozen. (See Farm products.)						
Fish -----						
Cod, large, shore, pickled, cured, per 100 pounds, Gloucester, Mass-----	7.650	7.650	7.900	114.0	114.0	117.8
Herring, large, split, per barrel (180-190 pounds), New York-----	(1)	(1)	(1)			
Mackerel, salt, large, 3s, per barrel, Boston-----	12.870	13.860	13.860	116.0	124.9	124.9
Salmon, canned, Alaska, red, per dozen, factory-----	2.375	2.450	2.585	162.6	167.8	177.0
Flour, rye, white, per barrel, Minneapolis-----	4.895	5.163	5.450	156.7	165.3	174.5
Flour, wheat, per barrel—						
Winter patents, Kansas City-----	6.600	6.995	7.106	164.5	174.4	177.1
Winter straights, Kansas City-----	5.831	6.225	6.069	151.6	161.8	157.8
Standard patents, Minneapolis-----	7.490	7.538	7.440	163.4	164.4	162.3
Second patents, Minneapolis-----	7.230	7.244	7.220	163.5	163.8	163.3
Patents, Portland, Oreg-----	7.723	8.345	8.192	171.8	185.6	182.2
Patents, soft winter, St. Louis-----	6.369	6.775	6.644	139.5	148.4	145.5
Straight, soft winter, St. Louis-----	5.656	6.095	6.013	133.0	143.3	141.4
Patents, Toledo-----	6.300	6.380	6.463	133.3	135.0	136.7
Fruit, canned, per case, New York—						
Peaches, California, standard 2½s-----	1.800	1.800	1.800	118.6	118.6	118.6
Pineapples, Hawaiian, sliced, standard 2½s-----	3.050	2.950	2.690	148.6	143.7	131.0
Fruit, dried, per pound, New York—						
Apples, evaporated, State, choice-----	.125	.131	.134	174.1	182.9	186.6
Currants, Patras, cleaned-----	.123	.119	.128	159.9	154.9	166.9
Prunes, California, 60-70s-----	.050	.059	.065	76.2	90.5	99.1
Raisins, coast, seeded, bulk-----	.071	.071	.074	98.2	98.2	101.7
Fruit, fresh—						
Apples, Baldwins, per barrel, Chicago-----	(1)	(1)	(1)			
Bananas, Jamaica, 9s, per bunch, New York-----	2.780	2.563	2.250	180.7	166.5	146.3
Lemons, California, choice, per box, Chicago-----	4.750	5.906	7.075	82.3	102.3	122.6
Oranges, California, choice, per box, Chicago-----	6.525	7.094	7.200	147.6	160.5	162.9
Glucose, 42° mixing, per 100 pounds, New York-----	3.960	4.260	4.260	185.3	199.3	199.3
Hominy grits, bulk, car lots, per 100 pounds, f. o. b. mill-----	2.413	2.380	2.424	146.2	144.2	146.9
Lard, prime, contract, per pound, New York-----	.126	.143	.144	114.4	129.8	130.7
Meal, corn, per 100 pounds—						
White, f. o. b. mill-----	2.375	2.330	2.374	148.4	145.6	148.3
Yellow, Philadelphia-----	3.031	3.400	3.475	211.4	237.1	242.4
Molasses, New Orleans, fancy, per gallon, New York-----	.615	.615	.625	161.4	161.4	164.0
Oatmeal, car lots, in sacks (90 pounds), per 100 pounds, New York-----	3.828	2.861	3.611	154.7	115.6	145.9
Oleomargarine, standard, uncolored, per pound, Chicago-----	.212	.225	.225	130.7	138.5	138.5
Oleo oil, extra, per pound, Chicago-----	.126	.153	.168	108.8	132.5	145.9
Pepper, black, per pound, New York-----	.100	.106	.119	92.3	98.0	109.8
Rice. (See Farm products.)						
Salt, American, medium, per barrel (280 pounds), Chicago-----	2.490	2.490	2.490	244.1	244.1	244.1
Sugar, per pound, New York—						
Granulated, in barrels-----	.066	.066	.071	154.1	155.0	167.2
Raw, 96° centrifugal-----	.031	.054	.060	146.0	154.0	170.0
Tallow, edible, per pound, Chicago-----	.099	.113	.098	124.1	142.0	123.2
Tea, Formosa, fine, per pound, New York-----	.310	.310	.313	124.8	124.8	126.1
Vegetables, canned, per dozen, New York—						
Corn, Maryland, standard-----	.975	.981	1.050	153.7	154.8	165.5
Peas, State and Western, No. 5-----	1.350	1.350	1.350	155.8	155.8	155.8
Tomatoes, New Jersey, standard, No. 3-----	1.500	1.500	1.500	115.4	115.4	115.4
Vegetables, fresh. (See Farm products.)						

¹ No quotation.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
FOODS—Concluded						
Other foods—Concluded.						
Vegetable oil—						
Coconut, crude, per pound, New York.....	\$0.099	\$0.108	\$0.108	73.4	80.2	79.9
Corn, crude, in barrels, per pound, New York.....	.113	.137	.129	185.8	225.7	212.2
Cottonseed, prime, summer, yellow, per pound, New York.....	.121	.139	.108	166.9	192.3	149.5
Olive oil, edible, in barrels, per gallon, New York.....	2.000	2.000	2.075	118.5	118.5	122.9
Peanut, crude, per pound, f. o. b. mill.....	.113	.116	.123	(?)	(?)	(?)
Soya bean, crude, in barrels, per pound, New York.....	.121	.128	.128	197.7	208.3	208.3
Vinegar, cider, 40-gallon, in barrels, per gallon, New York.....	.180	.180	.180	161.3	161.3	161.3
				187.5	180.9	186.5
CLOTHS AND CLOTHING						
Boots and shoes, per pair, factory						
Children's—						
Little boy's, gun metal, blucher.....	1.615	1.615	1.615	166.5	166.5	166.5
Child's, gun metal, polish, high cut, rubber heel.....	1.663	1.663	1.663	181.7	181.7	181.7
Misses', black, vici, polish, high cut, rubber heel.....	1.948	1.948	1.948	173.2	173.2	173.2
Youths', gun metal, blucher.....	1.473	1.473	1.473	143.4	143.4	143.4
Men's—						
Black, calf, blucher.....	6.250	6.250	6.250	200.8	200.8	200.8
Black, calf, Goodyear welt, bal.....	4.900	4.877	4.850	154.7	154.0	153.2
Black, dress, Goodyear welt, side leather.....	3.150	3.082	3.000	140.8	137.8	134.1
Gun metal, Goodyear welt, blucher.....	4.350	4.350	4.350	222.5	222.5	222.5
Mahogany, chrome, side, Goodyear welt, bal.....	3.500	3.500	3.500	217.1	217.1	217.1
Tan, dress, welt, calf.....	4.850	4.850	4.850	153.2	153.2	153.2
Tan, dress, Goodyear welt, side leather.....	3.350	3.305	3.250	149.7	147.7	145.3
Chocolate, elk, blucher.....	1.645	1.645	1.645	115.5	115.5	115.5
Vici kid, black, Goodyear welt.....	6.000	6.000	6.000	209.3	209.3	209.3
Women's—						
Black, kid, Goodyear welt, 8½-inch lace.....	3.850	3.850	3.850	141.7	141.7	141.7
Colored, calf, Goodyear welt, lace oxford.....	4.150	4.000	4.000	190.9	183.9	183.9
Kid, black, McKay sewed, lace oxford.....	3.500	3.500	3.500	235.0	235.0	235.0
Patent leather pump, McKay sewed.....	3.600	3.500	3.500	261.8	254.5	254.5
				192.9	194.6	188.6
Cotton goods, factory						
Denims, Massachusetts, 2.20 yards to the pound, per yard.....	.225	.233	.224	175.4	181.2	174.4
Drillings, brown, per yard—						
Massachusetts, D standard, 30-inch.....	.167	.173	.166	201.5	209.2	200.2
Pepperell, 29-inch, 2.85 yards to the pound.....	.170	.175	.175	206.8	212.6	212.6
Flannels, per yard—						
Colored, 4.20 yards to the pound.....	.150	.150	.150	205.6	205.6	205.6
Unbleached, 3.20 yards to the pound.....	.200	.200	.200	223.1	223.1	223.1
Ginghams, per yard—						
Amoskeag, 27-inch, 6.37 yards to the pound.....	.125	.125	.125	192.3	192.3	192.3
Lancaster, 26½-inch, 6.50 yards to the pound.....	.131	.131	.131	211.2	211.2	211.2
Hosiery, per dozen pairs—						
Men's half hose, combed yarn.....	1.800	1.800	1.797	223.7	223.7	223.3
Women's cotton, silk mercerized, mock seam.....	2.350	2.350	2.275	132.8	132.8	128.4
Women's combed yarn, 16-ounce.....	1.764	1.764	1.761	176.4	176.4	176.0
Muslin, bleached, 4/4, per yard—						
Fruit of the Loom.....	.181	(1)	(1)	211.6	—	—
Lonsdale.....	.163	.167	.167	201.7	206.2	206.2
Rough Rider.....	.149	.154	.151	185.4	191.4	187.9
Wamsutta nainsook.....	.235	.235	.235	255.3	255.3	255.3
Print cloth, 27-inch, 7.60 yards to the pound, per yard.....	.068	.070	.066	197.4	201.5	190.1
Sheeting, brown, 4/4, per yard—						
Indian Head, 2.85 yards to the pound.....	.155	.160	.165	184.1	190.0	196.0
Pepperell, 3.75 yards to the pound.....	.155	(1)	(1)	211.5	—	—
Ware shoals, 4 yards to the pound.....	.108	.116	.110	175.1	189.4	179.0
Thread, 6-cord, J. & P. Coats, per spool.....	.073	.073	.073	186.0	186.0	186.0
Underwear—						
Men's shirts and drawers, per dozen garments.....	8.125	8.125	8.125	227.2	227.2	227.2
Women's union suits, combed yarn, per dozen.....	13.500	13.500	13.500	197.0	197.0	197.0
Yarn, per pound—						
Carded, white, mulespun, northern, 10/1, cones.....	.438	.434	.408	197.8	196.2	184.1
Carded, white, mulespun, northern, 22/1, cones.....	.471	.469	.432	190.4	189.3	174.6
Twisted, ordinary, weaving, 20/2.....	.447	.463	.426	192.4	199.2	183.1
Twisted, ordinary, weaving, 40/2.....	.547	.553	.518	142.8	144.2	135.3

¹ No quotation.² No 1913 base price.

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WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
CLOTHS AND CLOTHING—Concluded						
Woolen and worsted goods, factory						
Flannel, white, 4/4, Ballard Vale, No. 3, per yard	\$1.000	\$1.000	\$1.000	205.6	206.1	207.3
Overcoating, 30 to 31 ounce, per yard	3.000	3.000	3.000	215.8	215.8	215.8
Suiting, per yard—				173.0	173.0	173.0
Clay, worsted, diagonal, 16-ounce	3.015	2.974	2.925	213.2	215.2	211.7
Middlesex, wool-dyed, blue, 16-ounce	3.600	3.600	3.600	233.0	233.0	233.0
Serge, 9½-ounce	1.395	1.395	1.395	219.0	219.0	219.0
Serge, 11-ounce	2.408	2.387	2.363	212.9	211.1	209.0
Trousering cotton warp, 11/11½-ounce, per yard	1.700	1.687	1.600	150.2	149.1	141.4
Underwear—						
Merino shirts and drawers, per dozen garments	33.000	33.000	33.000	168.5	168.5	168.5
Men's union suits, 33 per cent worsted, per dozen	30.380	30.380	30.380	309.6	309.6	309.6
Women's dress goods, per yard—						
Broadcloth, 9½-ounce, 64-56-inch	2.325	2.558	2.651	176.7	194.6	201.5
French serge, 35-inch	.775	.775	.775	234.9	234.9	234.9
Poplar cloth, cotton warp	.375	.375	.375	197.4	197.4	197.4
Sicilian cloth, cotton warp, 50-inch	.635	.635	.635	196.3	196.3	196.3
Storm serge, double warp, 50-inch	1.035	1.035	1.035	184.0	184.0	184.0
Yarn, per pound—						
Crossbred stock, 2/32s	1.550	1.600	1.650	199.6	206.0	212.4
Half blood, 2/40s	2.100	2.050	2.150	188.2	183.7	192.6
Fine, domestic, 2/60s	2.350	2.300	2.350	222.9	218.2	222.9
Silk, etc.						
Linen shoe thread, 10s, Barbour, per pound, New York	1.777	1.777	1.777	149.5	166.5	154.6
Silk, raw, per pound, New York—						
China, Canton, flature, extra A	5.272	6.145	5.988	150.7	175.6	171.1
Japan, Kansai, No. 1	5.390	6.076	5.439	148.1	166.9	149.4
Japan, special, extra extra	5.733	6.419	5.782	140.8	157.5	141.8
Silk yarn, per pound, New York—						
Domestic, gray spun, 60/1	4.165	4.312	4.410	142.8	147.8	151.2
Domestic, gray spun, 60/2, No. 1	5.390	5.468	5.488	155.5	157.7	158.3
FUEL AND LIGHTING						
Anthracite coal, per gross ton, tidewater, New York						
Broken	11.290	(¹)	(¹)	221.1	223.4	225.7
Chestnut	11.278	11.376	11.474	253.9		
Egg	11.270	11.376	11.479	212.2	214.1	215.9
Stove	11.424	11.570	11.722	222.6	224.7	226.7
				225.7	228.6	231.6
Bituminous coal						
Mine run, per net ton, Chicago	4.450	4.450	4.450	203.6	200.6	201.8
Prepared sizes, per net ton, Chicago	4.735	4.750	4.835	(²)	(²)	(²)
Screenings, per net ton, Chicago	3.250	3.240	3.063	(²)	(²)	(²)
Mine run, Kanawha, per net ton, Cincinnati	3.390	3.390	3.390	(²)	(²)	(²)
Mine run, smokeless, New River, per net ton, Cincinnati	3.990	3.990	3.990	154.1	154.1	154.1
Mine run, Pocahontas, per gross ton, Norfolk, Va.	3.990	3.990	3.990	165.4	165.4	165.4
Prepared sizes, per net ton, Pittsburgh	4.300	4.250	4.250	143.3	141.7	141.7
Mine run, per net ton, Indianapolis	4.250	4.000	4.000	(²)	(²)	(²)
	3.515	3.496	3.640	(²)	(²)	(²)
Other fuel and lighting						
Coke, Connellsville, furnace, per net ton, at oven	2.955	3.000	3.125	143.0	137.3	132.8
Gasoline, motor, per gallon, New York	.195	.188	.175	121.1	123.0	123.1
Matches, average of several brands, per gross, New York	1.540	1.540	1.540	115.9	111.7	104.0
Crude petroleum per barrel, at well—						
California	1.010	1.010	1.010	189.7	189.7	189.7
Kansas-Oklahoma	1.550	1.375	1.313	288.6	288.6	288.6
Pennsylvania	3.050	2.750	2.750	165.9	147.2	140.5
Refined petroleum, per gallon, New York—						
Standard white, 110° fire test	.135	.135	.135	124.5	112.2	112.2
Water white, 150° fire test	.215	.215	.215	156.4	156.4	156.4
				174.4	174.4	174.4
METALS AND METAL PRODUCTS						
Iron and steel						
Iron ore, per gross ton, lower lake ports—				130.4	130.4	128.2
Mesabi, Bessemer, 55 per cent	5.400	5.400	5.400	146.2	143.3	140.5
Non-Bessemer, 51½ per cent	4.750	4.750	4.750	130.1	130.1	130.1
				139.7	139.7	139.7

¹ No quotation.

² No 1913 base price.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
METALS AND METAL PRODUCTS—Concluded						
Iron and steel—Concluded.						
Pig iron, per gross ton—						
Basic, valley furnace	\$19.000	\$19.000	\$19.000	129.2	129.2	129.2
Bessemer, Pittsburgh	21.960	21.760	21.760	128.2	127.0	127.0
Foundry, No. 2, northern, Pittsburgh	20.760	20.885	21.560	129.7	130.5	134.7
Foundry, No. 2, Birmingham, Ala.	18.000	17.500	17.500	154.0	149.7	149.7
Ferromanganese, per gross ton, seaboard	106.000	95.750	95.000	181.9	164.3	163.0
Spiegeleisen, 18 and 22 per cent, per gross ton, furnace	34.600	33.375	32.100	138.4	133.5	128.4
Bar iron, per pound—						
Best refined, Philadelphia	.030	.030	.030	158.3	158.3	158.3
Common, Pittsburgh	.030	.030	.030	181.8	180.6	178.8
Bars, reinforcing, per 100 pounds, Pittsburgh	2.200	2.150	2.125	159.9	156.3	154.5
Nails, wire, per 100 pounds, Pittsburgh	2.980	2.913	2.880	163.8	160.1	158.3
Pipe, cast-iron, 6-inch, per net ton, New York	61.100	60.100	57.100	261.4	257.2	244.3
Skelp, grooved, per 100 pounds, Pittsburgh	2.150	2.000	2.000	154.7	143.9	143.9
Steel billets, per gross ton, Pittsburgh—						
Bessemer	38.000	37.750	36.400	147.3	146.4	141.1
Open hearth	38.000	37.750	36.400	145.6	144.7	139.5
Steel, merchant bars, per 100 pounds, Pittsburgh	2.150	2.125	2.040	138.9	137.2	131.8
Steel plates, tank, per pound, Pittsburgh	.021	.020	.018	141.2	131.8	123.0
Steel rails, per gross ton, Pittsburgh—						
Bessemer, standard	43.000	43.000	43.000	153.6	153.6	153.6
Open hearth, standard	43.000	43.000	43.000	143.3	143.3	143.3
Steel sheets, black, per pound, Pittsburgh	.035	.034	.034	159.4	156.6	155.7
Steel, structural shapes, per 100 pounds, Pittsburgh	2.200	2.150	2.050	145.7	142.3	135.7
Terneplate, 3 pounds I. C., per base box (200 pounds), Pittsburgh	11.300	11.300	11.300	162.9	162.9	162.9
Tin plate, domestic coke, per 100 pounds, Pittsburgh	5.500	5.500	5.500	154.6	154.6	154.6
Wire, per 100 pounds—						
Barbed, galvanized, Chicago	3.980	3.853	3.820	172.4	166.8	165.4
Plain, fence, annealed, Pittsburgh	2.780	2.719	2.680	183.8	179.8	177.2
				95.1	101.7	100.7
Nonferrous metals						
Aluminum, per pound, New York	.265	.269	.270	112.1	113.7	114.2
Copper, ingot, electrolytic, per pound, refinery	.124	.133	.130	78.5	84.6	82.5
Copper, sheet, per pound, New York	.185	.189	.195	87.3	89.0	91.9
Copper wire, bare, per pound, mill	.150	.158	.158	89.8	94.5	94.3
Lead, pig, per pound, New York	.071	.080	.081	161.8	181.6	184.3
Lead pipe, per 100 pounds, New York	8.820	9.572	9.784	173.6	188.4	192.5
Quicksilver, per pound, New York	.960	.961	.965	169.9	170.1	170.8
Silver, bar, fine, per ounce, New York	.675	.689	.697	110.2	112.5	113.8
Tin, pig, per pound, New York	.462	.518	.492	102.9	115.3	109.7
Zinc, sheet, per 100 pounds, factory	8.740	8.864	9.060	120.6	122.3	125.1
Zinc, slab, per pound, New York	.062	.066	.066	106.9	112.5	112.4
				168.8	169.2	170.7
				173.0	172.7	177.2
Lumber						
Douglas fir, per 1,000 feet, mill—						
No. 1, common, boards	16.500	16.000	16.000	179.2	173.8	173.8
No. 2 and better, drop siding	29.000	30.000	31.000	167.3	173.1	178.8
Gum, sap, firsts and seconds, per 1,000 feet, St. Louis	52.500	54.000	54.300	253.8	261.2	262.5
Hemlock, northern, No. 1, per 1,000 feet, Chicago	36.500	35.500	35.500	173.1	168.3	168.3
Maple, hard, No. 1, common, 4/4, per 1,000 feet, Chicago	61.500	61.500	61.500	204.1	204.1	204.1
Oak, white, plain, No. 1, common, 4/4 per 1,000 feet, Cincinnati	60.000	58.000	64.200	162.2	156.7	173.5
Pine, white, No. 2, barn, per 1,000 feet, Buffalo, N. Y.	57.800	55.000	55.000	197.8	188.2	188.2
Pine, yellow, flooring, long leaf, B and better, per 1,000 feet, New York	97.250	97.000	97.000	218.1	217.5	217.5
Pine, yellow, southern, per 1,000 feet, mill—						
Boards, No. 2, common, 1 x 8 ³	21.120	21.740	22.220	165.8	170.7	174.5
Flooring, B and better	38.510	39.560	39.920	167.2	171.7	173.3
Timbers, square edge and sound	23.550	24.660	24.960	160.9	168.5	170.6
Poplar, No. 1, common, 4/4, per 1,000 feet, Cincinnati	65.000	60.000	61.200	196.8	181.7	185.3
Spruce, eastern, random, per 1,000 feet, Boston	33.900	33.000	32.500	156.4	152.2	149.9
Lath, yellow pine, No. 1, per 1,000 mill	3.680	3.560	3.850	121.0	117.2	126.6
Shingles—						
Cypress, 16 inches long, per 1,000 mill	6.000	6.000	6.000	169.4	169.4	169.4
Red cedar, 16 inches long, per 1,000 mill	2.520	2.720	2.680	128.1	138.3	136.3

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WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
BUILDING MATERIALS—Concluded						
Brick, common, building, per 1,000				212.2	211.7	211.0
Simple average of 82 yard prices				212.3	211.7	211.0
Run of kiln, f. o. b. plant, Chicago ²	\$14.416	\$14.382	\$14.332	176.8	177.0	183.3
	8.730	8.740	9.050			
Structural steel				145.7	142.4	135.7
Other building materials				164.0	166.0	165.2
Cement, Portland, per barrel, f. o. b. plant—						
Simple average of 6 plant prices in Pa., Ind.,						
Minn., Tex., and Calif.	1.850	1.850	1.850	178.1	178.1	178.1
Buffington, Ind.	1.750	1.750	1.750	173.1	173.1	173.1
Northampton, Pa.	1.750	1.750	1.750	196.6	196.6	196.6
Crushed stone, 1½", per cubic yard, New York	1.750	1.750	1.750	194.4	194.4	194.4
Gravel, per ton, f. o. b. pit, simple average of 27						
plant prices	.951	.947	.950	192.3	191.5	192.1
Hollow tile, building, per block, Chicago	.064	.089	.089	100.0	139.1	139.1
Lime, common, lump, per ton, f. o. b. plant, simple						
average of 15 plant prices	9.542	9.559	9.476	231.4	231.6	229.8
Roofing, prepared, per square, f. o. b. factory ³ —						
Medium weight	1.680	1.680	1.680	(?)	(?)	(?)
Shingles, individual	5.030	4.980	4.980	(?)	(?)	(?)
Shingles, strip	4.868	4.860	4.800	(?)	(?)	(?)
Slate, surfaced	1.852	1.850	1.850	(?)	(?)	(?)
Sand, building, per ton, f. o. b. pit, simple average						
of 31 plant prices	.634	.631	.631	166.5	165.6	165.6
Slate, roofing, per 100 square feet, f. o. b. quarry	12.000	12.000	12.000	259.5	259.5	259.5
Glass, plate—						
3 to 5 square feet, per square foot, New York	.450	.450	.430	190.1	190.1	181.7
5 to 10 square feet, per square foot, New York	.625	.625	.605	196.4	196.4	190.1
Glass, window, American, f. o. b. works—						
Single, B, per 50 square feet	3.612	3.249	3.249	162.7	146.3	146.3
Single, A, per 50 square feet	4.275	3.420	3.420	188.0	150.4	150.4
Linseed oil, per gallon, New York	.980	1.028	1.010	212.1	222.5	218.6
Putty, commercial, per pound, New York	.040	.040	.040	150.9	150.9	150.9
Rosin, common to good (B), per barrel, New York	5.590	5.813	6.115	116.1	120.7	127.0
Turpentine, southern, barrels, per gallon, New						
York	.837	.893	.887	195.5	208.6	207.2
White lead, American, in oil, per pound, New						
York	.145	.146	.148	214.5	216.0	218.2
Zinc oxide (white zinc), per pound, New York	.070	.070	.070	130.1	130.1	130.1
Pipe, cast-iron. (See Metals and metal products.)						
Copper, sheet. (See Metals and metal products.)						
Copper wire. (See Metals and metal products.)						
Lead pipe. (See Metals and metal products.)						
Nails. (See Metals and metal products.)						
Reinforcing bars. (See Metals and metal prod-						
ucts.)						
Roofing tin (terneplate). (See Metals and metal						
products.)						
Zinc, sheet. (See Metals and metal products.)						
CHEMICALS AND DRUGS						
Chemicals				126.5	130.1	130.6
Acids, per pound, New York—				118.9	122.4	123.3
Acetic, 28 per cent.	.031	.031	.031	160.8	160.8	160.8
Muriatic, 20°	.009	.009	.009	69.2	69.2	69.2
Nitric, 42°	.058	.058	.058	117.8	117.8	117.8
Stearic, triple pressed	.130	.132	.133	98.1	99.5	100.0
Sulphuric, 66°	.007	.007	.007	70.0	70.0	70.0
Alcohol, per gallon, New York—						
Denatured, No. 5, 188 proof	.480	.508	.543	131.2	138.9	148.3
Wood, refined, 95 per cent	.650	.680	.680	135.9	142.2	142.2
Alum, lump, per pound, New York	.035	.035	.035	200.0	200.0	200.0
Ammonia, anhydrous, per pound, New York	.300	.360	.360	120.0	120.0	120.0
Bleaching powder, per 100 pounds, New York	1.900	1.900	1.900	161.0	161.0	161.0

² No 1913 base price.

³ Not included in weighted index.

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
CHEMICALS AND DRUGS—Concluded						
Chemicals—Concluded.						
Borax, crystals and granulated, per pound, New York	\$0.050	\$0.050	\$0.050	133.3	133.3	133.3
Copper, sulphate, 99 per cent crystals, per pound, New York	.047	.047	.048	90.4	90.2	91.2
Copra, South Sea. (See Foods.)						
Formaldehyde, per pound, New York	.089	.088	.088	105.9	103.6	103.6
Oil, vegetable—						
Coconut, crude. (See Foods.)						
Corn, crude. (See Foods.)						
Palm kernel, crude, per pound, New York	.089	.095	.094	87.9	94.1	93.5
Soya bean, crude. (See Foods.)						
Potash, caustic, 88-92 per cent, per pound, New York	.065	.066	.068	182.0	184.1	190.5
Sal soda, per 100 pounds, New York	1.100	1.100	1.100	183.3	183.3	183.3
Soda ash, 58 per cent, light, per 100 pounds, New York	2.290	2.290	2.290	392.6	392.6	392.6
Soda, bicarbonate, American, per pound, f. o. b. works	.018	.018	.018	175.0	175.0	175.0
Soda, caustic, 76 per cent, solid, per pound, New York	.038	.038	.038	257.5	257.5	257.5
Soda, silicate of, 40°, per 100 pounds, New York	.800	.800	.800	125.8	125.8	125.8
Sulphur, crude, per gross ton, New York	14.000	14.000	14.000	63.6	63.6	63.6
Tallow, inedible, packers' prime, per pound, Chicago	.078	.089	.090	110.0	125.6	127.0
Fertilizer materials				93.6	100.2	98.9
Acid phosphate, 16 per cent basis, bulk, per ton, New York	7.469	8.250	8.250	97.0	107.2	107.2
Ammonia, sulphate, double bags, per 100 pounds, New York	2.600	2.638	2.650	83.1	84.4	84.8
Ground bone, steamed, per ton, Chicago	20.000	20.000	20.000	99.4	99.4	99.4
Muriate of potash, 80-85 per cent, K. C. L. bags, per ton, New York	31.100	31.100	33.688	82.1	82.1	88.4
Phosphate rock, 68 per cent, per ton, f. o. b. mines	2.250	2.190	2.150	66.0	64.3	63.1
Soda, nitrate, 95 per cent, per 100 pounds, New York	2.474	2.498	2.438	100.2	101.2	98.7
Tankage, 9 and 20 per cent, crushed, per ton, f. o. b. Chicago	27.313	35.525	33.500	116.9	152.1	143.4
Drugs and pharmaceuticals				176.2	174.4	178.5
Acid, citric, domestic, crystals, per pound, New York	.460	.460	.460	105.7	105.7	105.7
Acid, tartaric, crystals, U. S. P., per pound, New York	.300	.292	.290	98.3	95.7	95.1
Alcohol, grain, 190 proof, U. S. P., per gallon, New York	4.780	4.780	4.780	191.3	191.3	191.3
Cream of tartar, powdered, per pound, New York	.213	.213	.213	89.3	89.3	89.3
Epsom salts, U. S. P., in barrels, per 100 pounds, New York	2.500	2.500	2.500	227.3	227.3	227.3
Glycerine, refined, per pound, New York	.170	.184	.190	86.3	93.4	96.4
Opium, natural, U. S. P., per pound, New York	9.000	10.600	12.000	149.6	176.2	199.4
Peroxide of hydrogen, 4-ounce bottles, per gross, New York	8.000	8.000	8.000	200.0	200.0	200.0
Phenol, U. S. P. (carbolic acid), per pound, New York	.255	.244	.240	232.1	222.2	218.4
Quinine, sulphate, manufacturers' quotations, per ounce, New York	.500	.500	.500	227.7	227.7	227.7
HOUSE-FURNISHING GOODS				170.8	171.0	171.1
Furniture				152.5	152.5	152.5
Bedroom—						
Bed, combination, per bed, factory	32.000	32.000	32.000	142.2	142.2	142.2
Chair, all gum, cane seat, per chair, factory	4.500	4.500	4.500	200.0	200.0	200.0
Chiffonette, combination, per chiffonette, factory	36.000	36.000	36.000	110.8	110.8	110.8
Dresser, combination, per dresser, factory	49.000	49.000	49.000	136.1	136.1	136.1
Rocker, quartered oak, per chair, Chicago	4.655	4.655	4.655	227.2	227.2	227.2
Set, 3 pieces, per set, Chicago	31.213	31.213	31.213	164.4	164.4	164.4

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Continued

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
HOUSE-FURNISHING GOODS—Concluded						
Furniture—Concluded.						
Dining room—						
Buffet, combination, per buffet, factory.....	\$48.000	\$48.000	\$48.000	111.6	111.6	111.6
Chair, all gum, leather slip seat, per 6, factory..	33.000	33.000	33.000	220.0	220.0	220.0
Table, extension, combination, per table, factory.....	30.900	30.000	30.000	162.2	162.2	162.2
Living room—						
Davenport, standard pattern, per davenport, factory.....	63.000	63.000	63.000	182.6	182.6	182.6
Table, library, combination, per table, factory..	32.000	32.000	32.000	160.0	160.0	160.0
Kitchen—						
Chair, hardwood, per dozen, Chicago.....	17.640	17.640	17.640	276.9	276.9	276.9
Refrigerator, lift-top type, each, factory.....	17.010	17.010	17.010	164.7	164.7	164.7
Table, with drawer, per table, Chicago.....	4.263	4.263	4.263	300.0	300.0	300.0
Furnishings						
Blankets, factory—						
Cotton, colored, 2 pounds to the pair, per pair..	1.570	1.570	1.570	259.5	259.5	259.5
Wool, 4 to 5 pounds to the pair, per pound.....	1.313	1.313	1.313	171.7	171.7	171.7
Carpets, per yard, factory—						
Axminster, Bigelow.....	2.832	2.832	2.832	211.5	211.5	211.5
Brussels, Bigelow.....	2.880	2.880	2.880	222.9	222.9	222.9
Wilton, Bigelow.....	4.800	4.800	4.968	199.3	199.3	206.3
Cutlery—						
Carvers, 8-inch, per pair, factory.....	1.350	1.350	1.350	180.0	180.0	180.0
Knives and forks, per gross, factory.....	15.000	15.000	15.000	260.9	260.9	260.9
Pails, galvanized iron, 10-quart, per gross, factory	23.240	24.270	24.270	158.4	165.2	165.2
Sheeting, bleached, 10/4, factory—						
Pepperell, per yard.....	.467	.478	.479	195.2	200.0	200.2
Wamsutta, P. L., per yard.....	1.140	1.140	1.140	294.5	294.5	294.5
Tableware—						
Glass nappies, 4-inch, per dozen, factory.....	.200	.200	.200	181.8	181.8	181.8
Glass pitchers, ½-gallon, per dozen, factory.....	2.500	2.500	2.500	312.5	312.5	312.5
Glass tumblers, ½-pint, per dozen, factory.....	.200	.200	.180	166.7	166.7	150.0
Plates, white granite, 7-inch, per dozen, factory..	1.050	1.050	1.050	226.6	226.6	226.6
Teacups and saucers, white granite, per dozen, factory.....	1.350	1.350	1.350	236.8	236.8	236.8
Ticking, Amoskeag, A. C. A., 2.85 yards to the pound, per yard, factory.....	.260	.260	.260	193.2	193.2	193.2
Tubs, galvanized iron, No. 3, per dozen, factory..	6.853	7.135	7.135	166.9	173.7	173.7
MISCELLANEOUS						
Cattle feed						
Bran, per ton, Minneapolis.....	22.125	23.688	23.525	112.4	115.0	115.8
Cottonseed meal, prime, per ton, New York.....	41.000	41.000	39.000	180.9	186.1	182.6
Linseed meal, per ton, New York.....	43.000	45.200	47.500	120.5	129.0	128.1
Mill feed, middlings, standard, per ton, Minneapolis.....	24.525	26.063	25.400	144.8	144.8	137.7
.....				151.3	159.1	167.2
Leather						
Calf, chrome, B grade, per square foot, Boston.....	.430	.460	.460	126.1	134.0	130.6
Glazed kid, black, top grade, per square foot, Boston	.650	.675	.675	131.2	136.3	136.7
Harness, California oak, No. 1, per pound, Chicago.	.402	.402	.412	159.5	170.6	170.6
Side, black, chrome, B grade, per square foot, Boston.....	.250	.280	.280	259.6	269.6	269.6
Sole, per pound—				97.7	109.5	109.5
Oak, in sides, middle weight, tannery run, Boston.....	.340	.340	.340	114.0	114.0	114.0
Oak, scoured backs, heavy, Boston.....	.425	.440	.445	94.7	98.0	99.2
Union, middle weight, New York.....	.391	.355	.355	97.4	88.5	88.5
Paper and pulp						
Paper—						
Newsprint, roll, per pound, f. o. b. mill.....	.038	.038	.038	182.7	182.7	182.7
Wrapping, manila, No. 1, jute, per pound, New York.....	.103	.103	.107	210.0	210.0	218.2
Wood pulp, sulphite, domestic, unbleached, per 100 pounds, New York.....	2.510	2.525	2.505	112.8	113.5	112.6
Other miscellaneous						
Hemp, manila, fair, current shipment, per pound, New York.....	.109	.113	.135	88.2	90.3	91.6
Jute, raw, medium grade, per pound, New York.....	.058	.068	.073	117.8	121.9	144.9
.....				86.0	100.9	108.4

WHOLESALE PRICES OF COMMODITIES, JULY, AUGUST, AND SEPTEMBER, 1924—
Concluded

Commodity	Average prices			Index numbers (1913=100)		
	July, 1924	Aug., 1924	Sept., 1924	July, 1924	Aug., 1924	Sept., 1924
MISCELLANEOUS—Concluded						
Other miscellaneous—Concluded.						
Lubricating oil, paraffin, 903 gravity, per gallon, New York	\$0.198	\$0.190	\$0.190	138.6	133.3	133.3
Rope, pure manila, best grade, per pound, New York	.185	.185	.185	126.1	126.1	126.1
Rubber, Para, island, fine, per pound, New York	.170	.211	.227	21.0	26.1	28.1
Sisal, Mexican, current shipment, per pound, New York	.076	.076	.076	176.6	176.6	176.6
Soap—						
Laundry, per 100 cakes, Cincinnati	4.125	4.125	4.125	133.8	133.8	133.8
Laundry, per 100 cakes, Philadelphia	4.459	4.459	4.459	126.4	126.4	126.4
Starch, laundry, bulk, per pound, New York	.058	.060	.060	157.5	163.0	163.0
Tobacco—						
• Plug, per pound, New York	.696	.696	.696	179.0	179.0	179.0
Smoking, 1-ounce bags, per gross, New York	8.320	8.320	8.320	147.5	147.5	147.5
ALL COMMODITIES (404 price series)				147.0	149.7	148.8

Changes in Cost of Living in the United States

THE Bureau of Labor Statistics has secured data on cost of living for September, 1924. These data, together with the data that have been given in previous reports, are shown in the tables following. The information is based on actual prices secured from merchants and dealers for each of the periods named. The prices of food and of fuel and light (which include coal, wood, gas, electricity, and kerosene) are furnished the bureau in accordance with arrangements made with establishments through personal visits of the bureau's agents. In each city food prices are secured from 15 to 25 merchants and dealers, and fuel and light prices from 10 to 15 firms, including public utilities. All other data are secured by special agents of the bureau who visit the various merchants, dealers, and agents and secure the figures directly from their records. Four quotations are secured in each city (except in Greater New York, where five are obtained) on each of a large number of articles of clothing, furniture, and miscellaneous items. Rental figures are secured for from 400 to 2,000 houses and apartments in each city, according to its population.

Table 1 shows the changes in the total cost of living from June, 1920, September, 1923, and June, 1924, respectively, to September, 1924, in 32 cities, and in the United States as determined by a consolidation of the figures for the 32 cities.

TABLE 1.—CHANGES IN TOTAL COST OF LIVING IN SPECIFIED CITIES FROM JUNE, 1920, SEPTEMBER, 1923, AND JUNE, 1924, TO SEPTEMBER, 1924

City	Per cent of decrease from—		Per cent of increase from—	City	Per cent of decrease from—		Per cent of increase from—
	June, 1920, to September, 1924	September, 1923, to September, 1924			June, 1924, to September, 1924	June, 1920, to September, 1924	
Atlanta	22.5	1.9	0.1	Mobile	22.3	10.2	1.8
Baltimore	19.5	1.3	.3	New Orleans	16.7	1.0	1.2
Birmingham	19.1	1.3	1.5	New York	20.9	1.2	.5
Boston	21.2	1.1	1.7	Norfolk	23.8	2.3	.6
Buffalo	20.7	1.4	1.0	Philadelphia	19.6	1.4	.1
Chicago	19.1	1.3	.6	Pittsburgh	17.3	1.8	.7
Cincinnati	20.7	.1	.3	Portland, Me	20.6	.6	1.5
Cleveland	19.2	1.1	1.1	Portland, Oreg	22.9	1.2	1.1
Denver	21.4	2.6	.3	Richmond	20.0	1.4	1.3
Detroit	23.0	2.0	2.6	St. Louis	19.9	.5	.4
Houston	21.0	.7	1.6	San Francisco	18.9	.9	1.1
Indianapolis	19.6	1.2	1.2	Savannah	26.8	1.8	.4
Jacksonville	21.7	.2	1.3	Scranton	18.1	.2	1.4
Kansas City	24.4	1.1	2.1	Seattle	20.7	.9	.1
Los Angeles	12.2	.1	1.1	Washington	20.4	1.7	.6
Memphis	18.6	1.2	.8				
Minneapolis	19.2	1.6	2.3	Average, U. S.	21.2	.9	.9

¹ Increase.² Decrease.

Table 2 shows the changes in each of six groups of items in 19 cities from December, 1914, to September, 1924.

In studying this and the following tables it should be borne in mind that the figures for the 19 cities in Table 2 are based on the prices prevailing in December, 1914, the figures for the 13 cities in Table 3 are based on the prices prevailing in December, 1917, while the figures for the United States, shown in Table 4, are a summarization of the figures in Tables 2 and 3, computed on a 1913 base.

It will be noted that, from the beginning of the studies to June, 1920, there was, with an occasional exception, a steady increase in prices, becoming much more decided during the latter part of that period. In June, 1920, the high water mark of prices was reached, the average for the United States on that date being 116.5 per cent higher than the average prices for 1913.

From June, 1920 to September, 1922, with few minor exceptions, prices decreased, and from September, 1922, to June, 1924, in most cities the fluctuations were slight, sometimes showing a decrease and sometimes an increase. In a few cities, however, there was a considerable increase during this period, the average change for the country as a whole being from 66.3 per cent to 69.1 over the average for 1913.

During the period from June to September, 1924, the changes ranged from a decrease of 0.6 per cent to an increase of 1.8 per cent, the average for the United States being an increase of 0.9 per cent.

There was an increase in the prices of food in every city except two; a decrease in the price of clothing in every city. Rents increased in 12 cities and decreased in 17. Fuel and light increased in 22 cities; house-furnishing goods decreased in 24 cities, and miscellaneous items increased in 11 cities and decreased in 17 cities.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO SEPTEMBER, 1924

Baltimore, Md.

Item of expenditure	Per cent of increase from December, 1914, to—																					
	Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	June, 1924	Sept., 1924
Food.....	14.1	20.9	64.4	96.4	91.1	92.5	110.9	75.6	43.4	48.6	46.9	38.3	39.9	39.4	46.1	42.6	46.5	52.0	50.6	43.9	44.0	48.1
Clothing.....	2.7	24.0	52.1	107.7	128.9	177.4	191.3	158.5	123.2	101.5	88.6	82.0	78.9	77.8	80.5	81.6	81.4	92.9	81.8	81.6	78.3	76.2
Housing.....	1.2	.9	3.0	13.8	16.8	25.8	41.6	49.5	63.0	64.0	64.7	65.2	65.4	65.6	66.9	67.6	69.6	70.4	71.9	71.7	72.4	72.4
Fuel and light.....	1.5	9.1	25.5	46.0	37.1	48.1	57.6	79.0	70.9	84.9	85.5	85.5	84.8	90.9	94.9	95.5	91.6	88.2	93.5	93.5	84.8	88.9
House-furnishing goods.....	5.6	26.4	60.8	122.3	134.6	167.0	191.8	181.9	147.5	128.7	123.7	115.0	113.3	114.2	116.6	125.0	127.5	129.5	130.2	132.7	129.4	124.8
Miscellaneous.....	1.4	18.5	51.3	78.7	82.8	99.4	111.4	112.9	111.8	112.2	108.6	106.9	104.4	103.8	102.6	103.2	103.8	104.0	105.2	105.6	109.9	106.1
All items.....	11.4	18.5	51.3	84.7	84.0	98.4	114.3	96.8	77.4	76.5	73.2	67.9	67.6	67.2	70.9	70.2	72.0	74.7	74.8	71.9	71.9	72.5

Boston, Mass.

[1948]

Food.....	10.3	18.0	45.8	74.9	67.9	80.8	105.0	74.4	41.9	52.1	50.4	34.3	32.5	37.4	44.9	41.2	39.7	47.9	48.8	39.3	37.9	44.7
Clothing.....	6.6	21.9	47.5	117.5	137.9	192.4	211.1	192.7	150.3	118.8	106.3	98.9	96.7	92.4	92.0	92.6	93.0	93.4	92.6	92.0	91.2	88.7
Housing.....	1.1	.1	1.1	2.8	5.1	12.2	16.2	25.8	29.8	31.6	33.8	33.9	34.4	34.9	36.7	37.2	40.2	44.3	47.0	49.1	50.7	51.3
Fuel and light.....	1.1	10.5	29.2	56.6	55.0	63.2	83.6	106.0	97.8	94.4	98.5	93.9	92.5	91.7	99.9	97.7	88.8	92.8	97.0	91.1	90.7	94.5
House-furnishing goods.....	8.4	26.3	58.4	137.6	153.7	198.7	233.7	226.4	171.2	139.5	136.9	128.1	124.2	124.0	133.6	142.5	150.5	148.7	148.2	147.0	136.9	135.5
Miscellaneous.....	1.6	15.7	38.1	62.0	64.8	81.1	91.8	96.6	96.2	94.6	93.0	91.6	89.5	89.3	87.8	88.4	89.2	89.2	93.0	90.3	88.0	87.6
All items.....	1.6	15.7	38.1	70.6	72.8	92.3	110.7	97.4	74.4	72.8	70.2	61.2	59.6	60.9	65.1	63.9	63.5	67.9	69.4	64.6	63.2	66.0

Buffalo, N. Y.

Food.....	2.4	30.1	64.1	87.8	82.9	94.7	115.7	78.5	37.7	49.9	50.8	39.4	38.5	41.2	48.8	41.5	41.6	50.9	51.9	42.3	39.5	45.4
Clothing.....	8.9	29.6	58.5	123.1	140.7	190.8	210.6	168.7	131.6	102.4	96.5	87.7	83.6	79.4	81.4	83.0	83.4	84.9	83.8	83.2	81.7	80.8
Housing.....	1.2	4.7	9.4	20.7	28.0	29.0	46.6	48.5	61.1	61.7	61.7	61.9	64.7	64.7	64.9	64.9	70.0	70.9	71.8	72.0	76.3	76.3
Fuel and light.....	1.3	9.3	23.5	49.3	51.9	55.7	69.8	74.9	73.9	79.5	79.7	78.8	78.8	122.1	115.7	119.5	119.1	116.7	120.4	122.2	116.6	117.9
House-furnishing goods.....	7.1	24.1	50.2	106.3	118.1	165.4	199.7	189.2	151.3	130.9	124.7	115.5	108.0	107.8	112.8	121.3	127.9	127.0	127.5	125.7	121.0	120.8
Miscellaneous.....	3.5	24.4	51.1	76.0	78.7	90.3	101.9	107.4	107.8	105.7	103.0	99.5	97.9	97.9	97.5	98.7	100.5	102.7	102.5	102.5	101.9	101.1
All items.....	3.5	24.4	51.1	80.9	84.2	102.7	121.5	101.7	80.3	78.4	76.8	69.9	68.6	71.0	73.9	72.5	74.1	78.2	78.6	75.1	73.9	75.7

Chicago, Ill.

Food.....	2.7	25.2	53.4	78.7	73.3	93.1	120.0	70.5	41.9	51.3	48.3	38.3	41.6	40.7	44.8	42.4	45.1	52.7	52.5	48.3	47.9	52.1
Clothing.....	7.5	24.2	50.6	138.9	157.1	224.0	205.3	158.6	122.7	86.0	74.3	66.8	63.0	65.8	67.5	71.2	72.2	76.0	76.0	74.9	72.6	70.9
Housing.....	1.1	.7	1.4	2.6	8.0	14.0	35.1	48.9	78.2	79.8	83.9	84.1	87.4	87.6	88.9	89.1	92.1	92.1	95.4	95.8	104.4	104.2
Fuel and light.....	1.9	6.6	19.3	37.1	35.7	40.1	62.4	83.5	65.3	67.1	69.4	54.8	55.4	64.3	65.6	62.4	54.9	57.1	59.3	57.7	53.0	53.9
House-furnishing goods.....	5.9	20.0	47.5	108.9	126.9	176.0	215.9	205.8	162.4	138.0	133.7	114.5	108.5	107.5	120.4	127.2	133.1	133.8	132.9	131.7	122.2	121.5
Miscellaneous.....	3.0	19.5	41.8	58.7	61.7	84.3	87.5	96.5	98.5	97.5	94.5	92.7	87.9	87.3	86.7	87.3	87.7	88.1	88.1	88.1	90.7	90.7
All items.....	3.0	19.5	41.8	72.2	74.5	100.6	114.6	93.3	78.4	75.3	72.3	65.1	65.0	65.6	68.0	68.0	69.6	73.2	73.7	72.0	72.6	73.7

Cleveland, Ohio

Food.....	1.4	26.4	54.3	79.4	79.7	92.9	118.7	71.7	37.4	47.7	40.9	29.8	34.6	32.3	41.1	37.1	42.1	47.0	43.6	38.2	37.2	44.6
Clothing.....	2.0	18.0	43.7	102.6	125.2	171.2	185.1	156.0	124.0	90.8	85.8	77.4	72.4	69.5	70.9	77.1	77.6	79.6	79.6	79.1	78.4	75.2
Housing.....	.1	.9	11.3	16.5	21.8	39.9	47.3	80.0	88.1	82.8	81.2	72.0	69.6	70.1	74.0	73.8	73.8	74.7	78.7	79.1	77.7	77.9
Fuel and light.....	.3	10.0	26.8	51.9	47.9	62.9	90.3	94.5	89.6	91.9	103.8	102.2	102.2	113.5	116.3	118.0	151.6	150.8	147.0	145.3	142.6	143.1
House-furnishing goods.....	4.7	19.7	47.8	102.4	117.0	165.5	186.5	176.8	133.6	110.0	100.8	88.4	87.8	92.3	104.8	118.7	129.6	130.5	129.3	122.7	118.0	112.8
Miscellaneous.....	1.4	19.1	42.9	67.1	74.7	85.9	117.9	134.0	129.6	123.4	123.2	111.1	110.7	109.4	109.4	108.1	110.8	110.8	113.1	112.7	112.7	112.5
All items.....	1.4	19.1	42.9	71.4	77.2	98.2	120.3	107.3	87.5	82.4	78.8	68.5	68.9	68.1	72.9	73.3	77.1	79.9	79.6	77.3	75.9	77.9

Detroit, Mich.

Food.....	4.1	26.5	59.7	82.5	86.4	99.5	132.0	75.6	41.1	54.3	47.3	36.5	43.1	39.8	44.8	42.6	46.7	54.2	47.5	43.4	45.5	47.8
Clothing.....	2.3	18.9	46.7	113.8	125.2	181.8	203.8	176.1	134.1	99.9	92.5	82.7	81.4	81.2	79.9	83.1	84.0	84.2	85.3	84.7	82.3	78.1
Housing.....	2.1	17.5	32.6	39.0	45.2	60.2	68.8	108.1	101.4	96.6	91.1	88.0	86.9	87.6	92.1	92.3	96.9	99.1	107.5	107.3	105.6	104.2
Fuel and light.....	1.6	9.9	30.2	47.6	47.6	57.9	74.9	104.5	83.6	81.9	77.5	74.0	75.2	90.3	95.5	93.3	87.3	86.0	84.9	81.4	81.8	82.3
House-furnishing goods.....	8.7	24.5	50.4	107.3	129.3	172.6	206.7	184.0	134.0	102.9	96.8	82.6	76.0	80.0	81.1	100.5	105.7	104.9	105.3	106.7	103.4	98.3
Miscellaneous.....	3.5	22.3	49.9	72.6	80.3	100.1	141.3	144.0	140.1	131.9	130.7	126.3	121.3	122.2	121.5	123.5	124.2	128.2	128.4	127.7	127.2	124.0
All items.....	3.5	22.3	49.9	78.0	84.4	107.9	136.0	118.6	93.3	88.0	82.4	74.6	75.3	75.6	79.4	79.4	81.7	85.5	84.7	83.0	82.8	81.7

Houston, Tex.

Food.....	11.0	19.9	57.3	86.1	85.7	97.5	107.5	83.2	45.6	49.7	50.1	40.2	38.9	38.5	45.0	39.1	41.2	43.5	46.4	40.8	37.3	46.1
Clothing.....	2.7	25.0	51.5	117.3	134.8	192.0	211.3	187.0	143.4	111.5	104.9	98.8	98.4	97.8	98.2	100.4	100.4	102.6	102.6	102.0	100.8	96.2
Housing.....	12.3	17.3	17.7	11.7	1.9	13.4	25.3	35.1	39.4	39.4	39.8	39.5	38.5	38.1	37.3	37.0	36.7	36.7	36.4	35.7	34.9	34.8
Fuel and light.....	1.9	8.3	22.7	47.5	37.6	60.0	55.1	74.2	46.0	39.0	34.4	34.4	32.9	35.7	39.2	33.6	36.5	40.2	55.8	58.4	45.0	45.0
House-furnishing goods.....	6.1	39.6	62.3	119.9	144.5	181.8	213.9	205.2	173.7	156.7	148.2	137.5	133.7	131.8	140.4	146.7	150.2	149.2	148.2	148.2	143.7	142.0
Miscellaneous.....	1.3	16.4	44.9	67.6	72.3	88.2	90.4	103.9	100.8	100.0	99.0	96.0	94.0	93.0	93.0	92.8	91.5	91.9	93.2	90.1	89.5	89.1
All items.....	1.3	16.4	44.9	75.7	80.2	101.7	112.2	104.0	79.7	75.0	73.6	67.2	65.9	65.4	68.4	66.5	67.2	68.7	70.6	67.7	65.0	67.6

1 Decrease.

CHANGES IN COST OF LIVING

105

[1919]

TABLE 2.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1914, TO SEPTEMBER, 1924—Continued

Jacksonville, Fla.

Item of expenditure	Per cent of increase from December, 1914, to—																					
	Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	June, 1924	Sept., 1924
Food.....	10.3	17.6	50.8	76.2	74.2	80.9	90.1	65.6	32.6	43.1	40.6	30.0	30.6	28.9	34.8	31.0	32.0	35.1	39.9	33.5	30.2	35.6
Clothing.....	10.5	33.7	71.9	130.5	39.8	217.2	234.0	209.3	167.5	131.1	117.9	104.8	99.9	99.1	99.3	101.3	101.1	104.9	104.5	103.7	102.7	98.4
Housing.....	16.9	118.2	118.7	5.9	9.7	22.0	28.9	34.1	36.5	37.7	38.3	37.6	35.3	34.2	35.1	35.2	34.3	33.0	33.4	33.4	33.3	33.0
Fuel and light.....	(?)	2.3	15.1	55.2	49.2	64.1	72.6	92.6	80.7	68.1	68.9	61.6	58.9	58.9	65.7	65.9	63.6	62.1	75.1	75.1	72.1	71.4
House-furnishing goods.....	15.1	43.4	73.7	126.5	140.0	186.2	224.2	222.3	182.7	140.9	134.9	122.0	115.3	117.7	127.1	134.6	137.9	139.6	139.4	140.6	132.9	133.6
Miscellaneous.....	1.3	14.7	41.6	60.5	65.9	80.9	102.8	105.6	107.5	100.9	99.3	98.7	95.5	95.5	94.7	95.3	95.3	97.8	96.6	97.0	95.0	99.3
All items.....	1.3	14.7	41.6	71.5	77.5	101.5	116.5	106.2	85.8	78.7	75.1	68.0	65.7	65.0	67.8	67.4	67.7	69.9	71.9	69.7	67.3	69.5

Los Angeles, Calif.

Food.....	14.1	0.4	33.4	61.8	60.7	71.0	90.8	62.7	33.2	39.3	38.4	27.5	30.6	34.0	39.4	29.9	36.2	40.5	42.1	37.5	35.2	41.6
Clothing.....	2.8	14.3	45.0	109.1	123.3	157.6	184.5	166.6	127.4	98.3	94.3	84.4	81.3	78.2	78.0	83.2	82.5	83.6	83.0	83.2	81.4	80.9
Housing.....	12.7	12.5	1.6	4.4	8.7	26.8	42.6	71.4	85.3	86.0	90.1	96.0	95.6	94.4	94.8	97.1	97.7	99.3	100.9	103.7	99.4	96.8
Fuel and light.....	.4	2.3	10.4	18.3	18.6	35.3	53.5	53.5	52.7	52.7	48.4	39.1	35.9	35.6	34.5	33.7	33.8	34.1	34.0	34.0	33.6	34.3
House-furnishing goods.....	6.3	23.1	56.4	118.5	134.2	175.5	202.2	202.2	156.6	148.4	143.2	133.7	128.8	128.1	138.1	148.6	153.6	152.3	152.0	147.0	136.1	134.4
Miscellaneous.....	11.9	7.7	28.9	52.0	59.1	76.9	86.6	100.6	96.8	98.8	99.6	104.0	103.8	102.2	101.2	101.4	100.8	101.0	104.2	105.0	105.4	104.8
All items.....	11.9	7.7	28.9	58.0	65.1	85.3	101.7	96.7	78.7	76.8	76.4	72.4	72.5	72.4	74.5	72.9	75.1	77.1	78.8	77.4	75.1	77.0

Mobile, Ala.

Food.....	11.0	19.9	57.3	80.6	83.6	98.4	110.5	73.5	39.1	43.7	42.4	32.3	33.2	32.9	39.1	36.2	37.7	41.3	44.7	38.2	33.4	41.9
Clothing.....	2.0	9.0	38.8	86.0	94.0	123.7	137.4	122.2	90.6	68.1	57.7	50.3	49.7	51.0	50.8	51.3	51.8	55.4	55.4	55.2	54.3	53.4
Housing.....	11.9	14.3	13.6	11.2	11.9	29.6	34.6	53.6	53.3	53.1	49.9	48.4	47.7	47.3	43.8	43.1	42.5	42.5	42.6	42.3	41.4	41.0
Fuel and light.....	(?)	8.8	27.1	57.1	66.6	75.6	86.3	122.3	102.1	97.2	98.2	86.1	84.4	90.9	96.4	95.6	93.3	91.0	98.1	98.1	91.4	91.0
House-furnishing goods.....	4.1	15.3	42.8	108.3	113.9	153.3	177.9	175.4	140.7	124.3	116.9	98.2	97.8	93.1	97.9	108.6	114.0	114.2	114.8	114.4	109.3	107.2
Miscellaneous.....	1.4	13.8	43.2	72.4	75.3	87.0	100.3	100.7	96.9	96.1	94.3	89.6	87.5	87.3	91.0	90.4	89.8	89.8	91.3	88.8	93.7	94.3
All items.....	1.4	13.8	43.2	71.4	76.6	94.5	107.0	93.3	70.8	67.2	63.6	55.8	55.3	55.5	58.8	58.0	58.6	60.5	62.6	59.5	58.0	60.9

110501

New York, N. Y.

Food.....	1.3	16.3	55.3	82.6	75.3	91.0	105.3	73.5	42.5	50.3	51.8	36.5	40.0	38.8	49.5	43.0	44.4	48.2	52.0	41.2	41.1	43.2
Clothing.....	4.8	22.3	54.2	131.3	151.6	219.7	241.4	201.8	159.5	131.5	117.8	107.1	103.0	98.1	98.3	100.9	100.7	102.5	102.7	102.7	100.7	99.1
Housing.....	1.1	1.1	2.6	6.5	13.4	23.4	32.4	38.1	42.2	44.0	53.7	54.5	55.7	56.2	56.7	58.4	59.4	60.8	62.4	63.5	64.5	65.8
Fuel and light.....	1.1	11.0	19.9	45.5	45.4	50.6	60.1	87.5	95.9	92.4	90.7	89.4	89.0	97.7	95.7	93.2	89.1	94.6	94.2	93.2	88.8	92.0
House-furnishing goods.....	8.4	27.6	56.5	126.5	136.6	172.9	205.1	185.9	156.5	136.7	132.0	122.3	118.3	117.9	121.6	128.0	130.3	131.7	131.5	125.5	121.4	119.6
Miscellaneous.....	2.0	14.9	44.7	70.0	75.1	95.8	111.9	116.3	117.6	117.8	116.9	113.2	112.8	112.4	111.6	111.0	110.8	112.9	113.5	113.5	115.0	114.6
All items.....	2.0	14.9	44.7	77.3	79.2	103.8	119.2	101.4	81.7	79.7	79.3	69.9	70.7	69.7	74.2	72.2	72.6	75.4	77.3	72.7	72.5	73.3

Norfolk, Va.

Food.....	0.8	22.4	63.9	86.2	89.8	91.5	107.6	76.3	45.4	50.2	43.4	31.9	33.5	32.4	38.6	32.4	36.9	41.3	40.7	36.1	33.1	37.6
Clothing.....	.8	6.0	31.6	94.6	104.8	158.4	176.5	153.6	121.6	93.9	90.2	81.8	77.6	74.6	73.2	78.0	79.1	80.4	80.8	80.8	78.6	76.8
Housing.....	.1	1.7	1.7	39.0	46.5	63.3	70.8	90.8	94.6	94.6	93.4	91.7	88.1	82.5	77.2	74.7	73.0	70.1	67.0	66.2	64.2	63.2
Fuel and light.....	(2)	17.0	33.3	74.6	69.7	89.9	110.6	128.9	97.3	91.6	93.5	87.7	97.8	106.5	114.8	102.1	100.3	96.9	101.0	94.4	97.1	97.1
House-furnishing goods.....	.6	8.7	39.0	105.5	110.7	143.6	165.0	160.5	129.0	110.5	106.1	95.0	88.4	86.7	89.1	96.3	101.0	104.4	103.8	105.0	100.1	97.9
Miscellaneous.....	.6	14.7	45.2	76.8	83.7	97.5	108.4	106.3	106.3	112.5	109.3	102.6	100.8	100.6	99.6	99.8	102.2	105.2	104.4	103.8	103.0	103.0
All items.....	.6	14.7	45.2	80.7	87.1	107.0	122.2	109.0	88.1	83.9	79.2	71.3	69.5	68.1	69.9	69.5	71.1	73.4	72.4	70.9	68.4	69.4

Philadelphia, Pa.

Food.....	0.3	18.9	54.4	80.7	75.5	87.2	101.7	68.1	37.8	44.6	43.9	34.4	38.1	32.7	43.4	38.3	42.7	46.3	45.1	38.2	39.3	40.0
Clothing.....	3.6	16.0	51.3	111.2	135.9	190.3	219.6	183.5	144.7	112.2	104.6	96.2	89.5	87.4	87.6	88.0	87.6	88.4	88.2	87.4	85.5	84.6
Housing.....	1.3	1.7	2.6	8.0	11.3	16.7	28.6	38.0	44.2	47.1	48.1	48.7	49.6	51.1	52.9	54.7	58.1	62.4	66.9	69.9	72.4	71.9
Fuel and light.....	1.8	5.4	21.5	47.9	43.3	51.3	66.8	96.0	85.6	89.3	92.0	89.7	85.7	86.3	93.0	94.4	89.9	95.0	102.2	98.0	91.7	92.9
House-furnishing goods.....	6.9	19.9	49.8	107.7	117.8	162.8	187.4	183.4	135.5	109.1	101.6	91.7	90.0	89.1	96.9	108.1	110.8	110.8	111.6	108.8	102.3	99.1
Miscellaneous.....	1.2	14.7	43.8	67.5	71.2	88.6	102.8	122.3	119.2	116.4	116.2	113.8	112.3	111.5	110.7	112.0	112.4	112.0	112.0	112.0	110.7	111.3
All items.....	1.2	14.7	43.8	73.9	76.2	96.5	113.5	100.7	79.8	76.0	74.3	68.2	68.2	65.5	70.7	69.8	72.1	74.2	74.7	71.9	71.5	71.7

Portland, Me.

Food.....	¹ 2.0	18.6	49.8	86.8	80.6	91.9	114.5	78.7	46.7	56.8	54.8	39.2	39.9	44.5	49.1	48.1	45.3	51.7	52.3	45.9	44.1	50.4
Clothing.....	2.1	9.7	32.8	85.8	103.8	148.5	165.9	147.8	116.3	96.6	88.1	81.0	76.7	74.8	74.8	76.2	77.3	77.8	76.7	76.5	75.4	74.7
Housing.....	.2	.6	2.4	2.5	5.7	10.7	14.5	20.0	23.1	23.3	26.6	27.0	24.8	26.3	30.7	31.1	27.3	27.4	31.7	31.6	27.4	27.5
Fuel and light.....	.4	11.4	28.9	67.7	58.4	69.8	83.9	113.5	96.8	90.9	94.0	93.8	96.1	96.7	94.7	94.9	94.9	94.9	100.0	100.0	96.2	97.8
House-furnishing goods.....	6.2	20.9	43.5	110.8	126.4	163.7	190.3	191.2	152.2	139.1	123.6	110.6	108.1	106.4	114.2	122.6	129.7	130.4	130.2	127.4	126.7	126.2
Miscellaneous.....	1.4	13.8	38.0	65.6	72.1	83.2	89.4	94.3	94.1	94.1	91.2	89.5	88.2	88.0	88.0	88.0	88.0	87.6	89.3	88.7	87.9	87.0
All items.....	1.4	13.8	38.0	72.2	74.3	91.6	107.6	93.1	72.1	72.0	69.2	60.7	59.7	61.5	64.1	64.4	63.3	65.8	66.9	64.1	62.4	64.8

¹ Decrease.

² No change.

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CHANGES IN COST OF LIVING

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TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO SEPTEMBER, 1924—Concluded

Portland, Oreg.

Item of expenditure	Per cent of increase from December, 1914, to—																					
	Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	June, 1924	Sept., 1924
Food.....	13.8	9.8	42.2	70.6	67.1	81.6	107.1	60.9	26.0	35.9	33.1	24.6	26.5	30.1	34.3	26.5	29.5	34.1	35.1	28.6	28.5	34.8
Clothing.....	3.0	15.8	44.4	96.6	115.5	142.1	158.6	122.1	91.2	70.4	65.3	55.5	53.2	53.4	54.9	60.3	61.3	61.8	61.8	62.1	61.1	58.7
Housing.....	10.9	19.6	122.2	12.3	20.2	27.7	33.2	36.9	42.9	43.3	43.3	43.2	43.3	43.7	43.6	43.5	42.5	42.6	42.7	43.4	43.3	42.9
Fuel and light.....	1.0	3.4	20.2	30.9	31.3	42.3	46.9	65.9	67.1	58.9	59.4	56.2	50.3	59.0	65.7	70.2	61.3	62.1	67.1	65.3	55.5	57.2
House-furnishing goods.....	2.9	18.0	54.5	109.0	122.1	145.1	183.9	179.9	148.0	126.9	121.9	104.6	101.9	100.3	102.9	109.4	109.8	109.6	109.0	106.3	102.2	101.4
Miscellaneous.....	13.1	6.1	31.2	57.9	62.3	71.6	79.7	81.1	81.1	80.9	80.0	78.9	78.5	80.5	79.4	78.1	75.8	76.3	79.6	78.7	73.0	72.3
All items.....	13.1	6.1	31.2	64.2	69.2	83.7	100.4	80.3	62.2	60.5	58.3	52.3	52.1	54.2	56.1	54.6	54.6	56.4	57.8	55.3	52.8	54.5

San Francisco and Oakland, Calif.

Food.....	14.3	9.6	35.9	66.2	63.3	74.2	93.9	64.9	33.3	40.6	40.4	29.6	31.1	34.6	38.8	29.0	34.2	40.5	42.3	35.3	35.0	39.7
Clothing.....	2.5	14.5	43.6	109.0	134.6	170.4	191.0	175.9	140.9	110.1	106.3	97.8	90.7	86.1	85.4	90.0	92.1	93.8	94.4	94.4	91.5	90.9
Housing.....	1.7	12.5	14.0	13.9	13.5	4.7	9.4	15.0	21.7	23.6	25.8	27.7	29.4	30.3	30.0	31.7	33.4	34.1	36.0	37.0	38.0	38.3
Fuel and light.....	1.1	4.6	14.4	30.1	28.9	41.3	47.2	66.3	63.3	65.3	65.3	65.3	59.5	52.0	52.5	48.4	42.6	46.2	48.8	53.6	49.9	53.0
House-furnishing goods.....	6.0	21.7	48.2	103.4	116.6	143.8	180.1	175.6	143.9	121.7	113.9	105.6	104.4	103.8	105.4	116.5	116.7	117.1	116.9	115.8	113.4	111.3
Miscellaneous.....	11.7	8.3	28.6	50.5	61.0	74.7	79.6	84.8	84.4	87.4	86.8	84.4	83.7	83.5	84.2	84.8	79.4	79.2	81.2	72.7	73.2	72.7
All items.....	11.7	8.3	28.6	57.8	65.6	87.8	96.0	85.1	66.7	64.6	63.6	57.5	56.8	57.1	58.8	56.5	57.6	60.4	62.1	58.0	57.3	59.0

Savannah, Ga.

Food.....	10.3	17.6	50.8	76.2	74.2	80.9	91.7	63.5	28.7	36.8	33.7	16.7	22.7	19.8	27.6	22.6	24.3	25.0	19.4	17.5	20.8	
Clothing.....	.8	24.1	56.6	133.6	146.3	195.9	212.1	171.5	133.2	101.3	84.2	74.1	71.7	77.4	76.2	81.7	81.2	82.4	80.9	81.1	79.1	77.8
Housing.....	1.4	13.0	14.3	5.9	10.2	22.0	33.5	58.6	61.9	60.6	60.9	58.8	57.8	56.5	52.7	51.5	49.5	48.2	47.5	46.5	45.3	44.3
Fuel and light.....	1.3	1.7	21.1	37.5	35.5	52.2	65.3	94.4	74.2	66.4	66.1	65.3	55.2	60.6	68.3	67.8	61.9	62.2	64.1	63.6	59.7	59.2
House-furnishing goods.....	1.8	12.8	50.7	128.6	136.5	182.1	207.2	206.6	175.9	150.2	133.7	126.0	120.1	121.6	123.8	133.6	135.9	135.0	133.4	132.2	130.6	129.2
Miscellaneous.....	1.2	14.5	42.5	67.3	71.2	82.0	83.8	91.5	93.0	88.0	87.4	84.6	81.1	80.9	79.5	78.8	77.5	77.2	76.7	77.9	77.5	77.5
All items.....	1.2	14.6	42.5	75.0	79.8	98.7	109.4	98.7	77.6	71.3	66.2	56.9	56.8	57.2	59.2	59.2	57.9	58.3	58.2	56.3	54.8	55.4

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Seattle, Wash.

Food.....	12.8	8.5	38.7	72.5	69.3	80.9	102.3	54.1	27.1	34.9	30.5	27.1	30.0	31.6	33.9	28.1	31.0	36.1	35.8	32.7	33.1	34.6
Clothing.....	1.2	11.3	36.4	88.0	110.2	154.5	173.9	160.5	128.7	93.5	88.7	79.8	78.0	73.9	74.2	75.6	76.7	77.6	77.6	77.4	76.2	74.6
Housing.....	12.4	15.4	1.6	44.3	51.5	71.5	74.8	76.7	74.8	71.3	69.2	67.0	64.7	63.4	63.1	62.8	62.3	62.6	62.9	63.2	64.0	63.5
Fuel and light.....	1.2	2.9	23.9	51.8	51.8	63.8	65.8	78.7	78.7	77.3	69.0	67.5	64.0	62.7	59.6	60.9	58.0	58.2	59.1	57.7	56.8	59.0
House-furnishing goods.....	8.5	27.4	52.3	141.5	154.4	201.0	221.2	216.4	177.2	151.7	149.9	142.4	137.3	134.7	136.1	140.3	143.9	144.4	144.2	147.6	140.7	139.7
Miscellaneous.....	11.0	7.4	31.1	58.5	71.4	86.8	90.4	95.5	105.5	105.5	102.6	99.2	97.6	97.4	96.4	82.5	96.6	96.6	96.6	92.5	94.6	94.8
All items.....	11.0	7.4	31.1	69.9	76.9	97.7	110.5	94.1	80.2	75.5	71.5	67.4	67.0	66.5	66.7	61.9	66.4	68.4	68.5	66.3	66.7	66.9

Washington, D. C.

Food.....	0.6	15.7	61.1	90.9	(4) 84.6	(5) 93.3	108.4	79.0	47.4	59.1	51.1	40.8	44.3	42.5	49.2	43.0	48.8	52.7	52.3	43.5	43.7	49.0
Clothing.....	3.7	23.2	60.1	112.6	109.5	165.9	184.0	151.1	115.9	89.8	87.1	79.8	77.5	75.5	74.8	77.8	78.9	80.3	81.2	81.4	78.9	76.0
Housing.....	11.5	13.7	13.4	11.5	11.4	5.4	15.6	24.7	28.8	29.1	30.4	31.3	31.4	32.1	32.6	33.0	33.9	34.0	34.3	34.8	35.7	36.4
Fuel and light.....	(2)	7.3	24.9	40.9	41.8	42.8	53.7	68.0	57.1	57.6	49.9	47.1	44.5	49.0	55.1	53.2	51.2	49.4	47.0	46.4	42.9	43.2
House-furnishing goods.....	6.3	30.5	72.1	127.4	126.0	159.3	196.4	194.0	149.0	132.1	122.4	110.4	108.1	109.3	112.6	123.4	129.0	130.4	128.8	129.5	124.5	122.3
Miscellaneous.....	.4	15.3	44.3	55.9	57.4	62.7	68.2	73.9	72.0	70.5	75.8	73.7	73.7	73.7	72.0	72.2	72.5	73.2	74.9	75.2	75.0	72.7
All items.....	1.0	14.6	47.3	73.8	71.2	87.6	101.3	87.8	67.1	66.2	63.0	56.8	57.6	56.9	59.5	58.2	60.9	62.9	63.2	59.9	59.2	60.2

¹ Decrease.

² No change.

³ An error was made in computing the figures on food for September, 1922, in Savannah. This error was but recently discovered, and the figures for food and for all items for September, 1922, to June, 1924, have been changed accordingly.

⁴ Figures in this column are for April, 1919.

⁵ Figures in this column are for November, 1919.

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CHANGES IN COST OF LIVING

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Table 3 shows the changes in the cost of living from December, 1917, to September, 1924, for 13 cities. The table is constructed in the same manner as the preceding one and differs from it only in the base period and in the length of time covered.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO SEPTEMBER, 1924
Atlanta, Ga.

Item of expenditure	Per cent of increase from December, 1917, to—																			
	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	June, 1924	Sept., 1924	
Food.....	19.0	18.0	27.9	34.0	12.8	18.9	15.8	17.2	111.9	110.5	112.3	118.9	111.8	110.3	16.9	16.3	111.2	110.2	18.6	
Clothing.....	29.1	40.7	66.9	80.5	56.5	35.2	13.6	8.3	1.9	.4	3.1	2.8	5.4	5.9	6.7	6.9	6.9	5.7	5.0	
Housing.....	14.0	14.5	32.6	40.4	73.1	78.8	77.0	75.4	72.2	68.1	63.2	62.7	61.9	61.4	62.5	62.2	60.9	60.1	57.7	
Fuel and light.....	17.0	17.9	30.8	61.0	66.8	56.1	46.6	43.7	34.8	39.1	58.7	57.6	56.5	42.7	42.4	39.3	38.2	32.0	31.9	
House-furnishing goods.....	24.9	30.1	49.9	65.0	58.4	38.0	25.3	23.0	16.1	15.2	13.9	17.4	21.6	23.9	23.7	23.5	22.0	20.4	20.0	
Miscellaneous.....	14.8	21.5	31.7	34.6	39.7	40.5	39.4	39.7	36.1	34.5	34.2	34.1	34.1	32.8	33.6	33.3	33.8	33.8	33.7	
All items.....	19.7	23.3	37.9	46.7	38.5	25.2	20.7	18.7	13.8	13.7	13.9	15.1	14.6	14.2	15.9	16.0	13.8	13.6	13.7	
<i>Birmingham, Ala.</i>																				
Food.....	17.7	18.3	26.5	36.4	11.9	19.1	16.2	18.5	114.0	113.1	114.5	119.9	112.5	119.9	18.3	16.6	111.1	112.6	18.3	
Clothing.....	23.9	29.8	57.6	66.4	45.1	24.8	6.7	1.4	15.2	16.1	11.2	11.7	1.5	1.8	3.7	3.8	4.0	3.2	2.7	
Housing.....	8.1	12.8	34.9	40.3	68.5	77.4	76.5	70.9	67.5	67.0	66.0	62.3	62.6	63.1	64.6	67.9	68.4	68.6	68.6	
Fuel and light.....	22.8	31.9	39.8	55.3	74.2	54.3	53.1	44.1	29.8	25.0	40.0	49.9	49.8	40.7	46.0	50.2	48.1	40.5	43.0	
House-furnishing goods.....	19.4	20.2	45.1	55.6	48.1	32.0	15.0	12.0	3.0	3.3	5.4	8.9	14.9	17.8	18.6	19.7	17.7	14.3	14.3	
Miscellaneous.....	13.8	16.3	26.8	28.7	30.4	33.8	35.9	35.5	31.8	30.4	29.6	29.6	29.3	28.5	25.7	27.2	27.2	27.2	27.5	
All items.....	17.0	19.8	34.3	41.9	33.3	22.1	19.6	16.2	11.0	10.7	11.4	13.2	12.9	13.6	14.4	16.0	14.2	13.1	14.8	
<i>Cincinnati, Ohio</i>																				
Food.....	15.3	18.1	22.9	38.7	10.3	17.4	12.2	18.3	112.4	18.9	112.7	110.4	111.9	19.3	17.1	16.7	19.4	110.2	110.9	
Clothing.....	33.8	48.3	84.2	96.7	73.5	49.0	22.6	13.9	6.7	4.9	5.5	5.5	8.7	8.8	9.2	9.2	7.8	6.4	3.6	
Housing.....	.2	.8	12.8	13.6	25.0	27.6	28.2	28.5	30.3	31.0	33.6	35.2	38.3	40.7	42.2	45.6	48.7	49.3	50.3	
Fuel and light.....	10.0	5.6	11.0	26.9	34.1	15.7	15.6	42.4	35.6	35.2	58.2	61.0	58.6	51.9	51.6	53.0	49.3	39.3	38.7	
House-furnishing goods.....	25.7	30.5	51.1	75.5	66.7	39.7	25.2	22.3	16.7	15.8	15.7	17.2	21.3	24.3	25.8	26.2	26.5	23.2	23.3	
Miscellaneous.....	20.4	21.8	40.3	47.6	53.4	52.3	48.2	47.3	44.4	44.0	43.6	42.7	43.1	42.8	43.4	43.3	46.2	46.0	52.0	
All items.....	17.3	21.1	35.2	47.1	34.7	21.7	18.3	15.3	11.8	12.7	12.5	13.8	14.2	15.5	16.8	17.7	17.2	16.3	16.7	

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Denver, Colo.

Food.....	20.0	20.7	26.0	41.5	7.9	¹ 13.1	¹ 7.8	¹ 8.8	¹ 17.6	¹ 14.2	¹ 17.2	¹ 9.0	¹ 14.6	¹ 11.5	¹ 10.4	¹ 8.7	¹ 13.9	¹ 13.5	¹ 13.5
Clothing.....	40.1	53.2	82.1	96.8	78.3	53.9	33.7	27.7	18.3	15.3	15.9	16.6	16.9	16.9	17.5	17.9	17.2	16.1	15.3
Housing.....	12.8	21.8	33.5	51.9	69.8	76.9	80.1	82.6	84.4	84.8	85.0	86.9	87.1	85.4	86.7	88.9	87.6	84.4	84.2
Fuel and light.....	8.1	8.4	19.6	22.3	47.1	37.5	40.0	39.7	33.1	32.8	41.4	40.7	38.0	30.4	37.6	37.2	16.3	19.7	23.9
House-furnishing goods.....	22.6	31.3	46.3	60.2	58.9	42.5	32.5	27.9	21.1	20.4	20.0	21.2	24.7	26.1	26.7	27.0	26.2	23.8	24.2
Miscellaneous.....	14.8	17.7	32.3	35.4	38.8	42.8	44.1	43.1	40.2	38.1	37.7	37.6	37.9	37.1	37.5	36.8	36.5	35.1	35.6
All items.....	20.7	25.3	38.2	50.3	38.7	26.9	26.1	24.5	18.5	18.8	18.1	21.6	19.7	19.9	21.2	22.1	18.5	17.8	18.1

Indianapolis, Ind.

Food.....	17.8	16.4	28.2	49.0	11.0	¹ 10.1	¹ 2.1	¹ 8.4	¹ 13.4	¹ 9.9	¹ 13.2	¹ 11.1	¹ 10.3	¹ 8.0	¹ 4.2	¹ 6.5	¹ 9.8	¹ 10.0	¹ 6.7
Clothing.....	32.4	40.1	73.8	87.9	72.3	45.8	21.5	16.2	10.9	7.9	8.3	8.6	11.5	11.6	13.1	13.4	12.8	11.9	10.8
Housing.....	1.6	2.6	11.6	18.9	32.9	37.4	41.4	43.8	42.2	41.3	41.7	44.1	44.5	44.6	45.9	47.1	47.2	46.5	46.8
Fuel and light.....	19.8	16.7	27.3	45.6	60.3	49.4	47.5	42.5	34.8	44.9	71.3	73.4	69.1	54.9	54.3	41.5	42.6	38.2	36.7
House-furnishing goods.....	18.9	24.8	48.4	67.5	63.0	35.3	25.0	22.5	13.9	13.7	14.2	16.7	21.5	23.2	23.6	24.0	24.4	21.4	21.4
Miscellaneous.....	21.9	26.8	38.2	40.5	47.5	47.4	46.5	46.2	45.8	45.4	46.0	46.7	47.1	46.1	49.9	49.2	48.5	51.5	53.5
All items.....	19.1	21.1	36.5	50.2	37.6	23.9	22.6	19.3	15.3	16.4	17.1	18.8	19.7	19.4	22.2	20.6	19.3	19.3	20.7

Kansas City, Mo.

Food.....	17.3	15.1	24.5	44.9	10.2	¹ 8.3	¹ 4.3	¹ 6.6	¹ 15.7	¹ 13.5	¹ 16.1	¹ 12.0	¹ 12.9	¹ 12.5	¹ 12.1	¹ 10.2	¹ 12.2	¹ 12.7	¹ 11.3
Clothing.....	40.7	44.7	89.9	104.5	76.3	52.3	27.9	24.1	17.4	15.9	14.7	14.6	14.5	14.5	15.3	15.2	14.3	13.3	12.1
Housing.....	5.4	6.7	26.0	29.4	63.9	65.0	66.2	69.7	64.8	59.4	57.8	61.4	61.1	53.7	53.9	56.8	55.1	49.5	47.7
Fuel and light.....	18.0	9.6	27.5	35.2	55.1	43.3	43.7	42.6	36.0	36.3	47.1	40.2	38.6	36.1	35.1	36.7	35.9	34.5	34.8
House-furnishing goods.....	31.1	37.9	61.8	73.0	68.7	50.0	32.8	26.2	15.2	11.6	10.3	12.1	21.2	22.5	23.0	22.6	21.5	16.8	16.1
Miscellaneous.....	15.6	20.8	31.5	37.1	40.3	40.4	38.2	37.6	33.1	32.3	32.4	33.3	33.4	33.8	34.6	36.2	35.4	35.3	34.6
All items.....	19.6	20.6	38.2	51.0	39.5	27.3	23.9	22.5	15.3	15.0	14.2	16.2	16.0	15.3	15.5	17.2	15.8	14.3	14.2

Memphis, Tenn.

Food.....	20.3	22.7	28.4	38.8	7.0	¹ 14.2	¹ 9.2	¹ 11.2	¹ 16.1	¹ 15.1	¹ 17.7	¹ 14.9	¹ 15.3	¹ 13.9	¹ 11.7	¹ 11.2	¹ 14.1	¹ 17.1	¹ 14.0
Clothing.....	27.7	38.3	66.2	77.5	59.0	36.1	20.2	15.3	9.3	7.3	7.0	6.7	9.5	9.8	10.9	11.0	10.0	9.5	8.0
Housing.....	(²)	8.2	23.1	35.9	66.2	79.7	77.7	77.3	75.5	74.8	73.9	72.5	72.3	72.3	72.0	72.5	72.2	72.4	70.5
Fuel and light.....	26.8	23.4	34.1	49.7	105.4	64.5	66.1	67.1	61.8	56.3	70.4	68.5	70.5	62.8	62.1	65.0	66.2	66.2	66.2
House-furnishing goods.....	25.4	30.7	53.2	67.1	53.9	29.9	19.2	14.7	8.9	6.8	7.8	12.2	20.3	23.2	22.1	23.4	22.3	18.6	18.4
Miscellaneous.....	16.1	20.9	28.3	38.8	43.2	42.9	42.2	42.3	39.9	37.8	37.8	37.4	38.2	38.1	37.3	37.3	36.6	36.3	37.5
All items.....	18.3	23.3	35.2	46.4	39.3	26.7	25.1	23.2	19.2	18.2	17.9	18.6	19.6	19.9	20.6	21.0	19.5	18.2	19.1

¹ Decrease.

² No change.

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CHANGES IN COST OF LIVING

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TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO SEPTEMBER, 1924—Concluded

Minneapolis, Minn.

Item of expenditure	Per cent of increase from December, 1917, to—																		
	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	June, 1924	Sept., 1924
Food.....	17.7	21.4	34.1	50.0	13.0	17.9	13.5	14.9	¹ 10.0	¹ 6.0	¹ 9.9	¹ 5.3	¹ 7.6	¹ 6.4	¹ 5.0	¹ 4.7	¹ 6.7	¹ 7.9	¹ 7.8
Clothing.....	33.5	40.1	67.0	76.7	63.6	41.0	18.4	14.3	9.7	7.9	6.0	6.5	8.7	9.2	9.4	9.3	9.4	7.4	7.0
Housing.....	1.1	12.0	8.0	10.7	36.8	39.0	44.0	46.7	46.7	44.6	46.2	46.8	46.8	42.5	43.4	47.4	47.4	44.7	43.1
Fuel and light.....	14.7	13.4	22.4	36.9	60.3	52.8	50.5	50.2	43.7	43.7	44.8	47.0	48.0	44.9	43.0	45.6	44.4	42.2	42.5
House-furnishing goods.....	18.1	23.6	45.6	65.5	65.8	43.3	30.5	27.9	21.9	21.4	21.3	22.5	26.7	29.7	27.8	28.2	26.5	22.8	22.4
Miscellaneous.....	12.3	15.9	25.4	31.3	37.6	37.9	37.3	37.4	34.5	32.6	32.5	32.6	32.5	32.8	32.3	32.0	31.7	31.3	31.2
All items.....	15.8	18.8	32.7	43.4	35.7	23.7	21.6	20.7	17.0	17.3	15.9	18.0	17.8	17.4	17.8	18.8	17.9	16.2	15.9

New Orleans, La.

Food.....	16.6	17.4	21.1	28.6	10.7	¹ 10.7	¹ 6.4	¹ 9.3	¹ 12.0	¹ 12.8	¹ 13.7	¹ 10.5	¹ 12.5	¹ 13.2	¹ 9.9	¹ 8.7	¹ 11.0	¹ 14.6	¹ 10.0
Clothing.....	36.8	48.8	83.2	94.9	69.4	45.0	29.2	24.9	18.9	15.6	15.4	16.2	16.4	17.8	19.0	19.5	19.1	18.6	17.1
Housing.....	(3)	1	10.8	12.9	39.7	46.7	49.5	57.9	58.2	58.5	58.7	54.7	54.7	55.5	55.8	57.4	57.9	57.1	57.4
Fuel and light.....	19.7	20.8	24.7	36.3	41.5	29.2	36.2	40.4	31.8	33.4	30.7	38.5	35.2	32.9	34.4	37.1	34.5	32.9	32.2
House-furnishing goods.....	23.8	30.0	57.7	75.9	63.9	47.7	30.7	28.5	20.8	17.9	17.7	26.2	29.9	34.8	33.7	33.6	32.0	29.2	29.6
Miscellaneous.....	15.9	17.5	35.1	42.8	57.1	58.2	61.0	60.2	59.1	58.6	55.6	51.9	50.1	50.1	50.3	50.3	49.4	48.7	47.4
All items.....	17.9	20.7	33.9	41.9	36.7	23.8	23.8	22.7	19.9	18.9	17.8	18.6	17.6	17.7	19.4	20.2	18.8	16.8	18.2

Pittsburgh, Pa.

Food.....	18.8	16.2	25.1	36.5	14.3	18.8	13.0	15.6	14.4	12.2	11.7	15.4	18.1	15.4	14.2	12.1	17.9	17.5	16.7
Clothing.....	35.9	45.3	82.8	91.3	75.4	50.7	27.2	23.6	19.3	17.3	14.0	13.1	13.9	14.8	15.9	14.9	14.0	13.7	12.9
Housing.....	7.6	13.5	15.5	34.9	35.0	55.5	55.5	55.3	56.7	56.7	56.7	56.7	56.9	60.4	60.7	60.7	61.0	71.8	71.6
Fuel and light.....	9.2	9.4	9.8	31.7	64.4	59.8	55.6	66.2	66.0	66.0	73.0	72.8	73.1	68.4	69.1	76.9	76.2	74.8	93.0
House-furnishing goods.....	26.3	34.1	63.1	77.4	78.1	58.2	36.2	31.6	23.7	20.1	22.0	25.1	27.0	29.4	29.4	29.0	30.8	29.0	28.0
Miscellaneous.....	16.3	16.7	28.3	41.2	46.3	48.6	47.6	48.0	44.4	43.4	42.8	42.8	44.1	44.1	45.7	43.1	45.7	45.3	46.5
All items.....	19.8	21.8	36.2	49.1	39.3	27.7	24.4	22.8	17.4	17.8	17.6	20.1	19.6	21.3	22.3	22.9	20.8	22.4	23.3

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Richmond, Va.

Food	20.5	20.6	23.1	36.1	11.9	¹ 7.4	¹ 1.0	¹ 2.9	¹ 10.2	¹ 7.8	¹ 10.8	¹ 6.3	¹ 9.0	¹ 7.2	¹ 5.1	¹ 4.8	¹ 8.9	¹ 11.3	¹ 7.6
Clothing	33.8	42.3	78.6	93.6	69.0	43.8	24.2	21.2	15.9	12.9	10.6	10.6	11.8	12.5	13.4	12.9	12.7	11.9	10.9
Housing	1.0	3.6	9.8	12.5	25.9	29.4	33.0	34.1	34.2	34.5	35.4	35.3	35.7	35.7	39.1	39.4	39.5	39.5	41.0
Fuel and light	11.8	11.4	18.7	36.1	62.2	47.1	46.7	46.8	36.7	33.4	44.5	54.2	59.9	52.7	54.7	61.2	60.7	49.1	49.2
House-furnishing goods	26.3	28.6	55.9	75.4	70.0	48.8	36.0	33.0	28.1	27.6	27.5	29.4	34.7	40.0	40.4	40.5	40.8	37.8	33.6
Miscellaneous	9.0	13.5	24.0	32.4	36.0	38.7	38.4	38.4	35.5	34.7	34.6	33.5	33.9	33.9	34.7	35.4	35.8	35.8	34.8
All items	17.9	20.6	32.0	43.8	33.3	20.2	19.5	18.3	12.9	13.2	12.1	14.4	14.3	14.9	16.6	17.1	15.5	13.5	15.0

St. Louis, Mo.

Food	18.0	16.1	26.2	46.2	8.8	¹ 10.1	¹ 4.5	¹ 11.6	¹ 14.0	¹ 12.1	¹ 13.8	¹ 9.5	¹ 12.7	¹ 11.5	¹ 8.6	¹ 7.5	¹ 10.6	¹ 11.4	¹ 9.8
Clothing	32.4	39.3	78.1	89.7	70.0	43.8	21.2	17.2	9.1	7.9	6.2	6.3	9.0	9.0	9.5	9.6	9.5	8.6	8.1
Housing	2.7	3.8	16.8	29.8	42.4	52.5	61.2	63.8	64.1	65.7	67.0	68.0	70.2	74.6	77.4	79.5	80.9	83.4	83.6
Fuel and light	4.8	3.7	8.2	19.6	42.6	30.9	29.5	33.4	30.9	32.3	44.3	48.9	47.5	30.8	31.7	32.1	31.3	21.6	21.6
House-furnishing goods	21.8	32.5	52.9	73.1	70.2	43.5	25.1	19.2	14.3	12.8	12.3	14.9	27.5	29.8	31.0	30.5	30.6	26.2	26.1
Miscellaneous	14.5	15.7	30.3	37.6	43.2	42.1	42.0	40.6	34.7	33.2	33.1	33.4	33.5	33.4	35.8	35.8	35.8	35.7	35.7
All items	16.7	17.9	34.2	48.9	35.4	23.1	22.0	18.5	14.7	15.1	15.0	17.0	17.3	17.7	19.9	20.6	19.4	18.8	19.3

Scranton, Pa.

Food	21.3	18.1	26.9	41.4	17.8	¹ 4.0	2.8	4.1	¹ 6.8	¹ 6.7	¹ 9.0	¹ 2.1	¹ 5.5	¹ 5.1	¹ 1.3	0.2	¹ 6.7	¹ 8.7	15.4
Clothing	34.4	49.6	82.1	97.7	76.5	54.3	31.3	29.1	25.2	24.2	21.1	20.7	21.5	21.7	23.3	23.2	23.1	22.2	21.6
Housing .....	.5	6.2	2.4	17.2	18.5	41.5	42.2	44.6	46.6	52.8	53.1	53.6	53.6	59.0	59.5	60.8	61.0	67.6	68.1
Fuel and light	24.7	25.7	31.5	43.5	67.3	62.8	64.8	67.1	65.8	68.0	69.3	68.6	65.2	65.2	65.4	75.3	73.9	68.9	74.0
House-furnishing goods	27.0	35.6	48.9	62.8	62.0	48.6	34.6	30.7	25.7	24.2	25.4	28.5	31.8	34.7	34.4	34.9	35.4	31.6	33.0
Miscellaneous	21.4	24.9	34.7	47.9	50.4	54.6	53.8	52.4	50.1	49.9	49.3	49.3	51.4	51.4	51.4	51.7	52.8	53.7	53.9
All items	21.9	25.0	37.1	51.5	39.1	28.2	26.3	26.3	20.4	20.9	19.4	22.4	21.6	22.4	24.4	25.8	22.9	22.4	24.1

¹ Decrease.

¹ No change

[1057]

CHANGES IN COST OF LIVING

The following table shows the increase in the cost of living in the United States from 1913 to September, 1924. These figures are a summarization of the figures for the 32 cities, the results of which appear in the preceding tables, computed on a 1913 base.

TABLE 4.—CHANGES IN COST OF LIVING IN THE UNITED STATES, 1913 TO SEPTEMBER, 1924

Item of expenditure	Per cent of increase from 1913 (average) to—																						
	Dec., 1914	Dec., 1915	Dec., 1916	Dec., 1917	Dec., 1918	June, 1919	Dec., 1919	June, 1920	Dec., 1920	May, 1921	Sept., 1921	Dec., 1921	Mar., 1922	June, 1922	Sept., 1922	Dec., 1922	Mar., 1923	June, 1923	Sept., 1923	Dec., 1923	Mar., 1924	June, 1924	Sept., 1924
Food.....	5.0	5.0	26.0	57.0	87.0	84.0	97.0	119.0	78.0	44.7	53.1	49.9	38.7	41.0	39.8	46.6	41.9	44.3	49.3	50.3	43.7	42.4	46.8
Clothing.....	1.0	4.7	20.0	49.1	105.3	114.5	168.7	187.5	158.5	122.6	92.1	84.4	75.5	72.3	71.3	71.5	74.4	74.9	76.5	76.3	75.8	74.2	72.5
Housing.....	(1)	1.5	2.3	.1	9.2	14.2	25.3	34.9	51.1	59.0	60.0	61.4	60.9	60.9	61.1	61.9	62.4	63.4	64.4	66.5	67.0	68.0	67.8
Fuel and light.....	1.0	1.0	8.4	24.1	47.9	45.6	56.8	71.9	94.9	81.6	80.7	81.1	75.8	74.2	83.6	86.4	86.2	80.6	81.3	84.0	82.2	77.3	79.1
House-furnishing goods.....	4.0	10.6	27.8	50.6	113.6	125.1	163.5	192.7	185.4	147.7	124.7	118.0	106.2	102.9	102.9	108.2	117.6	122.2	122.4	122.4	121.3	116.0	114.9
Miscellaneous.....	3.0	7.4	13.3	40.5	65.8	73.2	90.2	101.4	108.2	108.8	107.8	106.8	103.3	101.5	101.1	100.5	100.3	100.3	101.1	101.7	101.1	101.1	101.1
All items.....	3.0	5.1	18.3	42.4	74.4	77.3	99.3	116.5	100.4	80.4	77.3	74.3	66.9	66.6	66.3	69.5	68.8	69.7	72.1	73.2	70.4	69.1	70.6
Electricity ²	3.7	6.2	8.6	11.1	6.2	6.2	7.4	7.4	4.9	4.9	4.9	4.9	4.9	6.2	6.2	7.4	7.4	7.4	8.6	8.6	8.6	8.6	8.6

¹ No change.

² This line shows the per cent of decrease in the price of electricity on the dates named as compared with the price in December, 1913. These figures are based on the weighted averages of consumption at the various rates charged.

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Average Retail Prices of Certain Foodstuffs in Manila, November, 1923

THE figures in the following table are taken from "Labor," the quarterly bulletin of the Bureau of Labor of the Philippines, for July-December, 1923 (two numbers):

AVERAGE RETAIL PRICES OF FOODSTUFFS IN MANILA, NOVEMBER 13, 1923, AND PER CENT OF CHANGE AS COMPARED WITH JULY 14, 1923

[1 peso at par= 50 cents; 1 liter= 0.908 dry quart, 1.0567 liquid quarts; 1 ganta= 2.71 quarts; 1 kilo= 2.2046 pounds]

Article	Unit	Average retail price on Nov. 13, 1923	Per cent of increase (+) or decrease (-) Nov. 13, 1923, compared with July 14, 1923	Article	Unit	Average retail price on Nov. 13, 1923	Per cent of increase (+) or decrease (-) Nov. 13, 1923, compared with July 14, 1923
Coffee (grains) -----	Liter	Pesos 0.606	-15	Beef, with bone, second class -----	Kilo	Pesos 0.777	+10
Rice, native:				Pork, without bone, first class -----	do	.993	-7
First class -----	Ganta	.423	+7	Pork, with bone, second class -----	do	.705	-6
Second class -----	do	.398		Cabbages -----	do	.696	(1)
Third class -----	do	.365	(1) +7	Egg plants -----	5	.093	+7
Crabs, first class -----	Each	.128	(1)	Onions, Bombay -----	5	.086	(1)
Crabs, second class -----	10	.350	(1)	Potatoes -----	Kilo	.178	(1)
Sardines, fresh -----	10	.150	(1) +66	Squash, red -----	Each	.325	+26
Sardines, canned -----	Can	.231		Squash, white -----	do	.400	(1)
Shrimps, first class -----	10	.401	(1)	Sweet potatoes -----	10	.126	(1)
Shrimps, second class -----	10	.207	(1)	Tomatoes -----	5	.086	+69
Smoked fish -----	10	.146	+46	Condensed milk -----	Can	.380	(1)
Chickens -----	Each	.409	+9	Eggs:			
Hens, first class -----	do	1.289	+7	Duck -----	Each	.040	+8
Hens, second class -----	do	.899	+15	Hen, Chinese -----	do	.037	+23
Roosters, first class -----	do	.989	(1)	Hen, native -----	do	.050	(1)
Roosters, second class -----	do	.773	(1)	Lard -----	Kilo	.699	(1)
Bananas, latundan -----	10	.092	+31	Sugar, pieces -----	do	.407	+7
Bananas, saba -----	10	.107	+41	Sugar, by the piece -----	5 pieces	.060	+20
Coconuts -----	Each	.063	+7	Vinegar -----	Bottle	.059	+48
Lemons -----	10	.051	+28	White salt -----	Liter	.056	+40
Beef, without bone, first class -----	Kilo	1.215	-2				

¹ Not reported.

Cost of Living and Wage Rates in Rumania

IN AN article in the *Bursa* quoted in the *Economic Review*,¹ Petre Mihail challenges the assertion repeatedly made in the Rumanian parliament and in the Government Press that living in Rumania is cheaper than in other countries. He proceeds to demonstrate the fallacy of this assertion by the following statistics:

A loaf of bread of 800 grams (1.76 lb.) costs 7 lei,² as against 25 bani³ in 1916, or 35 times as much; a kilogram⁴ of meat costs 30 lei, or 45 times as much as the 1916 price (65 bani). Sugar has risen from 1.15 lei per kilogram in 1916 to 35 lei, milk from 35 bani to 10 lei, cheese from 1.25 lei to 45 lei, wood for fuel from 3 to 90 lei per 100 kilogram, and household soap from 90 bani to 28 lei. The price of no article of consumption is less than 30 times the 1916 price, and the prices of some articles show a fiftyfold increase, as for instance rice, potatoes, beans (60 times), etc.

¹ The *Economic Review*, London, Sept. 5, 1924, p. 209.

² Leu at par=19.3 cents; exchange rate varies.

³ 100 bani=1 leu.

⁴ Kilogram=2.2046 pounds.

The following table gives the index numbers of retail prices of various articles of general consumption in January, 1922, and June, 1923 and 1924, with August, 1916, as base:

INDEX NUMBERS OF RETAIL PRICES OF VARIOUS ARTICLES OF CONSUMPTION IN RUMANIA, JANUARY, 1922, AND JUNE, 1923 AND 1924

[August, 1916=100]

Article	January, 1922	June, 1923	June, 1924	Article	January, 1922	June, 1923	June, 1924
Foodstuffs:				Clothing-continued:			
Sugar.....	200	3,830	3,000	Cotton.....	3,500	6,250	7,200
Wheat flour.....	1,750	2,500	3,000	Shirts.....	1,875	3,000	3,750
Maize flour.....	2,700	4,009	5,330	Stockings.....	1,330	4,160	3,800
Beans.....	2,000	5,000	7,500	Hats.....	1,200	3,300	3,820
Potatoes.....	660	5,330	5,330				
Salt.....	1,660	2,600	2,860	All articles of clothing.....	2,088	3,857	4,528
Bread.....	1,500	2,500	2,900				
Meat.....	1,000	3,250	4,500	Miscellaneous:			
Milk.....	1,000	1,750	2,500	Soap.....	1,280	2,460	2,460
Fat.....	1,870	5,000	4,370	Glass.....	1,500	2,500	3,000
Cheese.....	1,750	3,000	3,715	Wood for fuel.....	1,200	2,500	2,500
Wine.....	1,250	2,000	3,000	Lamp oil.....	1,810	3,200	3,720
Rice.....	4,000	5,330	5,000	Leather.....	500	1,820	2,200
Coffee.....	2,960	4,170	4,170	Shoe soles.....	460	1,730	2,000
Olives.....	2,000	4,000	6,000	Lumber for building.....	600	2,830	2,830
Fancy bread.....	2,000	3,200	3,600	Gasoline.....	320	3,000	3,800
Butter.....	2,690	4,506	5,380	Crude oil.....	930	3,300	4,000
All foodstuffs.....	1,928	3,649	4,244	Paper.....	1,570	2,000	3,800
				Printed matter.....	2,000	2,600	3,600
Clothing:				All miscellaneous articles.....	1,106	2,540	3,085
Garments.....	1,750	4,500	5,750				
Footwear.....	1,500	2,250	3,000	General index.....	1,707	3,348	3,950
Cloth (American).....	3,500	5,000	6,500				
Thread.....	2,000	2,400	2,400				

From the table preceding it will be seen that foodstuffs were 42 times higher in June, 1924, than in August, 1916, clothing 45 times, miscellaneous articles 30 times, and the general cost of living was nearly 40 times higher. The above general index does not include rent, which for dwellings already in occupation is 5 times that of 1916, but for newly built dwellings 40 times.

The following table taken from the official statistics of the Ministry of Labor shows the daily average wage rates for various industry and occupational groups in 1916, and in June, 1923 and 1924:

AVERAGE DAILY WAGE RATES IN RUMANIA, 1916 AND JUNE, 1923 AND 1924, BY INDUSTRY OR OCCUPATIONAL GROUP

[Lei at par=19.3 cents; exchange rate varies]

Industry or occupational group	1916	June, 1923	June, 1924	Industry or occupational group	1916	June, 1923	June, 1924
	<i>Lei</i>	<i>Lei</i>	<i>Lei</i>		<i>Lei</i>	<i>Lei</i>	<i>Lei</i>
Agriculture.....	3.00	45	65	Chemical industry.....	5.50	75	110
Mining.....	6.00	71	120	Pottery.....	6.00	82	115
Metal industry.....	6.00	72	125	Printing trades.....	6.50	75	120
Woodworking.....	6.25	81	120	Private-salaried employees.....	6.00	90	150
Food.....	5.85	66	110	Public-salaried employees.....	5.00	70	95
Clothing.....	5.75	73	105				
Building.....	7.10	77	125	Average.....	5.63	73	112.50
Transport.....	6.00	68	120				
Textile industry.....	5.00	71	95	General index.....	100	1,298	2,000
Leather industry.....	4.50	77	110				

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A comparison of the general wage index for June, 1923, which is 13 times higher than that for 1916, with the cost-of-living index for June, 1923, which is 33 times higher than that of 1916, makes it evident that in June, 1923, the average wage rate did not cover even half the cost of living. In June, 1924, the wage index was 54 per cent higher than in June, 1923, and 20 times higher than in 1916. Therefore, the average wage rate in June, 1924, just sufficed to cover half the cost of living, which was 40 times higher than in 1916.

In conclusion the Bursa states that of the three usual causes of a rise in prices—increasing consumption and decreasing production, depreciation of the currency, and an adverse trade balance—only the last two operate in Rumania. The recovery of the exchange will, however, not take place until real and durable measures are adopted by the Government with that object. Temporary palliatives will produce only temporary results. The trade balance will remain adverse just as long as obstacles are placed in the way of the free development of industry and production. The problem of the disproportion between wages and the cost of living will remain unsolved until the causes of the progressive increase of commodity prices are removed.

WAGES AND HOURS OF LABOR

Wages and Hours of Labor in the Men's Clothing Industry, 1911 to 1924

THE average earnings per hour of employees in factories of the United States making men's clothing have increased from 22.9 cents per hour in 1911 to 76 cents per hour in 1924—a wage higher than in any previous year of record in the industry.

Average full-time working hours have been reduced from 54.4 per week in 1911 to 44.1 in 1924. This means an 8-hour day and a Saturday half holiday in the great majority of the factories. Full-time weekly earnings have increased from \$12.30 per week in 1911 to \$33.52 per week in 1924.

Compared with the pre-war year 1913, average earnings per hour have increased 195.7 per cent, or to a wage nearly three times that of 1913. In the same period, full-time hours per week have been reduced 14.7 per cent.

Comparative figures of average earnings per hour, average full-time hours per week, and average full-time earnings per week are presented in this article for the industry and for the principal occupations for the years 1911 to 1914, 1919, 1922, and 1924. Index numbers based on these averages, with 1913 taken as a base or 100, are also presented for the industry as a whole and for each occupation for which 1913 data are available.

From 1911 to 1913 data were collected and published only for the principal occupations of this industry. These occupations are shown in the table below. The employees in these occupations constitute approximately 80 per cent of all employees. The index numbers for the industry from 1911 to 1914 are computed from averages of the combined data for all these occupations. In and after 1914 data were collected for all occupations. The index numbers for 1919 and later years are obtained by computing the per cent of increase in the average for all occupations as between 1914 and each later year, and increasing the index number previously established for 1914 by the per cent of increase in the average.

The averages in the table are computed from full-time hours per week and from the hours actually worked and earnings actually made by each wage earner during a selected representative pay period in each of the years covered. "Full-time-hours per week" as here used means the number of hours that are accepted by employers and employees as constituting a regular full working week and beyond which any work done is to be considered as overtime.

The data were taken by agents of the bureau directly from the pay rolls or other records of the establishments. Complete data for pieceworkers of establishments in which the time (hours) worked by such pieceworkers is not of record, were obtained by arrangements with the establishments to keep a special day-by-day record of the time worked by such pieceworkers for the selected pay period.

The 1924 figures cover 27,681 wage earners in 152 establishments operating 283 shops located in New York City, Chicago, Rochester,

Baltimore, Philadelphia, Cincinnati, Boston, and a group of small cities and towns in eastern Pennsylvania, and represent, according to the 1921 United States Census of Manufactures, 16½ per cent of the wage earners in the industry in the United States and approximately 27 per cent of the wage earners in the industry in these cities. The figures for the years prior to 1924 are summaries drawn from former bulletins published by the bureau.

An establishment as here used includes all shops under one ownership. Some establishments do all the cutting but do not operate shops making the coats, pants, and vests, such work being done by coat, pants, or vest contractors, while other establishments do all the cutting and make one or all of the different kinds of garments, having such garments as they do not make in their own shops done by contract. A contractor's shop is counted as a separate establishment, and each shop of a clothing manufacturer is counted as a separate shop. It was necessary to get contract shops in some cities in order to cover a representative number of wage earners for each garment.

Prior to 1924 wage studies in this industry covered employees of establishments located in large cities. As there has been in recent years some movement of the industry from the larger cities, especially from Philadelphia, to smaller places, the 1924 study covers a district made up of certain small cities and towns in eastern Pennsylvania.

The 1924 data were taken from the June pay rolls of 5 establishments, the July pay rolls of 104 establishments, and the August pay rolls of 43 establishments. The great mass of the data therefore is as of July and August.

In the 12 months ending June 30, 1924, the days of operation of 131 of the 152 establishments range from 108 to 307 days, the average for those reporting being 224 days. Of the 21 establishments not included, 15 were contract shops without any record of days of operation and 6 began business after July 1, 1923, and therefore had been in operation less than a year.

The difference between the average days of operation (224) and a possible full-time year of 313 days was due to the following conditions: Fifty-three establishments did not operate any Saturday of the year; 9 did not operate some Saturdays, such loss of time ranging from 4 to 45 days; 99 were closed on account of lack of orders from 5 to 197 days; 35 establishments were closed on account of strikes from 5 to 46 days; all establishments were closed for holidays from 6 to 21 days; and 21 were closed for other causes, such as funerals, moving, picnic days, etc., from 1 to 30 days.

Wage changes during the period between July 1, 1922, and the period covered by the 1924 survey were reported by 106 establishments. Increases ranging from 1.1 to 16½ per cent were given by 37 establishments, and increases ranging from \$2 to \$5 per week by 34 establishments. Later on, however, 9 of these firms reported decreases ranging from 3½ to 20 per cent, and 24 others decreases ranging from \$1.50 to \$4 per week. Increases of 5 to 10 per cent to some of their employees and from \$2 to \$4 per week to other employees were given by 9 establishments; 5 of these later decreased wages of pieceworkers 5 per cent and of time workers \$2 per week. Thirteen establishments made decreases ranging from 5 to 10 per

cent; later, 4 of these gave increases ranging from 5 to 10 per cent, while 4 made further decreases ranging from 5 to 10 per cent. Four establishments made decreases of \$1 and \$2 per week. One establishment made a decrease of \$3 per week and, later, another of \$2 per week. Four establishments made three wage changes, ending with a slight increase for 2 establishments and a return to old rates for the other 2. Three establishments made individual wage changes which did not apply to groups of employees or occupations as a whole. One establishment reduced hours of female employees but readjusted the rates so that they could make the same weekly earnings as before the change in hours.

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, FULL-TIME EARNINGS PER WEEK, AND INDEX NUMBERS IN THE MEN'S CLOTHING INDUSTRY IN THE UNITED STATES, BY OCCUPATION AND SEX, 1911 TO 1924

Occupation and sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Index numbers of—		
							Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
THE INDUSTRY:									
Principal occupations.....	1911	80	13,751	54.4	\$0.229	\$12.30	104.6	86.7	90.2
Do.....	1912	117	18,198	54.7	.231	12.49	105.2	87.5	91.6
Do.....	1913	133	19,874	52.0	.264	13.63	100.0	100.0	100.0
Do.....	1914	153	24,597	51.3	.256	13.06	99.2	99.6	98.8
All occupations.....	1914	153	20,118	51.6	.263	13.47	-----	-----	-----
Do.....	1919	134	19,919	47.9	.448	21.08	92.6	173.5	159.5
Do.....	1922	112	25,013	44.1	.728	31.91	85.3	283.2	241.4
Do.....	1924	132	27,681	44.1	.760	33.52	85.3	295.7	253.6
Basters, coat:									
Male.....	1911	30	1,112	55.3	.220	12.15	105	82	87
Do.....	1912	54	1,409	55.7	.215	11.94	106	81	85
Do.....	1913	48	1,588	52.5	.267	14.00	100	100	100
Do.....	1914	56	1,555	52.1	.257	13.33	99	96	95
Do.....	1919	54	1,043	47.5	.511	24.22	90	191	173
Do.....	1922	48	1,414	44.3	.848	37.58	84	318	268
Do.....	1924	60	1,541	44.4	.889	39.47	85	333	282
Female.....	1911	36	603	55.2	.176	9.64	105	95	99
Do.....	1912	50	839	55.5	.165	9.15	106	89	94
Do.....	1913	38	919	52.4	.186	9.73	100	100	100
Do.....	1914	51	812	51.7	.189	9.67	99	102	99
Do.....	1919	58	1,030	47.9	.356	17.03	91	191	175
Do.....	1922	45	949	43.8	.574	25.35	84	309	261
Do.....	1924	53	1,168	43.2	.592	25.57	82	318	263
Basters, pants:									
Female.....	1911	11	152	55.0	.153	8.42	104	95	99
Do.....	1912	20	183	54.8	.168	9.20	104	104	108
Do.....	1913	22	156	52.7	.161	8.48	100	100	100
Do.....	1914	33	156	52.6	.171	8.97	100	106	106
Do.....	1919	34	105	48.1	.275	13.10	91	171	154
Do.....	1922	27	110	43.9	.453	19.78	83	281	233
Do.....	1924	29	103	44.0	.550	24.20	83	342	285
Basters, vest:									
Female.....	1911	17	161	54.7	.181	9.86	104	94	97
Do.....	1912	26	274	55.4	.185	10.17	105	96	100
Do.....	1913	30	241	52.7	.193	10.17	100	100	100
Do.....	1914	36	264	51.8	.203	10.50	98	105	103
Do.....	1919	32	194	48.0	.318	15.32	91	165	152
Do.....	1922	38	241	44.0	.588	25.92	83	305	255
Do.....	1924	54	299	43.9	.638	28.01	83	331	275
Total basters:									
Female.....	1911	50	916	55.0	.173	9.48	105	94	98
Do.....	1912	73	1,296	55.4	.170	9.37	105	92	97
Do.....	1913	66	1,316	52.5	.184	9.66	100	100	100
Do.....	1914	89	1,232	51.9	.189	9.81	99	103	102
Do.....	1919	94	1,329	47.9	.344	16.47	91	187	170
Do.....	1922	78	1,300	43.9	.566	24.98	84	308	259
Do.....	1924	101	1,570	43.4	.597	25.91	83	324	268

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AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, FULL-TIME EARNINGS PER WEEK, AND INDEX NUMBERS IN THE MEN'S CLOTHING INDUSTRY IN THE UNITED STATES, BY OCCUPATION AND SEX, 1911 TO 1924—Continued

Occupation and sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Index numbers of—		
							Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Bushelers and tailors:									
Male.....	1911	42	496	54.2	\$0.248	\$13.33	104	91	94
	1912	58	574	54.8	.243	13.28	105	89	93
	1913	52	648	52.2	.273	14.23	100	100	100
	1914	72	583	51.6	.282	14.56	99	103	102
	1919	61	666	48.0	.473	22.42	92	173	158
	1922	58	464	44.1	.783	34.56	84	287	243
	1924	77	586	44.1	.879	38.76	84	322	272
Cutters, cloth, hand and machine:									
Male.....	1911	39	1,646	49.9	.406	20.13	102	94	95
	1912	52	2,012	49.8	.410	20.30	102	95	96
	1913	53	2,007	49.0	.433	21.16	100	100	100
	1914	53	1,931	48.6	.448	21.74	99	103	103
	1919	63	1,576	47.7	.628	29.69	97	145	140
	1922	45	1,975	44.0	1.033	45.50	90	239	215
	1924	57	1,984	44.2	1.111	49.11	90	257	232
Examiners, shop and stock room:									
Male.....	1911	31	269	52.4	.291	15.20	101	96	97
	1912	51	403	53.1	.292	15.39	103	96	98
	1913	48	434	51.8	.303	15.63	100	100	100
	1914	59	488	51.2	.317	16.18	99	105	104
	1919	65	488	47.8	.487	22.65	92	161	145
	1922	56	409	44.2	.803	35.45	85	265	227
	1924	82	494	44.2	.874	38.63	85	288	247
Female.....	1911	25	122	48.4	.321	14.71			
	1919	20	127	44.0	.475	20.57			
	1922	20	127	44.0	.475	20.57			
	1924	27	165	43.9	.506	22.21			
Fitters or trimmers, coat:									
Male.....	1911	32	140	54.5	.294	16.05	104	84	88
	1912	48	194	55.1	.292	16.05	106	84	88
	1913	49	205	52.2	.348	18.15	100	100	100
	1914	57	210	51.7	.332	17.13	99	95	94
	1919	53	207	47.7	.575	27.24	91	165	150
	1922	46	208	44.2	.959	42.46	85	276	234
	1924	52	146	44.3	1.096	48.55	85	315	267
Hand sewers, coat:									
Male.....	1911	18	221	55.8	.204	11.34	107	81	86
	1912	35	305	56.2	.212	11.90	108	84	90
	1913	20	144	52.1	.253	13.23	100	100	100
	1914	33	317	52.1	.270	14.04	100	107	106
	1919	10	66	47.8	.446	21.05	92	176	159
	1922	24	191	44.0	.898	39.57	84	355	299
	1924	24	140	44.0	.856	37.66	84	338	285
Female.....	1911	39	2,668	54.8	.155	8.45	105	87	91
	1912	56	2,888	55.2	.153	8.40	106	85	90
	1913	57	3,046	52.1	.179	9.33	100	100	100
	1914	64	3,119	51.7	.177	9.14	99	99	98
	1919	71	2,907	47.8	.334	15.09	92	187	162
	1922	53	3,063	44.2	.526	23.35	85	294	250
	1924	67	2,968	44.1	.555	24.48	85	310	262
Hand sewers, pants:									
Female.....	1911	25	656	54.9	.141	7.69	105	87	90
	1912	35	937	54.7	.150	8.18	105	92	96
	1913	38	856	52.2	.163	8.51	100	100	100
	1914	50	1,103	52.0	.150	7.77	100	92	91
	1919	42	440	48.0	.281	13.41	92	172	158
	1922	51	549	44.0	.422	18.61	84	259	219
	1924	71	581	44.3	.447	19.80	85	274	233
Hand sewers, vest:									
Female.....	1911	21	339	54.6	.167	9.10	104	89	93
	1912	30	570	54.9	.165	9.00	105	88	92
	1913	42	602	52.3	.188	9.81	100	100	100
	1914	49	684	51.6	.188	9.72	99	100	99
	1919	42	597	48.0	.315	15.07	92	168	154
	1922	42	701	44.0	.519	22.91	84	276	234
	1924	59	734	44.0	.569	25.04	84	303	255

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, FULL-TIME EARNINGS PER WEEK, AND INDEX NUMBERS IN THE MEN'S CLOTHING INDUSTRY IN THE UNITED STATES, BY OCCUPATION AND SEX, 1911 TO 1924—Continued

Occupation and sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Index numbers of—		
							Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Total hand sewers:									
Female-----	1911	61	3,663	54.8	\$0.153	\$8.37	105	86	91
	1912	89	4,395	55.1	.154	8.43	106	87	91
	1913	103	4,504	52.2	.177	9.23	100	100	100
	1914	126	4,906	51.7	.173	8.91	99	98	97
	1919	121	3,944	47.9	.326	14.90	92	184	161
	1922	101	4,313	44.1	.512	22.68	84	289	246
	1924	142	4,283	44.1	.543	23.95	84	307	259
Operators, coat:									
Male-----	1911	31	913	55.9	.264	14.70	106	87	92
	1912	53	1,364	56.2	.262	14.63	107	86	92
	1913	55	1,826	52.5	.305	15.93	100	100	100
	1914	62	1,522	51.9	.321	16.61	99	105	104
	1919	63	1,603	47.6	.591	28.05	91	194	176
	1922	50	1,785	44.1	.962	42.46	84	315	267
	1924	61	1,911	44.1	1.033	45.56	84	339	286
Female-----	1911	34	756	54.2	.195	10.53	104	98	102
	1912	44	949	54.3	.184	9.95	104	92	96
	1913	37	1,077	52.1	.199	10.34	100	100	100
	1914	46	1,114	51.8	.213	11.00	99	107	106
	1919	60	2,086	48.1	.361	17.28	92	181	167
	1922	42	1,603	43.9	.593	25.98	84	298	251
	1924	50	2,126	43.6	.614	26.77	84	309	259
Operators, pants:									
Male-----	1911	20	439	56.8	.242	13.71	108	77	84
	1912	40	890	56.5	.250	14.08	107	80	86
	1913	37	796	52.6	.313	16.40	100	100	100
	1914	45	827	52.6	.293	15.37	100	94	94
	1919	39	538	47.7	.599	28.47	91	191	174
	1922	50	1,084	44.2	.902	39.63	84	288	242
	1924	69	1,262	44.2	.965	42.65	84	308	260
Female-----	1911	26	599	54.8	.180	9.88	105	90	95
	1912	39	806	54.8	.182	9.95	105	91	96
	1913	40	1,048	52.3	.199	10.37	100	100	100
	1914	48	999	51.8	.204	10.57	99	103	102
	1919	51	1,371	48.2	.341	16.34	92	171	158
	1922	52	1,341	43.9	.574	25.14	84	288	242
	1924	62	1,603	44.7	.556	24.85	85	279	240
Operators, vest:									
Male-----	1911	16	109	55.2	.310	17.11	105	85	90
	1912	25	226	56.3	.304	16.95	107	84	89
	1913	30	247	52.6	.364	19.09	100	100	100
	1914	40	266	52.1	.362	18.82	99	99	99
	1919	29	208	47.9	.616	29.43	91	169	154
	1922	36	350	44.0	.990	43.60	84	272	228
	1924	48	438	44.1	1.034	45.60	84	284	239
Female-----	1911	17	312	54.4	.206	11.23	104	91	95
	1912	22	407	54.6	.207	11.27	104	92	95
	1913	28	468	52.4	.226	11.82	100	100	100
	1914	33	511	51.5	.239	12.32	98	106	104
	1919	37	544	48.1	.350	16.69	92	155	141
	1922	32	594	43.8	.596	26.27	84	264	222
	1924	46	738	43.8	.600	26.28	84	265	222
Total operators:									
Male-----	1911	46	1,461	56.1	.261	14.58	107	84	89
	1912	87	2,480	56.3	.261	14.64	107	84	90
	1913	90	2,869	52.5	.312	16.33	100	100	100
	1914	110	2,615	52.1	.316	16.44	99	101	101
	1919	101	2,349	47.7	.595	28.27	91	191	173
	1922	101	3,219	44.1	.946	41.63	84	303	255
	1924	134	3,611	44.1	1.010	44.54	84	324	273
Female-----	1911	55	1,667	54.5	.192	10.43	104	94	98
	1912	76	2,162	54.5	.187	10.20	104	92	96
	1913	76	2,593	52.2	.204	10.62	100	100	100
	1914	94	2,624	51.7	.214	11.10	99	105	105
	1919	109	4,001	48.1	.353	16.88	92	173	159
	1922	84	3,538	43.9	.587	25.71	84	288	242
	1924	113	4,467	44.0	.591	26.00	84	290	245

AVERAGE FULL-TIME HOURS PER WEEK, EARNINGS PER HOUR, FULL-TIME EARNINGS PER WEEK, AND INDEX NUMBERS IN THE MEN'S CLOTHING INDUSTRY IN THE UNITED STATES, BY OCCUPATION AND SEX, 1911 TO 1924—Concluded

Occupation and sex	Year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Index numbers of—		
							Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Pressers, coat:									
Male.....	1911	40	1,573	55.1	\$0.240	\$13.18	105	82	87
	1912	57	2,027	55.4	.244	13.49	106	84	89
	1913	58	2,401	52.3	.291	15.19	100	100	100
	1914	65	2,486	51.9	.290	14.99	99	100	99
	1919	69	2,228	47.8	.541	25.73	91	186	169
	1922	53	2,629	44.1	.869	38.41	84	299	253
	1924	66	2,673	44.2	.934	41.28	85	321	272
Pressers, pants:									
Male.....	1911	29	401	55.4	.250	13.84	106	81	83
	1912	47	637	55.4	.271	14.99	106	88	93
	1913	51	863	52.3	.309	16.14	100	100	100
	1914	61	694	52.1	.290	15.08	100	94	93
	1919	53	457	48.0	.546	26.01	92	177	161
	1922	59	641	44.0	.879	38.66	84	284	240
	1924	79	728	44.4	.890	39.52	85	288	245
Pressers, vest:									
Male.....	1911	20	186	54.7	.263	14.37	104	80	84
	1912	31	274	55.1	.275	15.10	105	84	88
	1913	43	284	52.4	.328	17.18	100	100	100
	1914	49	287	51.7	.323	16.69	99	98	97
	1919	42	247	48.0	.571	27.31	92	174	159
	1922	44	351	44.0	.899	39.72	84	274	231
	1924	61	373	44.1	.971	42.82	84	296	249
Female.....	1919	8	34	48.3	.335	16.06			
	1922	5	54	44.0	.593	25.66			
	1924	12	50	44.4	.507	22.51			
Total pressers:									
Male.....	1911	64	2,160	55.1	.244	13.40	105	82	86
	1912	102	2,938	55.4	.253	13.97	106	85	90
	1913	116	3,348	52.3	.298	15.55	100	100	100
	1914	137	3,467	51.9	.292	15.15	99	98	97
	1919	127	2,932	47.8	.544	25.90	91	183	167
	1922	110	3,621	44.1	.873	38.58	80	293	243
	1924	149	3,774	44.2	.930	41.11	85	312	264
Shapers, coat:									
Male.....	1913	41	182	52.4	.342	17.91	100	100	100
	1914	48	190	51.9	.343	17.74	99	100	99
	1919	49	182	47.8	.577	27.41	91	169	153
	1922	46	192	43.9	.966	42.40	84	282	237
	1924	61	233	44.1	1.033	45.56	84	302	254
Other employees:									
Male.....	1914	106	2,794	50.1	.270	13.48			
	1919	61	423	47.9	.442	21.19			
	1922	90	2,222	44.1	.695	30.05			
	1924	122	2,370	44.4	.699	31.04			
Female.....	1914	84	1,685	51.5	.147	7.57			
	1919	55	546	48.0	.300	14.30			
	1922	73	1,696	44.0	.416	18.27			
	1924	96	2,267	44.0	.424	18.66			

Average Weekly Earnings of Workers

Massachusetts

THE Department of Labor and Industries of Massachusetts reports^a as follows on the average weekly earnings of employees in manufacturing establishments in that State for a week in August, 1924, and a week in the preceding month:

EARNINGS OF MALES AND FEMALES IN 844 REPRESENTATIVE MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS IN JULY AND AUGUST, 1924

Industry	Number of establishments reporting	Average weekly earnings			
		Both sexes		Males	Females
		July, 1924	August, 1924	August, 1924 ¹	August, 1924 ¹
Automobiles, including bodies and parts.....	10	\$31.93	\$31.94	\$31.81	\$23.02
Boof and shoe cut stock and findings.....	47	22.57	23.20	24.74	15.47
Boots and shoes.....	70	22.19	23.99	26.48	16.57
Boxes, paper.....	23	21.36	21.36	26.01	15.96
Boxes, wooden packing.....	9	21.32	23.51	-----	-----
Bread and other bakery products.....	34	22.54	22.30	25.17	13.57
Cars and general shop construction and repairs, steam railroads.....	4	33.27	29.01	-----	-----
Clothing, men's.....	29	21.65	21.81	27.24	15.72
Clothing, women's.....	22	17.80	18.47	30.49	16.48
Confectionery.....	14	18.47	18.34	24.57	16.30
Copper, tin, sheet iron, etc.....	15	25.49	25.91	-----	-----
Cotton goods.....	50	18.42	18.62	21.34	17.65
Cutlery and tools.....	23	23.65	23.82	23.80	14.79
Dyeing and finishing, textiles.....	6	20.33	22.28	25.08	14.63
Electrical machinery, apparatus and supplies.....	13	26.20	27.10	-----	-----
Foundry products.....	25	26.00	28.20	-----	-----
Furniture.....	25	25.87	25.62	28.91	17.27
Hosiery and knit goods.....	12	14.55	15.72	28.70	13.82
Jewelry.....	32	23.02	22.49	28.32	13.23
Leather, tanned, curried, and finished.....	24	25.08	26.25	26.83	14.36
Machine shop products.....	37	27.79	28.32	25.57	18.18
Machine tools.....	24	26.24	26.68	-----	-----
Musical instruments.....	10	27.12	27.00	30.55	16.62
Paper and wood pulp.....	22	25.30	26.10	29.11	15.20
Printing and publishing, book and job.....	32	30.18	31.92	34.15	19.49
Printing and publishing, newspaper.....	22	40.35	37.93	34.82	24.50
Rubber footwear.....	3	27.00	23.87	-----	-----
Rubber goods.....	7	22.52	22.44	24.07	13.86
Rubber tires and tubes.....	3	30.84	31.82	-----	-----
Silk goods.....	12	19.78	20.01	23.77	16.10
Slaughtering and meat packing.....	4	26.04	23.03	22.93	12.96
Stationery goods.....	9	21.83	21.55	28.42	15.15
Steam fittings and steam and hot-water heating apparatus.....	8	22.94	21.66	-----	-----
Textile machinery and parts.....	15	23.50	23.87	22.56	16.88
Tobacco.....	7	25.35	24.32	28.60	14.70
Woolen and worsted goods.....	38	20.04	21.84	25.70	17.54
All other industries.....	104	24.48	24.68	28.91	15.57
All industries represented.....	844	22.88	23.27	26.89	16.14

¹ Based on additional pay-roll data, by sexes, furnished by 398 concerns employing, in August, 56,674 males and 21,913 females. Where no amounts are given, data available did not warrant a special showing.

Oklahoma

THE following report on average earnings per week in 26 industries in Oklahoma is taken from the Oklahoma Labor Market of September 15, 1924:

^a Press release.

AVERAGE WEEKLY EARNINGS IN 710 PLANTS IN OKLAHOMA, AUGUST, 1924

Industry	Average weekly earnings, August, 1924	Per cent of change, August compared with July, 1924	Industry	Average weekly earnings, August, 1924	Per cent of change, August compared with July, 1924
Cottonseed oil mills.....	\$20.47	-9.7	Printing, job work.....	\$27.52	+3.3
Food production:			Public utilities:		
Bakeries.....	25.55	+3.5	Steam railroad repair shops.....	30.05	+6.9
Confections.....	17.80	-9.8	Street railways.....	26.54	+4.4
Creameries and dairies.....	22.34	+5.2	Water, light, and power.....	24.79	-2.7
Flour milling.....	23.02	-6.1	Stone, clay, and glass:		
Ice and ice cream.....	27.24	+12.4	Brick and tile.....	16.88	-8.1
Meat and poultry.....	22.40	+2	Cement and plaster.....	24.78	+18.1
Lead and zinc:			Crushed stone.....	15.12	+5
Mines and mills.....	25.59	+3.9	Glass manufacture.....	21.45	-1.3
Smelters.....	25.79	+4.6	Textiles and cleaning:		
Metals and machinery:			Textile manufacturing.....	13.33	-4.4
Auto repair and assembling.....	32.53	+8.7	Laundry and cleaning.....	17.86	-4
Foundries and machine shops.....	27.44	+7	Woodworking:		
Steel tank construction.....	23.87	-9.4	Sawmills.....	12.40	+8.2
Oil industry:			Millwork, etc.....	26.00	-1.1
Production and gasoline extraction.....	29.35	+4.0	All industries.....	26.25	+3.5
Refining.....	30.02	+2.3			

Wisconsin

AVERAGE weekly earnings in various groups of Wisconsin industries for August, 1924, were as follows, according to the August, 1924, issue of the Wisconsin Labor Market:

AVERAGE WEEKLY EARNINGS IN SPECIFIED GROUPS OF INDUSTRIES IN WISCONSIN, AUGUST, 1924

Kind of employment	Average weekly earnings, August, 1924	Per cent of increase (+) or decrease (-) August, 1924, as compared with July, 1924	Kind of employment	Average weekly earnings, August, 1924	Per cent of increase (+) or decrease (-) August, 1924, as compared with July, 1924
<i>Manual</i>			<i>Manual—Concluded</i>		
Mining.....	\$24.05	+1.6	Construction—Concluded.		
Stone crushing and quarrying.....	24.62	-4.5	Marine, dredging, sewer digging.....	\$24.47	-29.6
Manufacturing.....	23.85	+6.2	Communication:		
Stone and allied industries.....	27.81	-2.2	Steam railways.....	35.94	-7.4
Metal.....	27.56	+10.4	Electric railways.....	25.81	-2.2
Wood.....	20.78	+4.2	Express, telephone, and telegraph.....	27.94	+9
Rubber.....	27.80	+6.2	Wholesale trade.....	27.60	+9.1
Leather.....	22.24	+10.9	<i>Nonmanual</i>		
Paper.....	24.06	+8.4	Manufacturing, mines, and quarries.....	35.76	-2.1
Textiles.....	19.30	+14.0	Construction.....	37.48	-12.8
Food.....	18.74	+4.0	Communication.....	21.30	+2.8
Light and power.....	27.22	-3.4	Wholesale trade.....	37.63	-2.8
Printing and publishing.....	32.26	-14.5	Retail trade, sales force only.....	20.20	+13.3
Laundry, cleaning, and dyeing.....	21.26	-17.4	Miscellaneous, professional services.....	37.20	+5.2
Chemical, including soap, glue, and explosives.....	32.07	+5.9			
Construction:					
Building.....	24.63	-7.4			
Railroad.....	19.78	+2			

Wages in Brussels, August, 1924

THE following table of wages of workers in various trades in Brussels in August, 1924, is taken from a consular report dated August 30. The report was made to the consular office by the city employment office of Brussels.

WAGES IN SPECIFIED OCCUPATIONS IN BRUSSELS, AUGUST, 1924

[Franc at par=19.3 cents]

Industry and occupation	Hourly wages	Industry and occupation	Hourly wages
Metal industries:	<i>Francs</i>	Construction industries—Concluded.	<i>Francs</i>
Coppersmiths.....	3.00-3.75	Plumbers.....	3.15-3.25
Firemen.....	2.75-3.00	Wood and furniture industries:	
Machinists.....	2.50-3.75	Cabinetmakers.....	3.85-4.25
Metal stampers.....	2.50-3.00	Stair makers.....	3.85-4.00
Tinsmiths.....	3.00-3.50	Carpenters.....	2.75-3.00
Ironsmiths.....	3.00-3.50	Machine woodworkers.....	3.55-4.00
Drillers.....	2.50-3.00	Tobacco industry:	
Blacksmiths.....	3.00-3.75	Cigarette makers.....	1 4.00
Tool makers.....	3.50-4.00	Tobacco cutters.....	2.60-2.70
Tool and die makers.....	3.50-4.25	Cigarette packers.....	1.25
Engineers, electrical.....	2.75-3.25	Book industry:	
Engineers, machine-tool.....	3.00-3.50	Binders.....	2 169.00
Iron molders.....	3.00-3.75	Hotel industry:	
Metal polishers.....	3.81	Cooks, male.....	3 1,000-1,800
Metal planers.....	2.75-3.25	Cooks, female.....	3 500-800
Lathe hands.....	3.25-4.00	Chambermaids.....	3 90.00
Food industry:		Elevator boys.....	3 90.00
Bakers.....	3.00-3.25	Firemen.....	4 15.00
Candy makers.....	2.75-3.00	Porters.....	3 90.00
Construction industries:		Domestic servants:	
Quarriers, slate.....	2.75-3.00	Cooks.....	3 225-500
Asphalt pavers.....	2.50-2.75	General servants.....	3 125-225
Tile setters.....	3.50-3.75	Cinema industry:	
Carpenters.....	3.75-3.85	Operators.....	2 100-125
Cement makers.....	3.25-3.75	Operators' helpers.....	2 75-90
Bricklayers.....	3.25-3.60	Commerce:	
Bricklayers' helpers.....	2.25-2.50	Clerks, male.....	3 400-500
Marble cutters.....	3.00-3.50	Clerks, female.....	3 350-400
Painters.....	3.00-3.25	Stenographers, male.....	3 400
Plasterers, ceiling.....	3.25-3.75	Stenographers, female.....	3 450-500

¹ Per 1,000 cigarettes.² Per week.³ Per month.⁴ Per day.

Agricultural Wages in Ontario

THERE was no dearth of agricultural labor in Ontario during the latter part of the summer of 1924, but the supply was somewhat dubious in quality, according to Crop Bulletin 160 of the Department of Agriculture of that Province. Many Ontario farmers have adopted a plan of assisting one another in rush periods. Other farmers of the Province have limited the land they cultivate to acreages which can be handled by their families.

Harvest wages, for August, 1924, ranged, with board, from \$2 to \$3 per day or from \$25 to \$45 per month, the average worker usually receiving \$2.50 per day or the man with ordinary experience \$35 when paid by the month.

Wages of Farm Labor in Norway, 1923-24

DATA on wages in agriculture in Norway have been gathered since 1915 by the Society for Norway's Welfare (*Selskapet for Norges Vel*). This work has now been taken over by the Central Bureau of Statistics of Norway. According to a report¹ recently issued by that bureau, wages increased rapidly after the pre-war period until they reached their peak in 1920-21; since then there has been a decrease each year.

The following table, taken from the report, shows the course of wages of various classes of farm workers since 1915-16. The duties and status of each of the various types of workers on Norwegian farms were described in the MONTHLY LABOR REVIEW for September, 1922 (pp. 116-118).

TREND OF WAGES OF AGRICULTURAL WORKERS IN NORWAY, 1915-16 TO 1923-24, BY SEX, OCCUPATION, AND YEAR

[Krone at par=26.8 cents; exchange rate varies]

Occupation and year	Average actual wages per day (kroner)									
	Men					Women				
	Winter work	Spring work	Hay harvest	Grain harvest	Other	Winter work	Spring harvest	Hay harvest	Grain harvest	Other
Farm laborers, boarding themselves:										
1915-16	3.08	3.64	4.00	3.64	3.32	1.84	2.12	2.35	2.22	2.00
1916-17	4.53	4.95	5.44	4.97	4.83	2.41	2.76	2.96	2.86	2.65
1917-18	6.20	7.13	7.86	7.27	6.87	3.33	3.93	4.21	4.17	3.66
1918-19	8.40	9.66	10.27	9.83	9.26	4.67	5.43	5.92	6.02	5.20
1919-20	9.61	11.55	12.42	11.41	10.96	5.41	6.53	7.06	6.81	6.10
1920-21	10.25	12.50	13.64	12.71	11.05	5.81	7.09	7.67	7.44	6.76
1921-22	7.91	10.28	11.06	10.11	9.60	5.06	6.13	6.64	6.44	5.80
1922-23	6.33	8.03	8.63	7.94	7.46	4.16	5.02	5.39	5.19	4.70
1923-24	6.17	7.47	8.14	7.49	7.01	4.07	4.74	5.14	4.95	4.45
Index numbers (1915-16=100)										
1916-17	147	136	136	137	145	131	130	126	129	133
1917-18	201	196	197	200	207	181	185	179	188	183
1918-19	273	265	257	270	279	254	256	252	271	260
1919-20	312	317	311	313	330	294	308	300	307	305
1920-21	333	343	341	349	360	316	334	326	335	338
1921-22	257	282	277	278	289	275	289	283	290	290
1922-23	206	221	216	218	225	226	237	229	234	235
1923-24	200	205	204	206	211	221	224	219	223	223
Average actual wages per day (kroner)										
Farm laborers, boarded by employer:										
1915-16	1.81	2.51	2.95	2.49	2.37	1.02	1.30	1.53	1.42	1.18
1916-17	2.71	3.33	3.89	3.35	3.19	1.34	1.71	1.95	1.85	1.57
1917-18	3.86	4.80	5.60	4.85	4.50	1.87	2.39	2.73	2.65	2.18
1918-19	5.31	6.64	7.41	6.73	6.13	2.63	3.32	3.78	3.86	3.09
1919-20	6.14	7.88	9.00	7.78	7.32	3.17	4.17	4.68	4.43	3.72
1920-21	6.84	8.71	9.88	8.83	8.11	3.50	4.60	5.13	4.93	4.14
1921-22	4.99	7.04	7.90	6.87	6.38	2.94	3.91	4.40	4.19	3.54
1922-23	4.03	5.45	6.13	5.35	4.93	2.53	3.25	3.67	3.48	2.97
1923-24	3.87	5.01	5.75	5.02	4.61	2.42	3.01	3.43	3.24	2.76

¹[Departementet for Sociale Saker.] Statistiske Centralbyrå. Arbeidslønnen i Jordbruket. Driftsåret 1923-1924. Norges Offisielle Statistikk. vii, 122 pp.

TREND OF WAGES OF AGRICULTURAL WORKERS IN NORWAY, 1915-16 TO 1923-24,
BY SEX, OCCUPATION, AND YEAR—Concluded

Occupation and year	Index numbers (1915-16=100)									
	Men					Women				
	Winter work	Spring work	Hay harvest	Grain harvest	Other	Winter work	Spring harvest	Hay harvest	Grain harvest	Other
Farm laborers, boarded by employer—										
Concluded.	150	133	132	135	135	131	132	127	130	133
1916-17	213	191	190	195	190	183	184	178	187	185
1917-18	292	265	251	270	259	258	255	247	272	262
1918-19	339	314	305	312	309	311	321	306	312	315
1919-20	378	347	335	355	342	343	354	335	347	351
1920-21	276	280	268	276	269	288	301	288	295	300
1921-22	223	217	208	215	208	248	250	240	245	252
1922-23	214	200	195	202	195	237	232	224	228	234
1923-24										
	Average actual wages per season (kroner)									
Occupation and year	Males			Females						
	Winter half year	Summer half year	Whole year	Winter half year	Summer half year	Whole year				
Farm servants, boarded by employer:										
1915-16	159	242	391	91	120	202				
1916-17	224	310	511	113	144	349				
1917-18	307	423	694	153	192	328				
1918-19	431	583	963	214	263	450				
1919-20	529	730	1,201	288	348	613				
1920-21	598	807	1,355	328	400	703				
1921-22	456	674	1,120	294	367	640				
1922-23	366	525	880	260	318	562				
1923-24	348	482	811	247	299	531				
	Index numbers (1915-16=100)									
1916-17	141	128	131	124	120	123				
1917-18	193	175	177	153	160	162				
1918-19	271	241	246	235	219	223				
1919-20	333	302	307	316	290	303				
1920-21	376	333	347	360	333	348				
1921-22	287	279	286	323	306	317				
1922-23	230	217	225	286	265	278				
1923-24	219	199	207	271	249	263				
	Average actual wages per season (kroner)									
Cattlemen, boarded by employer:										
1915-16	260	262	504	125	137	249				
1916-17	318	331	517	166	178	328				
1917-18	437	445	856	229	238	440				
1918-19	649	665	1,298	307	325	626				
1919-20	778	787	1,553	413	432	810				
1920-21	959	1,015	1,926	502	532	984				
1921-22	779	834	1,572	449	488	893				
1922-23	616	659	1,271	400	427	809				
1923-24	579	598	1,180	377	397	738				
	Index numbers (1915-16=100)									
1916-17	122	126	103	133	130	132				
1917-18	188	170	170	183	174	177				
1918-19	250	254	258	246	237	251				
1919-20	299	300	302	330	315	325				
1920-21	369	387	382	402	388	395				
1921-22	300	348	312	359	356	359				
1922-23	237	252	252	320	312	325				
1923-24	223	228	234	302	290	296				

As is seen, the table covers both the resident workers (servants and cattlemen) and the day laborers.

Wages vary greatly in the different districts of Norway. Servants' wages are highest in the best agricultural districts and lowest in the districts where agriculture competes with fishing, forestry, and other industries for its labor supply and where boys, whose wages are lower than those of adults, are generally hired for farm servants. Day laborers' wages show the opposite trend. As a rule the temporary laborer receives a slightly higher wage than the permanent day laborer, especially at harvest time, and as the day labor in the better districts is of a more permanent character the wage is therefore somewhat lower than in the other districts.

Only the comparatively large farms of the better farming districts employ cattlemen (*fjøsroktene*). In most places the livestock is cared for by the women of the farm in addition to their own work. Where married cattlemen are employed they often receive, in addition to their cash wage, payments in kind such as free house, fuel, potatoes, milk, etc., but board themselves. As is seen from the table, the yearly wages of cattlemen are high as compared with those of the farm servants. This is due to the fact that their work is heavier and involves more responsibility, and that the supply of cattlemen is usually small (in some districts none of these workers are available). There is no unemployment for this class of workers.

The old permanent master-and-servant relations in agriculture in Norway are disappearing. Workers are being hired and wages fixed for shorter and shorter periods. In many places the wage is fixed by the day instead of by the month, and for day laborers by the hour instead of by the day.

The cotten class also is rapidly decreasing. These cotters are a special class of farm laborers who perform certain work on the farm and are in return entitled to work for themselves a small holding belonging to the farm. Many of these have now acquired land which they hold in their own right.

Pay of Coal-Mining Apprentices in the Transvaal¹

AT THE annual meeting of the Transvaal Chamber of Mines, held in March, 1924, the collieries committee presented a report, including the following information concerning underground apprentices:

In order to encourage the training of coal miners, a system of apprenticeship has been devised and is being put into operation. The indenture for underground apprentices on the collieries is for a term of 939 shifts worked, or 3½ years, whichever is the lesser, and payment will be on the following scale:

For the first 312 shifts worked, 5s. per shift.

For the second 312 shifts worked, 7s. 6d.² per shift.

For the remaining period of apprenticeship, 10s. per shift.

There is a provision that an apprentice on the completion of his apprenticeship shall work if required to do so on any colliery for a period of not less than six months at 12s. 6d. per shift. The indenture generally is on the lines of that used by the Government Miners' Training Schools.

¹ Transvaal Chamber of Mines. Thirty-fourth annual report, year 1923. Johannesburg, July, 1924.

² Shilling, at par=24.3 cents; penny=2.03 cents. Exchange rate varies.

WOMAN AND CHILD LABOR

Hours and Earnings of Women in Missouri Industries

THE Women's Bureau of the United States Department of Labor has recently published a report (No. 35) upon the hours and earnings of women in Missouri, made at the request of the State committee appointed to draft a minimum wage law. The investigation was made during the months of May and June, 1922. Pay-roll figures were taken for a week in either April or May, 1922, and for a week in January, 1921. Figures concerning the year's earnings were based on the calendar year 1921. The investigation covered 22 cities and towns and included 174 establishments employing 17,939 women, of whom 16,403 were white and 1,536 were colored. The industrial distribution of the women studied was as follows:

	Number	Per cent
Manufacturing.....	12, 589	70. 2
Mercantile.....	3, 170	17. 7
Laundries.....	1, 141	6. 4
Telephones.....	1, 039	5. 8
Total.....	17, 939	100. 0

Hours

THE Missouri laws permit a 9-hour day and a 54-hour week, but considerable variation was found in the hours actually in effect. A little over one-fifth—22.5 per cent—of the women studied had a scheduled day of 8 hours or less, 25.4 per cent had a day of over 8 but under 9 hours, and 52 per cent had a 9-hour day.

It was a very common practice to shorten the hours on Saturday, so that only 9.7 per cent had a 54-hour week. Nearly a quarter, 24 per cent, had a week of 50 hours, 20.9 per cent had over 48 but under 50, and 32.2 per cent had a week of 48 hours or less.

In respect both of daily and of weekly hours the smaller towns in the State were less progressive, longer hours prevailing there than in the two larger cities.

Earnings

IN THE matters of wage rates and earnings, the white and the colored women fared so differently that they are treated separately. For both, earnings were low. For the 15,364 white women, not including telephone operators, for whom reports were obtained, the median earnings in a week in April or May, 1922, were \$12.65, ranging from \$9.80 in the 5-and-10-cent stores to \$15.90 in the manufacture of electric products. Grouping the women cumulatively by the per cent earning under given sums, the following figures appear:

	Per cent
Earning less than \$9 a week.....	20. 2
Earning less than \$12 a week.....	43. 4
Earning less than \$15 a week.....	67. 1
Earning less than \$18 a week.....	83. 7

A cost-of-living budget, prepared in the autumn of 1922 by a committee of the League of Women Voters, shows a minimum of \$15.26 a week as necessary "to take care of a working woman in decency and health, year in, year out." It will be observed that fully two-thirds of the white women studied were earning less than this minimum. These low earnings can not be attributed to short time or irregular attendance, for "even when consideration is limited to those who had worked a full week, one-half of these women earned less than \$13.70." Nor were they due to newcomers, learning their trade.

The figures on the length of time which the women had been in the trade did not bear out the common idea that women stay in industry but a short time. Only about one-fifth of these workers had been in the trade less than one year, while almost as large a proportion had been in the trade 5 and under 10 years. But the reward for remaining in the trade seemed slight, for although there was a tendency for wages to increase with the length of time in the trade the increase was not great. The extent of the increase varied considerably in the different industries, the least change with added time in the trade being found in the tobacco industry, where the women who had been in the trade 15 years or more received wages only 5 per cent above those of women who had been engaged in the work 1 and less than 2 years.

In the manufacture of shirts and overalls, however, the median earnings of those who had been in the industry 15 years or more were 78.1 per cent higher than for those who had been employed in it for 1 to 2 years, and for millinery workers, "the percentage of increase was 87.5 per cent as between the two groups of more and less experienced employees."

Figures as to yearly earnings were obtained for 1,972 women, selected "so as to include only those who were steady, experienced workers, who had worked for the firm for at least a year and who had not been absent more than 8 weeks."

The median year's earnings for these 1,972 women, distributed in the various industries throughout the State were \$748. The highest median was \$929, found in the tobacco industry, while the lowest was that of the 5-and-10-cent store workers, where half of the women earned less than \$622 a year. The largest number of women for whom information on year's income was secured was engaged in the manufacture of shirts and overalls and in shoe factories, where the median earnings were \$700 and \$805, respectively.

Colored Workers

OVER half—53.1 per cent—of the 1,536 colored women studied were found in the manufacture of food products, 23.3 per cent were in laundries, 17.9 per cent worked in tobacco, and 4.4 per cent in bag manufacturing. The median earnings for the whole group were \$6, the range being from \$4.60 in the manufacture of food products to \$9.80 in laundries. For white women in the same industries, the median was \$12.65, the range being from \$11.10 in the manufacture of food products to \$13.20 in tobacco manufacturing.

In the industries where only two or three isolated negro women were found there seemed to be little difference between their wages and those of the white women in the same establishments. It was when they were employed in large numbers and were practically the only women on a specific operation that their wages were conspicuously lower than those of white women.

Even more than in the case of white workers, the increase of wages according to time spent in the trade was irregular. Median earnings, on the whole, increased with experience up to the group who had been in their trades 4 but under 5 years, their median earnings being \$8.90. For those with an experience of 5 but under 10 years, the median was \$6.75, for those who had been in the trade 10 but under 15 years it was \$7.50, and for those with an experience of 15 years and over it was \$8.50.

The women studied were predominantly native born, only 6 per cent of those for whom nativity was learned being foreign born. Personal data were gathered for between 9,000 and 10,000 white women and between 700 and 800 colored women. Of the white women, 63.6 per cent were single, 55.7 per cent were under 25, and 84.1 per cent were living at home. Of the colored women, 27.1 per cent were single, 31.7 per cent were under 25, and 76.5 per cent were living at home. Summing up the facts for all the women studied the conclusion is reached that the situation is not entirely satisfactory.

The last census reported 244,615 women gainfully employed in Missouri. The women of the State, therefore, are an important factor in its industrial life. The figures in this survey indicate that while in certain respects State standards for these women are comparatively satisfactory and the individual standards of industry even higher, in other respects there is room for considerable improvement if modern progressive standards of earnings and hours are to be generally established.

Report of Shanghai Child Labor Commission¹

A CHILD labor commission appointed in June, 1923,² by the Executive Council for the Foreign Settlement of Shanghai, China, to consider the problems connected with the employment of child labor in the Settlement and to make recommendations to the council as to what regulations, if any, should be applied, submitted its report in July, 1924.

The commission held 33 meetings and heard the evidence of 36 witnesses, among whom were doctors, officers of the Municipal Services, social welfare workers, employers, contractors, and one woman who had worked for many years in silk filatures. Although a notice was inserted in the native and foreign press stating the nature of the inquiry and inviting those who wished to do so to attend and give evidence, only two persons availed themselves of the opportunity, so that it was evident that there was little public interest in the question.

As a result of this general lack of interest the commission had to be satisfied with information of a more or less general character, with the exception of certain industries such as cotton manufacturing and silk reeling. The commission found that there was practically no recorded information and no reliable statistics available on the subject of the inquiry. Modern factory methods of production are so little developed in China that they are found in only a few areas such as Shanghai, where the industrial development in recent years has been very rapid. The complete absence of educational facilities

¹ The Municipal Gazette. Report of Child Labor Commission. Shanghai, July 19, 1924, pp 259-282.

² For an account of the appointment and powers of this commission see MONTHLY LABOR REVIEW, March, 1924, p. 99.

for the vast majority of the people and the high birth rate which results in the population ever tending to outstrip the means of subsistence combine to keep the standard of living very low.

The average earnings of unskilled laborers in the Shanghai district were found to be not more than \$15 per month while in some instances, such as ricksha coolies, they were as low as \$8. The average cost of living for a man and his wife of the very poorest class was estimated at \$16 a month. As a result, the great majority of Chinese children are put to work at the earliest age possible. This, the commission considered, is not so great an evil when the family is engaged in tilling the soil, except on educational grounds, for it is not so likely that the child will be forced to work beyond its capacity. But when the work is performed under less hygienic conditions, with long hours and monotonous operations, the ill effects are very marked. The medical evidence given before the commission showed that country children in China are of good physique, while those living in cities are below the standard of western countries. Tuberculosis is particularly prevalent and conditions in modern factories were believed to be worse even than in the homes because of the humidity of the air. Crowded living conditions are largely responsible for the poor physique of the children and it was agreed by all the medical witnesses that the present industrial conditions in Shanghai are extremely detrimental to the bodily and mental welfare of child employees.

The industries in which children are employed were grouped into three classes—domestic; shops, small workshops, home industries, laundries, and the building trades; and mills and factories. It is a general practice throughout the country to sell young girls for domestic servants. They begin work as soon as they are physically capable of performing their tasks and this practice, like any form of slavery, is the source of much human misery. While the sale of these children is contrary to Chinese law, it does not appear to be interfered with by the authorities. Aside from evidence of this practice and its resultant evils, the commission was unable to obtain much reliable information regarding the general conditions of employment of children as domestic servants.

In the second class of employment (shops, laundries, etc.), the apprentice system is general. In the main, children are apprenticed at the earliest possible age at which they can begin to learn and at the same time be of some value to the employer. The term of apprenticeship is usually about 5 years and the apprentice receives little if any pay. In the hand laundries licensed by the council, about 70 boys under 15 years of age were found to be employed. They usually start work when about 13 or 14 years old, although some were found as young as 10 years, and in general the boys appeared undersized and much younger than the age given on inquiry. The work is hard and the hours are usually from dawn to dusk and often until late at night, with half an hour allowed for the mid-day meal. The boys are fed and lodged by the employer in rooms adjoining the laundries, and frequently they eat and sleep in the same room. For their services for an apprentice period of 3 years, the parents are paid \$60 or \$70.

In the building trades, apprenticeship, which is a universal practice, lasts from 3 to 5 years. The age at which boys are usually

apprenticed is 11 years, although many children start work at a younger age than this. The hours of work are from 8 to 10 a day, with one-half hour allowed in winter for the mid-day meal and 2 hours in hot weather. In the Shanghai district there were said to be about 20,000 apprentices most of whom live with subcontractors. It was said that the food given to the boys by the contractors is frequently poor and that it is worse when they are not working, employment not being continuous owing to the fact that the contract system is general.

In mills and factories visited by the commission many children were seen at work who could not have been more than 6 years of age. The hours of work are usually 12 with not more than 1 hour off for lunch, and the children usually have to stand the whole time they are at work. Most factories stop for one shift at week ends and, with this exception and the customary holidays at the Chinese New Year, work is continuous. Atmospheric and dust conditions and sanitation generally are very bad. The earnings of young children do not average more than 20 cents, silver, a day and in some instances contractors obtain young children from the country, paying the parents \$2 a month for the services of each child. These children are poorly housed and fed, and as they receive no money their condition is practically one of slavery. In cotton mills the children are usually employed in the spinning department.

In silk filatures most of the employees are women and young girls, in a proportion of one child to every two adults. The children brush the cocoons, removing the waste and so exposing the silk thread. This operation is performed over basins of very hot water with which the fingers of the children frequently and necessarily come in contact, and they are required to stand the entire time they are at work. Many of the children were not more than 6 years old. The temperature of the workroom is usually above normal because of the hot water in the basins, and fainting in hot weather is not uncommon. The children, whose earnings amount to from 20 to 25 cents, silver, a day, are said to present a pitiable spectacle. In addition to the hard work they are often ill-treated by the adult workers if the amount of silk produced from the cocoons falls short of a certain fixed quantity. The conditions under which these children are employed were considered by the commission to be indefensible.

Children in the Shanghai district are employed in the match factories in boxing the matches and making up parcels of boxes, for which as little as 9 copper cents is paid for a day's work. In one large factory visited by the commission children not more than 5 years of age were seen to be working with almost incredible rapidity. White phosphorus is used in some of these factories, but it was said that there was a possibility that native regulations coming into force next year forbidding the use of phosphorus might be observed. No precautions were taken against the risk of fire, although it is a special hazard in this industry. Much of the box making is home work, a mother and two children being able to finish from two to three thousand parts of boxes a day at a rate of 9 coppers per thousand.

In an appendix to the report the evils of the factory system as it is developing in China without adequate national regulation are summed up as follows:

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Actual overstrain and injury to life, health, and limb of workers, adult and youthful, but especially to very young workers, through excessively long hours without pauses, through night work, injurious dusts, poisonous substances, humidity, extremes of heat and cold; dangerous unguarded machinery, rapid crowding into towns without good housing, with consequent ill effect on family life, and breakdown of ancient village customs of local government and hygiene; strain on expectant and nursing mothers, and on young, adolescent girls and boys, the future parents of the nation; break-up of the old guild system, and lack of social and economic protection for unorganized and unrepresented workers where personal and fraternal relations of employer and employed are quickly changing into impersonal relations.

The recommendations of the commission include the following:

(1) That the executive council seek authority to make and enforce regulations prohibiting the employment in factories and industrial undertakings of children under 10 years of age, this limit being raised to 12 years within 4 years from the date when the regulations come into force.

(2) That the council seek authority to prohibit the employment in factories and industrial undertakings of children under 14 years of age for a longer period than 12 hours in any period of 24 hours, the working hours to include a compulsory rest period of 1 hour.

(3) That in view of local conditions, the prohibition of work of children at night is not immediately practicable. The commission, however, considers night work for young children such a serious evil that it is of the opinion that this question should in any event be further considered by the council at the end of a period of four years.

(4) That the council seek authority to make and enforce regulations under which every child under 14 years of age, employed in factories and industrial undertakings in the Settlement, should be given 24 hours' continuous rest from work in at least every 14 days.

(5) That the council adopt a measure for the proof of age of working children, such as, for instance, the procedure in the Hongkong ordinance which provides that in any prosecution, until the contrary is proved, the child concerned in the charge is to be assumed to be under a particular age if he or she so appears to the sitting magistrate.

(6) That the council seek authority to prohibit the employment of children under 14 years of age in factories and industrial undertakings at any dangerous, unguarded machine, in any dangerous or hazardous place, or at any work likely seriously to injure body or health, and to close any dangerous or hazardous premises where such children are employed until they are made safe.

(7) That the council define the term "factory" so as to mean premises in which 10 or more persons are employed in manual work, and to define the expression "industrial undertaking" so as to cover out-of-door occupations, such as building, construction work, and transport, but should not include any agricultural undertakings.

(8) That the council provide penalties for the violation of any of these regulations, and that the council provide an adequate staff of trained men and women to carry out the duties of inspection under the regulations.

These recommendations are designed to govern the child labor situation in the foreign settlement of Shanghai, covering 16,955 girls and 4,485 boys under 12 years of age. The boys are mostly employed in the cotton mills and the girls in the silk filatures.

LABOR AGREEMENTS AND AWARDS AND DECISIONS

AGREEMENTS

Brick and Clay Workers—New Straitsville, Ohio

THE agreement made between the Straitsville Impervious Brick Co. and the United Brick and Clay Workers' Union No. 387, May 2, 1924, contains several provisions of interest relative to hiring and discharging, hours of labor, and arbitration. Day work varies from 50 $\frac{5}{8}$ cents to 66 $\frac{1}{4}$ cents per hour. Piece work varies from 45 cents to 83 $\frac{1}{2}$ cents per thousand according to the character of the work to be done.

The other provisions of interest are as follows:

Hiring and discharging.—The company [is] to give preference to members of the union who are residents of New Straitsville, Shawnee, and vicinity whenever competent men are available and satisfactory to the company. When such union members are not available, the company will select and hire its employees, but if the union can show just cause why any man so chosen is not fit to be an employee, the company will agree not to hire him. All men hired are to agree before going to work to join the union, but no new man shall be asked or required to join the union until he shall have worked on the yard until satisfactory to the company.

Superintendents, foremen, two engineers, one machinist, office employees, and those engaged in construction work are not to become members of the union. In case of a shutdown the machinist will be kept employed entirely on machinery work of the character at which he is generally employed.

In case of a suspension after the termination of this contract, and pending the making of a new contract, the company shall have the privilege of keeping at work not only the employees specified above as not belonging to the union, but also such of their union employees as may be required to preserve and keep up the property, to wit, burners, kiln firemen, and cartmen, until the burning of the kilns shall be finished.

The company is to have entire control of the men at work, without interference by the union, and will have the natural right and privilege of disciplining or discharging any incompetent, disobedient, or unsatisfactory employee without obligation to submit such action to anyone for adjustment.

A discharged employee, however, may appeal to the grievance committee of the union for an investigation of the cause of his discharge, and said committee and the discharged employee shall be entitled to an impartial hearing before the manager of the company. If it is shown that he has been unjustly discharged, then it shall be the duty of the manager to reinstate him, and he shall be paid his wages for the time he has lost. In case of a first offense, no man shall be discharged, but shall be laid off for a period not exceeding 10 days.

It shall be optional with the company whether they shall fill the vacancy caused by discharging an employee with a new employee or with one of the remaining employees, and it shall be the duty of any man so chosen to take up the work of the discharged man at once so that the factory may continue its work without interruption.

In filling all positions requiring skill, special ability, or experience which pay higher wages, the company agrees to promote old employees whenever suitable men for such places are available.

No employee shall be discharged because of his activities in union matters or because of any petty prejudice or malice on the part of any foreman, in order to make an opening for employing some friend or favorite of such foreman.

Hours of labor.—Eight hours shall constitute a day's work and is the basis of the wage scale of this contract unless otherwise specified herein.

Employees shall work overtime and on Sundays at repair work at the regular rates of wages when such work is necessary to keep the plant in continuous operation. For Sunday work they shall be paid for one hour more than the actual time employed, and on week days they shall be paid for not less than one hour overtime. In consideration of the fact that the union and the company are trying to make a success of the 8-hour day in the machine room, the men employed there agree to cooperate fully in getting out the production. Should this production be gotten out in less than 8 hours, such men in the machine room as are not required for repair work may leave and will be paid for 8 hours. If necessary to work overtime in order to get out the production, the men will be paid for not less than 1 hour nor be expected to work more than 1 hour. Such overtime work will not be required on Saturday.

Piecework employees shall start at whistle time in the morning and work the full 8 hours unless excused by those in authority. They shall not place a limit on the maximum amount of work they will perform in a day, unless that is satisfactory to the company.

The amount of work to be performed by employees working by the hour shall not be limited by the performance of any task or operation, the completion of which does not constitute a day's work.

Arbitration.—In case of any local dispute, or any question not covered by this agreement or involving the interpretation of any part of it, arising between any employee and the company, the employee shall present his grievance to the grievance committee duly authorized by the union to act as its agent. Said committee shall carefully investigate the trouble, and if it finds the complaint well founded, it shall endeavor to adjust the difficulty with the superintendent of the plant, but failing to do so, the matter in dispute shall, within 10 days thereafter be left to the arbitration committee composed of one man chosen by the company, one man by the union, both men to be disinterested parties, and if they can not agree they are to call in a third disinterested man, and their decision is to be binding upon all parties.

The question of the discharge of any employee is not to be arbitrated, neither shall any dispute arising from a violation of the well-known rules of the company.

Pending investigation and arbitration, work shall be continuous, as the object of this section is to prevent strikes on the part of the employees and lock-outs by the employer, and is also to prevent any labor dispute from interfering with the continuous operation of the factory.

Check off.—The company agrees to check off all dues, assessments, fines, and initiation fees, and will pay the amount checked off to the financial secretary of the union on the second pay day of each month, provided the secretary shall submit the names not later than the first day of each month.

Painters, Decorators, and Paperhangers—Syracuse, N. Y.

THE agreement under which the painters, decorators, and paperhangers of Syracuse, N. Y., are working provides for extra payment for dangerous work or for responsibility and also penalizes the workman who does a poor job. The sections relating to these matters are as follows:

SECTION 8. Members working for regular employing painters, decorators or paperhangers shall receive \$1.10 per hour.

All exterior work being done on buildings over three stories or over the equivalent in height of three stories such as water tanks, trestles, bridges, and all structural-iron work whether done by swing scaffold, bos'n seat, window jacks or life belts shall receive \$1 per day more than the regular scale.

SECTION 13. In order to promote harmonious relationship between the parties hereto, it is mutually agreed that all defects due to imperfect workmanship are to be corrected by the man making the mistake, on his own time if he is capable, if not, he must pay for same.

SECTION 16. Any member of Local Union No. 31 placed in charge of any job where four or more journeymen are employed shall receive at least 10 cents per hour more than the regular journeyman wage.

Sign Writers—New York City

THE New York Sign Writers' Union, Local No. 230, is working under an agreement which not only sets minimum wage rates for the different classes of workers, but also provides that the employee shall be protected from loss due to weather conditions. The sections dealing with these subjects are as follows:

ARTICLE III. The minimum rates of wages from April 1, 1924, to March 31, 1925, shall be as follows:

Journeyman (any branch)—\$13.20 per day.

Apprentices—First year, no fixed salary.

Apprentices—Second year, \$3.96 per day.

Apprentices—Third year, \$5.28 per day.

Apprentices—Fourth year, \$6.60 per day.

After fourth year, by extension only of the party of the second part, \$11 per day.

Senior apprentices, \$9.60 per day.

The minimum rate for men engaged exclusively in the designing of outdoor advertising shall be \$16.80 per day.

SEC. C. Journeymen and senior apprentices employed on advertising work to be paid regardless of weather condition, or any other circumstance preventing them from working, and over which they have no control, such as rain, snow, or when the official thermometer reaches a point lower than 10 degrees above zero, providing they report for duty on such occasions.

AWARDS AND DECISIONS

Clothing Industry—Baltimore

SEVERAL interesting decisions have been made recently by the trade board in the clothing industry in Baltimore.

In case number 196, decided July 20, 1924, two lining basters after working for a time at week work marking cuffs, were returned to their regular occupation at piece work. They claimed that they had suffered a loss by their return and wished to be reimbursed therefor. The impartial chairman decided that "Since both of these men are experienced lining basters, and since they are paid the regular piece rates that all the other lining basters get, the trade board is of the opinion that they have no just ground for complaint."

In case No. 198, decided July 19, 1924, a woman sought reinstatement after being away from work for 10 months on a "verbal leave of absence." The impartial chairman said—

Obviously a position can not be held open for such a long time under circumstances like these. It is understood that a leave of absence for a considerable period, as distinguished from absence of a few days, must be secured in writing.

Case No. 210, decided August 9, 1924, is one of fixing work.

It appears that this man sewed in seven pairs of sleeves with black silk on light coats. The error was discovered in the final examining department after the coat had been completed. The man fixed his own work, but in order to do that, other work, not his, had to be ripped and after he had corrected his error the other parts had to be fixed again and the coat had to be repressed. It is for this fixing and pressing that the charge of \$4.65 was made.

The agreement requires the worker to fix any errors, regardless of when those errors are discovered, but he is not required to undo the work of others in correcting his own mistakes. The reason this last proviso was put into the agreement

is because the practice had formerly been to relieve a worker of responsibility for his errors when the garment had gone to other sections and had been worked on. This practice was justified on the ground that the foreman or examiner for each section should catch the errors before the work left the section. The firm contended, however, that it could not examine every coat at every operation, and it was agreed that the worker's responsibility should not stop at his section, but he should be responsible for mistakes no matter where the work may be at the time that they are discovered. Obviously, when the worker's responsibility was thus extended, the question arose as to the other work that might have been done on a garment after his error. The proviso was made, therefore, that the firm must prepare the work for him and he is to fix only his own work and no other.

The trade board is of the opinion that this agreement was intended not only to relieve him of ripping but also of fixing other people's work. His responsibility is for his own work only, and to charge him for busheling or pressing the coats after he had fixed his own mistake, is really to require him to fix other people's work besides his own.

Clothing Industry—Chicago

AMONG the more important decisions recently issued by the trade board at Chicago may be mentioned the following:

In case No. 706 (new series), decided July 21, 1924, the firm refused to pay an offpresser for work done, where the latter had lost his coupons and the firm was unable to check the claim. The worker placed his claim in the hands of an attorney and to avoid suit, the firm paid the claim and discharged the worker. The union requested the worker's reinstatement. The impartial chairman replied:

The board has no hesitancy in stating that the worker forfeited his rights under the agreement when he went beyond the agencies of adjustment set up thereby.

In Case No. 739 (new series), August 22, 1924, a buttonhole maker was discharged for poor work. The impartial chairman said:

It is not denied that the worker offered to fix the buttonholes. Willingness to fix work is not sufficient in itself to warrant reinstatement. If the worker can not make buttonholes properly she can not expect to retain her position. However, she has worked for this firm several years and this is her first suspension. It seems unlikely that the firm would have kept her this long unless her work was good most of the time. The board feels that she should be given another opportunity in view of the circumstances just related. Reinstatement on probation is directed.

In Case No. 744 (new series), August 26, 1924, a woman was discharged following a suspension for refusing to fix a coat a second time. The impartial chairman in directing her reinstatement commented as follows:

Refusal to fix work without asking that it be held for investigation, to leave the shop when suspended, and to carry out the instructions of the shop chairman are all serious offenses and collectively merit discharge. The union offers in extenuation that the worker has been but two and a half years in this country; that she is slow to comprehend procedure under the agreement and that this is her first experience with a suspension.

The board feels that consideration should be given to the difficulties cited by the union although the worker is supposed to attend union meetings where the procedure in case of disputed work and suspension, as well as the authority of the shop chairman would be made clear to her in her own language if necessary. The worker has now lost about a week. The board directs reinstatement without pay for time lost and will expect the union to take such further action as will avoid a recurrence and uphold the authority of the shop chairman.

In Case No. 748 (new series), September 11, 1924, the question of pay for a holiday was considered. The firm had a rule that attendance the day before a holiday was a condition for holiday pay. A few employees worked the Saturday before Labor Day to complete lots, but most of them were laid off Thursday or Friday night as the firm was taking an inventory. Only those who worked Saturday were paid for the holiday, the firm arguing that if those who laid off before Saturday were paid for the holiday, it would be possible for any worker on lay off period to claim pay for any holiday occurring during the lay off. The impartial chairman ruled:

The board feels that the fears of the firm with respect to precedent are unfounded. Whatever its practice has been with respect to holiday pay for men regularly on lay off will continue. In this case the lay off was for the purpose of inventory. It was made toward the end of the week and the board holds that the last day worked by these cutters was in effect the last working day before the holiday. The purpose of the rule has been served and the men should be paid.

Stonecutters—Denver

THE Industrial Commission of Colorado rendered a finding and award September 4, 1924, File No. 1149, in the case of a strike by the stonecutters of Denver. A local firm having a contract for certain stone work upon a school building in Denver obtained stone, machine finished, according to certain specifications, from a Chicago firm. This stone on arrival in Denver had to be cut, fitted, and carved by Denver workmen to prepare it for the building.

About August 1 the members of the union ceased work, giving as their reason that the work in Chicago had been done by men working in opposition to them and that an order had been issued by the executive board of the international union to the effect "that all of our members are requested on and after August 1, 1924, to refrain from working on any work that has been started—planed, turned, cut, or semifinished—by men working in opposition to our organization."

On or about August 12, 1924, this commission issued an order requesting the employees of the above contractors to return to work until the industrial commission had held a hearing herein and entered its award.

A telegram from the local employees to their international officers calling attention to the Colorado Industrial Law was sent and a reply received from such officers ordering the men to obey the Colorado law. The said employees generally complied with the order of the commission, so far as the commission is informed.

The evidence at said hearing covered a great deal of the history over the period leading up to the present difficulty and, without attempting to recite such history, and the contentions of the various parties thereto regarding the same, it will be sufficient to state that the object of the said order of said executive board was to have the members of said union cease work upon stone produced by mills and quarries not operated by members of said union, in order that local contractors employing local men would bring pressure to bear upon mills and quarries supplying such stone to negotiate, confer, and enter into contracts with the said international organization; that there are a number of quarries and mills producing machine-finished stone in the Indiana districts and that a very small percentage of such machine-finished stone manufacturers in said Indiana limestone districts are employing members of such union.

Members of the local union all testified that they had no grievance whatever against the local contractors, and that these contractors were fair to them as a union in every respect.

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The commission, after hearing all the evidence herein is of the opinion that the order of said executive board requesting and requiring the members of said local union to cease work for said contractors, is unfair and unreasonable, inasmuch as it is punishing an employer who has been friendly with and fair to the members of said union in this locality. It requires the men to stop further work upon stone which they have been working up to the arbitrary date of said order and without any reference to the time the contracts were let by said local contractors for said stone. That said members of said local union have heretofore worked upon said stone and neither the members of said union nor said contractors had notice of said order or the issuance thereof until within two or three days prior to the effective date thereof; that the attitude of said union in working upon and finishing stone purchased by said local contractors under similar conditions was sufficient assurance to said local contractors of their safety in entering into a contract with said [firm] for the quarrying and milling of said stone; and that the action of said union in arbitrarily fixing a date when work should cease upon stone furnished by said mill, without reference to the date of the contract entered into therefor, is unreasonable and unjust and left said local contractors without opportunity to protect themselves against such arbitrary order.

Therefore, it is the decision of the commission that said employees, in justice to said local contractors, the members of said union, and the general public, continue and finish the work upon the stone heretofore ordered and contracted for and to be placed in said school building.

Street Railways—Worcester and Springfield, Mass.

AN EXTENDED arbitration award has been made in the case of the dispute between the Worcester Consolidated Street Railway Co., Springfield Street Railway Co., Milford, Attleboro, & Woonsocket Street Railway Co., Interstate Consolidated Street Railway Co., and Attleboro Branch Street Railway Co., and Divisions 22 and 448 of the Amalgamated Association of Street and Electric Railway Employees of America, representing upwards of 2,000 employees.

The hearings extended over a month and occupied 14 full days. Four arguments for arbitration were submitted with 17 requests of the employees and 16 of the companies.

The employees requested an increase in the maximum wage of the blue uniform men operating two-man cars from \$5.22 a day to \$6.40 a day; an increase in the one-man car differential of from 8 cents an hour to 15 cents; and an increase in the wages of the miscellaneous employees of 30 per cent. The board increases the maximum wage of the blue uniform men operating two-man cars from \$5.22 a day to \$5.44 a day. This means a weekly wage for a six-day week of \$32.64, and a yearly wage, eliminating Sundays and holidays, of \$1,653.76. The differential for the one-man car operators is not increased, but is left at 8 cents an hour. The wages of the miscellaneous employees are increased 10 cents an hour.

The blue uniform men requested a workday of 8 hours, to be completed within 11 consecutive hours. The miscellaneous employees already have an 8-hour workday. The request is granted for the regular men, but the company is allowed to make a spread of not more than 14 hours for the spare men operating additional runs. Allowances, however, are granted the spare men for this extra spread, of 15 minutes for the twelfth hour, 30 minutes for the thirteenth hour, and 45 minutes for the fourteenth hour.

In rendering its decision the board threw out of consideration the question of rate of dividends, rate of fares, and financial conditions of the company and devoted itself to the question of wages, hours, and working conditions.

The board considered the following as important in its determination of a fair, just, and reasonable wage:

1. Cost of living.
2. Standard of living.
3. Present trend of wages in all employments.
4. Percentage of wage increase or decrease since 1913, 1914, and 1915 in all employments.
5. Rates paid to conductors and motormen in United States and in cities of comparable size and larger.
6. Rates paid in New England and Massachusetts.
7. Decisions in recent arbitration cases.
8. Present average earnings in other employments and in comparable employments.
9. Character of work of conductors and motormen.
10. Percentage of married men, number in family, and average age and length of service.
11. Family budgets.
12. Economic betterment requirements as to hours per day and days per year as influencing the hourly rate.

Continuing, the board said:

A mass of oral and documentary evidence was submitted relating to wages. In March, 1922, the wage rate of the blue uniform men was 68 cents an hour. This was then reduced to 58 cents an hour and has since continued at this rate.

The board believes that it is impossible to fix a wage rate by mathematical statistics. Bare cost of living statistics are important, yet American progress and stability demand that we consider also American standards of living. Increased efficiency and production, universal and advanced education, new inventions, the war, a disposition to treat labor with more liberality and, may be, a little socialism have all combined to create an American standard of living above the bare cost of living.

The bare cost of living has increased in Massachusetts, since March, 1922, 4.4 per cent. That the standard of living has also increased must be inferred from the reports of the National Industrial Conference Board, which shows that for the last five months of 1922 there were 240 wage increases to 17 reductions, and for the year 1923, 1,267 increases and 13 reductions. The reports of the United States Bureau of Labor Statistics show that for the last five months of 1922 there were 884 increases and 38 decreases; for the year 1923, 4,577 increases and 83 decreases; and for January and February, 1924, 155 increases and 62 decreases.

The index of the National Industrial Conference Board for all wage earners—weighted—shows an increase in average hourly earnings from July, 1914, to January, 1924, of 128 per cent, in average weekly earnings of 115 per cent. The Richey index for street-railway wage rates shows an increase in hourly rates—weighted—since 1913 of 119 per cent. The Bureau of Railway Economics shows that from 1915 to November, 1923, hourly rates have increased 138 per cent and yearly rates 93 per cent, while the Railway Age says daily rates have advanced 160 per cent. The index of New York State factory employees shows the increase since 1914 has been 110 per cent. The American Electric Railway Association reports for 85 companies operating over 100 miles of track each an increase of electric-railway trainmen's wages hourly—not weighted—since 1913 of 101.58 per cent.

Rates paid to conductors and motormen on street railways in United States show 279 companies paying 58 cents or less and 35 companies more than 58 cents an hour.

The weighted average in cities over 500,000 is 65.3 cents, in cities from 200,000 to 500,000, 54.75 cents, and in cities from 100,000 to 200,000, 52.8 cents an hour.

In New England the weighted average for all companies is 61.25 cents an hour. The Holyoke rate is 63 cents and has been for two years, and the Boston rate is 70 cents. The evidence also showed that the differential between Boston and Worcester and Springfield has in the past approximated from 2 cents to 3 cents.

Arbitration cases in the United States in 1923 showed increases in street-railway wages varying from 3.8 per cent to 14.8 per cent, with no decreases.

The evidence showed that the work of the blue uniform men requires skill, education, and training, unusual hours for work, and meals at irregular times

and not in accord with the regular meals at their homes; that increased traffic and congestion in the streets has not made transportation easier; that in Springfield in 1923 a record of days lost because of injuries received while on duty, where the time lost was over seven consecutive days per man, was 1,135 days; that injuries received causing a loss of less than seven days were much more numerous; that the work, while to an extent out-of-door, is not conducive to good health, especially on the one-man cars; that the density of population per car-mile is not nearly as great in Worcester and Springfield as in Boston, and that the employment is permanent and offers opportunities for extra work not found in all other trades.

Statistics showed that in Springfield 85.6 per cent of the men are married or heads of families, and that the average number of children per family is approximately two. The average age of the motormen in Springfield is 40.15 years; in Worcester, 42.6 years; and of the conductors in Springfield, 36.37 years; in Worcester, 36.5 years; and of the one-man car operators in Springfield, 40.77 years; in Worcester, 36.6 years. The average length of service of the regular man is from 11 to 12 years and of the spare men over 5 years.

Various family budgets were submitted as follows:

	Family of 5	Family of 3.4
Employees.....	\$2, 253. 04	\$1, 836. 23
Eastern Massachusetts Street Railway.....	2, 192. 46	1, 786. 85
Boston Elevated.....	2, 836. 53	2, 311. 77
California.....	2, 138. 40	1, 742. 80
United States Bureau of Labor Statistics.....	2, 045. 00	1, 666. 67
Street railway company.....	2, 042. 25	1, 664. 04

The budget of \$2,436 for a family of four, recommended by the Boston postal employees, was also submitted.

The percentage of rent increases in Springfield for 1921-1923 for 267 of the men was 14.38 per cent, or from \$29.93 to \$34.23 a month. Including heat, the average rent is \$41.43 a month.

The board is of opinion that in determining a wage rate per hour that the average amount earned per week or per year by all the men is of very little, if any, importance, unless the average amounts are earned in a number of hours per day, days per week, and per year comparable with the usual time worked in other employments and in accord with the humane and sensible dictates of society. Society should not, and does not, require a man to work at such a rate per hour that he will be compelled to work 7 days a week and 365 days a year in order to provide for his family.

Eliminating holidays and Sundays, leaves a working year of 304 days. Certainly most people expect that their pay for these 304 days shall be sufficient to support themselves and families and that the rate per hour shall be fixed accordingly. Perhaps the permanency of the employment of the blue uniform men and the fact that they appear to average 325 days a year requires that their rate per hour should be determined by that number of days per year. However, while the fact that the employment is steady is of importance in fixing the hourly rate, yet the fact that the nature of the business allows opportunity for some to do extra work is not important.

A one-man car differential is customary in this country and is recognized by these companies. The evidence showed that the average throughout the United States approximates 5 cents. The differential in Worcester and Springfield formerly was 13 cents but was reduced in 1922 to 8 cents. In Boston it is 8 cents. Without actual experience on the cars or exhaustive evidence as to the work it is extremely difficult for a board to determine the correct difference in cents per hour between this work and the work of the men on the two-man cars. However, it is admitted that there is a difference, that the employees on these roads do not seem to care for this work by itself and that there is only one employee with responsibility on the car instead of two. Therefore, the protection of the public, both those who ride and those who do not, and good service seem to require a differential large enough to attract the older and more experienced men in the service of the company. In Worcester the length of service of one-man car operators is 11 years and in Springfield 13 years.

In considering wages for the miscellaneous employees, it is almost impossible for a board of arbitration to determine separately a proper wage for each class of work.

Miscellaneous employees perform many different classes of work and often the difference appears to be in name only. It is extremely difficult to study satisfactorily each class of work in order to determine whether or not the difference actually exists. Furthermore, men performing the same class of work may frequently receive different rates of pay.

This board therefore rules that the wage increase hereinafter granted shall be applied either to the individual wage of each man as of the date determined by this award or to any so-called equalization rate that may hereinafter be determined for any man and that during the life of this award the lowest rate thus arrived at in each class of work shall be the minimum wage for that class.

The operation of motor busses by a street railway appears to create a separate department, the importance of which will greatly increase, particularly if the street railway has a monopoly of the transportation business in the communities served. The operation of the busses differs in many ways from the operation of a trolley or express car and is carried on under very different conditions. It is essential therefore that the operators shall constitute a separate department with seniority among themselves; provided, however, that motormen or conductors if qualified be appointed as bus operators whenever vacancies occur.

The determination of the hours of labor per day, the spread of hours, the minimum wage guarantee, and the time allowances presented considerations wide of scope and worthy of deep study.

The number of hours of the operation of a street railway and the intensity of that operation are coexistent with the demands of the service and are beyond the control of the company and of the men. All men can not work at equally desirable hours or under equally desirable conditions. The men know this when they enter the service of the company and the priority system is in formal acknowledgment thereof. However, all men should have approximately an equal wage and an equal number of work hours.

The spread of hours upon a street railway could be approximately the same as in any other business were it not for the service demands of the morning and afternoon peaks and the other exigencies of the business. It is absolutely essential for a street railway to provide suitable and efficient service, and a spread of hours different from ordinary business becomes, therefore, fundamental to the proper operation of the railway.

Different schedules based on agreed time-tables for both Worcester and Springfield were submitted to the board. These schedules showed the estimated wage cost of operations and how the runs were affected by the 8 or 9 hour day, with spreads of different lengths and with the 8-hour minimum guarantee. The schedule in use, and the cost thereof, under the existing contract were also presented. A schedule submitted by the company for Worcester provided for an 8-hour day with a 12-hour spread for the regular men and a 14-hour spread for the spare men and a minimum guarantee of 8 hours pay for each job. Schedules submitted by the employees for Springfield provided for an 8-in-11 day, and an 8-in-12 day with an 8-hour minimum.

Schedules submitted for Springfield of 8 in 11 and 8 in 12 depended for their practicability upon an agreement by the regular men that they would run as extras the cars necessary to take care of the afternoon peak. The estimated cost of all the schedules varied greatly and depended to a great extent upon what would be the decisions of the board as to the so-called bonuses or allowances.

Therefore it was impossible to arrive at any accurate estimate of wage cost of operation without a decision as to all three of the problems of hours, spread, and allowances. The board believes that it is most important that these three matters be considered together. They are coordinate and dependent each upon the other. It was apparent, moreover, that the 8-hour day did not in itself work injustice to the companies, and that all the elements in favor of its adoption, which are causing it to become more general in other employments, were present in these cases.

The award of this board, upon the requests concerning the hours of labor per day, the length of the spread, the so-called bonuses or allowances, and the minimum wage guaranty, was determined after thorough study of the problems of each question separately and their common dependency. The decision upon each was tempered by the consideration of each of the others, and was based upon the facts and evidence presented as applied to those cases. There was full recognition of the necessities of the street railway business and the board adopted as one of its fundamentals the principle that there should be so far as possible in cases of this kind an equal division of the wage and hours of work.

The board, therefore, has established as its basic day 8 hours' work to be performed within 11 consecutive hours and has made this basic day applicable to all regular runs, but has allowed the companies under certain conditions and with the payment of certain allowances, and with the consent of the men who relinquish their rights given them under the Massachusetts law for a basic day of 9 hours work to be performed in 11 hours, to arrange additional runs to be completed within not more than 14 consecutive hours.

This award is effective from January 1, 1924, to and including May 31, 1925, and the wages of each employee shall be increased during that period 10 cents per hour. The increase of 10 cents per hour from January 1, 1924, to and including June 27, 1924, shall be computed upon the basis of pay-roll hours of each employee and such payments shall be made to each employee on or before August 11, 1924. The new contracts between all the parties to this arbitration shall be effective from and after June 28, 1924, to and including May 31, 1925.

Many minor changes were made. The contract under the award was made effective as of January 1, and was to continue through May 31, 1925.

EMPLOYMENT AND UNEMPLOYMENT

Employment in Selected Industries in September, 1924

EMPLOYMENT in manufacturing industries increased 2.1 per cent in September, definitely confirming the upward trend which was reported in August. Aggregate earnings of employees in September increased 3.3 per cent, and per capita earnings increased 1.2 per cent. These increases in employment, pay-roll totals, and per capita earnings over August accentuate the increases which were shown for the same items in August as compared with July.

These unweighted figures, presented by the United States Department of Labor through the Bureau of Labor Statistics, are based on reports from 8,820 establishments in 52 industries, covering 2,548,989 employees whose total earnings during one week in September were \$64,943,349. The same establishments in August reported 2,495,787 employees and total pay roll of \$62,849,819.

Eight of the nine geographic divisions show increases in employment and seven of the nine show increases in pay-roll totals. The New England States led in both increased employment and pay-roll totals with a gain of 3.2 per cent in employment and 5.4 per cent in earnings. The South Atlantic States showed an increase of 3.1 per cent in employees and 3.6 per cent in pay roll. The West North Central States showed a gain of 2.5 per cent in both employment and earnings, and the Middle Atlantic States showed a gain of 2.4 per cent in number of employees and a gain of 4.3 per cent in earnings. The Mountain division alone showed a decrease in both employment and earnings, the Pacific States showed a small decrease of 0.1 per cent in pay-roll totals and a gain of 0.8 per cent in employment.

Comparison of Employment in September, 1924, and August, 1924

THE continued improvement in conditions in manufacturing industries is shown by comparisons of recent changes from month to month. Between June and July only 7 industries showed increases in employment and only 5 industries showed increases in pay-roll totals. Between July and August, 26 industries showed increases in employment and 35 industries showed increases in pay-roll totals. Between August and September, 39 of the 52 industries showed increases in employment and 41 industries showed increases in earnings.

The fertilizer industry led in increased employment and earnings with a seasonal increase of over 37 per cent in employees and an increase of 30 per cent in earnings. Rubber boots and shoes showed a gain of 19.3 per cent in employees and 18.2 per cent in earnings due to a resumption of operations after closing for repairs and vacations, as reported in August. Confectionery showed an increase of 16.1 per cent in employment and 19.8 per cent in pay rolls; machine

tools reported an increase of 12.6 per cent and 13 per cent in employees and earnings, respectively; and the shirts and collars industry increased 10.4 per cent and 19.8 per cent in both items, respectively. Ice cream showed the largest per cent of decrease in both employment and earnings, 6.9 and 9.6, respectively. Brick showed a decrease of 3.2 per cent in employees and 4.8 per cent in earnings, and stamped ware showed a decrease of 2.2 per cent in employment with an increase of 2.5 per cent in earnings. These were the only decreases of over 2 per cent in employment.

Ten of the 12 groups of industries showed increases in employment and 11 of the 12 groups showed increases in pay-roll totals. The miscellaneous group, which includes the automobile tire, rubber boot and shoe, and electrical machinery industries, showed the largest increase in employment, 4 per cent; and earnings increased 5.4 per cent. The leather group showed an increase of 3.8 per cent in employment and 5.4 per cent in earnings. The textile group showed an increase of 3.5 per cent in employees and 6.3 per cent in earnings. The iron and steel group showed a gain of 1.8 per cent in employees and 2.5 per cent in pay roll. The stone, clay, and glass group showed a decrease in both items of less than 1 per cent.

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

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN AUGUST AND SEPTEMBER, 1924

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		August, 1924	Septem-ber, 1924		August, 1924	September, 1924	
Food and kindred products.....	1,034	178,568	178,318	+2.7	\$4,268,696	\$4,439,307	+4.0
Slaughtering and meat packing	75	67,676	67,182	-0.7	1,646,731	1,647,917	+0.1
Confectionery.....	258	28,550	33,142	+16.1	523,167	626,674	+19.8
Ice cream.....	91	7,072	6,582	-6.9	226,222	204,594	-9.6
Flour.....	295	14,869	15,250	+2.6	392,715	413,228	+5.2
Baking.....	301	45,297	45,782	+1.1	1,164,421	1,230,591	+5.7
Sugar refining cane.....	14	10,104	10,380	+2.7	315,440	316,303	+0.3
Textiles and their products.....	1,678	489,581	506,744	+3.5	9,246,739	9,827,755	+6.3
Cotton goods.....	332	164,766	168,797	+2.4	2,491,798	2,633,844	+5.7
Hosiery and knit goods.....	263	67,010	70,446	+5.1	1,080,253	1,154,505	+6.9
Silk goods.....	203	50,202	51,463	+2.5	1,026,201	1,053,917	+2.7
Woolen and worsted goods.....	150	58,784	62,667	+6.6	1,320,135	1,433,680	+8.6
Carpets and rugs.....	31	19,556	20,092	+2.7	444,813	495,959	+11.5
Dyeing and finishing textiles.....	88	25,405	27,135	+6.8	579,982	648,614	+11.8
Clothing, men's.....	263	58,418	57,308	-1.9	1,438,706	1,411,378	-1.9
Shirts and collars.....	95	19,082	21,058	+10.4	262,243	314,070	+19.8
Clothing, women's.....	176	15,492	16,190	+4.5	387,429	426,207	+10.0
Millinery and lace goods.....	77	10,866	11,588	+6.6	215,179	255,581	+18.8
Iron and steel and their prod-ucts.....	1,533	529,311	538,662	+1.8	14,488,520	14,845,627	+2.5
Iron and steel.....	213	233,957	241,031	+3.0	6,603,084	6,818,146	+3.3
Structural ironwork.....	143	18,880	18,821	-0.3	516,528	508,174	-1.6
Foundry and machine-shop products.....	726	171,241	169,123	-1.2	4,600,083	4,564,013	-0.8
Hardware.....	56	30,373	31,458	+3.6	689,803	721,829	+4.6
Machine tools.....	172	19,010	21,412	+12.6	517,964	585,262	+13.0
Steam fittings and steam and hot-water heating apparatus.....	137	40,791	40,970	+0.4	1,158,209	1,194,493	+3.1
Stoves.....	86	15,059	15,847	+5.2	402,849	453,710	+12.6
Lumber and its products.....	1,057	196,244	198,370	+1.1	4,204,331	4,311,638	+2.6
Lumber, sawmills.....	433	113,848	113,868	(1)	2,278,702	2,349,587	+3.1
Lumber, millwork.....	259	31,572	31,666	+0.3	766,879	745,774	-2.8
Furniture.....	365	50,824	52,836	+4.0	1,158,750	1,216,277	+5.0

¹ Less than one-tenth of 1 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN AUGUST AND SEPTEMBER, 1924—Concluded

Industry	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		August, 1924	Septem- ber, 1924		August, 1924	September, 1924	
Leather and its products	341	114,593	118,955	+3.8	\$2,639,270	\$2,780,850	+5.4
Leather.....	124	23,910	25,195	+5.4	588,740	608,416	+3.3
Boots and shoes.....	217	90,683	93,760	+3.4	2,050,530	2,172,434	+5.9
Paper and printing	781	146,111	149,368	+2.2	4,415,163	4,595,494	+4.1
Paper and pulp.....	181	49,585	50,055	+0.9	1,275,861	1,311,530	+2.8
Paper boxes.....	153	15,242	15,946	+4.6	315,610	340,980	+8.0
Printing, book and job.....	247	38,104	39,280	+3.1	1,230,215	1,290,815	+4.9
Printing, newspaper.....	200	43,180	44,087	+2.1	1,593,477	1,652,169	+3.7
Chemicals and allied products	260	72,721	74,320	+2.2	2,130,573	2,131,853	+0.1
Chemicals.....	108	23,661	24,081	+1.8	622,384	630,279	+1.3
Fertilizers.....	103	5,389	7,393	+37.2	107,557	139,729	+29.9
Petroleum refining.....	49	43,671	42,846	-1.9	1,400,632	1,361,845	-2.8
Stone, clay, and glass products	604	102,621	101,779	-0.8	2,674,385	2,663,155	-0.4
Cement.....	77	24,886	24,529	-1.4	725,902	722,894	-0.4
Brick, tile, and terra cotta.....	340	32,821	31,765	-3.2	854,803	814,130	-4.8
Pottery.....	49	11,776	11,752	-0.2	290,392	294,310	+1.3
Glass.....	138	33,138	33,733	+1.8	803,288	831,821	+3.6
Metal products, other than iron and steel	48	12,104	11,832	-2.2	261,056	267,496	+2.5
Stamped and enameled ware.....	48	12,104	11,832	-2.2	261,056	267,496	+2.5
Tobacco products	187	41,652	42,813	+2.8	722,383	754,103	+4.4
Chewing and smoking tobacco and snuff.....	34	8,769	9,095	+3.7	137,064	146,234	+6.7
Cigars and cigarettes.....	153	32,883	33,718	+2.5	585,319	607,869	+3.9
Vehicles for land transporta- tion	917	420,516	423,114	+0.6	12,376,675	12,611,779	+1.9
Automobiles.....	225	250,024	251,974	+0.8	7,507,290	7,801,337	+3.9
Carriages and wagons.....	42	2,394	2,568	+7.3	56,051	61,998	+10.6
Car building and repairing, electric-railroad.....	188	17,732	17,673	-0.3	526,239	519,301	-1.3
Car building and repairing, steam-railroad.....	462	150,366	150,899	+0.4	4,287,095	4,229,143	-1.4
Miscellaneous industries	380	196,765	204,714	+4.0	5,422,028	5,714,292	+5.4
Agricultural implements.....	102	18,253	18,722	+2.6	474,355	482,928	+1.8
Electrical machinery, appar- atus and supplies.....	129	91,820	93,021	+1.3	2,472,787	2,523,937	+2.1
Pianos and organs.....	33	5,889	6,051	+2.8	167,430	182,892	+9.2
Rubber boots and shoes.....	10	9,328	11,126	+19.3	217,153	256,653	+18.2
Automobile tires.....	72	48,760	53,246	+9.2	1,426,693	1,614,509	+13.2
Shipbuilding, steel.....	34	22,715	22,548	-0.7	663,610	653,373	-1.5
Total	8,820	2,495,787	2,548,989	+2.1	62,849,819	64,943,349	+3.3

Recapitulation by Geographic Divisions

Geographic division							
New England.....	1,104	346,220	357,177	+3.2	\$7,954,539	\$8,387,907	+5.4
Middle Atlantic.....	2,246	749,580	767,770	+2.4	19,855,494	20,718,290	+4.3
East North Central.....	2,347	773,945	786,244	+1.6	21,512,006	22,082,488	+2.7
West North Central.....	799	135,852	139,243	+2.5	3,301,610	3,383,719	+2.5
South Atlantic.....	916	208,645	215,023	+3.1	3,792,088	3,928,895	+3.6
East South Central.....	401	89,246	90,033	+0.9	1,661,675	1,679,614	+1.1
West South Central.....	312	65,074	65,694	+1.0	1,336,658	1,337,931	+0.1
Mountain.....	145	25,795	25,582	-0.8	670,622	662,378	-1.2
Pacific.....	550	101,430	102,223	+0.8	2,765,127	2,762,127	-0.1
Total	8,820	2,495,787	2,548,989	+2.1	62,849,819	64,943,349	+3.3

Employment on Class I Railroads

July 15, 1924.....		1,756,871			¹ \$229,429,757		
August 15, 1924.....		1,772,704		+0.1	² 232,414,352		+1.3

¹ Amount of pay roll for 1 month.

Comparison of Employment in September, 1924, and September, 1923

REPORTS are available from 6,423 establishments for a comparison of employment and pay-roll totals between September, 1924, and September, 1923. These reports, from identical establishments in the two years, show a decrease in 1924 of 13 per cent in employment, a decrease of 14.2 per cent in earnings, and a decrease of 1.4 per cent in per capita earnings. The total number of employees covered by this comparison in September, 1924, was 1,931,688, whose earnings in one week amounted to \$49,894,764, while the number of employees in September, 1923, was 2,219,315 and their earnings in one week amounted to \$58,134,454.

Eight of the nine geographic divisions show a considerable decrease in the yearly comparison in both employees and earnings, the decreases in employment ranging from 7.2 per cent in the West South Central States to 17.6 per cent in the New England division. The New England States also showed the largest decrease in pay-roll totals, 21.4 per cent, while the smallest decrease in earnings was shown for the West North Central States, 4.7 per cent. The Mountain Division was the only group showing an increase in either employment or earnings in the year interval, with an increase of 4.7 per cent in employment and 3.6 per cent in pay-roll totals.

There were decreases in employment in September, 1924, as compared with September, 1923, in 46 of the 52 industries and decreases in pay-roll totals in 39 industries. The rubber boot and shoe industry led in decreased employment, 42 per cent and decreased pay-roll totals, 51.1 per cent. The cotton goods, shirts and collars, foundry and machine-shop products, machine tools, agricultural implements and steel shipbuilding all report decreases in employment of over 20 per cent in the year's time.

There were increases in employment in September, 1924, as compared with September, 1923, in 6 industries, and increases in earnings in 11 industries. The automobile-tire industry led in increased employment and earnings with percentages of 32.5 and 40.8, respectively. Cane sugar refining showed an increase of 13.9 per cent in employment and 14.1 per cent in pay-roll totals. The printing and the tobacco industries also showed smaller increases in both items, while the women's clothing, baking, confectionery, paper and pulp, and dyeing and finishing textiles industries showed increases in earnings but decreases in number of employees.

Ten of the 12 groups show decreases in both employment and earnings in the 12-month period, the iron and steel group leading with a decrease of 20 per cent in employees and a decrease of 23.1 per cent in pay rolls. The vehicles group follows with decreases of 16.5 per cent and 18.9 per cent in employment and in earnings, respectively, and the textile group shows a loss of 15 per cent in number of employees and 16.9 per cent in earnings. The paper and printing and the tobacco group of industries show slight gains in employees and in earnings in the year interval.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN SEPTEMBER, 1923, AND SEPTEMBER, 1924

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		Septem-ber, 1923	Septem-ber, 1924		September, 1923	September, 1924	
Food and kindred products	672	142,448	134,846	-5.8	\$3,542,792	\$3,462,466	-2.3
Slaughtering and meat packing.....	72	71,765	65,975	-8.1	1,751,097	1,617,975	-7.6
Confectionery.....	87	14,254	13,692	-3.9	259,133	265,347	+2.4
Ice cream.....	24	2,306	2,177	-5.6	66,382	63,331	-4.6
Flour.....	247	13,993	12,657	-9.5	359,783	344,062	-4.4
Baking.....	232	32,135	31,236	-2.8	859,170	889,678	+3.6
Sugar refining, cane.....	10	7,995	9,109	+13.9	247,227	282,073	+14.1
Textiles and their products	1,272	457,318	388,926	-15.0	9,329,490	7,754,066	-16.9
Cotton goods.....	231	151,192	116,489	-23.0	2,694,937	1,810,855	-32.8
Hosiery and knit goods.....	201	60,345	51,247	-15.1	1,016,202	828,464	-18.5
Silk goods.....	184	49,913	46,939	-6.0	1,053,483	968,182	-8.1
Woolen and worsted goods.....	131	50,042	46,230	-7.6	1,176,246	1,084,993	-7.8
Carpets and rugs.....	20	20,132	18,081	-10.2	555,625	443,923	-20.1
Dyeing and finishing textiles.....	62	24,272	23,671	-2.5	550,803	556,378	+1.0
Clothing, men's.....	179	55,629	48,231	-13.3	1,404,843	1,253,763	-10.8
Shirts and collars.....	82	21,871	17,255	-21.1	331,553	257,739	-22.3
Clothing, women's.....	121	13,614	11,695	-14.1	320,010	340,115	+6.3
Millinery and lace goods.....	61	10,308	9,088	-11.8	225,788	209,684	-7.1
Iron and steel and their products	1,159	485,552	390,610	-20.0	14,044,794	10,800,574	-23.1
Iron and steel.....	154	223,094	185,135	-17.0	6,427,165	5,218,993	-18.8
Structural ironwork.....	126	16,374	14,581	-11.0	443,140	392,946	-11.3
Foundry and machine-shop products.....	519	169,518	122,983	-27.5	5,041,327	3,344,735	-33.7
Hardware.....	26	15,246	13,798	-9.5	369,127	309,461	-16.2
Machine tools.....	150	20,806	16,125	-22.5	580,508	431,245	-25.7
Steam fittings and steam hot-water heating apparatus.....	105	25,433	23,862	-6.2	766,830	710,732	-7.3
Stoves.....	79	15,081	14,126	-6.3	416,697	392,462	-5.8
Lumber and its products	601	121,588	114,491	-5.8	2,682,692	2,586,292	-3.5
Lumber, sawmills.....	190	59,909	55,646	-7.1	1,235,799	1,139,289	-7.9
Lumber, millwork.....	166	24,011	23,082	-3.9	583,209	574,227	-1.5
Furniture.....	245	37,668	35,763	-5.1	862,684	822,776	-4.6
Leather and its products	277	114,378	104,094	-9.0	2,424,665	2,424,968	-0.1
Leather.....	118	27,750	24,774	-10.7	695,822	598,869	-13.9
Boots and shoes.....	159	86,628	79,320	-8.4	1,928,843	1,826,099	-5.3
Paper and printing	648	116,388	118,357	+1.7	3,489,842	3,655,081	+4.7
Paper and pulp.....	137	41,633	41,313	-0.8	1,073,340	1,084,745	+1.1
Paper boxes.....	138	13,884	13,279	-4.4	281,089	280,591	-0.2
Printing, book and job.....	198	25,168	26,120	+3.8	832,536	879,795	+5.7
Printing, newspaper.....	175	35,703	37,645	+5.4	1,302,877	1,409,950	+8.2
Chemicals and allied products	169	48,506	42,616	-12.1	1,330,447	1,200,827	-9.7
Chemicals.....	63	14,097	12,606	-10.6	364,796	338,772	-7.1
Fertilizers.....	73	6,671	5,886	-11.8	135,547	116,067	-14.4
Petroleum refining.....	32	27,738	24,124	-13.0	830,104	745,988	-10.1
Stone, clay, and glass products	506	87,449	79,166	-9.5	2,274,483	2,062,756	-9.3
Cement.....	61	17,248	16,684	-3.3	509,397	487,317	-4.3
Brick, tile, and terra cotta.....	276	24,134	22,370	-7.3	628,952	573,607	-8.8
Pottery.....	41	9,567	9,458	-1.1	250,055	240,281	-3.9
Glass.....	128	36,500	30,654	-16.0	886,169	761,551	-14.1
Metal products, other than iron and steel	30	9,869	8,363	-15.3	214,954	191,443	-10.9
Stamped and enameled ware.....	30	9,869	8,363	-15.3	214,954	191,443	-10.9
Tobacco products	160	31,038	31,224	+0.6	532,938	563,043	+5.6
Chewing and smoking tobacco and snuff.....	26	2,850	2,937	+3.1	40,792	45,818	+12.3
Cigars and cigarettes.....	134	28,188	28,287	+0.4	492,146	517,225	+5.1
Vehicles for land transportation	618	401,271	334,893	-16.5	12,394,604	10,050,338	-18.9
Automobiles.....	163	251,068	211,562	-15.7	8,107,539	6,600,755	-18.6
Carriages and wagons.....	34	2,307	1,947	-15.6	52,978	47,623	-10.1
Car building and repairing, electric-railroad.....	168	17,131	15,137	-11.6	483,029	436,513	-9.6
Car building and repairing, steam-railroad.....	253	130,765	106,247	-18.7	3,751,058	2,965,447	-20.9
Miscellaneous industries	311	203,510	184,102	-9.5	5,672,753	5,192,910	-8.5
Agricultural implements.....	71	19,483	15,426	-20.8	503,678	404,577	-19.7
Electrical machinery, apparatus, and supplies.....	114	97,752	85,102	-12.9	2,686,882	2,327,154	-13.4
Pianos and organs.....	23	5,972	5,248	-12.1	170,696	160,774	-5.8
Rubber boots and shoes.....	8	16,602	9,637	-42.0	465,206	227,376	-51.1
Automobile tires.....	62	36,743	48,668	+32.5	1,059,724	1,491,653	+40.8
Shipbuilding, steel.....	33	26,958	20,021	-25.7	786,567	581,376	-26.1
Total	6,423	2,219,315	1,931,688	-13.0	58,134,454	49,894,764	-14.2

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COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN SEPTEMBER, 1923, AND SEPTEMBER, 1924—Concluded

Recapitulation by Geographic Divisions

Geographic division	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		September, 1923	September, 1924		September, 1923	September, 1924	
New England.....	779	305,850	251,874	-17.6	\$7,446,232	\$5,856,269	-21.4
Middle Atlantic.....	1,775	716,087	618,306	-13.7	19,476,813	16,747,411	-14.0
East North Central.....	1,768	720,694	629,657	-12.6	20,828,993	17,807,902	-14.5
West North Central.....	579	111,561	102,733	-7.9	2,657,820	2,533,880	-4.7
South Atlantic.....	663	171,884	153,961	-10.4	3,206,698	2,839,594	-11.4
East South Central.....	236	58,932	53,111	-9.9	1,115,544	974,680	-12.6
West South Central.....	176	43,824	40,688	-7.2	967,442	874,769	-9.6
Mountain.....	102	15,683	16,423	+4.7	425,822	441,232	+3.6
Pacific.....	345	74,800	64,935	-13.2	2,009,090	1,819,027	-9.5
Total.....	6,428	2,219,315	1,981,688	-13.0	58,134,454	49,894,764	-14.2

Employment on Class I Railroads

August 15, 1923.....	1,957,055	-----	¹ \$263,145,797	-----
August 15, 1924.....	1,772,704	-9.4	¹ 232,414,352	-11.7

¹ Amount of pay roll for 1 month.

Per Capita Earnings

PER capita earnings increased in September, 1924, as compared with August, in 37 of the 52 industries covered by the bureau's survey. The largest increase, 11.4 per cent, was shown in the millinery and lace goods industry, followed by a gain of 8.5 per cent in both the carpets and rugs and the shirts and collars industries. The stove industry showed a gain of 7 per cent, the piano and organ industry a gain of 6.3 per cent, and the women's clothing industry a gain of 5.3 per cent. Stamped ware, dyeing and finishing textiles, and baking each showed an increase of over 4 per cent in per capita earnings. The greatest decreases in per capita earnings were: In fertilizers 5.3 per cent, in lumber (millwork) 3 per cent, in ice cream 2.8 per cent, and in cane sugar refining 2.4 per cent.

Comparing per capita earnings in September, 1924, and in September, 1923, increases are found in 29 of the 52 industries, women's clothing leading with an increase of 23.7 per cent. The chewing and smoking tobacco and snuff industry showed a gain of 9 per cent; pianos and organs, 7.2 per cent; confectionery, 6.6 per cent; carriages and wagons and baking, 6.5 per cent, respectively; and automobile tires, 6.3 per cent. The rubber boot and shoe industry showed the greatest decrease in per capita earnings in the 12-month period, 15.8 per cent. Cotton goods showed a decrease of 12.7 per cent and carpets and rugs a loss of 11.1 per cent. Foundry and machine-shop products showed a decrease of 8.5 per cent in the year interval.

COMPARISON OF PER CAPITA EARNINGS SEPTEMBER, 1924, WITH AUGUST, 1924,
AND SEPTEMBER, 1923

Industry	Per cent of change September, 1924, compared with—		Industry	Per cent of change September, 1924, compared with—	
	August, 1924	September, 1923		August, 1924	September, 1923
Millinery and lace goods.....	+11.4	+5.3	Cigars and cigarettes.....	+1.3	+4.7
Carpets and rugs.....	+8.5	-11.1	Hardware.....	+1.1	-7.4
Shirts and collars.....	+8.5	-1.5	Cement.....	+1.0	-1.1
Stoves.....	+7.0	+0.5	Furniture.....	+1.0	+0.5
Pianos and organs.....	+6.3	+7.2	Slaughtering and meat packing.....	+0.8	+0.5
Clothing, women's.....	+5.3	+23.7	Electrical machinery apparatus and supplies.....	+0.7	-0.5
Stamped and enameled ware.....	+4.8	+5.1	Foundry and machine-shop products.....	+0.5	-8.5
Dyeing and finishing textiles.....	+4.7	+3.6	Machine tools.....	+0.3	-4.2
Baking.....	+4.6	+6.5	Iron and steel.....	+0.2	-2.2
Automobile tires.....	+3.6	+6.3	Silk goods.....	+0.2	-2.3
Confectionery.....	+3.2	+6.6	Clothing, men's.....	(1)	+2.9
Cotton goods.....	+3.2	-12.7	Chemicals.....	-0.5	+3.8
Paper boxes.....	+3.2	+4.3	Agricultural implements.....	-0.8	+1.5
Automobiles.....	+3.1	-3.4	Shipbuilding, steel.....	-0.8	-0.5
Carriages and wagons.....	+3.1	+6.5	Petroleum refining.....	-0.9	+3.3
Lumber, sawmills.....	+3.0	-0.8	Rubber boots and shoes.....	-0.9	-15.8
Chewing and smoking tobacco and snuff.....	+2.9	+9.0	Car building and repairing, electric-railroad.....	-1.0	+2.3
Steam fittings and steam and hot-water heating apparatus.....	+2.7	-1.2	Structural ironwork.....	-1.3	-0.4
Flour.....	+2.6	+5.7	Brick, tile, and terra cotta.....	-1.6	-1.6
Boots and shoes.....	+2.5	+3.4	Car building and repairing, steam-railroad.....	-1.7	-2.7
Woolen and worsted goods.....	+1.9	-0.2	Leather.....	-1.9	-3.6
Paper and pulp.....	+1.8	+1.9	Sugar refining, cane.....	-2.4	+0.2
Printing, book and job.....	+1.8	+1.8	Ice cream.....	-2.8	+1.0
Glass.....	+1.7	+2.3	Lumber, millwork.....	-3.0	+2.4
Hosiery and knit goods.....	+1.7	-4.0	Fertilizer.....	-5.3	-3.0
Printing, newspaper.....	+1.6	+2.6			
Pottery.....	+1.5	-2.8			

¹ No change.

Time and Capacity Operation

FULL-time and full-capacity operation again showed an increase in September according to reports in percentage terms received from over 6,400 establishments. The establishments in operation were making an average of 91 per cent of full time as compared with 88 per cent in August and 87 per cent in July. The same establishments were operating 79 per cent of full capacity as compared with 77 per cent in August and 75 per cent in July. This is a gain of 3 per cent in both full-time and full-capacity operation over the August report. Four per cent of the reporting establishments were idle, 60 per cent were operating on a full-time schedule and 36 per cent on a part-time schedule, while 38 per cent had a full normal number of employees and 59 per cent were operating with reduced force.

FULL AND PART TIME AND FULL AND PART CAPACITY OPERATION IN MANUFACTURING ESTABLISHMENTS IN SEPTEMBER, 1924

Industry	Establishments reporting		Per cent of establishments operating—		Average per cent of full time operated in establishments operating	Per cent of establishments operating—		Average per cent of full capacity operated in establishments operating
	Total number	Per cent idle	Full time	Part time		Full capacity	Part capacity	
Food and kindred products	772	1	66	33	91	42	57	83
Slaughtering and meat packing.....	37		51	49	91	32	68	83
Confectionery.....	199	1	68	31	94	31	68	80
Ice cream.....	57		82	18	96	33	67	82
Flour.....	258	3	43	53	81	44	53	82
Baking.....	212	(1)	88	12	97	51	49	88
Sugar refining, cane.....	9		78	22	90	89	11	96
Textiles and their products	1,170	6	52	42	89	34	60	79
Cotton goods.....	284	12	47	41	86	45	43	85
Hosiery and knit goods.....	149	5	43	52	84	23	71	73
Silk goods.....	143	6	55	38	95	28	66	78
Woolen and worsted goods.....	158	1	68	30	93	39	60	82
Carpets and rugs.....	22	9	41	50	83	27	64	66
Dyeing and finishing textiles.....	83	1	37	61	84	14	84	70
Clothing, men's.....	165	3	58	39	91	34	63	80
Shirts and collars.....	43	5	19	47	89	44	51	81
Clothing, women's.....	82	5	61	34	92	37	59	79
Millinery and lace goods.....	41	2	39	59	80	32	66	70
Iron and steel and their products	1,233	2	49	49	87	19	79	68
Iron and steel.....	157	11	32	57	78	17	73	69
Structural ironwork.....	110		75	25	95	29	71	76
Foundry and machine-shop products.....	582	2	48	51	87	17	82	66
Hardware.....	42		26	74	87	7	93	74
Machine tools.....	155	1	53	46	89	6	92	49
Steam fittings and steam and hot-water heating apparatus.....	114		58	42	92	36	64	84
Stoves.....	73	3	45	52	86	27	70	80
Lumber and its products	799	4	66	30	93	52	44	88
Lumber, sawmills.....	347	7	67	26	93	65	28	92
Lumber, millwork.....	186	2	78	20	96	59	40	88
Furniture.....	266	1	57	42	91	30	68	82
Leather and its products	236	4	67	29	93	28	67	79
Leather.....	94	5	71	23	94	24	70	71
Boots and shoes.....	142	4	64	32	92	31	65	83
Paper and printing	553	2	74	25	95	58	40	90
Paper and pulp.....	128	7	59	34	93	55	33	90
Paper boxes.....	117		64	36	92	40	60	86
Printing, book and job.....	182		72	28	95	50	50	86
Printing, newspaper.....	126		99	1	100	91	9	93
Chemicals and allied products	167	5	67	28	91	38	57	76
Chemicals.....	67	4	67	28	93	22	73	73
Fertilizers.....	51	10	49	41	82	22	69	60
Petroleum refining.....	49		86	14	97	78	22	94
Stone, clay, and glass products	486	10	62	28	91	43	47	82
Cement.....	63	2	89	10	99	79	19	97
Brick, tile, and terra cotta.....	265	10	84	26	90	43	47	83
Pottery.....	43		44	56	87	37	63	83
Glass.....	115	17	50	32	87	25	57	71
Metal products other than iron and steel	83	3	52	45	92	18	79	69
Stamped and enameled ware.....	33	3	52	45	92	18	79	69
Tobacco products	109		68	32	94	30	70	81
Chewing and smoking tobacco and snuff.....	23		61	39	96	26	74	76
Cigars and cigarettes.....	86		70	30	94	31	69	82
Vehicles for land transportation	661	1	66	33	92	46	53	81
Automobiles.....	166	4	36	60	81	13	83	63
Carriages and wagons.....	30	3	67	30	92	37	60	69
Car building and repairing, electric-railroad.....	135		93	7	99	76	24	94
Car building and repairing, steam-railroad.....	320	(1)	69	31	95	51	48	86
Miscellaneous industries	243	4	57	39	91	27	69	73
Agricultural implements.....	56	11	39	50	89	11	79	59
Electrical machinery, apparatus, and supplies.....	77		60	40	91	25	75	74
Pianos and organs.....	23		78	22	94	61	39	91
Rubber boots and shoes.....	8		25	75	87	13	88	77
Automobile tires.....	59	7	54	39	91	37	56	83
Shipbuilding, steel.....	20		90	10	97	15	85	50
Total	6,462	4	60	36	91	38	59	79

¹ Less than one-half of 1 per cent.

Wage Changes

DURING the month ending September 15 wage rate increases were reported by 16 establishments in 7 industries, and wage rate decreases were reported by 67 establishments in 17 industries.

The increases, averaging 8.6 per cent, indicate no general trend in any group of industries and affected only 657 employees, or 29 per cent of the total number of employees in the establishments concerned. The decreases, which averaged 8.8 per cent, affected 20,000 employees, or 74 per cent of the total employees in the establishments concerned. Approximately two-thirds of the number affected by the decreases were in the textile group, the cotton goods industry reporting 87 per cent of the decreases in that group.

WAGE ADJUSTMENT OCCURRING BETWEEN AUGUST 15 AND SEPTEMBER 15, 1924

Industry	Establishments		Amount of increase or decrease in wage rates		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
<i>Increases</i>							
			<i>Per cent</i>	<i>Per cent</i>			
Confectionery.....	258	2	10	10.0	119	33	(1)
Silk goods.....	203	1	2	2.0	41	13	(1)
Lumber, millwork.....	259	1	10	10.0	52	33	(1)
Furniture.....	365	3	10	10.0	139	48	(1)
Printing, book and job.....	247	6	5-21.7	9.0	108	17	(1)
Printing, newspaper.....	200	2	6.3-11	7.6	56	16	(1)
Tobacco, cigars, and cigarettes.....	153	1	7.5	7.5	142	87	(1)
<i>Decreases</i>							
			<i>Per cent</i>	<i>Per cent</i>			
Cotton goods.....	332	19	5-12.5	9.4	11,129	91	7
Hosiery and knit goods.....	263	4	7-10	8.4	1,259	49	2
Silk goods.....	203	1	7	7.0	272	71	1
Clothing, men's.....	263	3	10-20	12.7	88	81	(1)
Iron and steel.....	213	8	1.3-4	3.4	1,899	44	1
Foundry and machine-shop products.....	726	2	7-10	9.7	656	93	(1)
Steam fittings and steam and hot-water heating apparatus.....	137	1	10	10.0	75	53	(1)
Stoves.....	86	1	6	6.0	90	23	1
Lumber, sawmills.....	433	6	5-12.5	9.9	806	54	1
Leather.....	124	3	5-10	9.8	756	87	(1)
Boots and shoes, not including rubber.....	217	1	3	3.0	60	30	(1)
Paper and pulp.....	181	1	7-10	8.6	1,012	96	2
Brick and tile.....	340	13	10-20	10.3	1,299	99	(1)
Glass.....	138	1	10	10.0	196	95	(1)
Automobiles.....	225	1	3	3.0	200	28	(1)
Agricultural implements.....	102	1	10	10.0	50	23	(1)
Shipbuilding, steel.....	34	1	22.5	22.5	78	100	(1)

¹ Less than one-half of 1 per cent.

Index of Employment in Manufacturing Establishments

INDEX numbers for September, 1924, for each of the 52 industries surveyed by the Bureau of Labor Statistics, together with a general index for the combined 12 groups of industries, appear in the following table in comparison with index numbers for August, 1924, and September, 1923.

The general index of employment of the Bureau of Labor Statistics for September, 1924, is 86.7.

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES, SEPTEMBER, 1924, AS COMPARED WITH AUGUST, 1924, AND SEPTEMBER, 1923

[Monthly average 1923=100.0]

Industry	1923			1924		
	September	August	September	September	August	September
General index	99.8	85.0	86.7			
Food and kindred products	104.5	94.6	97.1			
Slaughtering and meat packing.....	102.7	90.5	89.9			
Confectionery.....	109.6	85.2	98.9			
Ice cream.....	104.1	112.4	104.6			
Flour.....	106.5	94.9	97.4			
Baking.....	103.5	100.8	101.9			
Sugar refining, cane.....	94.4	103.3	106.1			
Textiles and their products	97.7	80.7	83.5			
Cotton goods.....	95.1	74.5	76.3			
Hosiery and knit goods.....	97.2	79.8	83.9			
Silk goods.....	99.4	91.2	93.5			
Woolen and worsted goods.....	97.9	82.3	87.7			
Carpets and rugs.....	100.0	82.7	84.9			
Dyeing and finishing textiles.....	96.8	78.8	84.1			
Clothing, men's.....	100.4	89.3	87.6			
Shirts and collars.....	96.0	69.7	77.0			
Clothing, women's.....	101.9	81.9	85.6			
Millinery and lace goods.....	98.9	82.3	87.7			
Iron and steel and their products	101.8	78.9	79.9			
Iron and steel.....	102.4	82.1	84.6			
Structural ironwork.....	103.5	91.9	91.6			
Foundry and machine-shop products.....	102.3	75.4	74.5			
Hardware.....	100.0	83.1	86.1			
Machine tools.....	100.8	68.2	76.8			
Steam fittings and steam and hot-water heating apparatus.....	101.4	94.4	94.8			
Stoves.....	97.7	81.3	85.5			
Lumber and its products	102.5	92.6	93.4			
Lumber, sawmills.....	103.7	92.7	92.7			
Lumber, millwork.....	100.0	97.8	98.1			
Furniture.....	99.0	89.1	92.7			
Leather and its products	98.3	87.3	90.6			
Leather.....	96.4	82.0	86.4			
Boots and shoes.....	99.2	89.0	92.0			
Paper and printing	100.1	97.5	99.8			
Paper and pulp.....	98.7	91.2	92.0			
Paper boxes.....	102.7	96.1	100.5			
Printing, book and job.....	99.7	99.0	102.0			
Printing, newspaper.....	99.9	102.5	104.7			
Chemicals and allied products	99.7	84.3	88.0			
Chemicals.....	98.0	85.1	86.0			
Fertilizers.....	102.3	62.7	86.0			
Petroleum refining.....	101.1	92.6	90.8			
Stone, clay, and glass products	101.9	95.9	95.0			
Cement.....	101.7	102.2	100.7			
Brick, tile, and terra cotta.....	107.6	102.9	99.6			
Pottery.....	104.3	111.1	110.9			
Glass.....	94.7	81.4	82.8			
Metal products, other than iron and steel	91.8	81.0	79.2			
Stamped and enameled ware.....	91.8	81.0	79.2			
Tobacco products	99.0	92.5	94.9			
Chewing and smoking tobacco and snuff.....	98.6	94.8	98.4			
Cigars and cigarettes.....	99.1	92.2	94.5			
Vehicles for land transportation	101.5	88.7	84.2			
Automobiles.....	100.9	83.6	84.2			
Carriages and wagons.....	93.5	73.7	79.1			
Car building and repairing, electric-railroad.....	102.9	87.5	87.2			
Car building and repairing, steam-railroad.....	101.5	83.8	84.1			
Miscellaneous industries	93.5	80.2	82.2			
Agricultural implements.....	89.8	66.8	68.5			
Electrical machinery, apparatus, and supplies.....	102.4	87.4	88.5			
Pianos and organs.....	103.1	90.1	92.6			
Rubber boots and shoes.....	92.3	44.3	52.8			
Automobile tires.....	80.1	98.2	107.3			
Shipbuilding, steel.....	93.2	74.2	73.7			

The following table shows the general index of employment in manufacturing industries from June, 1914, to September, 1924, based on figures published by the Bureau of Labor Statistics:

GENERAL INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES, JUNE, 1914, TO AUGUST, 1924

[Monthly average 1923=100.0]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
January		91.9	104.6	117.0	115.5	110.1	116.1	76.8	87.0	98.0	95.4
February		92.9	107.4	117.5	114.7	103.2	115.6	82.3	87.7	99.6	96.6
March		93.9	109.6	117.4	116.5	104.0	116.9	83.9	83.2	101.8	96.4
April		93.9	109.0	115.0	115.0	103.6	117.1	84.0	82.4	101.8	94.5
May		94.9	109.5	115.1	114.0	106.3	117.4	84.5	84.3	101.8	90.8
June	98.9	95.9	110.0	114.8	113.4	108.7	117.9	84.9	87.1	101.9	87.9
July	95.9	94.9	110.3	114.2	114.6	110.7	110.0	84.5	86.8	100.4	84.8
August	92.9	95.9	110.0	112.7	114.5	109.9	109.7	85.6	88.0	99.7	85.0
September	94.9	98.9	114.4	110.7	114.2	112.1	107.0	87.0	90.6	99.8	86.7
October	94.9	100.8	112.9	113.2	111.5	106.8	102.5	88.4	92.6	99.3	
November	93.9	103.8	114.5	115.6	113.4	110.0	97.3	89.4	94.5	98.7	
December	92.9	105.9	115.1	117.2	113.5	113.2	91.1	89.9	96.6	96.9	

Employment and Earnings of Railroad Employees, August, 1923, and July and August, 1924

THE following table shows the number of employees and the earnings in various occupations among railroad employees in August, 1924, in comparison with employment and earnings in July, 1924, and August, 1923.

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

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN AUGUST, 1924, WITH THOSE OF JULY, 1924, AND AUGUST, 1923

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

Month and year	Professional, clerical, and general			Maintenance of way and structures		
	Clerks	Stenographers and typists	Total for group	Laborers (extra gang and work train)	Track and roadway section laborers	Total for group
	<i>Number of employees at middle of month</i>					
August, 1923	175,054	25,486	291,264	80,518	247,176	471,185
July, 1924	166,962	24,967	281,082	67,309	222,003	421,823
August, 1924	166,960	25,021	281,192	69,358	225,783	428,917
	<i>Total earnings</i>					
August, 1923	\$22,422,615	\$3,066,260	\$39,091,319	\$7,035,978	\$19,674,396	\$45,571,541
July, 1924	21,490,750	3,049,286	38,095,460	5,195,648	16,425,656	38,469,542
August, 1924	21,399,182	3,034,775	37,981,467	5,492,166	16,693,567	39,138,119

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN AUGUST, 1924, WITH THOSE OF JULY, 1924, AND AUGUST, 1923—Concluded

Month and year	Maintenance of equipment and stores					Total for group
	Carmen	Machinists	Skilled trade helpers	Laborers (shops, engine houses, power plants, and stores)	Common laborers (shops, engine houses, power plants, and stores)	
<i>Number of employees at middle of month</i>						
August, 1923	142,393	69,323	138,217	50,036	68,231	605,120
July, 1924	113,844	60,496	112,808	44,253	58,184	516,373
August, 1924	115,606	61,139	113,889	44,171	58,341	520,438
<i>Total earnings</i>						
August, 1923	\$21,296,296	\$11,388,894	\$15,590,360	\$4,954,528	\$5,834,966	\$80,756,009
July, 1924	15,866,333	9,041,073	11,767,722	4,225,465	4,658,876	64,642,323
August, 1924	16,198,622	9,094,127	11,912,836	4,218,291	4,686,692	65,337,960
Month and year	Transportation other than train and yard					Transportation (yard-masters, switch tenders, and hostlers)
	Station agents	Telegraphers, telephoners, and tower-men	Truckers, (stations, warehouses, and platforms)	Crossing and bridge flagmen and gate-men	Total for group	
<i>Number of employees at middle of month</i>						
August, 1923	31,749	27,618	42,100	23,256	218,823	26,498
July, 1924	31,414	26,536	36,547	23,196	207,613	24,110
August, 1924	31,359	26,410	36,689	23,165	207,435	24,089
<i>Total earnings</i>						
August, 1923	\$4,824,023	\$4,055,428	\$4,000,596	\$1,753,175	\$26,468,984	\$4,763,257
July, 1924	4,861,901	3,908,013	3,367,788	1,750,627	25,259,655	4,444,186
August, 1924	4,813,736	3,901,028	3,404,593	1,740,269	25,183,450	4,447,376
Month and year	Transportation, train and engine					Total for group
	Road conductors	Road brakemen and flagmen	Yard brake-men and yard helpers	Road engineers and motor-men	Road fire-men and helpers	
<i>Number of employees at middle of month</i>						
August, 1923	39,106	80,619	55,574	47,135	49,380	344,165
July, 1924	35,519	71,636	48,415	42,392	44,342	305,865
August, 1924	36,077	72,622	49,110	43,020	44,997	310,633
<i>Total earnings</i>						
August, 1923	\$9,095,933	\$13,722,328	\$9,089,103	\$12,357,997	\$9,123,610	\$66,494,687
July, 1924	8,234,593	12,121,771	7,907,935	10,710,735	7,944,827	58,518,591
August, 1924	8,447,872	12,513,612	8,185,169	11,032,820	8,186,302	60,325,980

Extent of Operation of Bituminous Coal Mines, August 30 to September 20, 1924

CONTINUING a series of tables which have appeared in previous numbers of the MONTHLY LABOR REVIEW, the accompanying table shows for a large number of coal mines in the bituminous fields the number of mines closed the entire week and the number working certain classified hours per week from August 30 to September 20, 1924. The number of mines reporting varied each week, and the figures are not given as being a complete presentation of all mines, but are believed fairly to represent the conditions as to regularity of work in the bituminous mines of the country. The mines included in this report ordinarily represent 55 to 60 per cent of the total output of bituminous coal. The figures are based on data furnished to the Bureau of Labor Statistics by the United States Geological Survey.

WORKING TIME IN BITUMINOUS COAL MINES IN THE UNITED STATES, BY WEEKS, AUGUST 30 TO SEPTEMBER 20, 1924

[The mines included ordinarily represent from 55 to 60 per cent of the total output. Prepared by the Bureau of Labor Statistics from data furnished by the United States Geological Survey]

Week ending—	Number of mines reporting	Mines—														Working full time of 48 hours or more	
		Closed entire week		Working less than 8 hours		Working 8 and less than 16 hours		Working 16 and less than 24 hours		Working 24 and less than 32 hours		Working 32 and less than 40 hours		Working 40 and less than 48 hours			
		No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
1924																	
Aug. 30.	2,514	1,101	43.8	21	0.8	117	4.7	192	7.6	253	10.1	272	10.8	303	12.1	255	10.1
Sept. 6.	2,509	1,076	42.9	33	.3	126	5.0	216	8.6	326	13.0	300	12.0	317	12.6	115	4.6
13.	2,407	1,008	41.9	19	.8	91	3.8	147	6.1	222	9.2	291	12.1	336	14.0	293	12.2
20.	2,389	1,032	43.2	19	.8	71	3.0	139	5.8	220	9.2	263	11.0	350	14.7	295	12.3

Study of Seasonal Irregularity in the Building Trades

ONE of the recommendations of the President's Conference on Unemployment, which was held in Washington in 1921, was that continuing committees should be set up to deal with the problems of the business cycle and of seasonal unemployment, especially in such important industries as bituminous coal mining and the construction industries. This recommendation was followed, and the work of the committee on seasonal operation in the construction industries has been summarized in a volume recently issued entitled, "Seasonal Operation in the Construction Industries."¹ The committee was made up of builders, manufacturers of building materials, real estate operators, representatives of the Government and of organized labor, bankers, engineers, contractors, and architects, so that a many-sided consideration of the subject was assured.

¹ President's Conference on Unemployment. Committee on Seasonal Operation in the Construction Industries. Seasonal operation in the construction industries; the facts and remedies. New York, McGraw Hill Book Co. (Inc.), xxx, 213 pp. A preliminary pamphlet, containing some of the important points of the study was issued by the United States Department of Commerce, and noted in the issue of the MONTHLY LABOR REVIEW for September, 1924, pp. 222, 223.

All forms of construction were considered, but conditions in the building industries are of the most general interest. In these industries the committee finds that beyond question there is much unemployment, and that much of this is preventable.

Typical instances studied in this survey indicate that the building industries, with over 2,000,000 workers, are so operated that many crafts are out of work three months each year. Few workers have an opportunity to work more than nine months. Earnings in 9 months must be sufficient for 12 months' living, else the craft is depleted. Seasonal unemployment is great even among the crafts in which there is the greatest apparent shortage of men during the active construction period.

The worker, the building industry, and the public all suffer through this irregular employment. Good mechanics are "out of work and looking in vain for work during three or four months, using up the savings laid by in the good season, and becoming less skilled at their trades through lack of practice." Striving to rush all the building work of a year into a brief season, employers bid against each other for workers and pay the highest seasonal price for materials, congestion on the railroads may delay delivery when every day wasted means a heavy loss, and the desire for speedy output militates against good work. All through the industry runs a waste for which the public must eventually pay in higher prices.

For most contractors, 12 months' overhead cost of maintaining their offices and staff must be charged against the jobs carried on actively during seven or eight months.

Building supply dealers must maintain establishments big enough to handle a large amount of work during four or five months. These establishments are practically idle during at least three months, and are operating at only a fraction of their capacity during the rest of the year. Building material manufacturers also have to maintain unnecessarily large plants and equipment or else stock up materials during dull seasons in order to meet peak demands. This of course adds to the cost of their product.

Architects find their office work crowded largely into the first six months of the year, although their field work is often active for some months later.

Intermittent employment conditions keep young men from taking up the building trades, and account in large part for the high hourly wage rates which have lately attracted so much public attention, and give a false impression of actual earnings.

The committee does not attach much importance to the contention that weather conditions are responsible for the seasonal irregularity of employment. It is a matter, it holds, rather of custom than of climate. Changes in the kind of materials used and in building methods have made it possible to carry on work practically throughout the winter. A very careful study was made of the actual number of days when weather conditions made it impossible to work to advantage, data being collected for a number of years; of the loss through overhead during these periods; of the cost involved in protecting workers and materials from winter weather; of the comparative efficiency of labor during the winter season, and of the expenses directly due to winter conditions, such as the cost of removing snow and ice, and the like. Against these were set the savings involved in the lower cost of materials bought for winter delivery, the greater speed and certainty of delivery, in spite of the occasional risk of a tie-up of the roads by storms, the larger supply of labor, making it possible to select the best workmen, instead of

being obliged to take any worker who could be secured, and the saving in time, and therefore in interest on capital involved, by working straight ahead through the winter, and as a result of the survey, the conclusion is reached that winter building is not only practicable but profitable as well.

Summarizing the question of winter construction, it may be stated without fear of contradiction that both from an engineering and quality standpoint any type of modern building construction can be accomplished and most classes of engineering construction fully as well in the winter months as at other seasons if the proper protection during the progress of certain parts of the work is provided. The increased cost of providing this protection, clearing away snow and ice, and all expenses incidental to such work will vary from 5 per cent of the total cost of a building to something less than 1 per cent, depending on the severity of the winter and the size of the job, the relative expense being proportionately lower the larger the job.

The available data indicate that even for those types of work primarily affected by weather conditions there is a decrease in the labor cost. On the remainder of the work not primarily affected by winter conditions it is also fair to assume at least a similar saving in cost due to increased productivity at seasons of relative inactivity. Analysis of the figures * * * confirms the conclusions of the contractors experienced in winter work that, under average conditions, where the structural frame of a building of steel frame or reinforced concrete construction is carried on during winter months increased labor productivity during the winter months amounting to some 2½ per cent of the total cost of the building practically offsets the 1 to 5 per cent addition to total expense involved in proper protection of the work.

When there are also taken into account the pecuniary advantages of more continuous operation of forces and equipment, the lower material cost and the saving to the owner of capital time charges through quicker occupancy, it is evident that these latter can be considered as almost entirely net savings.

Methods of regularizing construction activity are considered at length. Determination of facts and cooperation of different groups involved are prime essentials. For every locality data should be gathered showing what weather conditions may be reasonably expected. Studies should be made to show at what times each of the building trades is most or least fully occupied. Such studies have been made in some cities—Boston and New York, for instance—and for these charts are given showing in what months a contractor can be surest of obtaining labor in a given trade.

Such data, checked by records of retail sales of materials and records of architects, contractors, and labor organizations, must be available to furnish the framework for any thoroughgoing campaign to eliminate seasonal idleness. The fact-finding survey should include a study of construction, maintenance, and repairs by classes, such as residential, industrial, business and commercial, hospitals, church buildings, public utilities, public buildings, public works, and streets and roads to show which can adjust its program with benefit to the community. The costs of present practice should be set forth in terms of time lost, of money wasted, and of new construction needed.

Given such data the regularization of employment within the industry is only a matter of intelligently applying them, but to induce intending builders to make the application all the interests concerned should cooperate. Examples are given of the part which may be taken by engineers, architects, dealers, contractors, subcontractors, equipment manufacturers, material producers, labor and the general public, and in addition to their individual efforts there must be concerted group action. The report gives many instances showing how this can be effectively utilized.

Employment of Negroes on Railroads

THE United States Department of Labor has recently issued a statement¹ dealing with the employment of negroes on railroads which shows that at present there are 136,065 engaged in one capacity or another in railroad work. The largest group consists of laborers, with train and Pullman porters as the second, but they are found in practically every occupation connected with railroad operation. Numerically their distribution by occupation is as follows:

Baggagemen and freight agents.....	111
Boiler washers and engine hostlers.....	2, 377
Brakemen.....	4, 485
Conductors.....	33
Engineers.....	111
Firemen.....	6, 478
Foremen and overseers.....	1, 195
Inspectors of way and structures.....	202
Laborers.....	95, 713
Porters, train and Pullman.....	20, 224
Superintendents.....	2
Switchmen and flagmen.....	2, 874
Telegraphers.....	97
Telegraph and telephone linemen.....	202
Miscellaneous occupations.....	1, 961
Total.....	136, 065

The miscellaneous group includes such workers as ticket agents, station hands and the like, who are not separately classified in official returns. No figures are given for the distribution by sex, but it is stated that the total "includes an appreciable number of female employees who work as porters, laborers, telegraph operators, etc. The New York State rail lines, in fact, boast of four female negro telegraphers."

Geographically, these 136,065 negro rail hands are well distributed throughout every State in the Union. Georgia leads, with 10,865, and is followed by Louisiana, with 9,141; Virginia, 9,010; Alabama, 8,844; Texas, 8,381; Tennessee, 8,100; Mississippi, 7,744; North Carolina, 5,321; Florida, 5,091; Illinois, 4,554; Arkansas, 4,184; Kentucky, 3,916; South Carolina, 3,858; Missouri, 3,706; Pennsylvania, 3,569; Ohio, 3,219; Maryland, 2,221; West Virginia, 2,052; Oklahoma, 1,807; Indiana, 1,167; New York, 1,127. Each of the remaining States has less than 1,000 negro rail workers, New Hampshire, with its 1 brakeman, 2 laborers, and 1 switchman, completing the list.

As a result of the study, it is indicated that the prospects for colored workers on the railroads are promising.

The summary plainly shows that avenues of employment in the transportation industry are rapidly being opened to the colored worker and that his future in this phase of employment has a particularly bright aspect.

¹ Press release of Sept. 20, 1924.

Recent Employment Statistics
Public Employment Offices
Illinois¹

A SUMMARY of the reports of the public employment offices of Illinois for August, 1923, and August, 1924, is given in the table following:

LABOR SUPPLY AND DEMAND AT THE ILLINOIS FREE EMPLOYMENT OFFICES, AUGUST, 1923, AND AUGUST, 1924

Item	August, 1923			August, 1924		
	Males	Females	Total	Males	Females	Total
Number of registrations.....	16,177	6,842	23,019	11,550	6,006	17,556
Help wanted.....	13,764	6,521	20,285	7,030	4,527	11,557
Persons reported placed in employment.....	11,081	5,240	16,321	6,011	3,808	9,819

The number of persons registered per 100 jobs was 113.4 in August, 1923, and in August, 1924, the ratio had reached 151.9.

Iowa

The following report on the operation of the Iowa public employment offices for August, 1924, is taken from the Iowa Employment Survey for that month:

PUBLIC EMPLOYMENT SERVICE ACTIVITIES IN IOWA FOR AUGUST, 1924

Sex	Registration for jobs	Jobs offered	Number of persons referred to positions	Number of persons placed in employment
Men.....	5,022	4,224	3,712	3,709
Women.....	1,377	1,017	929	884
Total.....	6,399	5,241	4,641	4,593

Massachusetts

The work of the four public employment offices of Massachusetts for July, August, and September, 1924, for the same months in 1923, and for the whole of 1923, is reported as follows by the State department of labor and industries:

OPERATIONS OF MASSACHUSETTS PUBLIC EMPLOYMENT OFFICES FOR CERTAIN MONTHS IN 1923 AND 1924 AND FOR THE YEAR 1923

Year and month	Working days	Applications for positions	Help wanted	Persons referred to positions	Persons reported placed in employment
1924:					
July.....	26	34,153	2,820	3,425	2,409
August.....	26	30,560	2,808	3,323	2,389
September.....	25	37,116	3,888	4,854	3,258
1923:					
July.....	25	31,152	3,745	4,699	2,933
August.....	26	30,906	3,512	4,223	2,829
September.....	24	28,622	3,946	4,796	3,170
Year 1923.....	303	356,394	50,413	60,071	40,044

¹ Illinois. Department of Labor. The Labor Bulletin, September, 1924, p. 32.

Ohio

The following data on the activities of the State-City Employment Service of Ohio for August and September, 1924, were furnished by the department of industrial relations of that State:

RECORDS OF PUBLIC EMPLOYMENT OFFICES IN OHIO FOR AUGUST AND SEPTEMBER, 1924

Group	August				September			
	Applicants	Help wanted	Persons referred to positions	Persons reported placed	Applicants	Help wanted	Persons referred to positions	Persons reported placed
Males.....	30,198	7,929	8,044	7,322	33,109	9,761	9,837	8,896
Females.....	14,992	6,182	5,806	5,105	16,059	7,667	7,092	6,170
Farm and dairy workers.....	517	337	354	259	541	374	395	310
Total.....	45,707	14,448	14,204	12,686	49,709	17,802	17,324	15,376

Oklahoma¹

The placements of the public employment service of Oklahoma for August, 1924, compared with those for the previous month and for August, 1923, are reported as follows:

PLACEMENT WORK OF THE OKLAHOMA PUBLIC EMPLOYMENT OFFICES FOR JULY AND AUGUST, 1924, AND AUGUST, 1923

Industry	July, 1924	August, 1924	August, 1923
Agriculture.....	1,898	823	319
Building and construction.....	52	69	110
Clerical (office).....	4	4	33
Manufacturing industries.....	58	83	89
Personal service.....	905	956	1,082
Miscellaneous.....	993	1,185	1,260
Total, all industries.....	3,910	3,120	2,893

The cost to the State for placement, by years, is shown below:

AVERAGE EXPENSE TO THE STATE FOR EACH PLACEMENT MADE BY THE FEDERAL-STATE EMPLOYMENT SERVICE, 1919 TO 1924

Year	Place-ments	Total cost	Approximate average cost per placement
Last half of 1919.....	32,348	\$9,010.55	\$.28
1920.....	60,203	17,104.10	.28
1921.....	50,231	12,433.15	.25
1922.....	40,436	10,545.87	.26
1923.....	51,682	11,105.15	.21
First half of 1924.....	29,222	5,901.80	.20

The placements for the first six months of 1924 include those of harvest labor in June.

¹ Oklahoma. Department of Labor. Oklahoma Labor Market, Oklahoma City, September, 1924.

Pennsylvania¹

A summary is given below of the reports of the Pennsylvania State employment offices for July, 1924, for the three preceding months, and for July, 1921, July, 1922, and July, 1923:

OPERATIONS OF PENNSYLVANIA PUBLIC EMPLOYMENT OFFICES IN JULY, 1924,
AS COMPARED WITH SPECIFIED MONTHS

Month	Persons applying for positions			Persons asked for by employers			Persons receiving positions		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
July, 1921 (4 weeks).....	35,121	3,056	38,177	3,790	1,535	5,325	3,335	871	4,206
July, 1922 (4 weeks).....	16,634	3,232	19,866	12,720	1,823	14,543	9,296	1,323	10,619
July, 1923.....	16,863	3,540	20,403	18,200	2,740	20,940	13,288	1,750	15,038
1924:									
April (5 weeks).....	12,983	3,449	16,432	9,392	2,324	11,716	8,940	1,621	10,561
May (4 weeks).....	9,218	4,020	13,238	6,011	1,783	7,794	5,677	1,273	6,950
June (4 weeks).....	8,554	4,146	12,700	4,669	1,481	6,150	4,399	1,220	5,619
July (5 weeks).....	9,865	3,889	13,754	5,459	1,609	7,068	5,178	1,400	6,578

Wisconsin²

The activities of the Wisconsin public employment offices in August, 1924, as compared with August, 1923, are shown in brief in the following table:

REPORT ON THE FEDERAL-STATE-MUNICIPAL EMPLOYMENT SERVICE OF WIS-
CONSIN, AUGUST, 1923, AND AUGUST, 1924

Item	August, 1923 (5 weeks)			August, 1924 (4 weeks)		
	Males	Females	Total	Males	Females	Total
Registrations.....	12,281	3,490	15,771	7,073	3,507	10,580
Help wanted.....	12,804	3,644	16,448	6,526	2,744	9,270
Persons referred to positions.....	11,822	3,263	15,085	6,215	2,649	8,864
Persons placed in employment.....	9,825	2,542	12,367	4,941	1,912	6,853

Departments of Labor

California

THE issue of the first number of The California Labor Market Bulletin, September, 1924, indicates that another important State realizes the value of a monthly survey and report by the State labor office on the changes in volume of employment and wages. Such changes, the bulletin declares, furnish "one of the best known indexes of business and industrial conditions." In collecting these data the California Bureau of Labor Statistics is collaborating with the United States Bureau of Labor Statistics.

The following figures from the above-mentioned report show the increases and decreases in number of employees and in weekly pay rolls in 474 California establishments in August, 1924, compared with the preceding month:

¹ Pennsylvania. Department of Labor Industry. Labor and Industry, Harrisburg, September, 1924,

p. 26.

² Wisconsin Industrial Commission. Mimeographed report.

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF WEEKLY PAY ROLL IN 474 CALIFORNIA ESTABLISHMENTS BETWEEN JULY AND AUGUST, 1924

Industry	Number of employees, August, 1924	Per cent of increase (+) or decrease (-) as compared with July, 1924	Amount of weekly pay roll, August, 1924	Per cent of increase (+) or decrease (-) as compared with July, 1924
Stone, clay, and glass products:				
Miscellaneous stone and mineral products	2,150	-1.5	\$65,995	+2.4
Lime, cement, and plaster	567	+ .9	22,068	-3.2
Brick, tile, and pottery	1,927	- .3	46,002	+5.7
Glass	860	+ .2	23,546	-3.4
Total	5,504	- .5	157,611	+1.6
Metals, machinery, and conveyances:				
Agricultural implements	591	-9.8	16,082	-7.8
Automobiles, including bodies and parts	2,730	+7.5	95,553	+24.5
Brass, bronze, and copper products	138	+4.5	4,331	+24.9
Engines, pumps, boilers, and tanks	1,222	+1.0	40,779	+19.7
Iron and steel forgings, bolts, nuts, etc.	668	+11.9	20,201	+22.1
Structural and ornamental steel	4,674	+ .4	148,160	+9.9
Shipbuilding, boat building, and naval repairs	937	-2.2	27,527	-10.2
Tin cans	819	-3.5	19,791	-4.9
Other iron-foundry and machine-shop products	5,935	-5.7	183,968	+1.8
Other sheet-metal products	950	-1.8	29,716	+2.1
Copper and other metal products	670	+19.0	19,711	+16.5
Total	19,334	- .4	605,819	+7.9
Wood manufactures:				
Sawmills and logging camps	8,936	-11.0	270,114	-9.6
Planing mills, sash and door factories, etc.	9,299	-1.5	266,217	- .9
Other wood manufactures	3,652	-7.0	105,060	-1.9
Total	21,887	-6.5	641,391	-4.9
Leather and rubber goods:				
Tanning	719	+8.0	19,136	- .7
Finished leather products	435	+4.3	10,266	+5.7
Rubber products	344	+5.8	10,844	+5.7
Total	1,498	+6.4	40,246	+2.9
Chemicals, oil, paints, etc.:				
Explosives	499	-8.3	15,839	+1.2
Mineral oil refining	2,159	-41.6	83,510	-38.6
Paints, dyes, and colors	274	-11.3	7,296	-15.4
Miscellaneous chemical products	1,365	+17.7	40,582	+25.6
Total	4,297	-24.7	147,227	-23.5
Printing and paper goods:				
Paper boxes, bags, cartons, etc.	1,740	+ .5	43,958	+4.3
Printing and publishing	2,538	+39.5	88,513	+41.2
Other paper products	823	-2.4	20,207	-4.9
Total	5,101	+16.1	152,678	+21.1
Clothing, millinery, and laundering:				
Men's clothing	1,663	+23.6	32,858	+20.2
Women's clothing	834	-2.7	16,755	+2.0
Knit goods	314	+24.1	7,520	+31.9
Millinery	359	+40.2	7,608	+40.0
Laundering, cleaning, and dyeing	1,039	-6.3	22,828	-4.9
Total	4,209	+10.2	87,569	+11.0
Food, beverages, and tobacco:				
Canning and preserving fruits and vegetables	9,079	+6.0	178,245	+24.8
Canning and packing fish	1,109	-16.7	13,398	-22.1
Confectionery and ice cream	1,658	+1.8	42,136	+3.2
Groceries, not elsewhere specified	452	+4.6	11,364	+10.4
Bread and other bakery products	2,238	- .7	67,586	+3.1
Slaughtering and meat products	2,595	+9.5	77,199	+14.7
Cigars and other tobacco products	1,068	+4.6	18,452	- .4
Dairy products	1,524	+3.3	50,151	+14.5
Other food products	2,947	- .7	75,203	-1.9
Total	22,670	+2.9	533,734	+10.5
Miscellaneous	1,289	+12.6	45,548	+14.0
All industries	85,789	-1.2	2,411,823	+2.6

Illinois

In August, 1924, there were some indications of an improvement in business conditions in Illinois. While some industries showed a decline and almost every industry, even those in which the main tendency was upward, had some cases of employment shrinkage, yet for industry as a whole the trend was slightly upward as is shown by the following statistics from the September, 1924, issue of the Labor Bulletin of the Illinois Department of Labor:

COURSE OF EMPLOYMENT AS REPORTED BY 1,505 ILLINOIS FIRMS, AUGUST, 1923, AND JULY, 1924, COMPARED WITH AUGUST, 1924

Industry	Number of employees, August, 1924	Per cent of change—	
		July, 1924, to August, 1924	August, 1923, to August, 1924
Stone, clay, and glass products:			
Miscellaneous stone and mineral products.....	1,548	-0.6	-16.5
Lime, cement, and plaster.....	450	+4	-8.8
Brick, tile, and pottery.....	4,954	-1	-4.8
Glass.....	4,114	-3.7	-7.3
Total.....	11,066	-1.5	-7.2
Metals, machinery, and conveyances:			
Iron and steel.....	30,483	-8	-22.4
Sheet-metal work and hardware.....	7,630	-2.6	-9.2
Tools and cutlery.....	1,140	-5.6	-38.7
Cooking, heating, ventilating apparatus.....	4,652	+8.9	-9.3
Brass, copper, zinc, babbitt metal.....	2,352	-1.2	-6.3
Cars and locomotives.....	12,228	-6.0	-24.3
Automobiles and accessories.....	7,214	+9	-34.3
Machinery.....	14,978	-3.7	-16.2
Electrical apparatus.....	45,125	-2.0	+7.2
Agricultural implements.....	5,316	-4	-37.5
Instruments and appliances.....	2,353	-6.6	-9.7
Watches, watch cases, clocks, jewelry.....	7,343	+45.4	+5.9
Total.....	140,814	-2	-13.5
Wood products:			
Sawmill and planing mill products.....	2,716	+1.4	+9
Furniture and cabinet work.....	6,413	+1.7	-15.9
Pianos, organs, and other musical instruments.....	2,686	+11.3	-23.6
Miscellaneous wood products.....	2,884	+3.9	-6.8
Household furnishings.....	588	+7	-12.1
Total.....	15,287	+3.6	-12.2
Furs and leather goods:			
Leather.....	1,565	+12.9	-37.5
Furs and fur goods.....	55	+10.0	-17.1
Boots and shoes.....	10,438	+5.2	+2.5
Miscellaneous leather goods.....	1,617	+3.5	-4.4
Total.....	13,675	+5.8	-4.3
Chemicals, oils, paints, etc.:			
Drugs and chemicals.....	1,941	+13.2	-27.2
Paints, dyes, and colors.....	2,066	-5	-3.7
Mineral and vegetable oils.....	3,533	+9.2	-10.8
Miscellaneous chemical products.....	3,069	-1.4	-27.0
Total.....	10,609	+4.6	-18.1
Printing and paper goods:			
Paper, boxes, bags, and tubes.....	3,462	-3.4	-6.7
Miscellaneous paper goods.....	970	+11.2	-3.9
Job printing.....	8,355	+2	+3.3
Newspapers and periodicals.....	3,481	+9	+8.9
Edition bookbinding.....	1,573	+3.8	.....
Total.....	17,841	+5	+1.4

COURSE OF EMPLOYMENT AS REPORTED BY 1,505 ILLINOIS FIRMS, AUGUST, 1923,
AND JULY, 1924, COMPARED WITH AUGUST, 1924—Concluded

Industry	Number of employees, August, 1924	Per cent of change—	
		July, 1924, to August, 1924	August, 1923, to August, 1924
Textiles:			
Cotton goods.....	1,033	-0.2	-12.2
Knit goods, cotton and woolen hosiery.....	2,501	+20.6	-33.1
Thread and twine.....	531	-5.3	-12.6
Total.....	4,065	+10.8	-20.6
Clothing, millinery, and laundering:			
Men's clothing.....	12,405	-3.4	-13.5
Men's shirts and furnishings.....	801	+3.1	-15.2
Overalls and work clothing.....	804	-6.9	-15.6
Men's hats and caps.....	36	-14.3	-70.1
Women's clothing.....	1,082	+10.7	-5.6
Women's underwear and furnishings.....	424	-6.8	-37.0
Women's hats.....	887	+4.2	+34.5
Laundering, cleaning, and dyeing.....	2,453	-8	-1.4
Total.....	18,892	-2.0	-11.5
Food, beverages, and tobacco:			
Flour, feed, and other cereal products.....	896	+9	-20.2
Fruit and vegetable canning and preserving.....	579	-54.6	-61.5
Groceries not elsewhere classified.....	4,347	-2.4	-3.4
Slaughtering and meat packing.....	23,045	+1.1	-18.8
Dairy products.....	3,611	-1.5	+5.2
Bread and other bakery products.....	2,652	-4.1	-1.1
Confectionery.....	2,490	+8.0	+2.1
Beverages.....	1,327	+2	-18.9
Cigars and other tobacco products.....	1,418	+2.8	-10.9
Manufactured ice.....	352	+9	-22.8
Ice cream.....	737	-3.9	
Total.....	41,454	-1.2	-15.2
Total, all manufacturing industries.....	273,703	+3	-12.4
Trade—Wholesale and retail:			
Department stores.....	2,905	-3.5	+2.7
Wholesale dry goods.....	573	+1.6	-37.0
Wholesale groceries.....	753	+7.9	-5
Mail-order houses.....	14,664	+1.2	-12.7
Total.....	18,895	+7	-10.4
Public utilities:			
Water, light, and power.....	15,443	+1.1	+13.3
Telephone.....	26,330	+1.2	+7
Street railways.....	27,277	-3	+3.3
Railway car repair shops.....	12,132	+1.9	-18.1
Total.....	81,182	+8	+2.1
Coal mining.....	9,803	-1.2	-34.1
Building and contracting:			
Building construction.....	6,684	+8.7	-16.9
Road construction.....	852	-8	+26.3
Miscellaneous contracting.....	1,503	+3.3	-4.7
Total.....	9,039	+6.8	-9.4
Total, all industries.....	392,622	+5	-10.1

Iowa

The statistics given below, showing percentage changes in the number of employees in specified industries in Iowa in August, 1924, as compared with the previous month, were furnished by the bureau of labor statistics of that State.

CHANGES IN VOLUME OF EMPLOYMENT IN IOWA, JULY TO AUGUST, 1924

Industry	Employees on pay roll, August, 1924		Industry	Employees on pay roll, August, 1924	
	Number	Per cent of increase (+) or decrease (-) compared with July, 1924		Number	Per cent of increase (+) or decrease (-) compared with July, 1924
Food and kindred products:			Leather products:		
Meat packing.....	5,385	-6.6	Shoes.....	246	+1.7
Cereals.....	1,156	+26.2	Saddlery and harness.....	155	-5.5
Flour and mill products.....	109	+ .8	Fur goods and tanning, also leather gloves.....	115	-11.1
Bakery products.....	778	+ .8	Total.....	516	-3.6
Confectionery.....	506	+10.7			
Poultry, produce, butter, etc.....	1,214	+6.4	Paper products, printing and publishing:		
Sugar, syrup, starch, glucose.....	989	+39.9	Paper and paper products.....	322	+10.3
Other food products, coffee, etc.....	399	+2.1	Printing and publishing.....	1,988	-3.5
Total.....	10,536	+2.8	Total.....	2,310	-1.9
Textiles:			Patent medicines.....	529	-3.8
Clothing, men's.....	711	-13.4	Stone and clay products:		
Millinery.....	171	-1.2	Cement, plaster, gypsum.....	2,201	- .8
Clothing, women's, and woolen goods.....	492	+8.1	Brick and tile (clay).....	1,146	- .2
Gloves, hosiery, awnings, etc.....	675	-1.9	Marble and granite, crushed rock and stone.....	145	+2.0
Buttons, pearl.....	530	+21.0	Total.....	3,492	- .6
Total.....	2,579	+ .2	Tobacco, cigars.....	429	+ .5
Iron and steel work:			Railway car shops.....	1,924	+55.1
Foundry and machine shops (general classification).....	1,640	-3.0	Various industries:		
Brass and bronze products, plumbers' supplies.....	468	+12.5	Brooms and brushes.....	167	-4.6
Automobiles, tractors, engines, etc.....	1,865	-1.6	Laundries.....	326	+2.0
Furnaces.....	276	+4.2	Mercantile.....	3,660	- .2
Pumps.....	307	+ .3	Public service.....	189	- .4
Agricultural implements.....	705	-6.2	Seeds.....	146	-5.8
Washing machines.....	1,170	-3.2	Wholesale houses.....	1,094	- .3
Total.....	6,431	-1.4	Other industries.....	262	-4.0
Lumber products:			Total.....	5,844	- .8
Mill work, interiors, etc.....	2,074	-----	Grand total.....	37,839	+2.0
Furniture, desks, etc.....	762	+3.0			
Refrigerators.....	90	+3.4			
Coffins, undertakers' goods.....	163	-----			
Carriages, wagons, truck bodies.....	160	-4.2			
Total.....	3,249	+ .8			

Maryland

The following report from the commissioner of labor and statistics of Maryland gives the percentage differences between the number of employees and between the amounts of pay rolls in August and September, 1924, in various industries in that State:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN MARYLAND IN AUGUST AND SEPTEMBER, 1924

Industry	September, 1924			
	Employment		Pay roll	
	Number of employees	Per cent of increase (+) or decrease (-) as compared with August, 1924	Amount	Per cent of increase (+) or decrease (-) as compared with August, 1924
Bakery.....	271	-0.4	\$6,103	-3.6
Beverages and soft drinks.....	263	-7.4	7,071	-11.7
Boots and shoes.....	1,407	+14.8	24,935	+22.3
Boxes, fancy and paper.....	383	-6.2	5,185	+1.0
Boxes, wooden.....	362	+2.2	6,338	-4.1
Brass and bronze.....	2,402	+3.5	55,327	+7.8
Brick, tile, etc.....	984	+1.4	23,713	-7
Brushes.....	980	-1.0	18,296	-7
Car building and repairing.....	4,597	+1.3	150,711	+2.8
Chemicals.....	1,248	+8.7	34,413	+9.7
Clothing, men's outer garments.....	3,457	-1.8	67,478	-4.5
Clothing, women's outer garments.....	918	+1.6	14,511	+3.9
Confectionery.....	1,574	+20.7	13,106	+24.6
Cotton goods.....	1,111	-3	20,690	-11.5
Fertilizer.....	1,111	+44.4	23,162	+34.4
Food preparation.....	145	+2.1	3,462	+4.8
Foundry.....	1,520	-7.2	35,425	-9.7
Furnishing goods, men's.....	2,964	+22.4	38,332	+30.6
Furniture.....	902	+1.8	22,521	+8.6
Glass.....	889	-1.3	21,934	+17.0
Hats, straw.....	1,049	+106.4	17,570	+128.5
Ice cream.....	384	-4.3	11,030	-9.6
Leather goods.....	722	+10.7	14,384	+19.1
Lithographing.....	470	+2	13,092	+6
Lumber and planing.....	1,055	-12.4	18,982	-13.5
Mattresses and spring beds.....	151	+7.0	3,472	+6.1
Patent medicine.....	720	+9.5	11,093	+7.9
Pianos.....	868	+1.9	23,459	+7.4
Plumbers' supplies.....	1,334	-2.8	35,741	-7.4
Printing.....	1,123	+3.5	34,710	+7.6
Rubber tire manufacturing ¹	2,622	+21.5	147,396	+28.5
Shipbuilding.....	562	+10.4	17,729	+31.5
Shirts.....	737	-6.2	10,728	+10.9
Silk goods.....	473	-1.3	6,991	+5.7
Slaughtering and meat packing.....	1,250	-2.9	33,564	+3
Stamping and enamel ware.....	1,105	+4.5	21,143	+10.0
Stoves.....	380	-2.5	6,040	-3.4
Tinware.....	3,877	+2.7	77,490	+3.5
Tobacco.....	1,003	-1.7	15,092	+7.2
Umbrellas.....	427	+21.3	5,839	+16.3
Miscellaneous.....	2,995	-2.3	65,238	+0.5

¹ Pay-roll period one-half month.

Massachusetts ¹

The Massachusetts Department of Labor and Industries has decided that in its press releases on volume of employment wage earners will be classified as employed full time or part time. It is thought that this method of presentation will more clearly indicate employment conditions than the showing of operating schedules by number of establishments as has been the practice. The variations in volume of employment from July to August, 1924, in specified industries in Massachusetts are as follows:

NUMBER OF EMPLOYEES IN 844 MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS, WEEK INCLUDING OR ENDING NEAREST TO JULY 15 AND AUGUST 15, 1924

Industry	Number of employees on pay roll			
	July, 1924	August, 1924		
		On full time	On part time	Total
Automobiles, including bodies and parts.....	1,736	1,573	129	1,702
Boot and shoe cut stock and findings.....	1,515	1,176	531	1,707
Boots and shoes.....	20,910	12,291	11,091	23,382
Boxes, paper.....	1,820	961	939	1,900
Boxes, wooden packing.....	747	537	159	696
Bread and other bakery products.....	3,364	2,350	963	3,313
Cars and general shop construction and repairs, steam railroads.....	2,929	2,457	505	2,962
Clothing, men's.....	2,719	1,114	1,463	2,577
Clothing, women's.....	793	477	180	657
Confectionery.....	3,362	2,713	887	3,600
Copper, tin, sheet iron, etc.....	809	551	266	817
Cotton goods.....	32,889	17,206	19,737	36,943
Cutlery and tools.....	4,345	2,731	804	3,535
Dyeing and finishing textiles.....	5,814	647	3,986	4,633
Electrical machinery, apparatus, and supplies.....	8,238	2,317	5,983	8,300
Foundry products.....	2,671	1,502	1,213	2,715
Furniture.....	2,104	1,756	403	2,159
Hosiery and knit goods.....	5,156	1,846	2,801	4,647
Jewelry.....	2,196	772	1,861	2,633
Leather, tanned, curried, and finished.....	4,033	2,959	1,384	4,343
Machine-shop products.....	5,573	3,871	1,631	5,502
Machine tools.....	1,484	621	786	1,407
Musical instruments.....	771	424	357	781
Paper and wood pulp.....	6,014	4,099	1,956	6,055
Printing and publishing, book and job.....	2,788	1,252	1,458	2,710
Printing and publishing, newspaper.....	2,060	2,127	26	2,153
Rubber footwear.....	5,920	3,491	1,672	5,163
Rubber goods.....	2,271	1,217	1,059	2,276
Rubber tires and tubes.....	992	1,084		1,084
Silk goods.....	2,225	1,200	978	2,178
Slaughtering and meat packing.....	1,511	74	1,396	1,470
Stationery goods.....	1,701	1,283	432	1,715
Steam fittings and steam and hot-water heating appa- ratus.....	1,314	163	1,116	1,279
Textile machinery and parts.....	4,808	409	4,447	4,856
Tobacco.....	817	856	4	860
Woolen and worsted goods.....	13,083	4,967	8,401	13,368
All other industries.....	26,367	12,325	15,101	27,426
Total.....	187,849	97,399	96,105	193,504

¹ Massachusetts. Department of Labor and Industries. Press release.

New York

The Department of Labor of New York has furnished the report given below showing the fluctuations in number of employees and amount of pay roll in certain manufacturing industries in that State in August, 1924, compared with August, 1923, and July, 1924.

CHANGES IN VOLUME OF EMPLOYMENT AND PAY ROLL IN SPECIFIED MANUFACTURING INDUSTRIES IN NEW YORK STATE FROM AUGUST, 1923, AND JULY, 1924, TO AUGUST, 1924

Industry	Per cent of change—			
	July, 1924, to August, 1924		August, 1923, to August, 1924	
	Employment	Pay roll	Employment	Pay roll
Cement.....	-1.0	-2.6	-2.7	-2.2
Brick.....	-13.0	-24.6	+3.8	-8.6
Pottery.....	-2.0	-.2	+8.1	+9.9
Glass.....	+24.6	+15.9	-14.1	-5.8
Pig iron and rolling-mill products.....	10.7	+18.1	-38.7	-44.6
Structural and architectural ironwork.....	+2.7	+3.6	+1.4	+8.1
Hardware.....	-.2	+4.4	-27.3	-30.9
Stamped ware.....	-.6	-.2	-37.6	-32.2
Cutlery and tools.....	+8.3	+17.9	-25.3	-30.7
Steam and hot-water heating apparatus.....	(1)	+6.5	-13.1	-14.2
Stoves.....	+38.9	+40.0	-9.9	-12.4
Agricultural implements.....	-4.2	-8.2	-33.6	-33.8
Electrical machinery, apparatus, etc.....	-.1	-.9	-5.4	-8.2
Foundry and machine shops.....	-.7	+1.9	-10.5	-9.0
Automobiles and parts.....	+9.5	+13.3	-23.2	-22.5
Car, locomotive, and equipment factories.....	-7.1	-8.6	-37.5	-41.2
Railway repair shops.....	+4.3	+10.2	-12.4	-13.7
Lumber:				
Millwork.....	-1.9	-4.8	-1.2	+10.2
Sawmills.....	-5.3	-9.4	-12.0	-15.7
Furniture and cabinet work.....	+1.0	+2.2	-7.3	-3.6
Furniture.....	+7	+2.7	-6.3	-2.6
Pianos, organs, and other musical instruments.....	+5.3	+9.9	-13.3	-5.1
Leather.....	+6.4	+4.8	-9.2	-8.2
Boots and shoes.....	+2.6	+4.4	-13.1	-14.6
Drugs and chemicals.....	+8	+1.2	-9.3	-3.8
Petroleum refining.....	-3.4	-4.3	-9.3	-8.9
Paper boxes and tubes.....	+1	+3.4	-7.7	-2.1
Printing:				
Newspaper.....	-1.7	-2.8	-19.7	-15.9
Book and job.....	-1.0	+1	-5.0	+8
Silk and silk goods.....	-24.9	-16.8	-41.2	-37.1
Carpets and rugs.....	+1.4	-.4	-10.6	-20.8
Woolens and worsteds.....	-14.6	-11.7	-33.1	-30.4
Cotton goods.....	+34.0	+44.8	-20.2	-21.2
Cotton and woolen hosiery and knit goods.....	-4.5	-6.6	-31.0	-36.5
Dyeing and finishing textiles.....	+2	+2.3	-4.7	-8.3
Men's clothing.....	+2.3	+1.4	-7.5	-5.6
Shirts and collars.....	-7.2	-13.3	-27.4	-33.7
Women's clothing.....	+26.9	+48.5	-20.9	-16.8
Women's headwear.....	+11.8	+19.4	-5.3	-4.6
Flour.....	+6.4	+1.8	-.5	+8
Sugar refining.....	-9.1	-5.3	+10.6	+12.0
Slaughtering and meat products.....	-2.7	-5.4	-2.3	-3.2
Bread and other bakery products.....	-3.5	-5.3	-5.0	+6.4
Confectionery and ice cream.....	+6.3	+3.8	-7.1	+1.4
Cigars and other tobacco products.....	-.3	-3.0	+2.4	+10.6

¹ Change of less than one-tenth of 1 per cent.

Oklahoma

There was a rise of volume of employment in 13 out of 26 Oklahoma industries in August, 1924, compared with the previous month, and in the same period pay rolls increased in 15 industries, as shown by the following statistics from the September 15, 1924, issue of the Oklahoma Labor Market:

CHANGES IN EMPLOYMENT AND PAY ROLLS IN 710 INDUSTRIAL ESTABLISHMENTS IN OKLAHOMA, FROM JULY TO AUGUST, 1924

Industry	August, 1924			
	Employment		Pay roll	
	Number of employees	Per cent of change as compared with July, 1924	Amount	Per cent of change as compared with July, 1924
Cottonseed-oil mills.....	41	+51.9	\$839.42	+37.1
Food production:				
Bakeries.....	438	+7	11,189.27	+4.2
Confections.....	82	+12.3	1,459.41	+1.3
Creameries and dairies.....	129	-14.6	2,882.30	-10.1
Flour milling.....	403	+8.3	9,277.62	+1.7
Ice and ice cream.....	548	+3.4	14,927.46	+16.5
Meat and poultry.....	1,421	+5.5	31,823.58	+5.7
Lead and zinc:				
Mines and mills.....	2,820	+3.0	72,160.97	+7.0
Smelters.....	2,054	-4.4	52,976.28	-1
Metals and machinery:				
Automobile repairing and assembling.....	1,072	+8.4	34,875.96	+17.9
Foundry and machine shops.....	712	+2.6	19,539.86	+3.3
Steel tank construction.....	507	+4.8	12,101.60	-5.1
Oil industry:				
Production and gasoline extraction.....	3,524	-6.4	103,413.36	-2.6
Refining.....	5,506	-2.4	165,306.73	-1
Printing, job work.....	313	-9	8,614.12	+2.3
Public utilities:				
Steam railroad repair shops.....	1,785	-6	53,643.68	+6.2
Street railways.....	553	-5.8	14,674.27	+1.4
Water, light, and power.....	1,201	+6.9	29,774.44	+4.0
Stone, clay, and glass:				
Brick and tile.....	370	-7.5	6,244.39	-15.0
Cement and plaster.....	1,000	-18.2	24,777.42	-3.4
Crushed stone.....	300	-31.4	4,535.13	-31.0
Glass manufacturing.....	738	-18.7	15,829.90	-19.8
Textiles and cleaning:				
Textile manufacturing.....	261	+4.0	3,478.93	-7
Laundering and cleaning.....	1,380	-1.6	24,647.34	-2.0
Woodworking:				
Sawmills.....	428	-7	5,306.22	+7.5
Millwork, etc.....	281	+12.8	7,307.34	+11.6
Total, all industries.....	27,867	-2.3	731,607.00	+1.2

Wisconsin

Industrial employment in Wisconsin was, on the whole, practically at the same level from July 16 to August 15, 1924. The number of workers in manufacturing lines showed a decline of only 0.4 per cent. Certain individual industries, however, showed considerable variations both in employment and pay rolls within the above-mentioned period as is indicated by the following report from the Wisconsin Labor Market for August, 1924:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND IN TOTAL AMOUNT OF PAY ROLL IN VARIOUS INDUSTRIES IN WISCONSIN FROM AUGUST, 1923, AND JULY, 1924, TO AUGUST, 1924

Kind of employment	Per cent of increase (+) or decrease (-)			
	July to August, 1924		August, 1923, to August, 1924 ¹	
	Employment	Pay roll	Employment	Pay roll
<i>Manual</i>				
Agriculture.....			-23.5	
Logging.....	+8.3		+4.3	+9.0
Mining.....	+13.9	+15.7	+15.8	- .4
Lead and zinc.....	+14.0	+18.2	+102.6	+73.8
Iron.....	+11.7	+9.9	-46.3	-51.8
Stone crushing and quarrying.....	+6.9	+2.1	+14.2	+14.1
Manufacturing.....	- .4	+5.8	-9.2	-10.7
Stone and allied industries.....	+5.5	-1.7	-8.8	+6.3
Brick, tile, and cement blocks.....	- .9	-4.4	-12.3	-12.4
Stone finishing.....	+1.7	- .2	-5.9	+20.2
Metal.....	-1.5	+8.8	-20.5	-24.6
Pig iron and rolling mill products.....	-39.2	-36.2	-64.4	-62.8
Structural iron work.....	-55.4	-59.0	-61.3	-66.4
Foundries and machine shops.....	+1.3	+15.2	-25.4	-41.2
Railroad repair shops.....	+ .4	-1.7	-6.5	-5.9
Stoves.....	-8.4	-27.1	-27.6	-30.4
Aluminum and enamel ware.....	-1.1	+30.8	-15.8	-16.5
Machinery.....	- .1	+4.7	-16.1	-18.1
Automobiles.....	+4.4	+43.2	-19.9	-21.0
Other metal products.....	+1.8	+15.0	-10.7	-4.7
Wood.....	- .1	+4.1	-1.6	+4.7
Sawmills and planing mills.....	+2.8	+4.9	+6.2	+2.1
Box factories.....	-1.5	+1.7	-34.3	-35.3
Panel and veneer mills.....	-2.9	+3.7	- .2	-9.3
Sash, door, and interior finish.....	-3.1	+5.3	+3.7	+3.7
Furniture.....	-7.7	- .5	-12.4	-15.0
Other wood products.....	+11.2	+7.5	+1.3	-9.0
Rubber.....	+6.6	+13.2	+12.0	+43.3
Leather.....	-3.7	+6.8	-18.0	-18.7
Tanning.....	-7.0	+8.8	-14.5	-16.6
Boots and shoes.....	-2.0	+37.6	-30.4	-25.4
Other leather products.....	- .1	-28.8	-1.0	-6.6
Paper.....	+ .7	+8.5	-5.6	-5.8
Paper and pulp mills.....	+1.2	+10.2	-4.6	-4.4
Paper boxes.....	+2.7	+12.8	-15.1	-16.7
Other paper products.....	-7.2	-2.0	- .9	-4.0
Textiles.....	+ .4	+14.5	-13.1	-9.7
Hosiery and other knit goods.....	- .8	+21.7	-7.3	-4.7
Clothing.....	+1.9	+8.2	-15.7	-11.0
Other textile products.....	+1.7	+8.8	-26.3	-22.3
Foods.....	-3.6	+ .2	+8.3	+10.8
Meat packing.....	-17.5	-22.9	-13.3	-20.3
Baking and confectionery.....	+2.1	+2.6	-1.9	- .5
Milk products.....	-8.8	-13.2	-7.0	-10.5
Canning and preserving.....	-2.6	+20.6	+34.2	+94.5
Flour mills.....	+19.1	+5.9	-10.6	-19.4
Tobacco manufacturing.....	+ .4	+1.3	+13.2	-6.2
Other food products.....	-1.5	-1.1	+4.1	+4.1
Light and power.....			+19.9	+32.9
Printing and publishing.....	-1.7	-16.0	+5.2	+8.1
Laundering, cleaning, and dyeing.....	- .1	-17.5	-5.8	+1.1
Chemicals (including soap, glue, and explosives).....	- .5	+5.3	-23.8	-22.6
Construction—				
Building.....	+4.5	-3.2	+1.9	-9.0
Highway.....	+10.9		-15.6	
Railroad.....	+3.2	+3.4	+11.4	- .2
Marine, dredging, sewer-digging.....	+137.4	+67.1	+122.3	+73.1
Communication—				
Steam railways.....	-2.0	-9.2	-11.6	-16.1
Electric railways.....	-20.9	-22.6	-15.9	-23.1
Express, telephone, and telegraph.....	+2.4	+3.3	+4.9	+9.9
Wholesale trade.....	-1.7	+7.2	-22.4	-16.7
Hotels and restaurants.....	- .1		+1.6	
<i>Nonmanual</i>				
Manufacturing, mines, and quarries.....	+ .9	-1.2	- .8	+4.6
Construction.....	.0	-12.8	-14.3	-13.4
Communication.....	-1.4	+1.3	+2.3	+4.0
Wholesale trade.....	- .3	-3.1	+2.7	+10.2
Retail trade—Sales force only.....	-8.9	+3.2	-5.5	+8.3
Miscellaneous—Professional services.....	-1.7	+3.4	+5.4	+4.2
Hotels and restaurants.....	+ .9		+3.7	

¹ Identical establishments.

Plan for Recruiting Labor in the Philippines

TO ASSIST Philippine employers, especially agriculturists, to secure labor, the bureau of labor of the islands has formulated a system of cooperation which is set forth in the Quarterly Bulletin of that office, July-December, 1923 (2 numbers).

Among the provisions of this plan are the following: The bureau will undertake on request to secure employment agents (*capataces*) to recruit workers in groups of 40 or more, such workers according to the conditions stipulated by the *capataces* to be paid 1 peso¹ per day without subsistence but with free lodging and medical attention. Wages to the amount of 10 pesos for a single worker and 30 pesos for a married worker will be advanced. If the worker receives subsistence, 0.30 peso per day will be deducted from his wages. The agent is paid a commission of 5 pesos for each single worker recruited and 13 pesos for each married worker with a family, a daily wage of 1.50 pesos without subsistence for watching his force, and 0.10 peso for each of his men who work every day. If the agent is furnished subsistence, the cost thereof is deducted from his money remuneration.

The agent must give a bond to cover the advances made by planters to the workers for the commission on and transportation costs of laborers leaving without justification or without settling their accounts before the two-year contract has expired. However, in calculating the losses to the planter as a result of the departure of such laborers the services already performed by them must be taken into consideration.

After 12 months of service the worker shall be entitled to free transportation to and from his residence. Previous to a worker's completing a year of service his transportation expenses will be deducted from his wages.

If the employment agent is not able to hold the regular number of workers in accordance with his contract, and for whom he has been paid a commission, the employer shall deduct from his wages a sum equivalent to the amount involved in the commissions paid on those workers who left the force without just cause or without giving notice.

The regular daily hours of labor are 9, and it is provided that the worker shall receive additional compensation equivalent to 50 per cent of his wages for extra work at night, which in no case shall exceed 4 hours.

The function of the bureau of labor is to formalize the contracts between the employers and the agents. Employers requesting workers under this plan are required to deposit in the bureau of labor a certain amount of money to cover the costs of recruitment and transportation and the expenses of subsistence for laborers pending their transportation.

The bureau also recruits laborers directly for employers, the hours being the same as those under the employment agent plan with the same payment for overtime. The wages, however, are higher under the direct recruitment of the bureau, being 1.50 pesos per day without subsistence. Advances on wages are also made as in contracts with agents, and employers requisitioning labor must deposit a certain sum with the bureau of labor to defray initial expenses. The bureau will

¹ 1 peso=50 cents.

not assume responsibility for laborers who abandon their work without previous notice, so that although the recruitment of agricultural workers by bonded agents may be more expensive, it is regarded as a more convenient system for the planters.

Unemployment in Foreign Countries ¹

SINCE the last publication in the MONTHLY LABOR REVIEW (September, 1924, pp. 132-143) of data on unemployment in foreign countries the general employment situation has improved in some countries and has taken a turn for the worse in others. Although the prospects for a general improvement of the economic situation abroad are favorable since the regulation of the reparations problem and in view of expected investments abroad of American capital, it will still take considerable time to rehabilitate Europe economically. Until such rehabilitation is effected, more or less serious fluctuations in the labor markets of the various countries must be reckoned with. Thus, in July and August unemployment again considerably increased in Great Britain, Germany, Poland, and Austria and in a less marked degree in Denmark and Switzerland. The heavy increase in unemployment and short-time work in Germany, Austria, and Poland is chiefly due to a shortage of funds and credit stringency. Further decreases in unemployment took place in France, the Netherlands, Italy, Norway, Sweden, Finland, Czechoslovakia, Esthonia, and Canada. In Belgium the employment situation shows practically no change in recent months, remaining fairly good.

Briefly summarized, the situation in the individual countries at the latest date for which data are available is as follows:

Great Britain.—In describing the employment situation in August, the Ministry of Labor Gazette states that—

The decline in employment which was observed in July continued during August. Employment was good in the tin plate and steel sheet, carpet, jute, and brick trades; it was fairly good on the whole in the printing, silk, and Irish linen trades and in some branches of the woodworking industry; and fair in coal mining, in the tailoring and leather industries, and in certain branches of the metal trades. In many important industries, however, including iron and steel manufacture, engineering, shipbuilding, and the cotton and wool textile trades, it continued slack.

Among workpeople covered by the unemployment insurance acts, numbering approximately 11,500,000, and working in practically every industry except agriculture and private domestic service, the percentage unemployed on August 25, 1924, was 10.6, compared with 9.9 on July 28, 1924, and 11.8 at the end of August, 1923. * * * Among members of trade-unions from which returns were received the percentage of unemployed was 7.9 at the end of August, 1924, compared with 7.4 at the end of July and with 11.4 at the end of August, 1923. The number of workpeople registered at employment exchanges as applicants for employment was approximately 1,152,000 on August 25, 1924, of whom men numbered 876,000 and women 203,000, the remainder being boys and girls. The corresponding total for July 28, 1924, was 1,052,000, of whom 804,000 were men and 185,000 were women.

¹ Except where otherwise noted the sources from which this article is compiled are shown in the table on pp. 184 and 185.

Germany.—The Reichsarbeitsblatt, the official bulletin of the Federal Ministry of Labor, in its issue of September 1, 1924, summarizes the situation in July as follows:

The tendency of the labor market continued on the whole to be in an unfavorable direction, although some relief was afforded in a majority of districts by possibilities of employment in harvest work.

Quoting from the Vossische Zeitung, the Economic Review (London, September 12, 1924) sums up the industrial situation in July as follows:

Although in July more ready money was available on the money market, the depression from which business in Germany has suffered since April shows no signs of abating. The causes of this situation are the feeble purchasing power of the country and the impossibility of increasing foreign outlets, because owing to its former burdens the cost of production in industry is too high, which renders it unfit for competition. The shortening of hours of work and the discharge of workmen have steadily increased, with the result that the number of unemployed in receipt of relief in the unoccupied territory has increased from 240,000 on July 1 to 328,000 on August 1, an increase of 36.6 per cent. Of 2,058 undertakings, employing 1,131,311 hands, 56 per cent (43 per cent in June) reported business to be bad, and only 13 per cent (17 in June) reported it to be good.

Mining in the Ruhr was still suffering from the effects of the labor disputes in May. * * * Very unfavorable conditions likewise prevailed in the mining districts of Upper Silesia. The coal stocks in hand rose from 32,000 tons at the beginning of the month to 120,000 tons at the end. In spite of the bad financial position, in order to increase the sale of coal, prices for the coast districts and freights were reduced by 1 to 2 marks. Nevertheless, in certain mines staff reductions took place. Similar conditions prevailed in the lignite mines of Central Germany and the Rhine. * * * The situation of ore mining has again deteriorated. In the Lahn-Dill area the majority of mines have shut down and from August 1 only 30 per cent of the miners will be employed. Business in the potash industry showed some signs of life, nevertheless only about half the normal quantity was sold.

The economic and financial situation of the iron industry is cheerless, especially in the Ruhr. * * * Reduction of work and the closing down of factories increased to an appalling extent in the second half of the month.

Business difficulties in the engineering trade have still further increased. Orders, in spite of lower prices, have fallen off appreciably. Of 337 works, 71 per cent complained of bad business (59 per cent in June), while only 9 showed good business.

The chemical industry is in a bad way; the stocks remain unsold with the necessary consequences of reduction of work and cutting down of staffs. Conditions in building have somewhat improved. * * * On the other hand, the building material industry is practically idle. In the timber trade and sawmills the stagnation continues. * * * No demand is being made for paper, despite the very low prices. In the rolling stock industry large stocks of empty trucks have accumulated owing to the general trade depression.

The following employment statistics published in the September 1, 1924, issue of the Reichsarbeitsblatt and covering the month of July are the most recent statistics available:

Returns from trade-unions point to a more extensive depression in employment than in June. Out of 3,417,541 members covered by the 37 federations making returns, 427,683, or 12.5 per cent, were unemployed on July 26, 1924, as compared with 10.5 per cent at the end of the previous month and with 3.5 per cent at the end of July, 1923. These figures relate to members wholly unemployed. In addition, returns from 33 federations covering 2,950,000 members show that 830,844, or 28.2 per cent were working short time at the end of July, as compared with 19.4 per cent at the end of June.

The number of totally unemployed persons in receipt of unemployment doles increased from 277,237 on July 15 to 328,111 on August 1 and to 355,848 on August 15. These figures relate to the unoccupied area only. A noteworthy fact is that nearly one-third (100,478) of all the subsidized unemployed have been in receipt of doles for more than three months, and that 39,034 have been in receipt of pecuniary aid for more than six months.

During July the applications for work at employment exchanges rose in number by 7.8 per cent, as compared with those recorded in the preceding month, while offers of situations by employers decreased by 9.6 per cent. For every 100 positions for men there were on an average 425 applications, and for every 100 for women 207 applications; in June the corresponding figures were 359 and 171, respectively.

According to the monthly reports of the sick funds, the number of members paying contributions on August 1 (and therefore assumed to be working) showed a decrease of 1.7 per cent over the preceding month.

In an article in Commerce Reports (August 18, 1924, pp. 405-407), dealing with the effect of the Dawes plan on German industry, Mr. Alan G. Goldsmith, chief of the European Division of the U. S. Bureau of Foreign and Domestic Commerce, says:

Stabilization in Germany eventually will bring with it greater productivity and greater competitive power. The present low ebb in no way reflects Germany's potential capacity. A financially stabilized Germany will be able to use to its own advantage and also to the general betterment of the European situation its industrious population, technical skill, and material resources. On account of the depreciation a great portion of German profits has been going into building and plant construction, and there has been a great improvement in the German industrial machine since 1919. Such improvements were not occasioned by the imperative needs of the industrial situation, but, rather, were used as a means for converting paper-mark profits into commodity values before continued depreciation wiped them out entirely.

The Rentenmark stabilization, temporary as it may be, has already demonstrated the reaction of such a policy on industry. The German industrialist to-day finds himself with a surplus of fixed assets and a tremendous shortage of fluid working capital. * * * The new bank and the stabilization in general brought about by the effectual operation of the Dawes plan will make it possible for German industry with proper working capital to expand on a sound basis.

France.—Unemployment in France continues to be negligible. The latest returns as to the state of employment show that on September 17, 1924, only 487 persons were in receipt of unemployment benefits from departmental and municipal unemployment funds. It should be stated that in March, 1921, when France was in the midst of an economic crisis, the number of persons in receipt of unemployment benefit was 91,225. By January, 1922, this number had fallen to 10,071, and by January, 1923, to 2,764, and according to the most recent statistics it has dropped to 487.

The reports of public employment exchanges also indicate a slight decrease in the number of applicants for work. On September 13, 1924, 9,501 applicants for work were on the live register, as against 9,602 at the end of the preceding week.

Not only is there practically no unemployment among native French workers, but the shortage of skilled labor already apparent before 1914 and still further increased by the losses of the war has caused foreign labor to be engaged both for reconstruction purposes

and in ordinary industry. According to the Economic Review (London, September 12, 1924), returns of the immigration and emigration of labor have been issued by the Minister of Labor, but the figures for the former fall short of reality owing to the smuggling in of workmen and the freedom allowed to agricultural laborers and miners. According to these returns 183,472 foreign workmen entered France in 1922; 262,877 in 1923; and 121,393 during the first six months of 1924. During the first six months of the current year 20,298 foreign workmen left the country, which leaves a balance of over 100,000 workmen entering during the period. The highest number of arrivals was 29,009 in April, and the lowest 10,095 in January. In spite of this supply the latest statistics show that 1,200,000 more workmen are still required for the needs of national industry.

Belgium.—The latest figures available on unemployment relate to July, but are provisional only. Returns received by the Ministry of Labor from 1,454 approved unemployment funds, with a total membership of 654,441, show that 4,934 (0.8 per cent) were totally unemployed and 16,264 partially so at the end of the month. The total days lost through unemployment in July numbered 240,520, or 1.53 per cent of the aggregate possible working-days; in the preceding month the percentage was 1.50, and in July, 1923, 1.02. During July 13,711 applications for employment were received at employment exchanges, as compared with 13,177 in the preceding month. Jobs reported by employers in July numbered 11,717, as against 10,869 in June. There were thus on an average 117 applicants for each 100 positions reported as open, as compared with 121 in June.

A cable from the American commercial attaché at Brussels dated September 13, 1924 (Commerce Reports, September 22, 1924, p. 703), reports continued depression in Belgian key industries. Although foreign exchange was slightly stronger there was no relief in the metallurgical industry, owing to declining sterling prices and German competition. Moreover, French competition is appearing as a result of the depressed internal market. The mills are reducing their output and there is a prospect of several furnaces being banked.

There is very little business in cotton, yarn, linen, or cotton fabrics, and stocks at the mills are increasing. Manufacturers of fabrics are selling below the yarn base in order to keep up their activity.

The window-glass situation has been affected by the political conditions in the Orient which have closed an important market. Orders are slack, and production exceeds sales. There is a prospect of several basins being closed. The plate-glass industry has been favored by increased American orders.

Unemployment in August showed a decline from July, amounting to 3.2 per cent of the total workers registered at employment exchanges, as against 3.35 per cent in July. Unemployment, however, is considerably greater than it was at this time last year.

The Netherlands.—In its issue of August 30, 1924, the Maandschrift, the monthly bulletin of the Dutch Central Statistical Office, publishes figures compiled by the department of unemployment insurance and employment exchanges, which show that out of 255,311 members of unemployment funds making returns for the week ending

July 26, 1924, 16,119 (6.3 per cent) were totally unemployed and 4,396 (1.7 per cent) partially so. In the corresponding week of the preceding month (ending June 28) the percentages were, respectively, 5.7 and 1.4, and in the week ending July 28, 1923, 10.2 and 2.9. The same publication shows that at the end of June, 1924, 59,558 applicants for work were on the live register of employment exchanges as against 59,258 at the end of May.

Switzerland.—Since the abolition of the payment of doles to the unemployed by the Federal Government, the Swiss Labor Office no longer publishes actual unemployment figures but only the number of applicants for work on the live register of employment exchanges at the end of each month. These numbered 8,737 (6,894 men and 1,843 women) on August 30, 1924, as against 8,235 (6,604 men and 1,631 women) on July 31, 1924, and 22,554 (19,737 men and 2,817 women) on August 31, 1923. These figures indicate a slight increase in the number of applicants for work in August while at the same time the number of vacant positions decreased from 4,461 at the end of July to 3,608 at the end of August. Nevertheless the labor office considers the situation of the labor market as still satisfactory since in several occupational groups there is a heavy demand for workers. The demand for unskilled workers has, however, slackened considerably.

Considered by industry and occupational groups the situation of the labor market was less favorable in August in agriculture, gardening, the textile industry, and for all unskilled workers. A marked improvement took place in the case of the food, metal, machinery, and watch industries. The labor market was good in the case of female domestic servants, skilled agricultural workers, woodworking, the hotel and restaurant trade, the glass industry, and the building trades.

The Economic Review (London, September 19, 1924), quoting the *Neue Zürcher Zeitung*, summarizes the industrial situation as follows:

The chief factor in the present progress toward the recovery of Swiss economic life lies in the tourist traffic. The hotel industry, which, like the watch industry, suffered a considerable period of deep depression, has experienced a revival comparable to the best pre-war seasons, notwithstanding the unfavorable weather. Even in minor resorts, hotels and boarding houses have been crowded. Other industries, large and small, which are dependent upon the tourist traffic, have experienced a similar recovery.

Direct statistics relating to the degree of employment in industrial undertakings are now published by the labor office. They cover 420 large factories employing 51,500 persons, or 16 per cent of all the factory workers in Switzerland, and 59 building firms with about 6,000 employees. Of the 479 concerns, 49.9 per cent in the second quarter of this year recorded a working week of 48 hours, 44.5 per cent a week of over 48 hours, and only 5.6 per cent a week of less than 48 hours. This affords striking evidence of the reduction of short time. Of all the firms included in the survey, 93.1 per cent reported their degree of employment as satisfactory to good, while only 6.9 per cent reported it as bad. Nearly one-half reported a labor shortage, which clearly indicates that the unemployment crisis is practically over.

Italy.—According to a cable from the American trade commissioner at Rome, dated August 29, 1924 (Commerce Reports, September 8, 1924, p. 591), industrial improvement is being maintained in Italy. Unemployment in the country continues at a comparatively low ebb. The total number of unemployed in Italy at the end of July was

118,000 compared with 131,000 on June 30, 1924, and with 183,000 on July 31, 1923. There were 23,000 workmen on part time on July 31, 1924, in addition to the total given above.

The consul at Milan reports a steady improvement in most industries. The machine plants are active, some of them working to capacity. The larger plants complain of a lack of important orders for new railroad equipment, but have other orders. There is little local unemployment and some factories report that the demand for operatives is greater than the supply. Cotton spinners are working busily and are finding a good demand from weaving establishments.

The consul general at Naples reports that canners in his district are unusually busy and that crops are large in that region. Ships bound for the United States are carrying larger cargoes.

The consul at Turin reports an important crop of grain and states that grapes are of good quality, but 10 per cent less in quantity than last year. The Fiat automobile works are producing 100 cars daily, of which 65 per cent are light touring cars. The Biella woolen mills report a good season and two large plant additions are projected for the near future.

In the Leghorn consular district the general local situation remains unchanged and the number of unemployed is still high.

The consul at Palermo also states that there is little improvement in the general situation in his district with the exception of the sulphur industry. The improvement in this industry is due to the agreement with American producers and also to the settlement of labor disputes, as a result of which a 10 per cent advance in wages was recently granted.

Denmark.—According to a cable from the American commercial attaché at Copenhagen, dated August 14, 1924 (Commerce Reports, August 25, 1924, p. 464), labor is quiet in Denmark and unemployment remains practically stationary at about 14,000. The summer dullness and financial stringency have tended to curtail industrial operations, but it is nevertheless reported that certain lines, such as shipbuilding, building, and electrical industries are very active. Danish merchant shipping is well occupied.

Norway.—A cable from the American commercial attaché at Copenhagen, dated September 18, 1924 (Commerce Reports, September 29, 1924, p. 764), states that final adjustment of wage disputes in the important industries have made possible full recovery from the industrial stagnation that has characterized Norwegian conditions during the past few months and that the situation has now a more auspicious outlook. While economic changes during the past month have been unimportant, a general slight improvement in output is noticeable in most trades. Exports are setting new records, and the harvest prospects are better than formerly anticipated. As a result the unemployment figure is very low.

Sweden.—Cabling under date of September 17, 1924, the American consul at Stockholm reports (Commerce Reports, September 29, 1924, p. 765) that Swedish conditions in August, as in the few previous months, were characterized by stability. A very favorable development is revealed in the active trend of foreign trade, which is exerting a beneficial effect on business and finance. Swedish key industries are very active and exports are moving at very high figures.

Imports of raw materials are very heavy. Advance sales of wood pulp and lumber have set new records.

Unemployment figures have reached normal proportions and indicate a continued diminution. From a total of 5,600 during July, unemployment has now diminished to 4,750.

Finland.—The American trade commissioner at Helsingfors cabled recently (Commerce Reports, September 22, 1924, p. 707) that unemployment in Finland is almost negligible, practically all industries being fully engaged. Crop reports are favorable and a good harvest is assured. Finland's export trade in July reached the highest figure ever recorded for that month.

According to the Monthly Bulletin of the Bank of Finland only 532 applicants for work were on the register of communal employment exchanges at the end of July, as against 672 at the end of June.

Poland.—Recent reports from the American consulate at Warsaw state that industrial conditions in Poland are steadily growing worse. According to official estimates the number of unemployed was 143,657 on July 19, 1924, as against 87,940 on May 10. The Government orders given to several industries have proved insufficient materially to affect the general volume of production, and the relief measures intended to aid the unemployed are likewise insufficient.

It is realized that no improvement is possible until the level of prices and the cost of living are reduced. Some progress has been observed in that direction, especially since the last tariff reductions, but the price cuts are very slight and in many instances intended as a store-window decoy, while the prices at which the goods can really be purchased show little or no reduction. Poland is now reputed to be the most expensive country in which to live in the world.

The Government is taking extensive relief measures in order to alleviate the condition of the unemployed workers. The sum of 1,750,000 zloté² has been assigned for unemployment doles in Upper Silesia, and the provisional authorities have started large road building and house construction activities.

The American trade commissioner at Warsaw reports (Commerce Reports, August 25, 1924, p. 468) that the transition from the mark to the zloty (gold) basis has been characterized by increased price levels, wages, and production costs. The already limited amount of available capital has thus been still further reduced by loss of buying power, as well as by subscriptions to the Bank of Poland; and as the transition occurred between harvests, agricultural income was not available. Under such conditions the present industrial crisis seems but natural. The Government is now endeavoring to aid industry by reduction of freight rates on raw materials and metal products.

Textile stocks are congested, and the usual seasonal buying has not materialized, although long overdue; consequently mills are operating on a two-day-a-week basis. In order to meet German competition the Polish Government has authorized a 10-hour day for three months in the Upper Silesian heavy industries. In protest, a serious strike has occurred involving 150,000 men; but it is expected that a compromise will shortly be effected.

² Zloty=19.3 cents.

Austria.—After a considerable decrease of unemployment in May and June the number of subsidized unemployed in Austria in July was 65,282, an increase of 1,803. The failure of several large banks, and the subsequent financial crisis and credit stringency is beginning to show its effect upon industry and commerce. Unemployment in July increased not only among bank and commercial employees but also among industrial workers, especially among workers in the clothing and metal industries. The food industry and the hotel and restaurant trades are the only industry groups in which unemployment decreased in July, owing to the fact that tourist traffic was at a high level.

Czechoslovakia.—Recent reports from the American commercial attaché at Prague (Commerce Reports, August 11, 1924, p. 337, and September 8, 1924, p. 592) indicate that there has been little change in the general industrial situation in Czechoslovakia in the past two months, and that conditions are considered satisfactory in most branches. The outstanding feature in August was a recovery in the textile industry which particularly affected the cotton mills. Activity also increased in the tanning, shoe, cheap jewelry (*gablonz*), lumber, coal, and glass industries. Work in the iron and steel mills remained slack.

Unemployment has shown a gratifying decrease. On June 30 the number of unemployed was 85,966, as against 108,363 on May 31, 1924, and 246,616 on June 30, 1923. The number of unemployed persons in receipt of doles from the Government is also steadily decreasing.

Estonia.—Unemployment in Estonia seems to be at a normal level. On July 31, 1924, the number of unemployed persons was 1,372 as compared with 1,463 at the end of the preceding month.

Canada.—The Dominion Bureau of Statistics reviews the September employment situation as follows:

Employment showed a further decrease at the beginning of September, paralleling the movement indicated at the same time in 1923 and 1921. The declines in personnel recorded at this time of year are usually due, in part, to the farmers' demands for harvest workers. The decrease in the index number caused by the contraction recorded on September 1 is, however, larger than the average reduction on the same date of the last three or four years. The 5,942 firms reporting to the Dominion Bureau of Statistics employed 767,204 persons on September 1, or 14,374 less than on August 1. The index number declined from 94.7 on the latter date to 93.1 at the beginning of this month as compared with 100.0, 93.7 and 88.7 on September 1, 1923, 1922, and 1921, respectively.

The most pronounced contractions in employment at the beginning of this month were registered in iron and steel, nearly all branches of which showed severe curtailment; nickel mining, railway and highway construction and transportation also reported less activity. On the other hand, logging, building construction, coal mining, trade, and some branches of manufacturing showed improvement.

An analysis of the returns by Provinces shows that the trend of employment in all Provinces was downward. Firms in Ontario recorded the most extensive actual losses in pay roll, although the percentage reduction in the maritime Provinces was larger. Business activity in British Columbia showed the least falling off. In the maritime Provinces rolling mills, construction, and transportation registered pronounced contractions, but textiles and coal mines were busier, according to returns from 520 firms employing 64,610 persons. On August 1 they had an aggregate pay roll of 67,449 workers. The largest decreases in Quebec were shown in iron and steel, textiles, transportation, and railway construction. Building and highway construction, trade, and some manufactures, however, reported offsetting gains. Returns were received from 1,316

employers whose staffs aggregated 216,622 persons, or 2,280 less than in the preceding month. Declines in iron and steel principally caused the contraction in Ontario, although nickel-copper mining, rubber, railway transportation, and construction afforded less employment. Logging camps, on the other hand, were decidedly busier, and textile, food, and some other classes of manufacturing showed improvement. The 2,714 firms making returns employed 315,208 persons as compared with 321,088 on August 1. In the prairie Provinces reductions in railway construction and operation were responsible for most of the decrease of between 2 and 3 per cent in this district, while coal mines and building contractors reported increased activity. Statements tabulated from 767 firms showed that they employed 99,632 persons; in the preceding month they had employed 102,546 workers. In British Columbia manufacturing and logging showed improvement, but highway and railway construction registered declines on a larger scale. The result was a decrease of 461 in the staffs of the 625 firms reporting. They employed 71,132 persons.

A review of the returns by industries shows that further contractions were indicated in manufacturing as a whole, chiefly on account of large declines in iron and steel and smaller losses in leather, garment, brick, and nonferrous metal factories. Food, pulp and paper, electric current, and some other branches of manufacturing, on the other hand, afforded considerably more employment. Statements were received from 3,862 manufacturers, employing 426,440 persons as compared with 416,728 on August 1. Logging camps showed a revival of seasonal activity; 2,841 persons were added to the pay rolls of the 211 reporting firms, which employed 17,002 persons. Increases in coal mines were more than offset by contractions in nickel-copper mines in Ontario. An aggregate working force of 46,032 persons was indicated by the 212 operators making returns, as compared with 46,392 on August 1. Communication on the whole, was slacker; additions to staffs on telegraphs were more than offset by contractions on telephones. The 166 employers making returns reported 23,252 persons or 172 less than in the preceding month. Employment in the operation departments of the railways and in shipping and stevedoring declined, while no general change was indicated on street railways and in cartage. Statements were compiled from 273 employers whose staffs totalled 109,168 persons as compared with 112,145 on August 1. Further curtailment was indicated in railway construction, and highway contractors also employed smaller working forces. Building construction, however, continued to improve. A combined working force of 85,074 persons was recorded by the 465 employers and divisional superintendants making returns; they had 89,213 workers in the preceding month. Moderate gains were indicated by the 579 retail and wholesale establishments reporting, whose staffs were increased from 54,632 on August 1 to 54,813 at the beginning of September.

A summary of the latest statistical reports on unemployment abroad is given in the table following.

SUMMARY OF LATEST REPORTS ON UNEMPLOYMENT IN FOREIGN COUNTRIES

Country	Date	Number or per cent unemployed	Source of data	Remarks
Great Britain and Northern Ireland	Aug. 25, 1924	1,220,847 (number of unemployment books lodged), representing 10.5 per cent of all persons insured against unemployment.	Ministry of Labor Gazette, London, September, 1924.	Of the 1,220,847 persons who lodged their unemployment books, 959,727 were males and 261,120 were females. The per cent of unemployed workers was 9.9 on July 28, 1924, and 11.8 in August, 1923.
Do.....	Aug. 31, 1924	7.9 per cent of trade-union members.....	do.....	The corresponding per cent at the end of July, 1924, was 7.4, and 11.4 at the end of August, 1923.
Germany.....	Aug. 15, 1924	355,848 totally unemployed persons receiving unemployment donations. ¹	Reichsarbeitsblatt, Berlin, Sept. 1, 1924.	The corresponding number on July 15, 1924, was 277,237.
Do.....	July 26, 1924	12.5 per cent of trade-union members were totally unemployed and 28.2 per cent worked short time.	do.....	The corresponding per cent of totally unemployed was 10.5 per cent at the end of June, 1924, and 3.5 per cent at the end of July, 1923, and that of short-time workers was 19.4 per cent at the end of June, 1924, and 14.5 per cent at the end of July, 1923.
France.....	Sept. 17, 1924	487 persons in receipt of unemployment benefits from departmental and municipal unemployment funds.	Bulletin du Marché du Travail, Paris, Sept. 19, 1924.	Of the 487 persons in receipt of unemployment benefits, 452 were males and 35 were females. At the end of the preceding week the number of persons receiving unemployment benefits was 468.
Do.....	Sept. 13, 1924	9,501 persons on live register of public employment exchanges.	do.....	Of the 9,501 persons on the live register of employment exchanges, 6,261 were men and 3,240 were women. At the end of the preceding week the corresponding total was 9,602.
[1128] Belgium.....	July 31, 1924	21,198 out of 654,441 members of unemployment funds were either wholly unemployed or on short time. ²	Ministry of Labor Gazette, London, September, 1924, and Revue du Travail, Brussels, July 31, 1924.	The corresponding number on July 5, 1924, was 21,911. ² The aggregate days of unemployment in July, 1924, numbered 240,520, or 1.53 per cent of the aggregate possible working days, as against 1.50 per cent in June, 1924, and 1.02 per cent in July, 1923.
Do.....	July —, 1924	13,711 applicants for employment at public employment offices.	Ministry of Labor Gazette, London, September, 1924.	The corresponding number for June, 1924, was 13,177.
The Netherlands.....	July 26, 1924	16,119 members of unemployment funds, or 6.3 per cent of the total membership, were totally unemployed and 4,396, or 1.7 per cent, partially so. ²	Maandschrift, The Hague, Aug. 30, 1924.	In the corresponding week of the preceding month the percentages were, respectively, 5.7 and 1.4 and in the week ending July 28, 1923, 10.2 and 2.9.
Do.....	June 30, 1924	59,558 persons on live register of public employment exchanges.	do.....	The corresponding figure for May 31, 1924, was 59,258.
Switzerland.....	Aug. 31, 1924	8,737 applicants for work on the live register of employment exchanges.	Der Schweizerische Arbeitsmarkt, Bern, Sept. 15, 1924.	The corresponding figure on July 31, 1924, was 8,235 and on Aug. 31, 1923, 22,554.
Italy.....	July 31, 1924	118,000 persons totally unemployed and 23,000 short-time workers.	Commerce Reports, Washington, Sept. 8, 1924.	On June 30, 1924, the number of totally unemployed persons was 131,000 and on July 31, 1923, 183,000.
Denmark.....	do.....	14,349 unemployed persons.....	Report from American Consulate at Copenhagen, Aug. 4, 1924.	The corresponding figure on June 30, 1924, was 13,962 and on July 31, 1923, 20,100.
Do.....	Aug. 29, 1924	5.4 per cent of a total of 262,343 workers covered by returns of the trade-unions and of the Central Employment Exchange were unemployed.	Statistiske Efterretninger, Copenhagen, Sept. 22, 1924.	The corresponding per cent at the end of the last week of July, 1924, was 5.3, and 7.6 at the end of the last week of August, 1923.
Norway.....	June 25, 1924	9,400 unemployed persons.....	Sociale Meddeleser, No. 6, Christiania, 1924.	The corresponding figure on May 25, 1924, was 13,200 and on June 25, 1923, 11,200.
Sweden.....	July 31, 1924	4,750 unemployed (report of State unemployment commission).	Sociale Meddelanden, No. 9, Stockholm, 1924.	The corresponding figure for the end of June, 1924, was 5,600.

Do.....do.....	6.3 per cent of trade-union members.....do.....	The corresponding per cent on June 30, 1924, was 7.3 and on July 31, 1923, 9.1.
Finland.....do.....	532 unemployed (245 men and 287 women) registered at communal employment offices.	Bank of Finland Monthly Bulletin, Helsingfors, August, 1924.
Poland.....July 19, 1924	143,637 unemployed persons.....	Report from American Consulate at Warsaw, Aug. 8, 1924.
Austria.....July 31, 1924	65,282 totally unemployed persons in receipt of unemployment donations.	Statistische Nachrichten, Vienna, Aug. 25, 1924.
Czechoslovakia.....June 30, 1924	85,966 unemployed persons.....	League of Nations, Monthly Bulletin of Statistics, Geneva, August, 1924.
Do.....June —, 1924	19,200 totally unemployed persons received unemployment doles from the Government and 10,450 short-time workers received subsidies from their employers.	Report from American consul at Prague, July 19, 1924.
Estonia.....July 31, 1924	1,372 unemployed persons.....	League of Nations, Monthly Bulletin of Statistics, Geneva, August, 1924.
Canada.....do.....	5.4 per cent of trade-union members.....	Labor Gazette, Ottawa, September, 1924.
		The corresponding number at the end of June was 136,100.
		The corresponding figure for the end of June, 1924, was 63,479.
		The corresponding figure on May 31, 1924, was 108,363 and on June 30, 1923, 246,616.
		In May, 1924, the number of totally unemployed persons in receipt of Government doles was 29,000.
		The corresponding figure at the end of June, 1924, was 1,463.
		The corresponding per cent on June 30, 1924, was 5.8 and on July 31, 1923, 2.9.

¹ Exclusive of occupied territory.² Provisional figures.

German-Austrian Agreement on Unemployment Relief ¹

BY AN exchange of notes between the German and Austrian Governments under date of February 18, 1924, the German-Austrian reciprocal unemployment agreement of June-August, 1921, has been supplemented. Under the terms of the supplemental agreement, unemployment relief will be granted by each country to unemployed nationals of the other country residing within its boundaries, provided the unemployed are entitled to relief under the laws of the country in which they reside.

The agreement became effective on March 3, 1924, and may be abrogated quarterly on three months' notice.

Abolition of Emergency Unemployment Relief in Switzerland ²

ON JUNE 2, 1924, the Swiss Federal Council (*Bundesrat*) issued a decree repealing the decree of October 29, 1919, together with all subsequent amendments. The system of State relief of the unemployed instituted by the decree of October 29, 1919, which was provisional in character, pending the passing of an unemployment insurance act, is therefore abolished as from July 1, 1924. However, to meet the special cases of unemployed persons whose only prospect of employment is by a change of trade, and elderly workers whose earning capacity has been reduced, the cantons are authorized to grant subsidies towards the cost of training courses for the former or maintenance allowances to the persons undergoing such training, and may issue grants, under certain conditions, to the latter class of workers. Half the cost of these allowances will be borne by the Confederation.

It is stated in the report of the Federal Council on this measure that the improvement in the labor market has been so great that the justification for the emergency decree of October 29, 1919, has disappeared. It may be mentioned here that the total cost of the emergency unemployment relief measures in Switzerland up to December 31, 1923, was 491,736,000 francs,³ of which 276,484,000 francs was contributed by the Confederation, 197,867,000 francs by the Cantons and communes, and 17,385,000 francs by employers. Of the total sum, 334,155,000 francs was spent on the "creation of opportunities for work", and the remainder, 157,581,000 francs, on unemployment relief.

Another reason adduced by the Federal Council as a justification for the abolition of State unemployment relief is that there is every reason to hope that the unemployment insurance bill introduced in September, 1923, will be adopted by the Federal Assembly and will become law in 1925 and that as a consequence, the alleviation of unemployment will, thenceforward, be on a permanent and regular basis. During the interim period it is proposed: (1) To use the balance of the unemployment fund to subsidize relief works should

¹ From a report of the American Consulate at Berlin, dated April 30, 1924.

² The data on which this article is based are from *Der Schweizerische Arbeitsmarkt*, Bern, June 15, 1924, pp. 209-211, and Ministry of Labor Gazette, London, July, 1924, p. 240.

³ Franc at par=19.3 cents; exchange rate varies.

there be a recrudescence of unemployment during the course of next autumn and winter; (2) to defer until next autumn and winter the execution of relief works approved before April 1, 1924, the date on which the issue of grants for such works ceased; (3) to put in hand next winter certain works for the Confederation; and (4) to continue the issue of the subsidies granted from year to year to unemployment funds.

As regards items (1) and (2), the subsidies will be issued only in the form of supplements to the wages paid to the persons employed on the relief works. As regards item (4) there were, in 1923, 60 such funds, 18 of which were established by public authorities, 4 by joint bodies of employers and employed, and 38 by trade-unions. Their total membership in 1923 was 160,177; the total amount paid out in benefits was 2,077,613 ³ francs; and the Federal subsidy amounted to 583,612 ⁴ francs. The proposed subsidy to these funds for the year 1924 is, as in 1923, 30 per cent of the benefits paid out. The unemployment insurance bill referred to above contemplates an extension of this system.

⁴ These figures are provisional.

HOUSING

Progress of Town Planning in Massachusetts

THE annual report of the division of housing and town planning of the Massachusetts Department of Public Welfare for the year ending November 30, 1923,¹ emphasizes the growing interest in city planning and zoning and gives a summary of the work accomplished during the year.

Sixty-six active planning boards in Massachusetts; a State consultant on housing and planning; a State division of metropolitan planning; formation of the metropolitan Boston planning federation; 10 cities and towns already zoned; 29 more actively at work on zoning; 14 with comprehensive plans accepted or in preparation—these are a few of the encouraging things to report this year for Massachusetts.

In regard to zoning, Massachusetts passed an enabling act in 1920, and since then the movement has developed rapidly. At present Massachusetts stands sixth among the States in the number of places zoned, New Jersey leading with 51, followed by New York with 30, Illinois with 23, California with 17, Ohio with 13, and Massachusetts with 10. At the date of the report, the 10 cities which had accepted a zoning plan included Brookline, Springfield, and Worcester, and among the 29 at work on the subject were Boston, Cambridge, Fall River, and a number of the satellite cities around Boston. In most of these places city planning is combined with zoning, the idea being to obtain a general betterment of conditions along the lines in which it seems most needed. Also, it is impossible to zone a city satisfactorily without some idea of the directions in which it is likely to develop, and there is a growing feeling that it is better to determine and direct its development rather than to leave it to chance. In the older cities the planning sometimes leads to a demand for fundamental changes. In Boston, for instance, far-reaching alterations are under consideration.

At the recommendation of the planning board, a bill has been submitted to the legislature for the construction of a new thoroughfare through the downtown section of the city. This is the first step toward a comprehensive thoroughfare plan for the whole city.

Other studies of the board include: Boston's commercial, industrial, and maritime development. Transportation plans. Recreation facilities. Street improvement. Traffic regulation. Investigation of housing conditions, co-operating with the building commissioner and the rent and housing commission. Civic center for the Brighton district.

A brief statement is given of the financial status of the housing experiment at Lowell, begun in 1917. Of the appropriation of \$50,000, the expenditure for land, building, and improvements was \$43,255.54. In interest and principal, \$18,869.09 has been paid back into the State treasury, leaving a balance due, on December 1, 1923, of \$24,911.31. The original investment included 7 acres of land, with "one house standing on a lot," and 12 houses were built before the experiment was halted. The houses are all occupied, but in only one case by the original purchaser.

¹ Massachusetts Department of Public Welfare, Division of Housing and Town Planning, Public Doc. No. 103: Annual report for the year ending November 30, 1923. [Boston, 1924.] 13 pp.

Housing Situation in Philadelphia

IT IS the custom of the Philadelphia Housing Association to present each year in its annual report a careful and constructive study of some one or more aspects of the housing problem. This year¹ it takes up the question of whether the housing shortage in Philadelphia has been reduced by the extensive building program of 1922 and gives data as to the actual increase in housing accommodation as compared with the normal growth of the population. Closely connected with this is a study of rental conditions and rates in typical industrial sections of the city. The report includes also a series of special surveys dealing with the waste of city water, tenement housing, negro migrants² and congestion, and demolition of dwellings. A summary of State and local legislation concerning housing and a discussion of the zoning situation are also given.

In 1922 Philadelphia shared in the general revival of building, an extensive housing program was undertaken, and hundreds of old dwellings were converted into apartments or tenements. Because of this conspicuous activity numbers of persons, so the association believes, became convinced that the housing shortage had been met or at least so greatly reduced that it need no longer be a matter of public concern. As a result, there is danger of "a curtailed building program, a stiffening of mortgage money rates and of the supply of available mortgage money, and an unfavorable attitude toward a corrective and preventive housing program among the officials in legislature and judiciary." For these reasons the association considered it desirable to learn the true situation. With this in view, it made in April, 1923, a canvas of 14 industrial areas of which it had made a study in 1921 (see MONTHLY LABOR REVIEW, October, 1922, p. 154), checking up every house within the districts selected. In the 14 areas combined there were 61,135 houses, varying widely in size, character, and desirability, the rents ranging from \$11 to over \$100 a month. A total of 412 vacancies, or a ratio of 6.74 per 1,000, was found. A study of these vacant houses, with reasons for their vacancy, shows the following results:

VACANCIES IN 14 INDUSTRIAL SECTIONS OF PHILADELPHIA, APRIL, 1923, BY CAUSE OF VACANCY (61,135 DWELLINGS SURVEYED)

Distribution	Number of vacancies found	Per cent of total vacancies	Rate per 1,000 houses surveyed	Vacancy rate per 1,000 houses surveyed in 1921
For sale only.....	146	35.5	2.39	2.49
Unfit for occupancy.....	42	10.2	.68	1.31
Not in market.....	53	12.7	.86	1.13
Vacated for public improvements.....	49	11.9	.82	.....
Being repaired.....	35	8.5	.57	.29
Other usage.....	15	3.7	.24	.12
Available for occupancy:				
\$50 or less rental.....	56	13.6	.92	1.17
Over \$50 rental.....	16	3.9	.26	.22
Total.....	412	100.0	6.74	6.76

¹ Philadelphia Housing Association. Annual report for 1923: Housing in Philadelphia, by Bernard J. Newman. Philadelphia, [1924]. 50 pp.

² A summary of the findings of the association on the housing conditions among the negro migrants is given on pp. 54 and 55 of this issue of the MONTHLY LABOR REVIEW.

It will be noticed that while vacant houses were few, vacant houses for rent were still fewer, and that of those available for occupancy only 56 could be rented for \$50 or less per month. If the same ratio prevailed throughout the other districts of the city, "there are but 372 houses of this description in the entire city of about 2,000,000." This was fewer than were found in 1921. In other respects the situation had grown worse during the interval.

The number of houses vacant because they were structurally unsafe or insanitary was 48 per cent less than the number in 1921, while the number of houses vacant because they were being repaired was 96 per cent greater than in that year. This is strong indication that the pressure for homes drove owners to repair dwellings which they formerly considered too far gone to be restored.

In some of the industrial areas surveyed there were absolutely no vacant houses for rent—"not a vacancy of any description, either for rent or for sale, habitable or uninhabitable, was found among the 2,451 houses covered in the Manayunk district."

This survey, which seems to show conclusively that the housing shortage has not been overcome, is supplemented by a careful and exhaustive study of the additional housing accommodation provided in 1922 and 1923, including the alteration of old dwellings into apartments or tenements and also the loss through demolition of existing dwellings to make room for public improvements. After taking into consideration all normal factors, the conclusion is reached that "the housing deficit, after deducting 1923 new construction and conversion, totals 2,334 houses and 12,238 persons." This, however, makes no allowance for such abnormal conditions as the influx of negro migrants, nor does it take into account the possible increase, through marriages, in families needing accommodations. Surveying the whole situation, the conclusion is reached that during the three years ending December 31, 1923, Philadelphia's housing shortage has actually increased.

This conclusion is sustained by a study of tenement conditions, which showed a deplorable amount of overcrowding. A survey of 263 buildings used as multiple family dwellings shows that 32 per cent of the tenements consisted of one room only, 37.9 per cent of two rooms, 19.8 per cent of three rooms, and 10.2 per cent of four rooms and over. About 70 per cent of the families were in tenements of one or two rooms.

Naturally, such congestion means room overcrowding. In one house a small bedroom was found occupied by 5 girls, another by 5 boys, and another by a man and wife and 4 children, with 2 others by the parents and 6 children. This study showed occupancy distributed as follows: Fourteen per cent of the apartments averaged less than 1 person per room, 51.8 per cent averaged between 1 and 2 persons per room, 26.7 per cent averaged between 2 and 3 persons, 5.1 per cent averaged between 3 and 4, and 2 per cent averaged 4 or more persons per room. In the remaining apartments the number of persons could not be ascertained.

This overcrowding is rendered even more dangerous by the insanitary condition of many of the places. Only 34 tenements were found which were free from violations of the housing law, and among the 87 per cent in which one or more violations were found these were often of such a character as to produce most insanitary and objectionable conditions.

A study of rents shows that there had been, among the 1,055 properties studied, an increase of 20.99 per cent over the rates charged in 1922.

This extraordinary increase is the greatest for any one year since 1914. The total increase for these properties over 1914 was 84.96 per cent. The gross rentals for 1,055 houses with complete data for 1922 and 1923 were \$20,551 and \$24,866, and the average corresponding rentals were \$19.48 and \$23.57. In 1922 about 28 per cent of the properties studied showed a rent increase over the preceding year, 1921, but in 1923 there were 64.55 per cent of the properties that had rents increased over 1922. In other words, not only did 1923 experience an extraordinarily high percentage of rental increase but these increases affected more than twice the number of properties shown in 1922.

Contrary to records of preceding years, the negro tenants experienced a higher percentage of rent increase as well as a larger percentage of properties having rent increases, than white tenants, and also heavier than they had experienced in preceding years. While 64.45 per cent of all properties were subjected to rental increases in 1923, the rate for whites was 61.5 per cent, and for negroes 71.86 per cent.

A study of several groups of properties for a series of years shows that in 1923 there was "an increase in owner occupancy of 10.98 per cent as compared with an increase of 6.3 per cent in the preceding year." This is not an unmixed good because in order to meet the high cost of the houses many of the families have resorted to subletting.

From whatever angle the question is approached, the conclusion is reached that the housing program of Philadelphia falls below its needs, and that the workers suffer through this failure. There are not enough houses, and for the existing houses the rent or the purchase price, as the case may be, is too high. Three causes are suggested to account for this. To begin with, in 1923, at least, a large part of the program was in the hands of small builders not accustomed to mass production, and carrying it on in comparatively small projects. The savings possible under large construction were therefore impossible, costs of every kind were large, and an unnecessary amount of time was required for each unit of production. A second cause is the difficulty of financing building enterprises, and a third is the failure of the city to facilitate the development of new areas within city limits. "For years now there has been little, if any, program of extension. As a result, large areas are without main and branch sewers, water mains, and transit, and few street extensions have been made with the necessary grading and paving." As a result, builders must take high-priced land, since that of lower price is almost unavailable, and add the extra cost to the price of their finished product.

For housing extension, city improvements should always be ahead of the most extended dwelling construction that Philadelphia operators could project in any two years of forced building. It is not a theory that confronts the city, but a very serious problem of housing which is exacting its toll in misery, crime, sickness, and death from many thousands of citizens annually. The least the city can do to check such wastage is to provide the service facilities which yield such big returns financially, so that private business may build more homes and thus materially relieve the problem.

Housing Problem in Vienna

ACCORDING to a recent report from the American consulate at Vienna, the director of the municipal housing office of that city made a report in the *Arbeiter-Zeitung* (Vienna) for April 29, 1924, on the activities of his department, of which a summary is given below.

On January 1, 1923, the first-class applicants (persons urgently in need of living quarters) numbered 17,109. By April 1, 1924, in spite of the fact that over 7,300 flats had been allotted since January, 1923, the number of such applicants had increased to 23,450. On the second, or less urgent list, there were 14,523 persons.

The number of evicted persons and also of those who had to leave apartments that had been condemned because no longer habitable, also greatly increased. The number of the former was 843 and that of the latter 256. Thus at the time of the report 1,099 persons were homeless, and it is more difficult now to house them because the law on the seizure of apartments no longer operates successfully.

In 1922 all together 9,622 apartments were requisitioned by the municipal authorities. This was done in accordance with the old regulations, which, however, were superseded on January 1, 1923, by new regulations containing later rules and permitting of a great deal of circumvention. In 1923 only 6,014 apartments could be requisitioned, or 3,608 less than in the preceding year. If to these requisitioned apartments there are added 1,323 apartments in new buildings, it will be seen that altogether the housing office had 7,337 apartments at its disposal. In 1923 the office allotted 4,755 small flats, 693 medium-sized flats, 162 four-room flats, and only 57 larger apartments.

Although the population of Vienna has decreased by about 250,000 since 1914, living quarters are still far from being available in adequate number. This is due partly to the great increase of households through marriages, immigration from the Succession States, and the influx of people from the suburbs because of increased transportation costs, and to the fact that conditions and standards of living have improved. Statistics show that there were on an average 4.23 persons living in every apartment in 1910, 3.61 in 1920, and 3.49 in 1923.

INDUSTRIAL ACCIDENTS AND HYGIENE

Safety in American Industry¹

By JAMES J. DAVIS, SECRETARY OF LABOR

IT IS time to get down to facts in our effort to make industry safe for America. For some years we have been spending large amounts of time, energy, and money to safeguard the lives and limbs of the men whose labor makes this country the greatest industrial nation in the world. This purpose is a laudable one from every point of view. It is a work of true service, both to the individual and to humanity. It means the making of a better industry for America, and a better America for industry. Every life we save, every disability we prevent, every vocational disease we overcome or avoid, means something added to the sum total of human happiness. It likewise means something added to the sum total of our economic prosperity. I have no doubt that we have come a long way in the last decade or two in the matter of industrial safety, but I would like to be able to prove it.

So far as I can find out, and I have spent some time studying the matter, for the human factor in industry is a thing which lies close to my heart, we do not know what we are doing or where we are going as a nation in the way of preventing industrial disease. Our whole struggle for safety in industry, from a national point of view, is a fight in a fog. We are surrounded and bewildered by a constantly rising mist of slogans, and campaigns, and drives, and estimates. We know that in certain individual plants, and in certain individual industries, we are making tremendous strides toward safe operation. We know that our slogans and campaigns get results in many cases. But do you realize that no one to-day can tell within thousands how many American workers were killed in industry last year? I have seen estimates by our very best authorities which fixed the number of fatalities annually in industrial accident at 12,500, 25,000 and 35,000—a range of more than 20,000. The experts of the Bureau of Labor Statistics have estimated these fatalities at about 21,000. We say that such information as we have indicates that there are 2,453,418 industrial accidents annually, with a resulting wage loss of \$1,022,264,866. Truly these figures are appalling. They indicate a terrible wastage of human life and human effort. They call for our best efforts to end the conditions which make that waste possible. But in the end they are estimates, based on "limited statistical data," "relative hazards," and other more or less abstruse calculations of the expert. I want facts.

I believe the American people are entitled to know exactly what price we pay in human life and limb for our industrial prosperity.

I believe the American people are entitled to know where, when, and how men and women are killed and maimed in industry.

¹ Speech delivered before the National Safety Congress, Louisville, Ky., Sept. 29, 1924.

I believe that all of us who are working, as you are working, to cut down this human cost sheet of American industry, are entitled to have the facts upon which to base our efforts. I believe we ought to know where, when, and how accidents occur if we are to make an intelligent, effective fight to prevent them. I believe we must know the conditions which cause vocational diseases before we can find the means to avoid them. Our fundamental need in the fight for safety in industry is facts. Without them we are working in the dark. We are, nationally, like a physician who would undertake to treat a patient without first making a diagnosis of his ailment. You can not make a true diagnosis without facts.

I propose to make an effort to get the facts, and all of the facts as to industrial accidents in the United States. I want—and I know I will have—the support of your organization and of every other organization which is interested in saving human life and limb in industry. I am not one of those who believe that the Federal Government ought to busy itself about the affairs of every individual American. I am not one of those who seek to have the Federal Government poking its nose into everybody's business. I am old-fashioned enough to hold that the function of government is to govern, not to conduct the private business of its citizens.

This, however, is a national problem. That is clearly recognized when we note the wide range of industry and territory represented in this National Safety Congress under the auspices of the National Safety Council. The Federal Government is the only agency which can properly and efficiently assemble the facts which are fundamental in meeting this problem of industrial safety nationally. Our difficulties to-day lie in the wide diversity of statistics as to industrial accidents as those statistics are collected and collated by the individual States. State laws as to workmen's compensation under which most of the data as to industrial accidents are collected, differ widely. Industries covered in one State may not be covered in another. What is a reportable industrial accident in one State, may not be so classified in another State. Six States and the District of Columbia have no machinery for reporting industrial accidents. The result is that when we come to look at this matter nationally, we have only a hodge-podge of information, most of it utterly useless for the compilation of data covering the nation. I propose to put some order into this chaos.

I propose to ask the Federal Congress for the authority, the men, and the money to enable us to undertake real industrial safety research work in the Department of Labor, through either the present Bureau of Labor Statistics or some other agency. I am having legislation drafted which will accomplish this end, and which I propose to submit to the proper committees of the House and Senate when the Congress convenes this winter. Under this legislation I propose to seek the following:

Provision for the collection of all data as to industrial accidents and their prevention, and to industrial diseases and their prevention, by the Federal Department of Labor in cooperation with the various State agencies engaged in this work. By this means we would seek the cooperation of all State agencies in making all of our data uniform and comparable.

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Provision for the publication and dissemination of this information throughout American industry by the Department of Labor.

Provision for the maintenance by the Department of Labor at Washington of an industrial safety exhibit, where we could gather together for the benefit of American industry as a whole, models, devices, plans, and methods for safeguarding the worker in American industry. I would provide for making this exhibit a thorough and complete exposition of every machine or method proved by experience to be a contribution to the advancement of safety in industry. I would make it possible for any manager to find there in Washington the latest word in effective and practical means to make his plant safe for his employees. I would not confine this to mechanical safeguards alone. I would have it embrace every feature of industrial safety engineering and safety organization.

Under such a law, and with such machinery, we would gain much for industrial safety. We would provide for all America the real facts upon which to base accident prevention and vocational disease prevention. We would be able to pave the way for uniform State laws not alone as to industrial accident statistics, but as to accident prevention and the installation of industrial safety devices. At present, safeguards required by law in one State may not be required across the State line just a few miles away. A workman, accustomed to work at a machine properly safeguarded, by changing his place of employment, may find himself at an unguarded machine, exposed to loss of life or limb. Uniform State laws would end this danger.

In putting forward this program of Federal aid in industrial accident prevention, I ask your cooperation and support. I hope that when this legislation is placed before the Congress you will be behind it. The need for it should be apparent to all.

Your work for industrial safety has my earnest and whole-hearted support. After all, the vital factor in industry is the human factor. There is no excuse for wasting it, or neglecting it. I look forward to the day when American industry will be conducted without loss of life or limb, beyond the normal hazards of everyday existence. I look forward to the day when the worker will be as safe at his work as he is in his home, when our prosperity will come to us without the payment of a vast price in flesh and blood.

Accident Experience of the Iron and Steel Industry

By LUCIAN W. CHANEY, OF THE BUREAU OF LABOR STATISTICS

THE present article continues and brings up to the year 1923 the accident statistics for the iron and steel industry published in Bulletin No. 339 of this Bureau and in *The MONTHLY LABOR REVIEW* for October, 1923 (pp. 131-140).

The following summary table is based on the results attained by approximately 50 per cent of the industry. The plants included in this summary were deliberately chosen because they were those which had been longest and most successfully engaged in accident-prevention effort. While the average experience of an industry is a fair standard to which all concerns may properly be urged to attain, it is desirable from time to time to consider the most striking examples of successful effort.

ACCIDENT FREQUENCY RATES (PER 1,000,000 HOURS OF EXPOSURE) IN A SECTION OF THE IRON AND STEEL INDUSTRY, 1913 TO 1923, BY CAUSE GROUPS

Cause group	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Machinery.....	7.3	5.0	4.9	5.4	4.5	4.0	3.3	3.4	1.8	2.2	2.3
Vehicles.....	2.3	1.9	1.6	1.7	1.7	1.3	1.2	.1	.5	.4	.6
Hot substances.....	5.4	3.6	3.7	4.5	3.6	3.0	2.8	2.5	1.2	1.1	1.2
Fall of person.....	4.5	4.1	3.5	3.7	3.2	2.8	2.8	2.5	1.7	1.5	1.4
Falling objects.....	1.2	.7	.7	.6	.4	.3	.4		.1	.1	.1
Handling.....	26.7	19.4	20.6	21.5	15.7	12.8	11.7	10.4	6.5	5.8	5.5
Miscellaneous.....	12.9	8.8	6.5	7.0	5.4	4.6	4.1	3.1	1.3	1.9	1.8
Total.....	60.3	43.5	41.5	44.4	34.5	28.8	26.3	22.0	13.3	13.0	12.8

This table shows very clearly what can be accomplished by persistent and intelligent effort, and by comparison with the table at the end of this article it shows that the industry has still some way to go in order to reach the highest standard in accident prevention.

It will be observed that the frequency of accident in these selected plants for the year 1923 is 12.8 cases per 1,000,000 hours' exposure while the rate for the industry as a whole is 33.2. This means that the rate for the less successful half of the industry is in the vicinity of 50.

A very striking feature of the first section of the table below, covering the industry as a whole, is the extraordinary uniformity of the years 1922 and 1923. While nearly 100,000 more workers were employed in 1923, the frequency rates of the two years are almost identical and the severity rates exactly identical. It is evident from this that the impression given by the increased number of accidents in 1923 was not entirely warranted. In a number of cases where it has been possible to compute rates, it has been evident that the hazard was somewhat greater in 1923 than in 1922, but in no case has this excess been extreme. The situation disclosed in the iron and steel industry suggests very strongly the need, as a basis of judgment, of reliable accident rates rather than percentages of increase or decrease which may be wholly misleading.

A few points shown in the various departments are worthy of emphasis.

First, in open hearths (section 3 of the table) the severity rates have been going up for three years and the rate of 1923 (5.2) is higher than any since 1919 (6.8). This would certainly suggest that managers of such plants need to give the physical condition of their mills searching attention.

Accident occurrence in foundries (section 4 of table) continues to be somewhat erratic, with no definite downward trend.

Tube mills (section 11) maintain an extraordinarily low rate both in frequency (18.2) and in severity (1.5) of accidents.

Wire drawing (section 15) is unusual in that the severity rate (1.2) for permanent injury is higher than that for fatality (0.3). This appears to be due to cases where the workman becomes entangled in the wire going to the block and suffers some serious mutilation.

Yards (section 19) maintain a rather bad preeminence in severity rates (5.2) and while much better than was the case some years ago do not show the degree of improvement which might be desired.

Erection of structural steel (section 23) still overtops other occupations in both frequency (89.2) and in severity (9.4). While this severity rate is higher than any other it is still a notable decline from that of 1922 (21.1). The exposure in the years covered by the table is much smaller than could be desired, but the rates are sufficiently uniform to indicate that they fairly picture the hazards incident to the occupations.

Section 26 of the table isolates the characteristic operation in sheet rolling—namely, the hot rolling. It is not possible to judge from a few years whether this operation is more or less hazardous than that of the sheet mills as a whole (section 10).

The unclassified group (section 27) it must be understood, contains a very miscellaneous assortment of plants which could not for one reason or another be allocated to the several departments.

ACCIDENT FREQUENCY AND SEVERITY RATES IN IRON AND STEEL INDUSTRY FOR SPECIFIED PERIODS

THE INDUSTRY

Period	Equivalent in full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
		Death	Perma-nent disability	Tempo-rary disability	Total	Death	Perma-nent disability	Tempo-rary disability	Total	Death	Perma-nent disability	Tempo-rary disability	Total
1910 to 1914	1,810,911	1,524	5,080	226,305	232,954	0.4	1.3	57.5	59.2	2.3	1.1	0.7	4.1
1915 to 1919	1,545,706	1,731	4,469	186,532	192,732	.4	1.0	40.2	41.0	2.2	.8	.6	3.6
1920	442,685	327	1,084	49,482	50,893	.2	.8	37.3	38.3	1.5	.8	.4	2.7
1921	237,094	156	527	21,279	21,962	.2	.7	29.9	30.8	1.3	.7	.5	2.5
1922	335,609	236	878	32,120	33,234	.2	.9	31.9	33.0	1.4	.8	.5	2.7
1923	434,693	314	1,188	41,766	43,268	.2	.9	32.1	33.2	1.4	.8	.5	2.7

1. Blast furnaces

1910 to 1914	126,582	324	366	22,578	23,268	0.9	1.0	60.4	62.3	5.2	1.0	0.8	7.0
1915 to 1919	136,166	317	312	15,287	15,916	.8	.8	37.4	39.0	4.7	.9	.5	6.1
1920	35,470	47	58	3,214	3,319	.4	.5	30.2	31.1	2.7	.9	.4	4.0
1921	15,486	23	24	1,160	1,207	.5	.5	25.0	26.0	3.0	.5	.4	3.9
1922	17,933	38	35	1,586	1,659	.7	.7	29.4	30.8	4.2	.4	.5	5.1
1923	29,698	53	68	2,702	2,823	.6	.8	30.3	31.7	3.6	.1	.5	4.2

2. Bessemer

1910 to 1914	28,101	57	146	7,367	7,570	0.7	1.7	87.4	89.8	4.0	1.1	1.3	6.4
1915 to 1919	25,645	62	112	4,262	4,436	.8	1.5	55.4	57.7	4.8	1.1	1.0	6.9
1920	6,907	5	9	750	764	.2	.4	36.2	36.8	1.4	.3	.6	2.3
1921	3,440	4	6	252	262	.4	.6	24.4	25.4	2.3	.4	.4	3.1
1922	4,778	2	8	233	243	.1	.6	16.3	17.0	.8	.5	.3	1.6
1923	6,080	6	20	367	393	.3	1.1	20.1	21.5	2.0	.5	.5	3.0

3. Open hearths

1910 to 1914	71,293	143	333	15,809	16,285	0.7	1.5	72.8	75.0	4.0	1.6	1.0	6.6
1915 to 1919	86,175	191	317	12,563	13,071	.7	1.2	48.6	50.5	4.4	1.2	.9	6.5
1920	28,823	43	70	3,164	3,277	.5	.8	37.0	38.3	3.0	.8	.5	4.3
1921	12,783	9	21	1,082	1,112	.2	.6	28.2	29.0	1.4	.4	.5	2.3
1922	19,805	22	46	1,936	2,004	.4	.8	32.6	33.8	2.2	.9	.5	3.6
1923	24,917	42	74	2,145	2,261	.6	1.0	28.6	30.2	3.4	1.1	.7	5.2

ACCIDENT FREQUENCY AND SEVERITY RATES IN IRON AND STEEL INDUSTRY FOR SPECIFIED PERIODS—Continued

4. Foundries

Period	Equiva- lent in full- year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' ex- posure)			
		Death	Perma- nent disa- bility	Tempo- rary disa- bility	Total	Death	Perma- nent disa- bility	Tempo- rary disa- bility	Total	Death	Perma- nent disa- bility	Tempo- rary disa- bility	Total
1910 to 1914.....	95,917	84	449	17,765	18,298	0.3	1.6	61.7	63.6	1.8	1.1	0.7	3.6
1915 to 1919.....	92,746	84	277	16,604	16,965	.3	1.0	59.7	61.0	1.8	.9	.7	3.4
1920.....	35,300	13	97	6,688	6,798	.1	.9	63.2	64.2	.7	.8	.8	2.3
1921.....	15,388	9	34	2,756	2,799	.2	.7	59.7	60.6	1.2	.7	.8	2.7
1922.....	22,770	12	59	4,134	4,205	.2	.9	60.5	61.6	1.1	.9	.7	2.7
1923.....	38,660	26	126	7,171	7,323	.2	1.2	61.8	63.2	1.4	.8	.8	3.0

5. Bar mills

1915 to 1919.....	24,081	20	77	4,745	4,842	0.3	1.1	65.6	67.0	1.7	0.7	0.7	3.1
1920.....	3,880	1	5	525	531	.1	.4	44.8	45.3	.5	.2	.5	1.2
1921.....	1,912	-----	5	228	233	-----	.9	39.8	40.7	-----	1.0	.6	1.6
1922.....	3,780	7	10	392	409	.6	.9	34.6	36.1	3.7	.8	.5	5.0
1923.....	4,003	-----	17	443	460	-----	1.4	36.4	37.8	-----	.7	.6	1.3

6. Heavy rolling mills

1910 to 1914.....	67,663	74	261	9,007	9,342	0.4	1.3	44.4	46.1	2.1	0.9	0.6	3.6
1915 to 1919.....	75,166	91	275	6,950	7,316	.4	1.2	30.8	32.4	2.4	1.0	.5	3.9
1920.....	20,787	12	34	1,638	1,684	.2	.5	26.3	27.0	1.2	.4	.4	2.0
1921.....	9,000	3	15	485	503	.1	.5	16.5	17.1	.6	.3	.3	1.2
1922.....	14,574	9	56	752	817	.2	1.3	34.2	32.7	1.2	.9	.4	2.5
1923.....	16,602	8	36	882	926	.2	.7	17.7	18.6	1.0	.8	.3	2.1

7. Plate mills

1910 to 1914.....	27,711	19	105	3,129	3,253	0.3	1.6	48.0	49.9	1.8	1.4	0.7	3.9
1915 to 1919.....	35,073	25	89	4,016	4,130	.2	.8	38.2	39.2	1.4	.6	.5	2.5
1920.....	11,928	9	23	1,147	1,179	.3	.6	32.1	33.0	1.5	.6	.4	2.5
1921.....	4,580	3	7	318	323	.2	.5	23.1	23.8	1.3	.3	.4	2.0
1922.....	6,198	2	26	581	609	.1	1.4	31.2	32.7	.6	.9	.5	2.0
1923.....	8,731	5	24	662	691	.2	.9	25.3	26.4	1.1	1.2	.4	2.7

8. Puddling mills

1917 to 1919.....	8,460	4	15	1,082	1,101	0.2	0.6	42.6	43.4	0.9	0.4	0.6	1.9
1920.....	2,007	1	10	243	254	.2	1.7	40.3	42.2	1.0	.8	.6	2.4
1923.....	1,620	-----	3	280	283	-----	.6	57.6	58.2	-----	1.1	1.0	2.1

9. Rod mills

1915 to 1919.....	15,218	14	70	1,721	1,805	0.3	1.5	37.7	39.5	1.8	1.3	0.5	3.6
1920.....	3,729	1	9	344	354	.1	.8	30.7	31.6	.5	.5	.4	1.4
1921.....	2,099	-----	6	126	132	-----	1.0	20.0	21.0	-----	.7	.3	1.0
1922.....	2,645	1	5	196	202	.1	.6	24.7	25.4	.8	.5	.5	1.8
1923.....	3,224	1	10	189	200	.1	1.1	20.2	21.4	.6	1.3	.3	2.2

ACCIDENT FREQUENCY AND SEVERITY RATES IN IRON AND STEEL INDUSTRY
FOR SPECIFIED PERIODS—Continued

10. Sheet mills

Period	Equivalent in full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
		Death	Perma- nent disa- bility	Tem- porary disa- bility	Total	Death	Perma- nent disa- bility	Tem- porary disa- bility	Total	Death	Perma- nent disa- bility	Tem- porary disa- bility	Total
1910 to 1914.	128,423	88	308	19,262	19,658	0.2	0.9	50.0	51.1	1.4	0.6	0.6	2.6
1915 to 1919.	104,335	37	172	10,034	10,243	.1	.5	32.1	32.7	.7	.4	.4	1.5
1920-----	24,279	14	59	2,979	3,052	.2	.8	40.1	41.0	1.2	.7	.8	2.3
1921-----	15,845	5	38	1,702	1,745	.1	.8	35.8	36.7	.6	.5	.5	1.6
1922-----	24,391	10	66	2,951	3,027	.1	.9	40.3	41.3	.8	.8	.9	2.5
1923-----	29,814	14	61	2,390	2,465	.2	.7	27.6	28.5	1.0	.7	.5	2.2

11. Tube mills

1910 to 1914.	73,338	36	249	8,623	8,908	0.2	1.1	39.2	40.5	1.0	0.7	0.5	2.2
1915 to 1919.	75,108	38	178	4,825	5,041	.2	.8	21.4	22.4	1.0	.5	.3	1.8
1920-----	22,666	13	71	2,166	2,250	.2	1.0	31.9	33.1	1.1	.5	.5	2.1
1921-----	14,622	4	35	840	879	.1	.8	19.1	20.0	.5	.5	.4	1.4
1922-----	19,535	6	40	1,332	1,378	.1	.7	22.7	23.5	.6	.6	.4	1.6
1923-----	24,766	8	54	1,292	1,354	.1	.7	17.4	18.2	.6	.6	.3	1.5

12. Unclassified rolling mills

1910 to 1914.	104,829	82	360	21,501	21,943	0.3	1.2	71.8	73.3	1.7	1.1	0.9	3.7
1915 to 1919.	102,696	53	218	12,644	12,915	.2	.7	41.0	41.9	1.0	.5	.6	2.1
1920-----	21,055	16	68	2,785	2,869	.3	1.1	44.1	45.4	1.5	.9	.5	2.9
1921-----	12,068	4	36	1,479	1,519	.1	1.0	40.9	42.0	.7	.9	.7	2.3
1922-----	19,382	10	59	2,416	2,485	.2	1.0	41.5	42.7	1.0	.9	.7	2.6
1923-----	26,357	11	92	2,830	2,933	.1	1.2	35.8	37.1	.8	1.3	.6	2.7

13. Fabricating shops

1910 to 1914.	108,538	98	425	25,506	26,029	0.3	1.3	78.3	79.9	1.7	0.9	0.8	3.4
1915 to 1919.	80,985	59	163	13,195	13,417	.2	.7	54.3	55.2	1.5	.5	.6	2.6
1920-----	17,210	14	68	2,721	2,803	.2	1.3	52.7	54.2	1.6	1.1	.6	3.3
1921-----	12,908	5	45	1,971	2,021	.1	1.2	50.9	52.2	.8	.7	.6	2.1
1922-----	16,184	14	41	3,351	3,436	.3	.8	69.6	70.7	1.7	.8	.8	3.3
1923-----	22,547	9	52	4,019	4,080	.1	.8	59.4	60.3	.8	.7	.7	2.2

14. Forge shops

1910 to 1914.	6,249	8	19	1,080	1,107	0.4	1.0	57.6	59.0	2.6	0.6	0.7	3.9
1915 to 1919.	12,667	9	45	2,189	2,243	.2	1.2	57.6	59.0	1.4	1.1	.9	3.4
1920-----	2,197	-----	5	380	385	-----	.8	58.6	59.4	-----	.8	.7	1.5
1921-----	902	1	3	107	111	.4	1.1	39.5	41.0	2.2	1.0	.7	3.9
1922-----	1,514	2	8	233	243	.4	1.8	51.3	53.5	2.6	1.7	.9	5.2
1923-----	2,049	1	9	309	319	.2	1.5	50.2	51.9	1.0	.9	.7	2.6

15. Wire drawing

1910 to 1914.	59,481	21	383	11,504	11,908	0.1	2.1	63.5	65.7	0.7	1.9	0.6	3.2
1915 to 1919.	52,666	12	321	6,912	7,245	.1	2.0	43.7	45.8	.5	1.6	.5	2.6
1920-----	13,243	2	63	1,252	1,317	.1	1.6	31.5	33.2	.3	1.7	.5	2.5
1921-----	9,186	4	36	527	567	.1	1.3	19.1	20.6	.9	1.4	.4	2.7
1922-----	13,836	3	53	837	893	.1	1.3	20.2	21.6	.4	1.3	.4	2.1
1923-----	14,783	2	54	919	975	.04	1.2	20.7	21.9	.3	1.2	.4	1.9

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ACCIDENT FREQUENCY AND SEVERITY RATES IN IRON AND STEEL INDUSTRY
FOR SPECIFIED PERIODS—Continued16. *Electrical department*

Period	Equivalent in full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
		Death	Perma- nent dis- ability	Tem- porary dis- ability	Total	Death	Perma- nent dis- ability	Tem- porary dis- ability	Total	Death	Perma- nent dis- ability	Tem- porary dis- ability	Total
1910 to 1914.	14,921	33	48	1,957	2,038	0.8	1.1	45.2	47.1	4.6	1.2	0.5	6.3
1915 to 1919.	16,023	46	40	1,851	1,937	1.0	.8	38.5	40.3	5.7	1.0	.5	7.2
1920.....	4,473	5	3	408	411	.4	.2	30.0	30.6	2.2	.1	.4	2.7
1921.....	3,025	2	3	188	193	.2	.3	20.7	21.2	1.3	.6	.3	2.2
1922.....	3,528	4	1	164	169	.4	.1	15.5	16.0	2.3	.1	.4	2.8
1923.....	4,325	5	8	215	228	.4	.6	16.6	17.6	2.3	.4	.3	3.0

17. *Mechanical department*

1910 to 1914.	97,161	104	392	17,794	18,292	.4	1.3	61.0	62.7	2.1	1.1	.8	4.0
1915 to 1919.	154,846	154	492	18,556	19,202	.3	1.1	39.9	41.3	2.0	1.0	.5	3.5
1920.....	34,648	26	68	3,767	3,861	.3	.7	36.2	37.2	1.5	.6	.5	2.6
1921.....	25,036	21	41	1,703	1,775	.3	.5	22.7	23.6	1.7	.5	.4	2.5
1922.....	30,324	25	75	1,626	1,726	.3	.8	17.9	19.0	1.6	.7	.3	2.6
1923.....	37,449	37	102	2,045	2,184	.3	.9	18.2	19.4	2.0	1.0	.3	3.3

18. *Power houses*

1912 to 1914.	8,033	6	21	544	571	.2	.9	22.4	23.5	1.5	.8	.3	2.6
1915 to 1919.	13,219	27	21	739	787	.7	.5	18.6	19.8	4.1	.6	.3	5.0
1920.....	4,591	4	1	172	177	.3	.1	12.5	12.9	1.7	(¹)	.2	1.9
1921.....	2,344	2	---	77	79	.3	---	10.9	11.2	1.7	---	.2	1.9
1922.....	3,361	---	5	115	120	---	.5	11.4	11.9	---	.7	.2	.9
1923.....	4,070	6	4	117	127	.5	.3	9.6	10.4	2.9	.4	.1	3.4

19. *Yards*

1910 to 1914.	55,932	112	243	8,112	8,467	.7	1.5	48.6	50.8	4.0	1.4	.6	6.0
1915 to 1919.	53,890	106	258	5,685	6,049	.7	1.6	35.2	37.5	3.9	1.6	.6	6.1
1920.....	12,087	10	33	922	965	.3	.9	25.4	26.6	1.7	1.3	.4	3.4
1921.....	5,840	6	22	422	450	.3	1.3	24.1	25.7	2.1	1.9	.5	4.4
1922.....	7,969	15	16	536	567	.6	.7	22.4	23.7	3.8	.5	.5	4.8
1923.....	8,381	12	35	693	740	.5	1.4	27.5	29.4	2.9	1.9	.4	5.2

20. *Coke ovens*

1912 to 1914.	13,282	27	39	1,651	1,717	.7	1.0	41.4	43.1	4.1	1.5	.6	6.2
1915 to 1919.	28,901	66	44	2,095	2,205	.8	.5	24.1	25.4	4.6	.5	.4	5.5
1920.....	8,620	6	11	518	535	.2	.4	10.0	10.6	1.4	.7	.3	2.4
1921.....	5,768	2	4	182	188	.1	.2	10.5	10.8	.7	.3	.2	1.1
1922.....	6,554	2	1	207	210	.1	.1	10.5	10.7	.6	.2	.2	1.0
1923.....	8,961	7	14	416	437	.3	.5	15.5	16.3	1.6	1.1	.3	3.0

21. *Axle works*

1912 to 1914.	1,326	2	4	438	444	.5	1.0	110.1	111.6	3.0	2.1	1.6	6.7
1915 to 1919.	2,467	---	4	338	342	---	.5	45.7	46.2	---	1.2	.7	1.9
1920.....	743	---	---	100	100	---	---	44.8	44.8	---	---	.7	.7
1921.....	242	1	---	12	13	1.3	---	16.5	17.9	8.3	---	.5	8.7
1922.....	490	---	---	11	11	---	---	7.5	7.5	---	---	.1	.1
1923.....	774	---	---	30	30	---	---	12.9	12.9	---	---	.1	.1

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ACCIDENT FREQUENCY AND SEVERITY RATES IN IRON AND STEEL INDUSTRY FOR SPECIFIED PERIODS—Concluded.

22. Car wheels

Period	Equivalent in full-year workers	Number of cases				Accident frequency rates (per 1,000,000 hours' exposure)				Accident severity rates (per 1,000 hours' exposure)			
		Death	Perma-nent dis-ability	Tem-porary dis-ability	Total	Death	Perma-nent dis-ability	Tem-porary dis-ability	Total	Death	Perma-nent dis-ability	Tem-porary dis-ability	Total
1912 to 1914	2,367	3	15	609	627	.4	2.1	85.8	88.3	2.5	.9	1.3	4.7
1915 to 1919	5,904	7	18	1,313	1,338	.4	1.0	74.1	75.5	2.4	.5	1.0	3.9
1920	1,215	-----	4	170	174	-----	1.0	46.7	47.7	-----	.9	.6	1.5
1921	552	-----	2	92	95	-----	1.2	56.7	58.6	-----	.5	.7	4.9
1922	1,102	-----	-----	78	78	-----	-----	23.6	23.6	-----	-----	.6	.6
1923	1,099	-----	1	116	118	-----	.3	.3	35.2	-----	.2	.8	2.8

23. Erection of structural steel

1912 to 1914	2,157	26	24	738	788	4.0	3.7	114.0	121.7	24.1	5.5	1.8	31.4
1915 to 1919	4,979	45	35	1,522	1,602	3.0	2.3	101.9	107.2	18.1	2.6	1.6	23.3
1920	637	6	12	204	222	3.3	6.6	111.8	121.7	19.7	3.7	2.5	25.9
1921	573	5	4	168	177	2.9	2.3	97.8	103.0	17.5	1.1	1.7	20.2
1922	595	5	2	129	136	2.8	1.1	72.3	76.2	16.8	2.5	1.8	21.1
1923	912	3	7	234	244	1.1	2.6	85.5	89.2	6.6	1.6	1.2	9.4

24. Woven wire fences

1915 to 1919	7,311	1	47	684	732	.1	2.1	31.2	33.4	.3	1.6	.3	2.2
1920	1,097	-----	6	48	54	-----	1.8	14.6	16.4	-----	2.9	.2	3.1
1921	1,095	-----	3	79	82	-----	.9	24.1	30.0	-----	.8	.4	1.2
1922	1,528	-----	6	85	91	-----	1.3	18.5	19.8	-----	.7	.4	1.1
1923	1,603	1	3	124	128	.2	.6	25.8	26.6	1.2	.5	.2	1.9

25. Nails and staples

1915 to 1919	9,818	2	56	782	840	.1	1.9	26.5	28.5	.4	1.3	.3	2.0
1920	2,364	-----	8	164	172	-----	1.1	23.1	24.2	-----	.8	.1	.9
1921	1,718	1	6	91	98	.2	1.2	17.7	19.0	1.2	.6	.3	2.1
1922	2,366	1	10	121	132	.1	1.4	17.0	18.5	.8	1.3	.3	2.4
1923	3,404	1	7	131	139	.1	.9	17.4	18.5	.8	1.2	.2	2.2

26. Sheet rolling, hot mills

1920	6,660	2	12	624	638	.1	.6	31.2	31.9	.6	.5	.4	1.5
1921	3,728	3	3	424	430	.3	.3	37.9	38.5	1.6	.2	.5	2.3
1922	7,476	3	8	721	732	.1	.4	32.1	32.6	.8	.1	.5	1.4
1923	6,374	2	9	820	831	.1	.5	42.9	43.5	.6	.4	.5	1.5

27. Unclassified

1915 to 1919	293,329	237	706	30,612	31,555	.3	.8	34.8	35.9	1.6	1.3	.5	3.4
1920	104,741	72	261	11,208	11,541	.2	.8	35.7	36.7	1.4	.9	.5	2.8
1921	53,403	36	134	4,468	4,638	.2	.8	27.9	28.9	1.3	.8	.5	2.6
1922	79,405	39	233	6,848	7,120	.2	1.0	28.7	29.9	1.0	.8	.4	2.2
1923	95,138	52	273	9,719	10,044	.2	1.0	34.1	35.3	1.1	.9	.5	2.5

Thirteenth Congress of National Safety Council

FOR the first time since its organization the National Safety Council held its annual congress south of the Ohio River, the thirteenth congress being convened in the city of Louisville, September 29 to October 3, 1924.

One who has attended many of these meetings is impressed by the sustained interest of the men who have been in the movement from the first and by the expansion of the movement as evidenced by the number attending for the first time. It is evident that American industry is coming steadily to recognize that the care and protection of its human agents is as necessary a part of good business as the turning out of products. In the opening session of the congress Lewis A. DeBlois, in his address as president of the National Safety Council, showed that there has been a fairly steady decline in accidental fatalities, in which the activities of the council have undoubtedly been a factor. The rate of progress is in many cases very slow, however, and this slow progress is due to failure to develop in the working force the mental attitude which will insure considering all situations in the worker's experience from the safety angle.

At the same session Richard F. Grant, president of the Chamber of Commerce of the United States, delivered an address on "Cooperation in safety among trade and other associations" in which he said:

It is a matter of great public concern and interest that the question of safety has now assumed national proportions and is enlisting the unselfish work and devotion of men from all walks of life in an effort to find the best possible solution of the hazards of our complicated present-day life. The National Safety Council has done signal national service in keeping this vital question before the public. It is to be congratulated that its work in traffic safety now enlists the attention of Federal authorities and that there has been brought into a national conference the leading men of the country, both official and nonofficial, in the solution of these complex problems.

The afternoon of Monday, September 29, was devoted to a general session, at which the principal address was delivered by James J. Davis, United States Secretary of Labor, on "Safety in American industry." Secretary Davis announced his intention of developing the statistical service of his department to meet the needs of all industry. His address is printed in full on pages 193 to 195 of this issue of the MONTHLY LABOR REVIEW.

In an address on "Mental causes of accidents," Dr. Arnold L. Jacoby, director Psychopathic Clinic, Detroit, Mich., declared that:

There is no field of greater fertility for profitable scientific research than that of the mental factors entering into accidents. The expenditure upon the investigations of the minds of machine operators of but a small fraction of the amount of money that has been expended in the manufacture of safety signs alone would be productive of valuable results. As a result of such investigations, not only will there develop better methods of examination to separate mental hazards, but also better methods of education through the media of signs and instruction.

"The public safety problem," was discussed by C. F. Kettering, vice president and chief engineer General Motors Research Corp., Dayton, Ohio.

Another general session, devoted to education and public safety, was held on Tuesday afternoon, George H. Pride, of the Autocar Co., Ardmore, Pa., speaking on "The automobile age"; Ernest N. Smith,

general manager American Automobile Association, Washington, D. C., on "Motorists and pedestrians"; and Judge Shepard Bryan, Atlanta, Ga., on "Who is responsible for public accidents."

The success of the National Safety Council has been so great and its activities have become so varied that only a few of the sectional meetings of the congress can be here covered and therefore attention will be directed to those in which there was discussion of matters relating to pending safety codes and the progress of statistical method.

Rubber section.—This section, acting for the National Safety Council as sponsor, is gathering data for the preparation of a safety code for rubber-mill machinery. This effort is not in a stage for satisfactory discussion, however, and the section devoted itself to the discussion of such topics as benzol poisoning, lead poisoning, dust explosions, etc. The section has for some time been assembling and publishing its statistics on a standard basis.

Woodworking section.—The safety code in which this section is interested has been completed and submitted for the approval of the American Engineering Standards Committee. The section devoted one meeting to a discussion of woodworking guards placed on exhibition by manufacturers and members, which brought out several new devices and modifications of old ones of much interest. At other meetings fire prevention and the hazards of logging, lumbering, and sawmills were considered.

American Society of Safety Engineers.—For some years there has been a friendly rivalry between this organization and the engineering section of the council. Throughout this interval there has been discussion regarding the possibilities of consolidation, it being the opinion of many that more effective work could be done by a single body. One effort at consolidation failed but those interested continued their negotiations with the result that an agreement has this year been reached which is satisfactory to all concerned. A member of the National Safety Council staff will act as secretary. The principal local chapter will be located in New York City, with an assistant secretary, and local chapters will be organized at other points.

Packers and tanners.—The most animated discussion in the meetings of this section arose in connection with the paper on "Safety in motor-truck operation," by Z. C. Elkin, of the Chicago Motor Club, Chicago, Ill. Among other addresses was one on "Value of uniform accident statistics," by Lucian W. Chaney, of the United States Bureau of Labor Statistics.

Cement section.—This section follows the standard method in assembling and publishing its statistics. The papers on "Intangible assets of the cement manufacturer," by W. G. H. Cam, power and safety engineer, Canada Cement Co. (Ltd.), Montreal, Canada, and "The human element in safety work," by John H. Mallon, Louisville Cement Co., Louisville, Ky., were actively discussed. In connection with the second paper a number of new and ingenious methods of approach to the worker were suggested.

A B C session.—This session has now been a part of the program for several years. The number present and the earnest discussion which always arises show the importance of fundamentals, and that

the movement is still drawing to itself a large contingent of new men who need the elementary presentation for which opportunity is given at this session.

Safety exhibit.—The most notable feature of this exhibit was the number of automatic signaling systems for streets and highways on view. Within the year a number of these have been developed. The proposed national code on color of traffic signals has, however, not reached a stage to influence the development of these signaling devices.

Election of officers.—The following officers were elected for the coming year:

President.—Carl B. Auel, Westinghouse Electric Co., East Pittsburgh, Pa.

Vice President in charge of public safety.—David VanSchaack, Aetna Life Insurance Co., Hartford, Conn.

Vice President in charge of general activities.—Lewis A. DeBlois, E. I. du Pont de Nemours & Co., Wilmington, Del.

Vice President in charge of public relations.—Lew R. Palmer, Equitable Life Insurance Society, New York City.

Vice President in charge of local safety council.—George T. Fonda, Fonda-Tolsted (Inc.), New York City.

Vice President in charge of industrial safety.—Henry A. Reninger, Lehigh Portland Cement Co., Allentown, Pa.

Vice President and Treasurer.—Charles B. Scott, Bureau of Safety, Chicago, Ill.

Secretary and Managing Director.—William H. Cameron, Chicago, Ill.

Coal-Mine Fatalities in the United States in 1923

THE report of the United States Bureau of Mines on fatal accidents in coal mines in the United States during the calendar year 1923 (Bulletin 241) shows a reduction of 8 per cent in the fatality rate from that of the preceding year. Accidents in and around the coal mines in 1923 resulted in the death of 2,452 men—a fatality rate of 3.82 per million tons mined as compared with a rate of 4.15 for 1922. This was equivalent to a saving of 210 lives—that is, if the fatality rate of 1922 had continued throughout 1923 the number of lives lost would have exceeded the actual number of fatalities by 210.

Not only was there a reduction in the fatality rate for all causes but there was also a reduction for each of the main causes of coal-mine fatalities. The rate for falls of roof and coal, which are usually the cause of nearly half of all deaths in coal mines, was 1.81 per million tons as compared with 1.90 in 1922. Haulage accidents underground, which are usually the cause of about 17 per cent of the fatalities, had a rate of 0.64 per million tons as against 0.71 for the preceding year. The rates for gas and dust explosions were 0.58 and 0.65; for deaths due to electricity, 0.12 and 0.16; and for deaths from powder and other explosives, 0.18 and 0.19, in 1923 and 1922, respectively.

There were 2,249 fatal underground accidents during 1923, while 46 occurred in shafts, and 157 on the surface. The total number of deaths at bituminous mines was 1,943 and at anthracite mines 509. The fatality rate for bituminous mines was 3.56 per million tons in 1923 as compared with 3.98 for 1922, and for anthracite mines 5.32 in 1923 and 5.49 in 1922. There were 11 coal-mine disasters in

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which 5 or more men were killed in 1923, the total number of lives lost in these major catastrophes being 301, and 14 similar disasters in 1922 with 280 lives lost.

Preliminary estimates place the total number of men employed at the mines in 1923 at 846,990 and the amount of coal mined at 641,476,000 tons. The production in 1923 was approximately 164,525,000 tons more than in 1922, the output in 1922 having been greatly curtailed by the miners' strike of five months' duration, while there were only about 2,200 more men employed in 1923 than in 1922.

The following table shows the number of workers, average days active, number of men killed, fatality rate per 1,000 300-day workers, and production in coal mines for the years 1907 to 1923:

COAL-MINE FATALITIES AND PRODUCTION, 1907 TO 1923

Year	Men employed		Average days active	Men killed		Production (short tons)	Production per death (short tons)	Average production per man	
	Actual number	Equivalent in 300-day workers		Number	Rate per 1,000 300-day workers			Tons per year	Tons per day
1907 ¹	674,613	519,452	231	3,242	6.24	477,892,536	147,407	708	3.07
1908 ¹	678,873	441,267	195	2,445	5.54	460,309,857	167,407	603	3.09
1909 ¹	666,535			2,642		460,807,263	174,416	691	
1910.....	725,090	531,689	220	2,821	5.31	501,596,378	177,808	692	3.14
1911.....	728,348	534,122	220	2,656	4.97	496,371,126	186,887	682	3.10
1912.....	722,662	541,997	225	2,419	4.46	534,466,580	220,945	740	3.29
1913.....	747,644	593,131	238	2,785	4.70	570,048,125	204,685	762	3.20
1914.....	763,185	526,598	207	2,454	4.66	513,525,477	209,261	673	3.25
1915.....	734,008	511,598	209	2,269	4.44	531,619,487	234,297	724	3.46
1916.....	720,971	565,766	235	2,226	3.93	590,098,175	265,094	818	3.48
1917.....	757,317	634,666	251	2,696	4.25	651,402,374	241,618	860	3.42
1918.....	762,426	654,973	258	2,580	3.94	678,211,904	262,873	890	3.45
1919.....	776,569	542,217	209	2,317	4.27	553,952,259	239,082	713	3.41
1920.....	784,621	601,283	230	2,271	3.78	658,264,932	289,857	839	3.65
1921.....	823,253	474,529	173	1,987	4.19	506,395,401	254,854	615	3.56
1922.....	844,807	405,056	144	1,979	4.89	476,951,121	241,006	565	3.92
1923.....	² 846,990			2,452		³ 641,476,000	261,613		

¹ Figures are only for States under inspection service. Figures omitted for 1909 (census year) because not comparable.

² Number of employees based on estimates of State mine inspectors.

³ Estimated.

The following table shows, by causes, the fatalities at coal mines and the rate per million tons during the calendar years 1922 and 1923:

FATAL ACCIDENTS AND RATE PER MILLION TONS AT COAL MINES FOR THE YEAR ENDED DECEMBER 31, 1922 AND 1923, BY CAUSES

Cause	Number killed		Rate per million tons		Cause	Number killed		Rate per million tons	
	1922	1923	1922	1923		1922	1923	1922	1923
Underground:					Shaft.....	41	46	0.09	0.07
Falls of roof or face.....	905	1,158	1.90	1.81	Surface:				
Mine cars and locomotives.....	341	413	.71	.64	Haulage.....	54	59	.11	.09
Gas and dust explosions.....	311	372	.65	.58	Machinery.....	23	26	.05	.04
Explosives.....	92	114	.19	.18	Miscellaneous.....	61	72	.13	.11
Electricity.....	74	75	.16	.12	Total.....	138	157	.29	.24
Mine fires.....					Grand total.....	1,979	2,452	4.15	3.82
Miscellaneous.....	77	117	.16	.18					
Total.....	1,800	2,249	3.77	3.51					

The report also gives detailed information in regard to the distribution of accidents by States from each specified cause, the amount of coal produced and the percentage of coal mined by various methods, by States and years.

Safety Codes Recommended by American Engineering Council

IN the MONTHLY LABOR REVIEW for July, 1924 (p. 191), was given a list of codes recommended by the American Engineering Council in a resolution adopted January 11, 1924. At the time that notice was printed, the text of the whole resolution was not yet available. The following codes¹ were recommended by the council, in addition to those listed in the July issue:

National safety code for the protection of the heads and eyes of industrial workers. [Published by the United States Bureau of Standards.]

Safety code for power presses and foot and hand presses. [Published by the National Safety Council.]

Safety code for mechanical power transmission apparatus. [Published by the American Society of Mechanical Engineers; U. S. Bureau of Labor Statistics, Bul. No. 364.]

Safety Code for Mechanical Power-Transmission Apparatus

THE United States Bureau of Labor Statistics has just issued, as Bulletin No. 364, the safety code for mechanical power-transmission apparatus approved as the tentative American standard July, 1923, by the American Engineering Standards Committee. This code applies to all moving parts of equipment used in the mechanical transmission of power, including prime movers, intermediate equipment, and driven machines, excluding point of operation, and is intended to serve as a guide to State and municipal authorities and may be adopted by them in whole or in part.

Safety Codes Adopted in Ohio

THE following safety codes adopted by the Industrial Commission of Ohio became effective January 1, 1924:

- General safety standards for workshops and factories.
- Specific requirements covering polishing and grinding machines.
- Specific requirements covering the operation of metal working machinery.
- Specific requirements covering the operation of woodworking machinery.
- Specific requirements for building and construction work.
- Specific requirements for conducting fire drills in factories and lofts.
- Specific requirements for potteries.
- Specific requirements for steel mills.
- Specific requirements governing blowers and exhausters.
- Specific requirements in foundries and core rooms and regulations for the employment of women in core rooms.
- Specific requirements relating to passenger and freight elevators.

¹ From copy of resolution furnished by Dr. M. G. Lloyd, chief of the safety engineering section, United States Bureau of Standards.

Eye Hazards in Industrial Occupations¹

A STUDY recently completed by the National Committee for the Prevention of Blindness brings attention to the appalling amount of suffering and economic waste resulting from preventable eye injuries. The introduction to the report states that "the science of human rehabilitation has developed artificial hands, arms, and legs that can do almost anything the human member can do. But no one has yet produced an artificial eye that can see." This fact alone, therefore, makes the eye hazard the most serious of all nonfatal industrial hazards. In the preparation of the report the committee realized that if it were to be more than a mere narrative of facts, figures, ideas, and experiences it must be based on a very definite and unchanging point of view. The viewpoint governing the compilation of material therefore is summarized as follows:

First, the elimination of eye hazards in industry is not only a moral obligation, but a good business proposition;

Second, goggles at best are a handicap; the first effort, therefore, should be directed toward elimination of the hazard itself by revising the process of manufacture, by redesigning the machine or tool, or by guarding the machine or tool at the point of operation.

Third, few people have normal vision. Greater attention should therefore be given to examination of the eyes of employees, to consideration of the condition of the eyes with relation to the visual requirements of the job, and finally to the correction of defective vision and the treatment of eye diseases and eye infections among employees.

Industrial eye hazards include those due to accidents, infection, and eye diseases, and eyestrain. The accident hazards are from flying chips of metal, mineral, or wood; splashing liquids, i. e., molten metal, acids, or other injurious chemicals; and an almost endless variety of explosions. Hazards of infection and of eye diseases come about through neglect of eye injuries, through incompetent first-aid treatment, through contact with persons suffering with contagious eye diseases, and through exposure to excessive radiated heat. Eyestrain results from improper or insufficient lighting, from wrong vocational placement, and from ignorance of or disregard for defective vision.

Although the development of the safety movement in the past decade has done much to improve conditions, all that has been accomplished thus far is said to be only a beginning. There are still numberless plants, where there are serious eye hazards present, in which no goggles are available even where workmen on their own initiative might apply for them. In many other plants workmen wear goggles on their caps or in their pockets unless the "boss" is watching them, and there are still many plants in which there are shop mechanics who are expert in removing particles from the eyes of fellow workmen with such objects as toothpicks, matches, nail files, handkerchiefs, or even the tongue. There are two reasons which account for such conditions in a period in which a generally high degree of industrial efficiency has been reached. First, as a rule it is only in the larger plants which are able to afford a safety engineer and which keep accurate records of the accident experience

¹ National Committee for the Prevention of Blindness (Inc.), Eye hazards in industrial occupations, by Louis Resnick and Lewis H. Carris. New York, 130 E. 22d St., 1924. xix, 247 pp.

that it is realized that eye accidents are the most serious and costly of the nonfatal accidents, and, second, the failure to stress sufficiently the possibility of injury to the eye results from the fact that the eye accident hazard is only one of the many serious hazards with which safety organizations, trade associations, and industrial commissions must deal, special attention being given to this class of accident usually only in plants where there has been a high frequency of costly eye accidents.

It is estimated that of the 100,000 blind persons in the United States approximately 15,000 have been made blind through industry, and that in addition to the totally blind there is a much larger number of men, women, and children who are handicapped through life by an impairment of their vision resulting from industrial injury. The number both of the totally blind and of those whose vision has been seriously impaired as a result of the hazards of their industrial environment grows larger each year. The National Safety Council has estimated that there are about 200,000 industrial eye accidents occurring annually in the United States, or an injury to an eye every three minutes, day and night, on every day of the year. Fortunately the great majority of these accidents do not cause permanent injury, but it is estimated that several thousand eyes are made blind in the United States each year through industrial accidents.

The solution of the problem of reducing or eliminating eye accidents is held to be in legislation, education, and organized accident-prevention activities in industry. A first essential for a satisfactory reduction in this class of accidents is the enactment of laws requiring the reporting of accidents and the provision of safeguards. In spite of the sincere attempts of many employers to promote safety activities, the enactment of workmen's compensation laws has provided the greatest stimulus for industrial safety activities. Owing to the pressure of competition and the nearly universal temptation among both employers and employees to take a chance, it can be assumed that in those States in which there is no law requiring the safeguarding of workers from accident and health hazards, where there is no law requiring employers to compensate workmen for injuries received in the course of their occupation, or where there is no law requiring even the reporting of accidents, little effort will be made to prevent accidents. For that reason intelligent legislation is a prerequisite of the prevention of eye as well as other types of accidents.

Legislation, even of the most satisfactory kind, must be supplemented by education of workmen, foremen, superintendents, plant managers, and owners, since many accidents can not be guarded against by any mechanical means. An analysis of more than a quarter of a million accidents in the plants of the United States Steel Corporation showed that hand labor was responsible for 44.04 per cent of these accidents. The use of mechanical safety devices or appliances could not possibly have prevented the majority of these accidents, which were due to carelessness and the failure of workmen to follow simple safety precautions. The only remedy for this condition is thorough education of the individual workman in safe practices.

In addition to adequate safety legislation and safety education there is still the need for well-organized accident-prevention activities within the individual plant, mine, railroad, or other work place. Such activities include the provision of mechanical guards and safety devices, frequent inspection of plant conditions and operating methods, and the use of illustrated posters, warning signs, and other forms of safety literature.

The dollar cost of industrial eye hazards depends upon the actual cost of compensation; the indirect cost resulting from the spoilage of raw materials and finished products, the latter often including extensive labor costs; and the slowing up not only of the work of the individual but of the whole industrial machine as a result of defective vision, poor lighting, eye accidents, and other accidents caused wholly or partially by poor vision. At the present time it is impossible to compute the cost of these accidents, owing to the lack of uniformity in the method of compiling statistics even for the compensation costs alone. In Pennsylvania, during the eight years in which the workmen's compensation act has been in force, more than 40 per cent of all the compensation awarded for permanent injuries has been paid for the loss of eyes.

In an effort to form some idea of the actual situation in the average plant where little serious attention is given to accident prevention, the committee sent a questionnaire to a large number of representative plants in which good safety work is being done. The plants were asked to report for the year 1922 on the average number of employees, the average number of goggles in use, the number of goggles damaged while in use, and the number of eye injuries. In 72 plants, employing approximately 168,000 men, the eyes of 15,989 workers, or almost 10 per cent of the total number of workers, were injured during the year. It was shown that the use of goggles saved 1,522 workers from certain serious if not permanent eye injuries, as there were that number of goggles damaged by splashing molten metal, flying fragments of metal, or chemicals. Many others were doubtless saved, as the goggles of each workman using them stop many flying objects which do not damage the goggles but which would seriously injure the delicate structure of the eye. The total number of pairs of goggles in use in these plants was only 18,205, an entirely inadequate number among 168,000 employees. Only 26 of these plants reported that the eyes of all new employees are examined, while 43 reported that no examination of the eyes of workmen is made. From the replies received it was evident that eye hazards are most serious in metal-working plants, as in a group of 20 metal-working plants, with a total of 30,980 employees, there were 6,769 eye injuries reported, or an average of one eye accident for every five employees.

The percentage of subnormal vision in industry is shown by the results of eye examinations in different plants: Of 6,142 men employed by a shipbuilding company, 3,111, or 51 per cent, had defective vision. Fifty-two per cent of 1,000 applicants for employment by a firm manufacturing silk were found to have visual defects, and 50 per cent of the new employees of a company manufacturing optical goods were found on examination to have some eye defect. A con-

dition probably indicative of conditions existing in thousands of other plants which have not given any attention to the eyesight of their workers was found in a car-building plant of the Middle West which began for the first time in 1922 to examine the eyes of employees. It was found that there were 125 men on the pay roll of the company each of whom had a glass eye. In most cases the condition was not recognized by the employment department when the men were hired. During the first half of 1923 about 55 per cent of the 4,700 men in this plant were given goggles with corrective or individually prescribed lenses. In these four plants, therefore, in different sections of the country and representing widely divergent industries, approximately one worker out of every two could not see clearly what he was doing, where he was going, or what was passing before him. Not only is fatigue due to faulty vision the cause of accidents, but there are also many accidents which are the direct result of poor eyesight, and while there are no statistics showing the relationship between defective vision and accident frequency, there can be no doubt, the report states, that poor vision is often the cause of accidents which are attributed to carelessness.

Effects of Dust Inhalation upon Metal Grinders¹

AN EXHAUSTIVE study has been made by the British Factory Department of the effects of dust inhalation upon workers engaged in grinding metals and cleaning castings. In the course of the study visits were made to factories representative of all the different processes and 1,153 males employed in these processes were given physical examinations.

In every case selection of workers for examination was carefully avoided and as far as possible all the workers in a particular group were examined. Since the object of this examination was to determine the effect of the industry on the health of the workers, the greatest emphasis was put upon the examination of the lungs and upper respiratory passages.

The workers examined were grouped according to the particular dust hazard to which they were exposed. In the first group were 638 sandstone grinders who were mainly exposed to silica dust; in the second group, 314 grinders on manufactured wheels exposed to emery and similar dusts; and in the third group, 201 dressers of castings exposed to dust from molding sand, etc. These groups were further divided into hand and machine grinders and those doing wet and dry grinding.

The following table shows the percentage of the workers engaged in the different processes who showed evidence of different forms of respiratory diseases:

¹Great Britain. Factory Department. Report on the grinding of metals and cleaning of castings, with special reference to the effects of dust inhalation upon the workers. London, 1923.

PER CENT OF WORKERS SHOWING EVIDENCE OF RESPIRATORY DISEASES AMONG 1,153 METAL GRINDERS IN GREAT BRITAIN, GROUPED ACCORDING TO MOST IMPORTANT DUST HAZARDS TO WHICH EXPOSED

Occupation	Number examined	Average age	Average number of years employed	Per cent showing evidence of—					
				Fibrosis	Tuberculosis		Bronchial catarrh	Bronchitis	Pulmonary catarrh
					Suspicious	Definite			
Sandstone grinders:									
Wet grinders, hand.....	495	36.87	21.49	73.97	14.14	7.07	14.94	10.90	8.28
Wet grinders, machine.....	40	35.25	15.18	37.50	2.50	2.50	19.90	-----	-----
Dry grinders.....	103	42.12	18.09	38.83	4.85	.97	14.57	11.65	4.85
Manufactured-wheel grinders:									
Dry wheel hand grinders.....	71	35.16	12.86	21.12	4.22	-----	23.94	19.71	5.63
Cutlery and spring-knife hafters.....	29	36.34	20.68	17.24	17.24	10.34	10.34	27.58	6.89
Machine grinders.....	58	36.98	8.41	5.17	5.17	1.72	17.24	5.17	-----
Glaziers.....	156	35.84	16.82	33.33	5.76	5.76	27.56	12.17	5.76
Cleaning castings:									
Dressers of castings.....	201	38.11	14.42	22.38	4.50	1.50	25.37	12.93	6.96

The changes in the lungs resulting from these occupations in which dust is the hazard may be classed as (1) catarrh, caused by irritation and the reaction to it; (2) congestion, showing a failure of the reaction or of recovery from it which is usually associated with an accompanying diseased condition; (3) fibrosis, when the effect of new scar tissue is produced, and (4) secondary or added changes. These changes merge into each other gradually and it is often difficult to distinguish the precise limits of each class, as secondary conditions following the action of the dust indirectly often differ in degree only. Fibrosis of the lungs is the most important manifestation of the effect of dust inhalation, and one difficult to diagnose as it gives rise to no symptoms in the early stages. Dyspnoea (difficult or labored breathing) is less frequent in the early stage than cough and expectoration. It is slightly more frequent than these symptoms in the second stage, and occurs in all advanced stages. Fibrosis occurs in these occupations as silicosis, primarily resulting from the inhalation of fine particles of silica. This form is related to a high incidence of and mortality from pulmonary tuberculosis and to a nontuberculous form of chronic pneumonia which may cause disability and death. Fibrosis occurs also as a result of the inhalation of minute particles of dust of such substances as emery and as a secondary result of some pathological change following either a chronic bronchitis or other inflammatory change resulting from dust inhalation or another disease or injury not associated with dust inhalation.

In the whole series of 1,153 examinations, definite evidence of tuberculosis was found in 53 cases. The largest number, 35, occurred among wet sandstone hand grinders, representing 7.07 per cent of the 495 engaged in that occupation. The 18 remaining cases, or 2.76 per cent, were scattered among the other occupations, half of them, however, occurring among glaziers. The average age of those affected was 41.64 years; arranged in age groups there were 2 under 25 years; 10 between the ages of 25 and 35; 18 between 35 and 45; 15 between 45 and 55; 6 between 55 and 65; and 2 over 65. Besides these cases, which could be definitely diagnosed as tuberculosis, there was a still larger number which were designated as "suspicious" and among which the majority of future definite cases would arise.

Bronchial catarrh was found in 221 cases, or 19.16 per cent of all those examined. The incidence was highest in the glaziers' group,

27.56 per cent, while dressers and dry manufactured-wheel grinders had nearly as high a percentage, and silica-stone workers were the least affected. Dusts other than silica were shown to be associated with the occurrence of bronchial catarrh in direct proportion to the amount of dust to which the workers were exposed.

Bronchitis was found to be more frequent among dressers during the first five years of employment than later. The incidence was highest among cutlers and spring-knife hafters and lowest among machine grinders. Among all occupations there were 146 cases or 12.6 per cent of the total workers examined.

Pulmonary catarrh was present in 76 cases, or 6.5 per cent of those examined. This disease occurs most typically among wet sandstone grinders between 60 and 65 years of age and commonly in those of heavy build and a tendency to stoutness. This condition appears to depend for its origin on the presence of fibrosis and may be considered to be a result of it. The average age of those suffering from it was 42 years.

Fibrosis of the lungs was found to show the highest proportion of cases among wet sandstone hand grinders, 73.97 per cent of those examined showing the affection in some degree. It begins to appear in the first five-year period of employment and increases rapidly until at the end of 20 years of employment nearly 80 per cent are affected. At the end of 40 years practically all these workers suffer from this condition. Machine wet sandstone grinders and dry sandstone grinders show the next most frequent incidence of fibrosis but average only about half as many cases as hand grinders on wet sandstone.

The conclusions reached in regard to the prevention of dust and accident hazards as a result of this study may be briefly summarized as follows:

All processes of grinding and glazing metals generate dust in varying degrees of quantity and fineness.

The large amount of dust produced in dry grinding on grindstones, manufactured wheels, and glazing appliances can, in most cases, be satisfactorily removed by the use of dust exhaust systems, while the dust evolved at grinding on wet manufactured wheels is usually of such small amount and of such a character that it may be disregarded.

In wet grinding on sandstones an injurious quantity of siliceous dust is produced by the operation of "racing," or preliminary dressing operations on newly-mounted stones; by the intermittent but frequent rodding, hacking, or scarring of the grindstones for the purpose of maintaining their true form and abrading property; and from the actual operations of grinding. The dust arising from the process of racing can be practically all removed by an efficient dust exhaust system, while the dust from rodding, hacking, and scarring can be prevented by a plentiful supply of water to the upper part of the grindstone. In the operation of grinding, also, it is considered that it should be possible to grind with a fresh supply of water applied to the upper part of the grindstone instead of in a trough as is now the practice.

The substitution of manufactured wheels for grindstones so far as possible is regarded as of paramount importance.

In the cleaning of castings where siliceous and other dusts are produced by knocking out cores, brushing off adherent sand, and smoothing the surfaces of the castings, the dust should be controlled by localized exhaust ventilation, by dampening the floor of the cleaning room, and by frequent cleaning of the work places. Close-fitting doors for sand-blasting apparatus are essential and operatives should be provided with helmets, gauntlets, and overalls.

Care should be taken in mounting and running grindstones and manufactured wheels and maximum safe working speeds should be adopted and proper guards should be installed to withstand the impact and retain the pieces in the event of manufactured wheels bursting.

WORKMEN'S COMPENSATION

Report of Industrial Commissioner of South Dakota

THE seventh annual report of the industrial commissioner of South Dakota covers the year ending June 30, 1924. The subject first discussed is that of administration and cost of workmen's compensation, and the statements there made furnish a key to much that follows. The administrative staff consists of "the deputy commissioner and one stenographer, with a small amount of additional clerk hire at times of rush." Suggestion is made of the addition of a file clerk "at a cost of possibly a thousand dollars a year"; also of a field man to investigate serious accidents, which "would lead to more efficiency, but, of course, at a greater cost." The cost per claim handled during the year was just above \$1.02.

Because of the lack of funds practically no statistics are presented, while hearings have been delayed until a number have accumulated in the same general locality so as to avoid expense of travel.

With a compensation basis of 55 per cent of the workman's wages and a maximum of \$15 per week, the commissioner recognizes that restricted benefits result to the injured workmen, but the general sentiment of the legislature as expressed in past sessions is against going above that figure. The maximum death benefit is \$3,000, which "is lower than the amount allowed in most States." A bill to increase the amount to \$5,000 was introduced in 1923 and passed the senate at a compromise of \$4,000, but the house committee recommended that this should not pass, so the amount is unchanged. Opposition to increases is based on the view that "compensation is not intended to take the place of full wages, but is intended to be at a figure which will keep the injured employee free from need until he is again able to get back to work." In view of this statement and of the benefit rates provided, it hardly needs to be added that the theory of compensation which places the burden of industrial accidents on the industry rather than on the injured workman lacks something of adequate recognition in this State.

Under the heading "New legislation," the commissioner recommends provisions for hearings by a board of arbitration in accordance with the provisions of the Nebraska law. He also renews a repeated recommendation as to a revision of paragraph 2 of section 9459, which contains conflicting provisions as to the waiting time, which is fixed at 10 days in one sentence and practically eliminated in another, the two being in direct conflict.

There is an increase in the number of accidents reported, the number for 1924 being 4,535 as against 3,473 for the previous fiscal year. This increase is said to be due largely to the greater number of employers taking out insurance, as it is found that but few uninsured employers make reports. Those carrying insurance report to

the insurance companies, which are required to forward such reports to the department, a method which is believed to "keep the file fairly accurate."

Of 2,823 claims in which payments were made during the last fiscal year, 925 were for less than \$10, 678 for \$10 and under \$20, 711 for \$20 and under \$50, 293 for \$50 and under \$100, 194 ranged from \$100 to \$1,000, and the remaining 22 exceeded \$1,000 in amount.

The complaint of physicians as to the inadequate allowance for medical relief is recognized. The law fixes \$150 for medical and hospital services, and the State Medical Association asks for this amount to be doubled, one-half to be allocated to medical and one-half to hospital service. The department approves this request as a reasonable one and not likely to add heavily to the total expenditures, since the present limitation is exceeded in only the minimum number of cases. Thus of 4,028 cases in which costs are reported, 813 call for less than \$5 medical relief and 1,402 for between \$5 and \$10, these 2 groups accounting for more than one-half the total. But 62 cases run from \$100 to \$150.

It is apparent that under the limitations imposed upon the department the best possible work is being accomplished, but the impression is inevitable that there is no possibility of following up all cases in any way to determine whether or not full justice is being done, even under the limited provisions of the existing law.

LABOR LAWS AND COURT DECISIONS

Labor Legislation of Argentina ¹

By ETHEL YOHE LARSON, OF THE U. S. BUREAU OF LABOR STATISTICS

Pension Laws

Law of January 28, 1924

ONE of the new pension laws of Argentina (No. 11289) which was promulgated on January 28, 1924, provides for the establishment of compulsory insurance funds against old age and sickness for four groups of workers. By a decree of January 31, 1924, its application was suspended until April 1, 1924, during which time certain provisions were modified.

Scope.—The workers subject to the operation of the law are the wage-earning and salaried employees (1) of the Argentine Merchant Marine, including the staff of offices or agencies of shipping companies having offices in Argentina, the permanent staff of naval dockyards and dry docks, and port and river pilots; (2) of industrial establishments; (3) of the printing and publishing industry; and (4) of mercantile establishments. Employees of trade-unions and mutual benefit societies may come under the law provided the associations pay the employers' contribution. Employees are considered permanent who have had more than six months of continuous service with one firm. Persons under 18 years of age and home workers are not covered by the provisions of this law.

Benefits.—The law provides for the payment of pensions to the workers (1) upon retirement; (2) for disability; and (3) for disability due to the employment; and (4) to the worker's family upon his death.

Administration.—Each group of employees is to have its own fund but all the funds are to be administered by a board of management consisting of a president, appointed by the Executive of the Republic with the approval of the Senate, and one representative each of the employers and the employees belonging to each fund, with an equal number of alternates.

The representatives are to hold office for three years and receive the remuneration fixed by the budget.

Election of representatives.—In electing the delegates, each employer is entitled to a number of votes proportionate to the total wages and salaries paid by him during the preceding year. Employees' representatives are to be elected, by ballot, by delegates elected from the various electoral districts, the number of such delegates to be in proportion to the number of members of the fund in each district. Each delegate is entitled to cast a number of votes equal to that obtained by him in his district.

¹This is the first of a series of articles to be published in the MONTHLY LABOR REVIEW on labor legislation in South American countries.

Powers and duties of the board.—The board must issue regulations for the operation of the funds and the granting of pensions, and keep a separate account for each fund, showing receipts and expenditures.

The amounts of the pensions are to be determined by a technical committee appointed by the board. This committee must within a year take a census of employees, and within a year after the completion of the census determine on an actuarial basis the benefits which can be granted.

Employers must furnish the board any information required regarding their employees on penalty of a fine of from 100 to 2,000 pesos.²

Capital of the funds.—The resources of the various funds are derived from contributions from employers and employees amounting to 5 per cent per month on wages paid and received, respectively, up to 1,500 pesos, all employees in the occupations covered contributing, but employers contributing only for permanent employees. When an employee receives an increase in his wages or salary the difference, for the first month, between his former pay and the increased pay must be contributed to the fund.

Fifty per cent of the capital of the funds may be loaned on mortgage to employees covered by the law, either individually or combined in cooperative societies, for the exclusive purpose of purchasing or building homes in conformity with the regulations to be issued by the board.

Special provisions.—A special advisory court, composed of the chairman of the fund, the chairman of the National Labor Committee, and the Inspector General of Justice, has the duty of settling any difficulties which may arise in the application of the law until the board of management is established.

Law of October 9, 1923

Another pension law (No. 11232), practically identical with the law described above, was promulgated on October 9, 1923, covering employees of national and private banks. Employees of State and municipal banks may also come under the act upon application made within six months after the promulgation of this law.

The capital of the fund is obtained in a manner slightly different from that provided by the law of January 28, 1924: Employees entering banking establishments covered by the law must pay into the fund in 10 monthly installments an amount equal to their first month's salary. Persons already employed must contribute, in 24 monthly installments,³ an amount equal to one month's salary. The banks are required to make monthly contributions to the fund equal to 8 per cent of the total monthly salaries of their employees.

Other Pension Laws

Two other laws—that of April 16, 1919 (No. 10650), providing for a national retirement and pension fund for employees of Government-controlled railroads, and that of February 11, 1921 (No. 11110),

² Peso at par = 96.48 cents; exchange rate varies.

³ Although this provision appeared also in the pension law No. 11289, it has been suspended because of the difficulties involved due to the number of insured persons who are not paid monthly.

establishing a national pension and subsidy fund for permanent wage-earning and salaried employees of private enterprises engaged in various lines of public service—have already been covered in the MONTHLY LABOR REVIEW, issues of April, 1920 (pp. 206-209), and July, 1921 (pp. 212, 213), respectively.

Home Work Law

ACCORDING to the Argentine law passed on October 8, 1918, and the regulative decree of December 30, 1918, home work is defined as any kind of industrial change (*transformación*) performed customarily by way of trade by the worker in his home, provided it is effected wholly or partially on the account and by the orders of an employer. The law covers only home workers in the Federal capital and the national territories.

Registers.—Every proprietor, director, or manager of an industrial or commercial establishment who gives out work to be done in the worker's home must keep a register containing the names of the workers, their addresses, the quality and nature of the work given to them, and the remuneration which they are to receive. Every home worker must possess a work book provided by the employer in which shall be entered the nature and quality of the work, the date on which it was given out, the remuneration to be paid, and the value of the materials supplied. The date when the finished work is returned and the amount paid for it shall be entered in the work book, as also the conditions of payment in case the materials are lost or damaged, and the names and addresses of guarantors.

Hygiene and safety.—Specific rules and regulations concerning hygiene and safety in the domestic workshops (*talleres de familia*) are as follows: (1) Steam boilers shall not be used; (2) industries which are dangerous or unhealthful may not be carried on unless the undertaking is under official supervision and subject to the safety and hygiene regulations prescribed for factories and workshops; (3) the trimming of hats, and the manufacture, repairing, cleaning of clothing, footwear, flowers, or textile substances is prohibited, as is also the preparation and packing of food in a house occupied by a person with an infectious or contagious disease; (4) persons in charge of houses occupied by home workers must notify the health authorities of any cases of infectious or contagious diseases, after which the inspectors shall prohibit home work in such houses and shall remove any goods upon which work was being done; (5) physicians who treat a tuberculosis patient in a living room in which home work is carried on shall immediately notify the competent authority; (6) work shall not be resumed in a building in which there has been a case of infectious or contagious disease until the sick person has been cured or removed and the room in which he was treated has been properly disinfected.

Wage commissions.—Upon the written request of 50 workers the National Labor Department shall form wage commissions in the municipalities for every trade in which home workers are employed. Each of the commissions shall be composed of an equal number of representatives of employers and workers in the trades concerned; the number thereof being fixed by the National Labor Department. The term of office of the wage commissioners shall be two years, but

they may be reelected indefinitely. These commissions shall have the duty of fixing minimum hourly rates or piecework rates of wages adjusted to the national laws respecting maximum hours of labor. They shall render a decision on every petition for the fixing of a minimum wage relating to home work in the trades subject to their jurisdiction. A petition may be made by a member of the commission, by the labor inspectors, or by 10 interested workers. Decisions shall be rendered by a simple majority of votes.

Minimum wage.—In determining a minimum wage the commissions shall take into consideration the following points: (1) The nature of the work; (2) the current price of the finished article in the locality; (3) the needs of the worker; (4) the minimum wage received by workers in factories and workshops in the Federal Capital or the national territories producing the same or a similar article; (5) local customs, rents, and the cost of necessary food articles in the place where the work is carried on; (6) the value of the materials and tools which the worker needs in executing the work. The minimum wages as fixed by the commission shall be paid to the worker in their entirety. The scale of wages shall be posted in the buildings in which the work is given out and returned. Managers of industrial and commercial establishments who violate this regulation shall be punished by a fine of from 100 to 300 pesos. Workers who have been paid a lower wage than that fixed by the commission may, regardless of any agreement to the contrary, demand from the employer the balance of their wages. The right to make a claim shall expire at the end of one year from the date of payment. Disputes which arise in the application of this law as regards payments of wages fixed by the wage commissions shall be settled by justices of the peace in the respective localities, providing the amount claimed does not exceed 500 pesos. Claims for larger amounts shall come under the jurisdiction of the civil judges. Appeal from the decisions of the justices of the peace shall lie to the civil judges; appeal from the decisions of the civil judges shall lie to the courts of appeal.

Inspection.—Inspectors of the National Labor Department shall have the following duties: (1) To examine the employers' registers of home workers to see that they are kept in the proper manner; (2) to examine the work books of the home workers; (3) to see that the scale of wages is posted conspicuously in the rooms concerned; (4) to ascertain as far as possible whether the wages paid are in accordance with the said scale of wages; (5) to investigate complaints made by interested parties and to verify their truth by investigation of the facts; (6) to inspect the homes of employers and workers on suitable days and hours; (7) to see that wages are paid in cash. The rooms of home workers who work for themselves alone shall not be subject to inspection. Rooms in which only the members of a family are engaged in home work shall not be inspected except in cases where a steam boiler is used or where the industry is considered dangerous or unhealthful.

Penalties.—A fine of 100 to 300 pesos is imposed on those employers who fail to keep the registers in the manner prescribed by this law. The proprietors, directors, or managers of commercial or industrial undertakings may impose fines upon the workers for defective work or for damaging materials; however, they shall not ex-

ceed one-sixth of the day's wages. The head of a domestic workshop, in which a steam boiler is used or dangerous or unhealthful work is carried on, shall be imposed with a fine of from 50 to 100 pesos. The manager of an establishment who accepts articles which have been made in a house in which a person is suffering from an infectious or contagious disease shall be punishable with a fine of 200 pesos if he is proved to have had knowledge of the illness. Employers who pay a lower wage than that fixed as the minimum shall be fined 300 pesos.

Seamen's Legislation in Finland

SOCCIALA Meddelanden No. 7, 1924, issued by the Swedish Social Board (*Socialstyrelsen*), states that uniformity in seamen's legislation, already secured between Norway, Sweden, and Denmark,¹ has been extended to Finland, a law having been promulgated in Finland March 8, 1924, effective January 1, 1925, which in the main conforms to the legislation proposed by the Joint Maritime Act Committee for the Scandinavian countries and Finland. From the viewpoint of workmen's protection, the new law is more effective in one respect at least than the Swedish law, in that the minimum age for stokers and coal trimmers is fixed at 18 years of age instead of 16 as in Sweden.

In the Finnish law the right of disciplinary punishment (i. e., loss of wages not to exceed 7 days) is not confined to vessels in foreign commerce as in Sweden but applies to all vessels which ship their crew.

As in Norway and Sweden, hours of work for seamen in Finland are regulated by a special law, which was promulgated April 26, 1924, and becomes effective at the beginning of 1926. This legislation is also based on the proposal of the Joint Maritime Act Committee.

Apprenticeship Law of New Zealand

THE New Zealand Apprenticeship Act of 1923, which became effective April 1, 1924, undertakes to establish a complete system of apprenticeship. Control of the system is vested in the court established by the industrial conciliation and arbitration act of 1908, but the court may appoint local committees and delegate authority to them. Such committees must always contain representatives of employers and workers in equal numbers, but others may be added at the discretion of the court.

The court has authority to issue for any industry and locality orders prescribing the wages, hours, and other conditions of apprenticeship, the proportion of the total number of apprentices to the total number of journeymen that may be employed, the period of apprenticeship, and the minimum age for entering apprenticeship. It may also cancel or amend any such order, but before making,

¹ See MONTHLY LABOR REVIEW, October, 1922, pp. 191, 192, and August, 1923, pp. 184-186.

canceling, or amending an order, it must give opportunity for interested persons to be heard and to produce evidence if they wish to do so. These provisions are followed by a section giving the court very wide and drastic powers:

Without in any way limiting the general powers conferred upon it by the foregoing provisions of this section, the court shall also have power—

(a) To require any employer to employ and to continue to employ such number of apprentices as the court may consider necessary to insure an adequate supply of journeymen in the interests of the industry;

(b) To cancel any contract of apprenticeship;

(c) To prohibit, on such grounds and on such conditions as the court may think fit, any employer from employing or continuing to employ an apprentice;

(d) To order the transfer of any apprentice from an employer to any other employer who is willing and able to undertake the obligations of the original employer;

(e) To require an employer to give to an apprentice further facilities within the scope of his business to enable the apprentice to acquire a proper knowledge of his industry;

(f) To fix the period of probation to be served by an apprentice in any industry;

(g) To order the attendance of any apprentice or apprentices at a technical school or other place where suitable training is available (whether during the ordinary hours of employment or otherwise) in any case where the court is of opinion that sufficient facilities for the complete training of the apprentice are not provided by the employer and where the minister of education has certified that suitable accommodation and training are available at such school or place;

(h) To order any apprentice or apprentices to submit to such examination as the court may prescribe;

(i) To order that any increase in wages due to an apprentice may be withheld by the employer for such period as the court may think fit;

(j) To order that the period during which any increase is withheld under the last preceding paragraph shall not be deemed to be included in the period of apprenticeship;

(k) To enter at all reasonable times upon any premises where an apprentice is employed, and to inquire into the training, progress, and welfare of such apprentice, and to delegate such powers to any person or persons appointed in writing in that behalf;

Provided that if the powers referred to in this paragraph are delegated by the court to any committee the committee may delegate such powers only to one member of the committee representative of the employers and one member representative of the workers, who shall act together;

(l) To determine the number or proportion of apprentices to journeymen that may be employed by any employer.

Every contract of apprenticeship is to be signed by the employer, the apprentice, and, if he is a minor, by his parents or guardian. Upon becoming of age the apprentice is bound by the contract exactly as if he had signed it after reaching his majority; up to that time the parents or guardian are responsible. Contracts of apprenticeship are to be registered with a district registrar of apprentices, who is empowered to permit the transfer of an apprentice from one employer to another under certain circumstances. Penalties are provided for any breach of an apprenticeship contract on either side.

The act contemplates the registration of potential as well as actual apprentices, and for this purpose the registrar is entitled to call upon school principals to furnish "as soon as practicable after any child leaves school with the intention of entering into employment," a report giving the grade he has reached, the subjects in which he has shown aptitude, and "any other matters that may be deemed relevant to the future employment and training of the child." This report is to be supplied to the parents, and also to the registrar,

who must act as vocational adviser, if requested to do so. The registrar is also to keep a list of young persons who wish to enter apprenticeship and of employers who wish to take apprentices, and this is to be at the service of both sides. The termination or alteration of any contract of apprenticeship must be reported to the registrar, and put on file by him.

Other sections permit two or more employers to join in taking an apprentice, allow special contracts of apprenticeship for suitable periods in the case of persons already possessing some skill in the industry chosen, and authorize the establishment of recognized training schools by employers under certain conditions. It is specified that the provisions of the act are not to apply, except by special direction of the court, to the apprenticeship of any female, nor are they to affect contracts of apprenticeship which have been in force for more than two years.

Concerning this act, the New Zealand Industrial Bulletin for August 11, 1924, observes:

The act has not yet been in force long enough to enable an expression of opinion as to its success to be made; the court is at present obtaining the views of employers and workers in the four chief centers before making general orders affecting the various industries.

LABOR ORGANIZATIONS AND CONVENTIONS

International Convention of Transport Workers and Seamen¹

THE International Congress of Transport Workers was held in Hamburg, August 7 to 12, 1924. There were 114 delegates in attendance who represented 40 organizations in 18 countries, with a membership of more than 2,000,000.

The principal subjects for consideration were "the international situation, the 8-hour day, and the socialization of the means of transport."

At the sessions of the International Seamen's Conference held August 4, 5, and 12, 1924, in Hamburg under the auspices of the International Federation of Transport Workers there was considerable discussion in regard to observations and suggestions submitted referring to the establishment of an international seamen's code, dealing especially with "procedure for engagement and dismissal; employment of colored labor; fines and punishments; illness on board ship or abroad; indemnities in the event of shipwreck; work of women and children on board; hygienic questions; questions relative to the safety and civil rights of seamen."

The conference decided to authorize the advisory committee of the Seamen's Section of the International Federation of Transport Workers to combine these various comments and proposals into one document. After this document was approved by the conference, it was forwarded to the International Labor Office for transmittal to that body's joint maritime commission.

Three resolutions of the conference treated, respectively, of (1) the right to indemnity, (2) penalties to which seamen are subject, and (3) the creation of ships' councils.

The following resolution was unanimously adopted:

In view of the fact that the 8-hour day or 48-hour week figures in Part XIII of the Treaty of Versailles; that seamen of all classes and ratings have the same right to reasonable working conditions as land workers; and that the general introduction of the 8-hour day or 48-hour week on vessels of the contracting States can not be regarded as a burden for the shipowners; the representatives of the seamen meeting at Hamburg on August 4, 5, and 12, 1924, under the auspices of the International Federation of Transport Workers decide and undertake to demand from their respective Governments the enforcement of the 8-hour day, and to make every effort and use every means at their disposal to create around this question such an atmosphere as will lead to its prompt and international realization.

In transmitting this resolution to the International Labor Office the bureau of the International Transport Federation requested that the question of the 8-hour day or 48-hour week be included in the agenda of the next International Labor Conference.

¹ International Labor Office Industrial and Labor Information, Geneva, Aug. 25, 1924, pp. 23-28, and Sept. 15, 1924, pp. 20-22.

International Congress for Scientific Organization of Labor¹

THE International Congress for the Scientific Organization of Labor met at Prague, July 21 to 24, 1924, at the call of the Masaryk Academy of Labor in that city and the Committee of American Engineers. The convention, which was attended by 296 delegates, was under the patronage of the President of Czechoslovakia. The United States Secretary of Commerce was the honorary president of the Congress. There were 140 Czechoslovakian delegates to the Congress. The next largest delegations came from the United States (44 members) and Poland (40 members). Soviet Russia had 7 delegates.

The leading purpose of the meeting was to further the most economical production possible in order to offset the additional costs of imperative social reforms.

The program of the Congress was broad and varied, including the discussion of the scientific organization of labor from numerous angles. A classified list of the reports submitted is given below:

Documentary reports on institutions dealing with the scientific organization of labor in the various countries as, for example, in the United States, in Russia (i. e. the Central Institute for the Scientific Organization of Labor) and in Czechoslovakia (i. e. the Masaryk Labor Academy).

Reports on the scientific organization of vocational education, on new psychological methods and on the work of industrial psychology.

Reports on the social side of the scientific organization of labor, such as the participation of workers in the administration of undertakings, in profits, etc.

Reports on technical questions connected with the scientific organization of labor in the various branches of industry, agriculture, commerce, etc.

Reports on the scientific organization of public administration.

The Masaryk Labor Academy has published these reports in English and a French edition will be brought out later.

As will be noted from the foregoing list, the Congress paid special attention to the human element in production.

Another Congress of a similar character is to be held in Philadelphia in 1926.

Austrian Free Trade-Union Movement in 1923²

ECONOMIC difficulties in Austria involving extensive unemployment and the reduction in the numbers of civil service employees in 1923 have necessarily had an adverse effect on the membership of the Austrian Free (Social-Democratic) Trades-Unions. The membership of the General Federation of Free Trade-Unions (*Gewerkschaftskommission*) fell from 1,049,949 in 1922 to 896,763 in 1923, a loss of 153,186 members, or 14.59 per cent of the total membership. The above total membership includes 608,162 members of manual workers' organizations and 288,601 members of organizations of private salaried employees and civil service employees. The female members numbered 203,924. Of this number 158,406 were manual workers and 45,518 were private or public salaried employees. The proportion between the sexes in foregoing figures has not been

¹ International Labor Office. *Industrial and Labor Information*, Geneva, Sept. 15, 1924, pp. 13-15.

² *Arbeit und Wirtschaft*, Vienna, June 1, 1924, pp. 473-503.

appreciably altered by the diminution of the total membership in 1923. In point of fact the proportion of female members had slightly increased, being 22.74 per cent in 1923, as against 22.17 per cent in 1922.

At the end of 1923 there were affiliated with the General Federation 47 central federations and 8 local unions, as against 49 and 14, respectively, at the end of the preceding year. The diminution in numbers was due to several amalgamations of unions.

The financial statement of the General Federation for the year 1923 shows receipts of 96,203,855,458 crowns³ and expenditures of 69,076,756,705 crowns. The expenditures thus formed 71.8 per cent of the receipts, as against 68.94 per cent in 1922. The above figures relate, however, only to the ordinary receipts and expenditures, no accounting of strike funds being published. The relative increase of expenditures in 1923 was chiefly due to increased disbursements for unemployment relief.

Twenty-Third Congress of Trade-Union Committee of Belgium⁴

THE twenty-third congress of the Trade-Union Committee of Belgium was held at Brussels August 2 to 4, the delegates present at the conference representing more than 600,000 members of Belgian trade-unions. A number of delegates were present also from other countries, including a representative of the International Federation of Trade-Unions and delegates from Japan. According to the report of the general secretary of the committee the trade-union membership had declined by nearly 24,000 at the end of 1923 over the membership of the preceding year, although it was stated that there has been an increase in membership since that time.

The questions of reaction and the 8-hour day, trade-union discipline, tax reform, and workers' holidays were on the agenda for consideration by the conference. Owing to length of the discussions on trade-union discipline the conference adjourned without taking up the question of workers' vacations and the reform of taxation.

The general secretary in presenting his report said that the success of workers' action during the past year in both the industrial and the legislative fields gave reason to expect continued progress, but certain questions, such as the question of rents, and the defense of the national crisis funds, which were formed by the Government in 1921 to pay unemployment allowances, demanded special attention. The discussion of the report brought out several criticisms of the attitude of the committee on both national and international questions, the principal criticisms being that the committee had not been sufficiently revolutionary, that trade-union action was subordinated to the political movement, and finally that the committee had refused to form the "single front" demanded by the Trade-Union International of Moscow. In his reply defending the policy of the committee, the secretary said that the trade-unions had not subordinated themselves to any one party, although they could not altogether separate themselves from the Belgian Workers' Party by which they were estab-

³Crown at par=20.3 cents; exchange rate varies.

⁴L'Information Sociale, Paris, Sept. 4, 1924; Industrial and Labor Information, Geneva, Aug. 13, 1924, pp. 25-27.

lished in 1898. As for the "single front" proposed by the Communists, the Belgian workers were opposed to it, since its purpose was to break up the organizations affiliated to the International Federation of Trades-Unions.

After voting for a resolution demanding the continuance of the rent act of February 20, 1923, the congress unanimously approved the general report.

The question of trade-union discipline occasioned a long debate, the proposals of the committee being directed toward measures of protection against the action of communists within the trade-unions. By a majority vote the congress passed a resolution stating that it was the duty of all organizations affiliated to the trade-union committee to take the necessary measures to repress all division in their ranks and steadfastly to oppose all those who, under any pretext whatever, provoked trouble and dissension in the organizations. Also, the congress stated that no trade-union member had the right to interfere in the affairs of any other organization unless he was expressly asked to do so by the proper organizations such as the congress or the central or national committee. Taking into consideration the opposition of the Communist Party to the International Federation of Trade-Unions and its affiliated organizations and the methods which it had employed to divide and weaken them, it was considered that membership in the Communist Party was incompatible with holding any trade-union office whatever and the affiliated organizations were charged with seeing that no such person should be intrusted with office. The enforcement of these measures was put into the hands of the officers and the national committee.

The report upon reaction and the 8-hour day followed the lines of the resolution adopted by the congress of the International Federation of Trade-Unions at Vienna last June. It called attention particularly to the paragraph which stated that it was the duty of the International Federation to continue the negotiations begun with the Socialist Workers' International for united action with the various parliamentary groups for ratification of the Washington hours convention and the adoption of an 8-hour law in those countries which so far have failed to enact it. This resolution was adopted by the congress, with a pressing appeal to the workers of the entire world to work for this reform. The resolution also protested against the attacks on social legislation enacted since the war, the delay in the revision of the laws relating to trade councils and industrial accidents, and the failure to regulate the cost of living and speculation.

English Trades-Union Congress ¹

THE English Trades-Union Congress held its 56th annual session at Hull, September 1 to 6, 1924, with 724 delegates in attendance representing 170 organizations with a membership of approximately 4,328,000. A number of the matters dealt with were of general interest, among them being an increase in the powers of the

¹ Data are from Ministry of Labor Gazette (London), September, 1924, p. 316; Manchester (England) Guardian, issues of Sept. 3, 4, and 6, 1924; and Labor Magazine, London, September, 1924, p. 231.

general council in dealing with industrial disputes, an endorsement of the so-called "Industrial Workers' Charter," the inauguration of a campaign for bettering the conditions of agricultural laborers, action looking to a closer organization of the workers, and provision for immediate action should war seem imminent at any time between sessions of the congress.

The general council was established some years ago to serve as a means for united action, but its powers were strictly limited, thereby hampering its effectiveness. Accordingly, a resolution was presented making it obligatory upon unions affiliated with the congress to keep the council informed of negotiations between themselves and employers or other unions, especially when other workers might be involved in case trouble arose. The resolution also laid down a line of action for the council when such information was received.

The general policy of the council shall be that unless requested to do so by the affiliated union or unions concerned, the council shall not intervene so long as there is a prospect of whatever difference may exist on the matters in question being amicably settled by means of the machinery of negotiation existing in the trades affected.

In the event, however, of negotiations breaking down and the deadlock being of a character to directly or indirectly involve other bodies of work-people affiliated to the Trades-Union Congress in a stoppage of work, or to imperil standard wages or hours and conditions of employment, the council may take the initiative by calling representatives of the unions into consultation and use its influence to effect a just settlement of the difference.

In this connection the council, having ascertained all the facts relating to the difference, may tender its considered opinion and advice thereon to the union or unions concerned. Should the union or unions refuse the assistance or advice of the council, the council shall duly report to congress.

Where the council intervenes, as before provided, and the union or unions concerned accept the assistance and advice of the council, and where, despite the efforts of the council, the policy of the employers enforces a stoppage of work by strike or lockout, the council shall forthwith take steps to organize on behalf of the union or unions concerned all such moral and material support as the circumstances of the dispute may appear to justify.

This resolution was carried by an overwhelming majority, the card vote showing 3,608,000 in favor, and 259,000 opposed.

The workers' charter is a summary of the most important movements for which the congress in the past has declared, and the resolution embodying it pledged the congress to use every legitimate means for securing its adoption. The congress and the affiliated unions, it states, stand for the following objects:

1. Public ownership and control of natural resources and of services:
 - (a) Nationalization of land, mines, and minerals.
 - (b) Nationalization of railways.
 - (c) The extension of State and municipal enterprise for the provision of social necessities and services.
 - (d) Proper provision for the adequate participation of the workers in control and management.
2. Wages and hours of labor:
 - (a) A legal maximum working week of 44 hours.
 - (b) A legal minimum wage for each industry or occupation.
3. Unemployment:
 - (a) Suitable provisions in relation to unemployment, with adequate maintenance of the unemployed.
 - (b) Establishment of training centers for unemployed juveniles.
 - (c) Extension of training facilities for adults during periods of industrial depression.
4. Housing: Provision of proper and adequate housing accommodation.

5. Education: Full educational facilities to be provided by the State from the elementary schools to the universities.

6. Industrial accidents and diseases: Adequate maintenance and compensation in respect of all forms of industrial accidents and diseases.

7. Pensions:

(a) State pensions for all at the age of 60.

(b) Pensions for widowed mothers and dependent children.

The question of how the workers might be organized so as to secure greater solidarity without losing their independence provoked much discussion, and was finally left to the council to solve in future deliberations.

A composite resolution dealing with trade-union organization declared (a) that the time has arrived when the number of trade-unions should be reduced to an absolute minimum; (b) that the aim should be as far as possible organization by industry, with every worker a member of the appropriate organization; (c) that it is essential that a united front be formed for improving the standards of life of the workers; and instructed the general council to draw up (i) a scheme for organization by industry; and (ii) a scheme which may secure unity of action, without the definite merging of existing unions. After some discussion, this was agreed to by 2,503,000 votes to 1,428,000.

A resolution was carried which called for a campaign to secure for the rural workers a legal minimum wage, a guaranteed 48-hour week, a half holiday weekly, and full protection of the rents acts for occupiers of "tied" cottages. A fund of £1,000² was voted for this campaign.

The Miners' Federation presented a resolution, which was carried, instructing the general council to call a special congress to decide on industrial action, if there should be danger of war, "the congress to be called, if possible, before war was declared so that the trade-union movement might do everything in its power to prevent future wars."

Education received considerable attention.

A composite resolution on education was agreed to, recommending that the school-leaving age should be raised to 15 years, with maintenance allowances where necessary; that fees in municipal secondary schools should be gradually abolished; that the scholarship system should be extended with a view to the development of free secondary, technical, and university education; and that education in continuation schools should be made obligatory in the employers' time up to 18 years. After a considerable amount of debate, a resolution was also approved instructing the general council to take a more active part in the furtherance of working-class education.

Labor Movement in Iceland³

SOME years ago the workers of Iceland formed trade-unions and political organizations, the movement being of a social-democratic nature. The total trade-union membership is about 4,000, the largest unions being the Seamen's Union with about 1,200 members and the Harbor Workers' Union with about 600. There is also a union of about 400 women employed at drying fish.

² Pound at par=\$4.8665; exchange rate varies.

³Landsorganisationen i Sverige. Fackföreningsrörelsen, Sept. 11, 1924.

Workers' Organizations in Japan

AN ACCOUNT is given of the rapid growth of trade-unions in Japan during the first part of 1924 in *Industrial and Labor Information*, September 1, 1924 (pp. 37, 38). As shown by an investigation by the Japanese Bureau of Social Affairs, there were 432 unions with a membership of 125,551 at the close of 1923, while on May 15, 1924, there were 447 unions with a total membership of 175,454, or an increase of nearly 50,000 members within five months. An important cause of this rapid development of labor unions was the selection by the Japanese Government of candidates for workers' delegate and advisers to the sixth session of the International Labor Conference from the labor unions only instead of allowing the unorganized workers to have a part in the choice of a delegate as had been the case in other years.

The General Federation of Japanese Labor has established friendly relations with other big unions, such as the General Federation of Workers in Government Undertakings, the Japan Seamen's Union, and the Japan Farmers' Union. The Federation of Unions of Engineering Workers and the Federation of Printers, which were formerly the strongest unions in the Federation of Trade-Unions of Western Japan, were of anarchistic tendency and insisted upon liberal and decentralized combination as opposed to the principle of centralization favored by the General Federation. They also maintained an attitude of disapproval toward the International Labor Organization. Recently, however, the moderate members have gained the ascendancy, and at a mass meeting in March the attitude of the Federation of Engineering Workers was reversed, and it was decided to support the International Labor Office. This federation is now said to be endeavoring to unite all the different factions in the labor unions and especially to reconcile the General Federation of Japanese Labor and the Federation of Printers.

COOPERATION

Statistics of Certain American Credit Societies, 1921 and 1922

THE following table, compiled from the reports of the respective banking commissioners, shows the status of credit unions in Massachusetts and Rhode Island and of people's banks in Quebec, at the end of 1921 and 1922. Similar data for previous years were given in Bulletin No. 314 of this Bureau.

CONDITION OF COOPERATIVE CREDIT SOCIETIES IN MASSACHUSETTS, RHODE ISLAND, AND QUEBEC, AS OF DEC. 31, 1921 AND 1922¹

Year	Number of credit unions	Number of members	Share capital	Number of depositors	Amount of deposits	Number of borrowers	Amount of loans outstanding	Guaranty and reserve funds	Earnings for year
Massachusetts: ²									
1921	82	32,226	\$2,132,269	(3)	\$1,586,873	12,180	\$3,314,370	\$140,482	-----
1922	86	37,797	2,428,077	14,257	2,181,245	14,687	3,832,709	196,295	\$150,532
1923	90	44,969	3,072,899	17,357	2,675,420	17,002	4,766,497	245,654	206,081
Rhode Island:									
1921	2	2,156	76,830	(3)	552,673	522	437,914	7,235	4 2,674
1922	3	3,761	114,996	(3)	747,972	1,025	647,242	7,722	46,312
Quebec:									
1921	⁴ 103	33,166	1,328,991	30,570	4,602,204	9,219	5,799,282	318,071	352,940
1922	111	32,173	1,355,310	30,583	3,912,375	8,999	5,292,332	397,517	334,396

¹ Compiled from Massachusetts, Report of commissioner of banks, 1922, Pt. II, and 1923, Pt. IV; Rhode Island, Report of bank commissioner, 1922 and 1923; and Quebec, Statistical Yearbook, 1923.

² Figures are for year ending Oct. 31.

³ Not reported.

⁴ 1 society reporting.

⁵ Not including 5 societies which failed to report.

Comparative Statistics of Cooperation in Various Countries¹

PREVIOUS issues of the MONTHLY LABOR REVIEW² have contained comparative statistics showing the development of the cooperative movement, especially that of consumers, in certain countries for which information was available. In the present article

¹ The data on which this article is based are from Australia, Bureau of Census and Statistics, Labor Report (1922) No. 13; Austria, Bundesamt für Statistik, Statistisches Handbuch, 1924; International Review of Agricultural Economics (Rome), January-March and October-December, 1923; Arbeit und Wirtschaft (Vienna), July 15 and Sept. 1, 1924; Revue du Travail (Brussels), May, 1924, pp. 982-1015; La Coopération Belge (Brussels), Feb. 1 and Aug. 15, 1924; United States Department of Agriculture, Bul. No. 1266; Agricultural cooperation in Denmark; consular reports of Feb. 13 and Dec. 17, 1923; Social Tidsskrift (Helsingfors), No. 5, 1924; Bulletin du Ministère du Travail (Paris), January-March, 1924; Konsumgenossenschaftliche Rundschau (Hamburg), Jan. 19 and Sept. 13, 1924; People's Yearbook (Manchester), 1924; The Producer (Manchester), March, April, June, and October, 1924; Great Britain, Report of Registrar of Friendly Societies for year ending Dec. 31, 1922; International Cooperative Bulletin (London), issues of January to September, 1924; India, Department of Statistics, Statements showing progress of the cooperative movement in India during the year 1920-21 (Calcutta, 1922), No. 1640; Japan, Twenty-second Financial and Economic Annual, 1922; Cooperation among the Lithuanians in the United States of America, by Fabian S. Kemésis; Netherlands, Central Bureau voor de Statistiek, Jaarcijfers, 1922 (The Hague, 1924), pp. 126-129; Het Coöperatieve Nieuws (The Hague), Sept. 16, 1924; Norway, Departementet for Sociale Saker, Sociale Meddeleiser No. 8, 1923, pp. 182-189; Kooperatören (Christiania), January, 1924; Revue Mensuelle de Statistique (Warsaw), April, 1923; Kootenayus Bulletin, Cooperative Movement in Russia (London), Nos. 1-14; Kooperatören (Stockholm), Hefte 23-24, 1924; Verband Schweiz, Konsumvereine (V. S. K.), Rapports et Comptes concernant l'activité des organes de l'Union en 1923 (Basel, 1924); La Coopération Suisse (Basel), July 15, 1924; and International Labor Office, International directory of cooperative organizations (Geneva, 1924).

² October, 1920 (pp. 153-167), and October, 1923 (pp. 184-190).

that information is brought up to 1923, or where this was not possible, up to the latest year reported. Comparable figures are, however, difficult to secure. Some of the countries most important from the cooperative standpoint publish very few statistics, while other countries publish very complete figures each year. It will be noted, if reference is made to the previous articles, that certain countries included in those studies are omitted from the present one; this is due either to the lack of up-to-date information or to peculiar circumstances in the country which render authoritative statements as to the condition of the cooperative movement impossible. Certain new countries have been added.

Development of Various Types of Cooperative Societies

IN THE table below are shown, for 23 countries, the number of societies of each type in the latest year for which information was available:

NUMBER OF COOPERATIVE SOCIETIES OF SPECIFIED TYPES, BY COUNTRY

Country	Year	Banking, savings, and credit societies	Consumers' societies (all types) ¹	Agricultural societies ²	Insurance societies	Workers' productive or labor societies	Other types
Argentina	1921	29	47	160	6		21
Australia	1922		137	228			
Austria	1922	2,011	630	1,194		858	33
Belgium	1922	83	394	(³)	51	75	880
Bulgaria	1923		⁴ 85	⁵ 153			
Czechoslovakia	1923	5,852	3,587	3,479		1,825	199
Denmark	1922	⁶ 659	⁷ 1,806	⁸ 4,739	(³)	(³)	(³)
Estonia	1922	107	273		⁸ 500		
Federated Malay States	1923	19	1	574			1,594
Finland	1923	1,050	785	13,276		5,125	5,587
Germany	1923	20,884	6,226	1,737		105	
Great Britain	1922	39	1,737	⁹ 1,079		150	
Greece	1921	1,287	111	307		5	
India	¹⁰ 1921			42,582			4,921
Japan	1921	2,535	816	483		282	9,654
Latvia	1922	171	563	458	122		777
Lithuania	1923	222	422	28		45	
Mauritius	1922	36					
Netherlands	1923	834	591	1,153	84		370
Poland	1922	5,343	4,671	581			581
Rumania	1922	4,480	1,802	914		408	63
Russia	1922	616	26,006	16,031		4,818	
Switzerland	1922	537	2,148	5,746	247	51	2,679

¹ Includes stores, housing societies, farmers' consumers' societies, etc.

² Includes all types of agricultural societies, except agricultural credit, insurance, and consumers' societies.

³ Not reported.

⁴ Urban societies.

⁵ Rural societies.

⁶ Compiled from U. S. Department of Agriculture Bul. No. 1266.

⁷ In affiliation with Cooperative Wholesale Society.

⁸ Approximate.

⁹ In affiliation with Agricultural Organization Society.

¹⁰ Year ending June 30.

Consumers' Societies

IN THE following table are shown, for 13 countries, the number, membership, and 1923 sales of societies affiliated with the national cooperative organizations. For purposes of comparison the sales for 1922 are also given:

MEMBERSHIP AND SALES OF SOCIETIES AFFILIATED TO CENTRAL COOPERATIVE UNION, IN 1923, BY COUNTRIES

Country and union	Number of affiliated societies	Member-ship of affiliated societies	Mon-etary unit ¹	Amount of sales	
				1922	1923
Austria (German-Austrian Union).....	113	² 511, 019	Krone	221, 971, 570, 701	848, 996, 469, 000
Czechoslovakia (Union of Czech Societies).....	1, 371	556, 749	do	³ 1, 585, 762, 209	1, 315, 048, 904
Esthonia (E. T. K.) ⁴	263	90, 000	Mark	(⁵)	2, 038, 000, 000
Finland:					
K. K. ⁴	113	172, 500	do	735, 623, 404	843, 552, 454
Y. O. L. ⁴	464	182, 000	do	(⁵)	1, 082, 000, 000
France (National Federation).....	1, 819	1, 545, 000	Franc	(⁵)	1, 350, 000, 000
Germany:					
Central Union.....	1, 300	3, 375, 373	Mark	87, 065, 000, 000	⁶ 14, 844, 779, 356
National Union.....	24, 882	² 3, 300, 000	do	(⁵)	16, 570, 000, 000
German Cooperative Union.....	4, 020	³ 1, 225, 000	do	³ 91, 700, 000, 000	(⁵)
Great Britain.....	1, 314	4, 569, 256	Pound	169, 582, 357	165, 490, 038
Latvia.....	332	75, 000	Marx	(⁵)	15, 935, 864
Netherlands (Central Union).....	135	126, 725	do	(⁵)	-----
Norway.....	416	96, 401	Krone	104, 874, 100	108, 971, 300
Poland (Union of Polish Distributive Societies).....	149	171, 247	Mark	(⁵)	-----
Russia (Centrosoyuz).....	20, 120	6, 907, 000	Ruble	⁷ 243, 259, 788	⁸ 373, 115, 000
Sweden (Cooperative Union).....	886	274, 269	Krona	264, 000, 000	-----
Switzerland (V. S. K.) ⁴	516	⁹ 357, 208	Franc	274, 129, 268	264, 310, 086

¹ Owing to the great depreciation in the currency of some of the countries included in this table, no attempt is made to convert foreign into United States currency. Austrian krone at par=20.26 cents; Czechoslovak krone=20.3 cents; Esthonian mark, Finnish mark and franc=19.3 cents; German and Polish mark=23.8 cents; pound sterling=\$4.8665; Scandinavian krone=26.8 cents; gold ruble=51.46 cents; chervonetz ruble=\$5.146.

² 1922.

³ 1921.

⁴ Letters represent initials of name of central society.

⁵ Not reported.

⁶ Thousands.

⁷ Gold rubles.

⁸ Chervonetz rubles.

⁹ 494 societies reporting.

In the following table are shown the details of operation of the wholesale societies of 18 countries in 1923:

STATISTICS OF OPERATION OF WHOLESALE SOCIETIES IN VARIOUS COUNTRIES IN 1923

Country	Affiliated societies		Monetary unit ¹	Wholesale society			
	Number	Membership		Share capital	Value of goods produced	Sales	Surplus savings
Austria.....	125	(²)	Krone...	(²)	³ 70,000,000	466,564,209,700	(²)
Belgium.....	65	(²)	Franc...	(²)	5,508,278	88,903,220	(²)
Bulgaria.....	69	42,968	Leva....	4,461,848	(²)	(²)	560,399
Czechoslovakia (V. D. P.) ⁴	1,371	556,749	Krone...	(²)	(²)	(²)	(²)
Denmark.....	1,806	337,700	do.....	1,387,400	40,555,914	146,958,840	9,068,068
Esthonia (E. T. K.) ⁴	263	90,000	Mark....	(²)	(²)	1,203,373,250	5,700,000
Finland:							
S. O. K. ⁴	464	(²)	do.....	(²)	42,473,960	517,308,205	6,400,000
O. T. K. ⁴	112	172,500	do.....	(²)	(²)	464,606,725	6,300,000
France.....	1,640	(²)	Franc...	9,315,575	22,140,185	268,800,543	(²)
Germany.....	1,049	(²)	Mark....	(²)	³ 2,868,685,470	³ 13,799,071,745	(²)
Great Britain:							
England.....			Pound...		20,611,005	66,120,000	(²)
Scotland.....			do.....		5,155,332	17,259,000	(²)
Hungary ("Hangya")	1,962	18,000	Krone...	(²)	(²)	62,352,004,000	(²)
Netherlands (Handelskamer).	⁵ 445	(²)	Floren..	(²)	(²)	11,893,808	(²)
Norway.....	416	96,401	Krone...	(²)	(²)	23,954,644	(²)
Poland.....	149	171,247	Franc...	(²)	(²)	7,400,000	(²)
Russia.....	20,120	6,907,000	Ruble...			42,200,000	(²)
Sweden.....	886	274,269	Krona...	⁶ 9,500,000	(²)	72,228,401	1,075,826
Switzerland.....	516		Franc...	1,550,840	(²)	119,519,480	545,094
Scandinavian countries.....	73		Krone...	(²)		17,600,000	194,677

¹ Owing to the great depreciation in the currency of some of the countries included in this table, no attempt is made to convert foreign into United States money. Austrian, Hungarian, and Czechoslovak krona at par=20.3 cents; franc, leva, Esthonian mark, and Finnish mark=19.3 cents; Scandinavian krona=26.8 cents; German mark=23.8 cents; pound sterling=\$4.8665; florin=40.2 cents; and chervonetz ruble=\$5.146.

² Not reported.

³ Thousands.

⁴ Letters represent initials of name of wholesale society.

⁵ 1921.

⁶ Working capital.

⁷ The members of the Scandinavian wholesale society are the wholesalers of each of the three Scandinavian countries.

Cooperation in Foreign Countries

Belgium

IN 1908, the Belgian Department of Industry and Labor made an inquiry into the development of the cooperative movement in that country. A similar inquiry was undertaken in 1921, but so few of the cooperative societies furnished reports that the study was abandoned. In 1923, a study was made, the results of which were given in the May issue of the *Revue du Travail* (pp. 982-1015).

The inquiry covered all types of cooperative societies except agricultural societies, housing societies created under the law of October 11, 1919, and war reconstruction societies.¹ It was found that during the period 1873-1922, some 4,088 societies had been formed, of which 1,483 were still in existence on December 31, 1922. Of these 1,483 societies only 1,261 were actively functioning.

¹ At the end of 1922 there were 319 such societies in Belgium.

The geographical location of the 1,483 existing societies was as follows:

	Number of societies
Brabant.....	336
Anvers.....	263
Liège.....	244
Hainaut.....	187
West Flanders.....	187
East Flanders.....	161
Namur.....	51
Luxembourg.....	28
Limbourg.....	26
Total.....	1,483

The table below gives statistics relative to membership, share capital, business done, etc., in 1908 and 1922:

BELGIAN COOPERATIVE SOCIETIES, 1908 AND 1922, BY TYPE OF SOCIETY
[Franc at par=19.3 cents; exchange rate varies]

Type of society	1908						
	Number of existing societies	Membership		Number of societies reporting	Paid-in share capital Amount	Business	
		Number of societies reporting	Number of members			Number of societies reporting	Amount
Consumers' societies.....	394	379	250,106	375	Francs 7,235,042	1,376	Francs 172,129,649
Pharmacies.....	6	2	109	6	81,041	6	1,336,235
"Capitalistic" productive societies ²	84	70	5,305	71	4,409,008	65	14,716,359
Workers' productive societies.....	26	23	2,325	23	312,588	20	2,012,541
Dockers' societies ("nations").....	29	28	890	20	4,398,498	15	3,266,235
Credit societies.....	45	34	24,000	35	7,584,208	33	836,121,596
Housing societies.....	24	24	4,229	21	385,553	20	4,552,632
Insurance societies.....	66	60	10,897	56	2,947,143	50	2,686,740
Societies for purchase of raw materials.....	82	74	5,686	73	1,513,992	75	12,120,446
Miscellaneous societies.....	189	137	21,162	131	3,787,707	122	10,152,392
Total.....	945	831	324,700	811	32,654,785	782	959,094,825

Type of society	1922						
	Number of existing societies	Number in active operation Dec. 31	Number furnishing data	Number of members	Paid-in share capital	Reserve and other funds	Amount of business
Consumers' societies.....	353	322	257	386,708	Francs 17,782,677	Francs 18,885,999	Francs 446,942,038
Pharmacies.....	10	9	8	671	730,494		6,288,326
"Capitalistic" productive societies ²	252	186	145	12,227	29,775,170	1,387,369	659,933,601
Workers' productive societies.....	39	28	21	8,502	2,492,491	521,500	712,570,963
Dockers' societies ("nations").....	36	36	23	955	4,917,977		937,990,705
Credit societies.....	83	71	59	33,192	22,354,676	8,559,879	4,231,861,521
Housing societies.....	31	24	18	4,328	1,220,956		10,403,043
Insurance societies.....	51	45	38	12,897	2,909,990	6,465,014	12,10,873,848
Societies for purchase of raw materials.....	217	194	162	17,456	33,527,222	14,1,701,667	15,464,787,308
Miscellaneous societies.....	411	346	235	40,186	17,354,690	16,1,690,224	17,27,843,985
Total.....	1,483	1,261	966	517,122	133,066,343	39,211,652	5,327,495,338

¹ Includes figures for wholesale and various unions of societies.
² Societies, not generally regarded as truly cooperative, of private merchants.
³ 256 societies reporting.
⁴ 256 societies reporting; includes figures for wholesale and various federal societies.
⁵ 7 societies reporting.
⁶ 126 societies reporting.
⁷ 18 societies reporting.
⁸ 16 societies reporting.
⁹ 17 societies reporting.

¹⁰ 58 societies reporting.
¹¹ 19 societies reporting.
¹² Premiums received; 36 societies reporting.
¹³ 156 societies reporting.
¹⁴ 107 societies reporting.
¹⁵ 157 societies reporting.
¹⁶ 233 societies reporting.
¹⁷ 229 societies reporting.
¹⁸ 950 societies reporting.
¹⁹ 860 societies reporting.
²⁰ 923 societies reporting.

The table below, computed from that preceding, shows the average membership, share capital, and business per society, by type of society:

AVERAGE MEMBERSHIP, SHARE CAPITAL, AND BUSINESS PER SOCIETY, AT END OF 1922, BY TYPE OF SOCIETY

[Franc at par=19.3 cents; exchange rate varies]

Type of society	Average per society		
	Members-hip	Share capital	Business
Consumers' societies.....	1, 511	<i>Francs</i> 69, 193	<i>Francs</i> 1, 816, 180
Pharmacies.....	84	104, 356	786, 041
"Capitalistic" productive societies.....	84	205, 346	475, 663
Workers' productive societies.....	495	118, 690	698, 387
Dockers' societies ("nations").....	42	307, 374	2, 234, 747
Credit societies.....	563	378, 893	72, 963, 130
Housing societies.....	228	67, 831	677, 947
Insurance societies.....	339	76, 579	302, 051
Societies for purchase of raw materials.....	108	214, 918	2, 960, 429
Miscellaneous.....	171	74, 484	121, 589
Total.....	535	140, 070	5, 771, 934

It is seen from the above table that with the exception of the housing societies, the consumers' organizations had a smaller average paid-in share capital than any other type of society shown. These societies, however, had the use of 99,669,143 francs deposited with them by their members.

Consumers' Societies

Of the various phases of cooperation in Belgium, the consumers' cooperative movement is the most developed and the one having "the most tangible results." "Rare indeed are the localities of any importance which do not have their consumers' cooperative associations." One of the features of the consumers' movement is the extreme tendency toward amalgamation and centralization, the necessary result of competition with private business and especially with the "incorporated societies" (*sociétés anonymes*). The cooperative societies found combination necessary in order to increase their purchasing power, to provide markets for their manufactured products, and to "reinforce and extend cooperative action more and more." The report states that "it seems that the time is not far distant when Belgium will have only powerful regional societies with many branches." This already has taken place to a great degree, especially in the Provinces of Liège and Hainaut. The tendency to amalgamation also explains to a great extent the disappearance of many of the 4,088 societies reported as organized since 1873.

Of the 254 societies furnishing reports, 177 (or 69.7 per cent) had a business during 1922 of 400,000 francs or less, 17 (or 6.7 per cent) of from one million to two million francs, 11 (or 4.4 per cent) of more than 10 million francs, and 1 of more than 100 million francs. About one-fifth (224) of all the societies reporting kind of business done (1,002) are grocery stores, while nearly one-sixth each (155 and 156)

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handle dry goods or clothing; 66 sell bread only; 32 sell coal and 70 tobacco; only 7 societies were bakeries. Current prices are charged by 69.5 per cent of the societies reporting while the remaining 30.5 per cent operate on the cost-plus plan. The majority (65 per cent) of the societies giving information sell to the public as well as to their members.

Seventy-six societies make their own bread, and 26 the beer sold by them; 5 societies manufacture shoes; 3 societies clothing; 4 societies pastry; 2 societies liquors; and 2 societies confectionery. The following articles are manufactured by one society each: Wooden shoes, cigars, chocolate, sirup, soap, ice, sugar, and wheat flour.

Workers' Productive Societies

It is pointed out in the report that all the members of a workers' productive society are not necessarily employed by it; also that, on the other hand, salaried or auxiliary workers (not members) may be employed. In 19 such societies persons actually working numbered 7,115, of whom 6,705 were members and 410 nonmembers. Eight societies employed only their members, while in 3 societies the number of auxiliary workers was greater than the number of working members.

As to kind of goods manufactured or business done, the 39 existing societies are distributed as follows: Printing, 5; painting, 4; basket work, 2; quarrying, 2; manufacture of various articles, 2; of lace trimmings, 3; of shoes, 2; of chairs, 2; and of wooden shoes, 3; diamond cutting, lock manufacture, manufacture of gas meters and tinware, kitchen utensils, carriages, cigars, earthenware and crockery, braid, mechanical and electrical apparatus, paving stone and glass, 1 each. There are also 1 transport society, 1 forge, and 1 foundry.

Dockers' Societies ("Nations")

The word "nation" is used to designate longshore or dockers' societies, whose members carry on the work not only of loading and unloading ships' cargoes, but also of transporting, weighing, and placing them in warehouses. It is said that these societies were produced by the special conditions in the port of Anvers and are mentioned in the annals of that city as far back as the 13th century. They took their name partly from the names of the people whose goods they unloaded (American nation, Hessian nation, etc.) and partly from the classes of goods they handled or the nature of work done (silversmith nation, etc.).

In principle these "nations" are purely workers' corporations. Nevertheless, their character has been transformed, little by little, and it is stated that to-day they have become associations limited to and constituted among little capitalists, really masters who make the workers toil under their direction.

Housing Societies

It is pointed out that the apparently small importance of this class of societies as shown by the table on page 233 is due to the fact that figures for societies organized under the law of October 11, 1919, are not included. Of these latter societies, there were 151 in existence on December 31, 1922, with a paid-in capital of 112,485,500 francs.

During the year 1922 they constructed 11,405 dwellings, of which 9,225 were separate houses and the remainder were apartments.

Insurance Societies

The table following shows societies writing each type of insurance, premiums received, insurance paid, and the amount covered by policies written:

PREMIUMS RECEIVED, BENEFITS PAID, AND VALUE OF POLICIES

[Franc at par=19.3 cents; exchange rate varies]

Kind of insurance written	Number of societies reporting	Premiums received	Benefits paid	Value of policies
Fire.....	19	<i>Francs</i> 372, 214	<i>Francs</i> 44, 140	¹ 472, 905, 163
Life.....	4	4, 944, 073	3, 264, 583	18, 895, 553
Fire and life.....	2	3, 831, 226	893, 786	² 86, 507, 235
Accident.....	2	219, 816	71, 944	³ 1, 270, 013, 241
Annuity and pension.....	4	1, 494, 102	806, 400	⁴ 55, 766, 795
Plate glass.....	1	1, 980	1, 360	⁴ 165, 837
Maritime.....	1	2, 981	-----	66, 200
"Excluded risks".....	1	3, 255	-----	75, 000
Various.....	2	4, 204	1, 925	4, 777, 300
Total.....	36	10, 873, 851	5, 084, 138	81, 482
				1, 909, 253, 806

¹ 18 societies reporting.

² Life.

³ Fire.

⁴ 1 society reporting.

Denmark ²

THE development of the Workers' National Bank of Denmark, a bank corresponding to the "labor banks" of the United States, since its formation in 1919, is shown in the table below:

DEVELOPMENT OF WORKERS' NATIONAL BANK OF DENMARK, 1919 TO 1923

[Krone at par=26.8 cents; exchange rate varies]

Year	Loans	Deposit accounts	Turnover	Net profits
	<i>Kroner</i>	<i>Kroner</i>	<i>Kroner</i>	<i>Kroner</i>
1919.....	648, 000	4, 160, 080	314, 234, 970	98, 497
1920.....	2, 787, 471	10, 493, 739	474, 777, 805	329, 095
1921.....	3, 047, 286	13, 669, 703	340, 859, 552	123, 503
1922.....	3, 948, 718	17, 693, 096	429, 281, 736	105, 255
1923.....	2, 749, 434	25, 068, 283	1, 012, 964, 853	104, 111

The share capital of the bank amounts to 2,496,000 kroner and its reserve fund to 120,000 kroner.

Great Britain

Cooperative Congress ³

THE fifty-sixth annual congress of the Cooperative Union was held at Nottingham June 9-11, 1924, with 1,546 delegates from 530 member societies in attendance.

² Data are from International Cooperative Bulletin, London, July, 1924, pp. 212, 213, 219, 220.

³ Data are from Ministry of Labour Gazette, July, 1924, pp. 238, 239; International Cooperative Bulletin, London, July, 1924, pp. 197-201; and Monthly Circular of the Labour Research Department, London, Aug. 1, 1924, p. 182.

Reports and addresses brought out that although "upwards of 4,500,000 persons are enrolled as members of cooperative societies in Great Britain," cooperators feel that the movement has not advanced as it should; also that the "insidious system of credit trading" is becoming quite common. It was urged that the societies get back to the cooperative principle of cash trading. The growth of the Cooperative Insurance Society was pointed to as an example of the development possible to achieve in other cooperative lines.

Some progress was reported by the International Cooperative Alliance. The cooperative movements of 35 countries are now in affiliation and others are preparing to affiliate.

After a heated debate on the question of the cooperative societies' right to apply to their employees any changes in wage rates established by trade boards, industrial councils, or interim reconstruction councils, the congress took the stand that any variation in such rates may be enforced in cooperative establishments "unless such variations are the subject of negotiation between the employers and the trade-unions concerned; but such negotiations shall not prevent the employers from putting into operation such variation at the expiration of 14 days."

In the case of any body of workers for whom there is more than one rate available, the societies shall always pay the higher rate unless an agreement has been arrived at by negotiation or an award has been given authorizing a lower rate. Where trade-union agreements (either national or district) have been made by representative bodies of employers and workers, the same rates shall apply to cooperative employees employed in the area covered by the agreement.

As is pointed out, this resolution reaffirmed, "and this time with the final authority of the cooperative movement," the "proviso" which was one of the chief causes of last year's dispute.⁴

It even goes further, for though it does not insist that cooperative societies shall be allowed to pay trade-board rates, merely stipulating that they may put into immediate effect any reductions made, it does lay down that agreements made with private trades shall apply also to cooperative societies, thereby destroying the trade-union contention that cooperative rates ought generally to be higher than those in private employment.⁵

Other resolutions passed urged the continuation and expansion of the work of organizing training classes for cooperative employees and recorded the conviction of the congress that the best means by which the cooperative movement could assist agriculture lay in the promotion of cooperative trading arrangements between the farmers and the cooperative societies. The central board was therefore authorized to take necessary steps for carrying into effect the decision reached at the Carlisle congress in 1919 authorizing the establishment of an agricultural section of the Cooperative Union.

The next congress will be held in 1925 at Southport.

Agricultural Cooperation

The 1922-23 report of the Agricultural Organization Society, reviewed on pages 262-266 of the April-June, 1924, issue of the *International Review of Agricultural Economics* (Rome), gives the

⁴ See MONTHLY LABOR REVIEW, October, 1923, pp. 193-195.

⁵ Labor Research Department. Monthly Circular, London, Aug. 1, 1924, p. 183.

following data on the agricultural cooperative societies affiliated with the society:

STATISTICS OF ENGLISH AGRICULTURAL COOPERATIVE SOCIETIES AFFILIATED WITH AGRICULTURAL ORGANIZATION SOCIETY, 1921 AND 1922

[£ at par=\$4.8665]

Type of society	Number of societies		Number of members		Sales of agricultural supplies to members		Sales of agricultural products for members	
	1921	1922	1921	1922	1921	1922	1921	1922
Agricultural supply societies.....	112	101	37,138	35,741	£5,968,604	£5,259,808	£2,437,163	£1,814,010
Dairy societies.....	38	38	9,228	5,904	357,518	172,845	2,736,198	1,201,832
Egg and poultry societies.....	45	40	12,257	11,809	87,252	88,358	526,863	302,919
Auction, slaughtering, and general marketing societies.....	32	30	5,803	6,919	74,068	89,794	1,846,381	1,693,483
Credit, etc., societies.....	46	46	1,781	7,675	-----	33,011	-----	485,445
Small-holdings and allotments societies ¹	895	824	54,306	108,667	(²)	(²)	³ 57,153	³ 172,749
Total.....	1,168	1,079	120,513	176,715	6,487,442	5,643,816	7,603,758	5,670,438

¹ Figures for 1921 relate only to 408 societies.

² Included in sales of produce for members.

³ Includes also sales of supplies to members.

Report of British Labor Copartnership Association, 1923

The September, 1924, issue of Copartnership (London) contains (pp. 106, 107) the thirty-first annual report of the Labor Copartnership Association. The report shows an improvement over conditions in 1922, a year that with the preceding one was the worst in the societies' history. The following table shows the details of operation, for 1923, of the societies engaged in the various lines of business. Figures for 1922 and previous years were given in the December, 1923, issue of the MONTHLY LABOR REVIEW (pp. 194, 195).

RESULTS OF OPERATION OF COPARTNERSHIP PRODUCTIVE SOCIETIES IN GREAT BRITAIN, 1923, BY INDUSTRY

[£ at par=\$4.8665; exchange rate varies]

Country and industry	Number of societies	Share and loan capital and reserve	Amount of business	Profit	Amount returned as dividend on wages
England and Wales:					
Textile.....	13	£563,355	£1,239,861	£77,653	£13,142
Boot and shoe.....	15	355,906	643,999	27,810	9,543
Metal.....	3	38,353	87,647	2,568	725
Building and wood.....	6	53,799	49,169	460	-----
Printing.....	18	196,913	350,629	24,025	2,990
Miscellaneous.....	7	156,589	148,674	3,205	491
Total.....	62	1,364,915	2,519,979	¹ 135,741	26,691
Scotland:					
Textile.....	1	289,322	282,746	29,501	1,006
Baking.....	1	938,602	1,161,295	83,106	12,925
Printing.....	2	23,808	23,078	1,433	104
Total.....	4	1,251,132	1,467,119	114,040	14,035
Grand total.....	66	2,616,047	3,987,098	249,781	40,726

¹ Not the correct sum of the items, but is as given in the report.

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India

THE following table, compiled from the reports of the registrars of the respective Provinces,⁶ shows the status of the various types of cooperative societies in the year ending June 30, 1923:

OPERATIONS OF COOPERATIVE SOCIETIES IN INDIA IN 1922-23, BY PROVINCE AND TYPE OF SOCIETY

Province, and type of society	Number of societies	Number of members	Paid-in share capital	Reserve fund	Working capital	Savings for year
<i>Ajmer-Merwara</i>						
Central banks.....	7	^a 647	<i>Rupees</i> 243, 130	<i>Rupees</i> 287, 052	<i>Rupees</i> 2, 082, 158	<i>Rupees</i> 59, 434
Agricultural societies:						
Credit.....	441	9, 637	340, 719	259, 872	1, 862, 170	85, 846
Production.....	7	87	882	366	7, 268	310
Production and sale.....	1	106	113	-----	691	^b 14
Total.....	449	9, 830	341, 714	260, 238	1, 870, 129	86, 142
Nonagricultural societies:						
Credit.....	27	771	18, 608	4, 398	90, 390	2, 219
Purchase and sale.....	14	3, 074	42, 703	1, 650	82, 683	7, 211
Miscellaneous.....	1	26	1, 370	-----	13, 888	^b 189
Total.....	42	3, 871	62, 681	6, 048	186, 961	9, 241
<i>Bengal</i>						
Central banks.....	^a 89	7, 082	1, 856, 700	865, 684	15, 125, 775	278, 285
Agricultural societies:						
Credit.....	7, 011	186, 944	703, 769	2, 163, 802	14, 862, 021	436, 324
Purchase, and purchase and sale.....	21	4, 147	31, 486	7, 695	154, 641	5, 910
Production.....	114	4, 689	29, 802	1, 041	77, 658	^b 1, 962
Production and sale.....	55	5, 284	35, 652	185, 023	578, 575	345, 814
Miscellaneous.....	12	172	802	-----	1, 092	229
Total.....	7, 213	201, 236	801, 511	2, 357, 561	15, 673, 987	786, 315
Nonagricultural societies:						
Credit.....	186	62, 070	2, 255, 931	414, 995	8, 319, 268	291, 486
Purchase, and purchase and sale.....	76	12, 997	365, 551	17, 169	524, 473	^b 85, 717
Production and sale.....	232	3, 523	19, 151	24, 799	161, 977	5, 818
Miscellaneous.....	19	1, 131	38, 099	19, 410	84, 934	6, 317
Total.....	513	79, 721	2, 678, 732	476, 373	9, 090, 652	217, 904
<i>Bihar and Orissa</i>						
Central banks.....	49	^a 4, 840	854, 706	334, 679	9, 393, 950	220, 037
Agricultural societies:						
Credit.....	4, 627	134, 119	285, 443	992, 754	8, 526, 820	264, 737
Purchase.....	8	375	2, 175	98	9, 986	-----
Production and sale.....	26	327	3, 309	1, 887	22, 253	^b 5, 987
Total.....	4, 661	134, 821	290, 927	994, 739	8, 559, 059	258, 750
Nonagricultural societies:						
Credit.....	129	10, 341	346, 724	80, 319	1, 139, 354	57, 581
Purchase, and purchase and sale.....	25	4, 932	151, 938	9, 456	566, 248	9, 770
Production and sale.....	110	1, 870	11, 551	10, 342	222, 964	6, 496
Other.....	37	519	3, 060	818	27, 503	1, 065
Total.....	301	17, 662	513, 273	100, 935	1, 956, 069	74, 912
<i>Burma</i>						
Central banks.....	14	^a 1, 485	727, 435	160, 729	4, 350, 023	92, 781

^a Number of member societies.^b Loss.

⁶ Ajmer-Merwara [Registrar of Cooperative Societies], Report on the working of the cooperative societies in the district of Ajmer-Merwara for the year ending June 30, 1923; Bihar and Orissa [Registrar of Cooperative Societies], Report on the working of cooperative societies in Bihar and Orissa for the year 1922-23; Burma [Registrar of Cooperative Societies], Report on the working of cooperative societies act in Burma for the year ended June 30, 1923.

OPERATIONS OF COOPERATIVE SOCIETIES IN INDIA IN 1922-23, BY PROVINCE AND TYPE OF SOCIETY—Concluded

Province, and type of society	Number of societies	Number of members	Paid-in share capital	Reserve fund	Working capital	Savings for year
<i>Burma—Concluded</i>						
Agricultural societies:			<i>Rupees</i>	<i>Rupees</i>	<i>Rupees</i>	<i>Rupees</i>
Credit.....	4, 159	97, 948	2, 930, 474	3, 129, 719	18, 456, 905	374, 583
Purchase, and purchase and sale.....	18	1, 019	9, 644	844	16, 663	^b 2, 089
Production.....	2	130				
Production and sale.....	74	6, 947	479, 497	21, 952	902, 704	^b 102,860
Total.....	4, 253	106, 044	3, 419, 615	3, 152, 515	19, 376, 272	269, 619
Nonagricultural societies:						
Credit.....	323	50, 974	4, 970, 191	602, 207	8, 334, 249	559, 999
Purchase and sale.....	9	1, 053	79, 561	2, 220	125, 626	19, 913
Production and sale.....	11	598	30, 590	5, 913	135, 543	^b 7, 060
Other.....	1	47	785		785	86
Total.....	344	52, 672	5, 081, 127	610, 340	8, 596, 203	572, 938

^b Loss.

PROFIT SHARING

English Profit-Sharing and Copartnership Schemes in 1923

THE English Ministry of Labor has made it a custom for several years past to collect and publish annually statistics relating to the operation of profit-sharing and copartnership schemes, omitting those carried on in connection with cooperative societies and dealing only with those under which employees participate in profits on some prearranged basis. The data for the year 1923 are summarized in the issue of the Ministry of Labor Gazette for September, 1924.

At the close of 1923 there were 234 schemes in operation, conducted by 228 firms and affecting approximately 160,000 employees. Thirty-eight firms, the largest group having such schemes, were engaged in the supply of gas, water, and electricity; 33 were in engineering, shipbuilding, or metal trades; 34 were merchants; and 24 were textile manufacturers. The rest were scattered through a variety of trades.

In general, the number of firms carrying on profit-sharing schemes is so small compared with the total number in the industry that no conclusions can be drawn as to how far the conditions in the different industries favor profit sharing. The chief exception is the gas industry, in which a large proportion of the leading firms have introduced schemes and in which few plans, once adopted, have been dropped.

The type of scheme which is almost invariably adopted by gas companies provides for a bonus on the employees' wages at a rate varying inversely with the price charged for gas.

About 40 per cent of all the schemes in operation in 1923 provided for the payment to the employees of a proportion of the profits, either in cash or in sums credited to a savings or deposit account, from which amounts may be withdrawn at short notice. In a smaller number of schemes (although this is the normal type of scheme in the gas industry) a proportion of the profits is partly or wholly retained for investment on behalf of the employees in the capital of the undertaking, or is set aside for provident purposes, superannuation, etc. A type of scheme which has become prominent in recent years consists in the admission of employees to a share in the profits by the issue of employees' shares, either free or on specially favorable terms as to price or dividend; over 40 such schemes are at present in operation. Over 20 schemes are based on arrangements for the payment of interest, at a rate varying with the profits, on money deposited with the firm by its employees.

In some of the schemes it is hardly possible to calculate exactly what benefit the employee receives. When, for instance, shares are issued to employees on specially favorable terms, the "bonus" is that part of the dividends on those shares which represents the advantage given to the employees over other shareholders, and the exact amount of this advantage would be very difficult to calculate. Data were received, however, concerning 172 schemes under which the amount of benefit received could be reckoned, these showing that for 121,022 employees affected the average bonus per capita was £7 6s.,¹ and that the average ratio of bonus to earnings was 5.1 per cent.

¹ Pound at par=\$4.8665; exchange rate varies.

The results of these schemes during 1923 show a noticeable improvement as compared with the two previous years. The average amount of bonus paid under all the schemes included was £7 6s. per head in 1923 as compared with £6 5s. 3d. in 1922, and £6 14s. 3d. in 1921. The percentage addition to earnings represented by these bonuses (excluding a few cases for which this information is not available) was 5.1 per cent in 1923, 3.9 per cent in 1922, and 3.6 per cent in 1921. In calculating these averages allowance has been made for schemes which failed to pay a bonus, numbering 59 in 1923, as compared with 71 in 1922 and 64 in 1921.

The highest rate of bonus cited, 12.4 per cent on earnings, was paid by firms engaged in the manufacture of food and beverages; the 24 firms of merchants paid an average bonus of over £12 a head, or 8 per cent on earnings; the firms engaged in the manufacture of glass, chemicals, and soap paid on the average 6 per cent on earnings. Engineering and metal trades firms paid an average of 1 per cent on earnings, and companies supplying gas, water, and electricity paid an average of about 1.5 per cent.

Six schemes were dropped in 1923, four of which were given up because of failure or reorganization of the business or lack of profits to share, due to the industrial depression. One was discontinued because the firm "did not find that the scheme had the desired effect of inducing interest in their work among the employees and retention of their services over longer periods." The sixth had been started in 1917 by a textile company employing about 2,500 people.

Under this scheme the bonuses were retained for investment in securities held by a profit-sharing committee, but owing to the depreciation of these securities employees were stated to have left in order to realize their holdings, and in consequence the scheme was dropped.

The following table shows the number of profit-sharing schemes started, by date of their establishment, the number dropped, the number suspended, and the number in operation at the end of 1923:

PROFIT-SHARING SCHEMES STARTED, DISCONTINUED, AND IN OPERATION, 1880 TO 1923

Period in which started	Total schemes started	Schemes dropped by end of 1923	Schemes suspended at end of 1923	Schemes in operation at end of 1923
Up to 1880.....	35	29	-----	6
1881 to 1890.....	79	67	1	11
1891 to 1900.....	76	63	-----	13
1901 to 1905.....	26	19	-----	7
1906 to 1910.....	54	21	1	32
1911 to 1915.....	63	20	2	41
1916 to 1918.....	22	5	-----	17
1919 to 1920.....	101	15	2	84
1921 to 1922.....	20	-----	1	19
1923.....	8	-----	-----	8
Total.....	484	239	7	238

It will be noticed that the greatest amount of interest in profit-sharing schemes was shown in the two years immediately following the war, over one-fifth of the total number having been established during this period. The industrial depression which followed this time of activity had a marked effect in reducing the number of schemes started. In 1921 only 13 new schemes were reported as against 50 in 1920, while for 1922 and 1923 the numbers were, respectively, 7 and 8.

STRIKES AND LOCKOUTS

Strikes and Lockouts in the United States, April to June, 1924

ACCORDING to information received by the United States Bureau of Labor Statistics, 432 labor disputes resulting in strikes and lockouts occurred in this country during the second quarter of 1924. Inasmuch as some reports do not reach the bureau until several months after the strikes occur, the number of strikes occurring during the quarter was probably somewhat larger than the above figure. Complete data relative to many of these strikes have not been received by the bureau and it has not been possible to verify all that have been received. The data in the following tables should therefore be regarded as an advance statement, and should not be accepted as final.

NUMBER OF DISPUTES BEGINNING IN EACH MONTH, APRIL TO JUNE, 1923 AND 1924

Year	April	May	June	Month not stated	Total
1923.....	205	238	130	27	600
1924.....	126	143	91	72	432

The principal strikes reported as occurring in the second quarter of 1924 are as follows:

About 40,000 clothing workers in New York City struck on June 25 against a wage reduction and the sending of work to nonunion shops. This strike involved about 2,500 shops, and terminated successfully by July 12.

There was an interstate strike of 40,000 coal miners in April, embracing Missouri, Kansas, Arkansas, and Oklahoma, because of the failure of the wage conference to reach an agreement. The negotiations were between representatives of the Southwestern Interstate Coal Operators' Association and union officials representing the miners in the southwestern coal fields. An agreement to run for 3 years from April 1, 1924, was finally negotiated after the strike had lasted about a month.

Eleven collieries of the Glen Alden Coal Co., Pennsylvania, were involved in a strike of 15,000 miners from April 30 to about May 3, because of the discharge of a union official.

Coal miners in Kentucky and Tennessee, numbering about 8,000 in 65 mines, struck on April 16, as the result of their failure to negotiate a new agreement with the Western Coal Operators' Association.

An apparently unsuccessful strike of between 5,000 and 10,000 Filipino workers on the sugar plantations of Hawaii occurred during April for a wage increase and a reduction in working hours. The companies were able to continue operations by bringing in Japanese laborers.

About 7,500 miners in Pennsylvania, employed by the Lehigh Coal and Navigation Co., were out on strike for about three weeks in April because the company sent 11 men home when the gangway in which they were working was flooded with silt and water.

A ten days' strike of taxi drivers in New York City occurred during May. About 6,000 drivers were involved. They won their demand for 40 per cent of the receipts.

A strike of structural ironworkers, variously estimated at from 3,000 to 7,800 in number, began May 1 in New York City, affecting also northern New Jersey. The men demanded a closed shop and a wage of \$12 instead of \$10.50 for an 8-hour day. While reports concerning this strike are conflicting, it is understood that it was practically over by May 27, the men receiving the wage increase demanded.

Another coal strike occurred in Pennsylvania in the 12 collieries of the Lehigh Valley Coal Co., involving 5,700 men, against a reduction in the rate paid for yardage and because of the refusal of the company to confer with representatives of the district president. The strikers returned May 24, pending further investigation.

Carpenters in Allegheny County, Pa., numbering about 5,000 struck during April because of inability to reach an agreement with the Master Builders' Association. This strike lasted 10 days and was, in the main, successful.

The data in the following tables relate to the 432 disputes reported as having occurred in the three months under consideration. The strikes that occurred during the quarter but in which the exact month was not stated appear in a group by themselves.

STATES IN WHICH TWO OR MORE DISPUTES WERE REPORTED AS OCCURRING IN THE SECOND QUARTER OF 1924

State	Number of disputes					State	Number of disputes				
	April	May	June	Month not stated	Total		April	May	June	Month not stated	Total
California	1	4	4		9	New York	28	25	21	26	100
Connecticut		4		3	7	Ohio	5	17	3	6	31
Hawaii	1		1		2	Oklahoma	2				2
Illinois	3	14	7	4	33	Oregon	1	2	2		5
Indiana	3	5	5	6	19	Pennsylvania	30	15	14	7	66
Iowa	2	2		4	8	Tennessee	1		1		2
Kentucky	2				2	Texas	1	1			2
Maine		2	1		3	Virginia		2			2
Maryland	3	5	4	3	15	Washington		6	1		7
Massachusetts	9	10	5	3	27	Wisconsin		3	2	2	7
Michigan		2	3		5	12 other States	2	7	3		12
Missouri	7	1	4		12	Interstate	3	3			6
Nebraska	1			1	2						
New Hampshire		2	2	1	5	Total	126	143	91	72	432
New Jersey	16	11	8	6	41						

Of these 432 strikes, 370 occurred east of the Mississippi River and north of the Ohio and Potomac Rivers, 47 occurred west of the Mississippi, and 9 occurred south of the Ohio and Potomac Rivers and east of the Mississippi River. The other 6 were interstate strikes. Of these, 3 occurred east of the Mississippi River, 1 west of it, and 2 embraced both sides of the river. The largest of the interstate

strikes was that of 40,000 miners in the southwestern coal fields, already described.

From the foregoing it will be seen that more than 86 per cent of the strikes in the second quarter of 1924 occurred in the populous geographical section roughly defined as east of the Mississippi and north of the Ohio and Potomac Rivers. It will be noted also that about 69 per cent of the strikes during this period occurred in the 6 States of New York, Pennsylvania, New Jersey, Illinois, Ohio, and Massachusetts, in the order named.

As to cities, New York City led with 54 strikes, followed by Baltimore with 14, Chicago with 13, Paterson with 12, Scranton with 9, Rochester, Philadelphia, and Terre Haute with 8 each, and Boston, Buffalo, and Newark with 7 each.

As to sex of workers involved, the distribution of the strikes was as follows: Males, 337 strikes; females, 2; males and females, 79; sex of workers not reported, 14.

The industries in which two or more disputes were reported are shown in the following table:

NUMBER OF DISPUTES IN SPECIFIED INDUSTRIES REPORTED AS OCCURRING IN THE SECOND QUARTER OF 1924, BY MONTHS

Industry or occupation	Number of disputes				Total
	April	May	June	Month not stated	
Building trades.....	41	46	28	31	146
Clothing.....	20	9	9	14	52
Miners, coal.....	19	9	10	4	42
Bakers.....	3	13	11	7	34
Metal trades.....	9	13	3	4	29
Textiles.....	6	15	6		27
Chauffeurs and teamsters.....	4	6	3	1	14
Barbers.....	2	4	3	2	11
Street railways.....	1	3	2	2	8
Furniture.....	3	2	1		6
Stone workers.....		5			5
Coopers.....	1	1	2		4
Printing and publishing.....	1	3			4
Slaughtering and meat packing.....	1	1	2		4
Car builders.....	2	1			3
Food industries.....	1	1		1	3
Lumber and timber.....		3			3
Street, sewer, and park employees.....		2	1		3
Tobacco.....	2			1	3
Brewery and soft drink workers.....	1		1		2
Brick and tile.....		1		1	2
Farm labor.....	1		1		2
Hotels and restaurants.....			2		2
Iron and steel.....	1			1	2
Motion pictures and theaters.....		1	1		2
Paper and paper goods.....	1	1			2
Miscellaneous.....	6	3	5	3	17
Total.....	126	143	91	72	432

In 309 disputes the employees were reported as connected with unions; in 22 disputes they were not so connected; in 7 disputes both union and nonunion employees were involved; in 2 disputes they were unionized after the strike began; in 92 disputes the question of union affiliation was not reported.

In 223 disputes only 1 employer was concerned in each disturbance; in 21 disputes, 2 employers; in 8 disputes, 3 employers; in 9

disputes, 4 employers; in 6 disputes, 5 employers; in 36 disputes, more than 5 employers; and in 129 disputes the number of employers was not reported.

In the 286 disputes for which the number of persons was reported there were 248,584 employees directly involved, an average of 869.

In 38 disputes in which the number of workers involved was 1,000 or more, the strikers numbered 211,822, thus leaving 36,762 involved in the remaining 248 disputes, or an average of 148 each.

By months the figures are as follows: April, 112,890 persons in 89 disputes, average 1,268, of whom 15,523 were in 78 disputes of less than 1,000 persons each, average 199. May, 48,885 persons in 111 disputes, average 440, of whom 12,335 were in 100 disputes of less than 1,000 persons each, average 123; June, 73,389 persons in 64 disputes, average 1,147, of whom 6,884 were in 52 disputes of less than 1,000 persons each, average 132. In 22 disputes, involving 13,420 persons, the month in which the strike began was not reported.

The following table shows the causes of disputes so far as reported. The question of wages entered more or less prominently into at least 56 per cent of these disputes.

PRINCIPAL CAUSES OF DISPUTES REPORTED AS OCCURRING IN THE SECOND QUARTER OF 1924, BY MONTHS

Cause	Number of disputes				
	April	May	June	Month not stated	Total
Increase of wages.....	39	44	23	24	130
Decrease of wages.....	10	20	10	2	42
Wages, not otherwise specified.....	3	10	12	16	41
Increase of hours.....	1	1	2	2	6
Decrease of hours.....	1	2	2	2	7
Increase of wages and decrease hours.....	6	6	3	3	18
Decrease of wages and increase hours.....	1	1	1	2	5
Recognition of union.....	5	2	2	4	13
Recognition and wages.....	2	2	1	1	6
Recognition, wages, and hours.....	2	1	1	3	7
General conditions.....	5	2	3	2	12
Conditions and wages.....	1	4	1	1	7
Conditions, wages, and hours.....	1	1	1	1	4
Conditions and recognition.....	1	1	1	1	4
Discharge of employees.....	5	3	3	1	12
Employment of nonunion men.....	3	1	2	2	8
Open or closed shop.....	15	5	4	3	27
Unfair products.....	1	1	1	1	4
In regard to agreement.....	6	9	2	4	21
New agreement.....	6	9	2	2	19
Sympathy.....	2	1	3	1	7
Jurisdiction.....	1	1	3	1	6
Miscellaneous.....	10	11	7	4	32
Not reported.....	3	7	7	10	27
Total.....	126	143	91	72	432

It is often difficult or impossible to determine exactly when a strike terminates, since many strikes end without any formal vote on the part of the strikers. The bureau has information of the ending of 313 disputes during the quarter, including several in which the positions of the employees were filled or they returned to work with probably little or no interruption of the work.

The following table shows the number of disputes ending in the second quarter of 1923 and 1924, by months:

NUMBER OF DISPUTES ENDING IN THE SECOND QUARTER OF 1923 AND 1924, BY MONTHS

Year	Number of disputes				
	April	May	June	Month not stated	Total
1923.....	140	177	111	15	443
1924.....	87	125	98	3	313

The following table shows the results of disputes ending in the second quarter of 1924:

RESULTS OF DISPUTES ENDING IN THE SECOND QUARTER OF 1924, BY MONTHS

Result	Number of disputes				
	April	May	June	Month not stated	Total
In favor of employers.....	20	33	33	3	89
In favor of employees.....	40	42	27	-----	109
Compromised.....	19	22	17	-----	58
Employees returned pending arbitration.....	4	6	3	-----	13
Not reported.....	4	22	18	-----	44
Total.....	87	125	98	3	313

The next table gives the classified duration of disputes ending in the second quarter of 1924:

CLASSIFIED DURATION OF DISPUTES ENDING IN THE SECOND QUARTER OF 1924, BY MONTHS

Classified duration	Number of disputes				
	April	May	June	Month not stated	Total
1 day or less.....	8	7	3	-----	18
2 days.....	7	4	1	-----	12
3 days.....	2	4	2	-----	8
4 days.....	5	13	1	-----	19
5 to 7 days.....	16	13	12	-----	41
8 to 14 days.....	9	18	10	-----	37
15 to 21 days.....	7	6	2	-----	15
22 to 29 days.....	3	4	8	-----	15
30 to 90 days.....	9	26	24	-----	59
Over 90 days.....	5	5	4	-----	14
Not reported.....	16	25	31	3	75
Total.....	87	125	98	3	313

The number of days lost in the industrial disputes ending in the second quarter for the 238 reporting duration was approximately 6,134. The average duration of these was 26 days. The average

duration of the disputes lasting less than 90 days was 19 days. By months the record is as follows: April, 1,670 days lost, average 24 days; May, 2,331 days lost, average 23 days; June, 2,133 days lost, average 32 days.

Of the 313 disputes ending during the quarter, 238 reported duration, and of this number 193 reported the number of employees involved, aggregating 165,102, an average of 855 employees.

Of the 313 disputes reported as ending during the quarter, 219 reported the number of employees involved, aggregating 187,002, an average of 854 employees.

Strikes in Denmark in 1923¹

IN DENMARK in 1923 there were 58 work stoppages, 28 affecting the skilled and 30 the unskilled workers. Of these 35 lasted one week or less and 23 from 1 to 13 weeks.

The table following shows the number of industrial disputes and the number of days lost from 1916 to 1923. No lockouts took place in 1923.

NUMBER OF DISPUTES AND OF DAYS LOST IN DENMARK, 1916 to 1923

Year	Number of work stoppages	Number of working days lost	Year	Number of work stoppages	Number of working days lost
1916.....	66	241,150	1920.....	¹ 243	690,089
1917.....	215	210,892	1921.....	110	1,321,184
1918.....	253	182,448	1922.....	31	2,272,054
1919.....	472	877,548	1923.....	58	19,677

¹ General strike in April not included.

The State conciliator officiated in 1919 in 35 instances, in 1920 in 24, in 1921 in 20, in 1922 in 6, and in 1923 in 5.

Strikes in Tokyo, First Half of 1924

A DECIDED increase in the number of strikes in Tokyo during the first 6 months of the year is reported in the Trans-Pacific, Tokyo, August 23 (p. 17), and in a consular report from Tokyo dated August 5. This increase is said to be due to the slowing down of industry following the earthquake, so that instead of strikes for higher wages as in preceding years, the strikes during the first half of 1924 were largely the result of threatened wage reductions or dismissal of workers. An increasing cause of strikes also has been the demand by the workers for better treatment. In most cases the strikes have been unsuccessful and in some instances the leaders have been dismissed and strike breakers have been retained.

¹ Dansk Arbejdsgiverforening. Arbejdsgiveren, Sept. 12, 1924, p. 290.

The following table shows the number of strikes and strikers in Tokyo, January to June, 1921 to 1924:

NUMBER OF STRIKES AND OF STRIKERS IN TOKYO, JANUARY TO JUNE, 1921 to 1924

Month	1921		1922		1923		1924	
	Strikes	Strikers	Strikes	Strikers	Strikes	Strikers	Strikes	Strikers
January.....	32	3,160	13	1,800	12	562	45	6,163
February.....	43	5,062	17	5,792	13	3,195	50	3,348
March.....	47	5,589	27	2,745	32	4,031	107	3,914
April.....	27	6,226	18	837	21	2,392	105	13,211
May.....	19	3,539	21	7,629	17	2,280	67	12,086
June.....	14	1,590	20	4,558	51	5,451	37	16,206

Strikes and Lockouts in Rumania, 1923¹

A RECENTLY published report of the Rumanian Ministry of Labor on labor disputes in 1923 shows that 491 disputes occurred in the various industrial and commercial establishments throughout the country. Of these disputes, 326 affected a single establishment only and 165 affected more than one establishment. Industrial establishments were concerned in 442 disputes and commercial establishments in 49.

Of the disputes in 1923, 112 led to strikes affecting 16,841 workers and 10 led to lockouts affecting 433 workers, while 369 disputes affecting 81,978 workers were settled without resort to strikes or lockouts.

Most of the strikes occurred in Transylvania and were generally caused by demands for wage increases or shorter hours of labor. Of the total number of workers taking part in the strikes, 12,608 (or about 75 per cent) were members of trade-unions.

As regards the results of the strikes, 62 ended favorably for the workers, 16 ended unfavorably, and 34 were compromised. The total loss of working time through strikes was 287,822 days.

Lockouts caused a loss of 3,223 working-days. Five of the lockouts terminated in favor of the workers, 4 in favor of the employers, and 1 in a compromise.

Of the 81,978 workers who participated in disputes settled without strike or lockout, 65,819 were members of trade-unions. In 286 disputes the factory inspectors intervened and brought about a settlement. In 77 disputes the parties had recourse to arbitration, and 6 disputes ended in the dismissal of certain employees. Of these 369 disputes settled without resort to strike or lockout, 273 were adjusted in favor of the workers.

¹ International Labor Office. Industrial and Labor Information, Geneva, Aug. 4, 1924, p. 19.

Labor Disputes in Sweden in 1923

DATA given in the annual report¹ of the Swedish Social Board show that in 1923 industrial disputes in Sweden numbered 206, less than in any of the 7 preceding years. The number of employers affected (799) also shows a decrease as compared with the years 1917 to 1922. The number of workers affected exceeds the number for all preceding years except the year of the general strike (1909) and 1920. The average number of workers per dispute was 500 in 1923 as against 146 for the period 1912-1922. The most extensive disputes were the general disputes at the ironworks, paper pulp factories, sawmills, lumbering, and building material industries, these five disputes affecting directly a total of 80,000 workers.

Of the disputes reported 57, or 26 per cent, affected over 100 workers each while 92, or 45 per cent, affected, at the most, 25 workers.

The greatest number of disputes (52) occurred in the building industry. Disputes lasting more than a month involved 92.1 per cent of all the workers involved in the labor disputes, and about 40 per cent of the workers were affected by disputes lasting over three months. The longest and most extensive controversies were those in the iron and paper-pulp industries which lasted 6½ and 3 months, respectively.

The greatest number of controversies (137) were disagreements over wages. Of these, 11 were settled entirely or mainly in favor of the employers, 45 were settled mainly in favor of the workers, and 74 cases resulted in compromises. Matters connected with the hiring and discharging of workers caused 22 disputes; 8 of these were settled mainly in favor of the employers and 8 mainly in accordance with the workers' demands.

The 206 disputes caused a loss of 6,900,000 working-days, a larger number than for any year except 1909 (the year of the general strike) and 1920. The loss of working time was greatest in the mining and metal industry.

In 65 cases the State conciliators or the conciliation commission helped to bring about an agreement.

¹ Sweden. [Socialdepartementet] Socialstyrelsen. Arbetsinställelser och kollektivavtal samt förlikningsmännens verksamhet år 1923. Stockholm, 1924. 168 pp.

The following table shows, for the years 1903 to 1923, the number of employers and workers involved in industrial disputes, and number of working-days lost:

NUMBER OF EMPLOYERS AND WORKERS INVOLVED IN INDUSTRIAL DISPUTES, AND NUMBER OF WORKING-DAYS LOST, BY YEARS, 1903 TO 1923

Year	Strikes			Lockouts			Mixed disputes			Total number			Number of working days lost
	Number	Number involved		Number	Number involved		Number	Number involved		Number	Em- ploy- ers	Work- ers	
		Em- ploy- ers	Work- ers		Em- ploy- ers	Work- ers		Em- ploy- ers	Work- ers				
1903.....	109	256	5,970	16	96	982	17	126	17,619	142	478	24,571	642,000
1904.....	169	383	8,299	12	62	1,218	34	153	2,731	215	598	12,248	386,000
1905.....	152	325	13,186	12	12	456	25	510	19,264	189	847	32,906	2,390,000
1906.....	239	668	15,050	8	12	560	43	49	3,045	290	729	18,655	479,000
1907.....	243	498	11,278	23	37	5,669	46	283	6,593	312	818	23,540	514,000
1908.....	229	473	17,187	38	125	2,672	35	826	20,498	302	1,424	40,357	1,842,000
1909.....	102	7,707	229,248	22	451	71,364	14	30	1,137	138	8,188	301,749	11,799,700
1910.....	66	127	3,420	5	5	101	5	14	150	76	146	3,671	39,000
1911.....	85	150	4,940	9	1,759	15,145	4	11	491	98	1,920	20,576	569,800
1912.....	108	168	5,797	4	337	2,166	4	284	2,017	116	789	9,980	292,100
1913.....	118	203	9,574	1	1	17	-----	-----	-----	119	204	9,591	303,300
1914.....	105	181	8,832	8	64	5,368	2	2	185	115	247	14,385	620,500
1915.....	70	100	4,277	7	7	813	3	3	29	80	110	5,119	83,300
1916.....	218	474	19,287	2	2	41	7	23	1,383	227	499	20,711	474,700
1917.....	458	1,399	45,019	8	8	1,016	9	17	666	475	1,424	46,701	1,108,800
1918.....	668	1,756	50,377	10	10	756	30	923	10,090	708	2,689	61,223	1,436,400
1919.....	414	1,977	69,980	10	10	727	16	376	10,334	440	2,363	81,041	2,295,900
1920.....	455	1,952	42,657	9	544	37,988	22	458	58,394	486	2,954	139,039	8,942,500
1921.....	302	1,913	44,053	22	38	742	23	371	4,917	347	2,322	49,712	2,663,300
1922.....	354	1,069	43,547	11	17	287	27	174	31,845	392	1,260	75,679	2,674,580
1923.....	192	488	42,995	6	158	21,506	8	153	38,395	206	799	102,896	6,907,390

CONCILIATION AND ARBITRATION

Conciliation Work of the Department of Labor in September, 1924

BY HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 21 labor disputes during September, 1924. These disputes affected a known total of 13,594 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached strike or lockout stage), the craft of 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 and indirectly affected.

On October 1, 1924, there were 49 strikes before the department for settlement and, in addition, 14 controversies which had not reached the strike stage. Total number of cases pending, 63.

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[1196]

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, SEPTEMBER, 1924

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Men involved	
					Beginning 1924	Ending 1924	Directly	Indirectly
Auto garage workers, Waukegan, Ill.	Controversy	Garage employees.	Alleged discrimination.	Pending.	Sept. 2			
Jurisdictional dispute, Indianapolis, Ind.	do	Building trades.	Jurisdiction of ironworkers.	Adjusted. Award in favor of elevator constructors.	Aug. 24	Aug. 29	20	5
Spokane, Portland & Seattle Ry.	do	Railway men.	Organization trouble.	Pending.	Sept. 1		(1)	
35 shops raincoat makers, Boston, Mass.	Strike	Clothing.	Organization and agreement.	Unclassified. Returned before commissioner's arrival.	Sept. 4	Sept. 8	300	
Clothing workers, Akron, Ohio.	do	do	Organization of workers.	Pending. Injunction dissolved.	Sept. 5		6	15
Peoria Brick & Tile Co., East Peoria, Ill.	Controversy	Brickmakers.	Union recognition.	Unclassified. Settled before commissioner's arrival.	Aug. 29		100	10
Rodgers & Mitchell Tailoring Co., Cleveland, Ohio.	Strike	Tailors.	Alleged discrimination.	Unclassified. Adjusted in favor of workers before commissioner's arrival.	Sept. 5	Sept. 8	50	
Red Fern Lace Co., Somerville, N. J.	Controversy	Textile crafts.	Wages, recognition, and conditions.	Pending. Conferences pending.	(1)		100	
Reading Coal & Iron Co., Shenandoah, Pa.	Strike	Miners.	Working conditions.	Adjusted. Returned; conciliation board to settle terms.	Sept. 10	Sept. 11	639	275
French Lick Springs Hotel, French Lick, Ind.	Controversy	Building trades.	Asked union wage scale, 40 cents per hour for common labor.	Adjusted. All crafts working under union supervision.	Sept. 7	Sept. 21	(4)	
Style-Park Hat Co., Philadelphia, Pa.	Strike	Hatters.	Asked increase and recognition.	Pending.	Sept. 10		29	
Upholsterers, Boston, Mass.	do	Upholsterers.	Asked 44-hour week, recognition, and sanitary conditions.	Pending. Many are out for moral support of others.	Sept. 15		500	
Plasterers, Erie, Pa.	Controversy	Plasterers.	Asked \$2 per day increase.	Adjusted. Allowed \$1 per day increase —\$13 per day.	Sept. 6	Sept. 13	75	150
Robberts Bakery, Akron, Ohio.	Strike	Bakers.	(1)	Pending.	(1)		(1)	
Susquehanna Coal Co., Glen Lyon, Pa.	do	Miners.	Increase in size of mine cars.	Adjusted. Company to meet committee and make settlement.	Sept. 24	Sept. 26	1,250	
Penn Public Service Co., Corry, Pa.	do	Linemen.	Working conditions.	Unable to adjust. Men left the city.	Sept. 17		12	18
Plasterers, Pittsburgh, Pa.	Controversy	Plasterers.	Jurisdiction of plasterers and terrazzo workers.	Pending.	(1)		(1)	
Penn Hardware Co., Reading, Pa.	Strike	Employes.	(1)	do	(1)		(1)	
Mystic Manufacturing Co., Mystic, Conn.	do	Woolen weavers.	Disagreement over fines.	Unclassified. Returned before commissioner's arrival.	Sept. 17	Sept. 19	25	
Edward Bloom Co., New London, Conn.	do	Silk weavers.	(1)	Pending.	(1)		(1)	
Cigar makers, Tampa, Fla.	do	Cigar makers.	Wages and working conditions.	do	(1)		10,000	
Total							13,121	473

¹ Not reported.

CONCILIATION AND ARBITRATION

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Proceedings under Canadian Industrial Disputes Investigation Act¹

THE following table shows the proceedings under the Canadian industrial disputes investigation act for the year ended March 31, 1924, and from March 22, 1907, to March 31, 1924:

PROCEEDINGS UNDER THE CANADIAN INDUSTRIAL DISPUTES INVESTIGATION ACT, APRIL 1, 1923, TO MARCH 31, 1924, AND MARCH 22, 1907, TO MARCH 31, 1924

Industries affected	Apr. 1, 1923, to Mar. 31, 1924		Mar. 22, 1907, to Mar. 31, 1924	
	Number of applications received for boards	Number of strikes not averted or ended	Number of applications received for boards	Number of strikes not averted or ended
1. Disputes affecting mines, transportation and communication, other public utilities, and war work:				
Mines—				
Coal.....			68	10
Metal.....	1	0	20	5
Asbestos.....			1	0
Transportation and communication—				
Railways.....	12	0	188	7
Street railways ¹	4	0	101	7
Express.....			11	1
Shipping.....	5	0	32	0
Telegraphs.....	1	0	17	1
Telephones.....			7	0
Miscellaneous—				
Light and power ¹	3	0	22	3
Elevators.....			1	0
War work.....			30	1
2. Disputes not falling clearly within the direct scope of the act ¹	2	0	121	2
Total.....	28	0	619	37

¹ During the period Apr. 1, 1918, to Mar. 31, 1923, jurisdiction under the statute in connection with disputes relating to industries under provincial or municipal control not being claimed by the department, no proceedings under the statute took place, save by joint consent under section 63. During the present fiscal period, however, it has been held that jurisdiction in such matters rests with the Federal authorities and proceedings in the case of disputes in industries in which the act applies but which are owned or controlled by a municipal or provincial government have taken place without reference to section 63; these proceedings are therefore now shown under their respective classifications, and include three disputes, two involving street railways and one an electric light, heat, and power plant.

² Including 6 cases left over from the preceding year.

Compulsory Arbitration of Labor Disputes in Cuban Ports²

THE National Congress of Cuba has enacted a law, effective on June 10, 1924, providing for the establishment of commissions of intelligence which shall have authority to effect compulsory arbitration of labor disputes in the ports of Cuba. These commissions are to be composed of an equal number of employers and harbor employees and have under their jurisdiction all matters concerning maritime work at Cuban ports in their respective districts. The judge of the primary court of claims, or in the event that there is no such judge the municipal judge, is to preside over each commission. The duties of the commissions are as follows: (1) To maintain order during strikes, in cooperation with the police; (2) to protect laborers who do not wish to strike; (3) to endeavor to keep the employees at work when disputes arise between them and the employers; (4) in case of general strikes, to appoint and protect 10 per cent of the laborers to carry on the necessary work of the port. Appeals from the decisions of the commissions may be made to the Secretary of Agriculture, Commerce, and Labor, whose decisions shall be final.

¹ Canadian Labor Gazette, August, 1924, Ottawa, p. 646.

² Commerce Reports, July 21, 1924, p. 182.

REHABILITATION

Aid to Blind through Pennsylvania Bureau of Rehabilitation¹

OF THE 3,314 disabled persons registered with the Pennsylvania Bureau of Rehabilitation July 1, 1924, 123, or 3.7 per cent, were reported as having defective vision in both eyes.

Up to July 1, 1924, the bureau had completed the training of 189 disabled persons, 16 of whom were blind, the bureau itself meeting the costs of such training. At that time one totally blind person was being trained at the bureau's expense. In numerous other cases in which the bureau did not have to pay any training costs it has been of great assistance to blind persons. Numbers of the blind have been successfully placed where extended training was unnecessary, as in agricultural work, in small stores, and in canvassing jobs.

Chair caning, rug weaving, and piano tuning are among the occupations for which the bureau has trained the blind. One man, after following a course in the Pennsylvania Institution for the Blind, was trained in insurance salesmanship in the Wharton School of Finance. Another man, whose blindness is the result of an industrial accident, was to begin a commercial course this fall through the cooperation of the bureau of rehabilitation and the Pennsylvania Institution for Instruction of the Blind. He expects to secure a position later with the corporation by which he was employed when the accident occurred. A former coal miner, the father of a family of five, who is blind and has lost both hands, has recently been placed as interpreter in a county court at \$10 a day when serving.

In training the blind the bureau of rehabilitation cooperates with the Pennsylvania Institution for the Blind, as indicated above, and also with the Pennsylvania Association for the Blind and other agencies of a similar character.

The bureau has no appropriation for mere relief and in cases of blindness can, under the law, assist only such persons as may be considered susceptible to being returned to employment. Neither can the bureau aid blind persons cared for by other State agencies.

The State appropriation for the bureau of rehabilitation has never been over \$100,000 for a fiscal biennium for assistance to all types of physically disabled persons. The legislature appropriates, however, each session from \$300,000 to \$500,000 to be used exclusively for the benefit of the blind.

¹ Pennsylvania. Department of Labor and Industry. Labor and Industry, September, 1924, Harrisburg, pp. 24, 25.

IMMIGRATION

Statistics of Immigration for August, 1924

By J. J. KUNNA, CHIEF STATISTICIAN, BUREAU OF IMMIGRATION

IN THE classification of aliens the terms (1) immigrant and emigrant and (2) nonimmigrant and nonemigrant, respectively, relate (1) to permanent arrivals and departures and (2) to temporary arrivals and departures. In compiling the statistics under this classification the following rule is observed: Arriving aliens whose permanent domicile has been outside of the United States who intend to reside permanently in the United States are classed as immigrant aliens; departing aliens whose permanent residence has been in the United States who intend to reside permanently abroad are classed as emigrant aliens; all aliens residents of the United States making a temporary trip abroad and all aliens residing abroad making a temporary trip to the United States are classed as nonemigrant aliens on the outward journey and nonimmigrant aliens on the inward.

The few tables of immigration statistics here presented for August, 1924, and for July and August, 1924, show the inward and outward passenger movement, the number of immigrant and emigrant aliens by races or peoples and country of permanent residence, and the number of aliens admitted under the Immigration Act of 1924.

During August, 1924, a total of 37,256 aliens (23,290 immigrant and 13,966 nonimmigrant) were admitted and 23,371 (8,633 emigrant and 14,738 nonemigrant) departed, resulting in an increase in our alien population of 13,885. About 5 per cent of the aliens applying for admission were rejected during the month, the exact number being 2,114. The number of aliens admitted, debarred, and departed, and United States citizens arrived and departed, is shown in Table 1.

Only 10,818 immigrant aliens were admitted from European countries during July and August, 1924, compared to 111,134 such admissions during the same months of the preceding year, a decrease of 100,316. On the other hand, the number of emigrant aliens departed for European countries during these two months of 1924 reached a total of 14,615, or 3,050 more than for the same period of the year 1923, when 11,565 departed. The principal races or peoples admitted during August, 1924, those comprising 10 per cent or more of the total, are the English, German, Irish, Mexican, Scandinavian, and Scotch. Of the emigrant aliens departed during the month, about 33 per cent were Italians returning to Italy. Admissions and departures of the permanent class are shown in Table 2 by country of permanent residence and in Table 3 by races or peoples.

On comparing the occupations of the immigrants with that of the emigrants, it is found that 5 per cent of the admitted during August were professional; 17 per cent were skilled; 14 per cent, were laborers; 22 per cent were in the miscellaneous class; and 42 per cent had no occupation. While of the emigrants departed during this month, 2 per cent were professional; 10 per cent were skilled; 52 per cent were laborers; 12 per cent were classed as miscellaneous; and 24 per cent had no occupation.

The number of aliens admitted under the Immigration Act of 1924 is shown by country or area of birth in Table 4. It will be noted that 9,978, only about 27 per cent of the total for August, were quota immigrants—the number charged to the quota. The number of nonimmigrants under section 3 and nonquota immigrants under section 4 of the act, which classes are not charged to the quota, reached a total of 27,175 in August and 48,479 during July and August, over 50 per cent of these classes coming from nonquota countries.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT, JULY AND AUGUST, 1924

During—	Arrivals					Departures					
	Aliens admitted			United States citizens arrived	Aliens de-barred	Total arrivals	Aliens departed			United States citizens departed	Total departed
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total		
July, 1924.....	11,661	11,112	22,773	20,927	1,929	45,629	8,493	15,747	24,240	43,812	68,052
August, 1924..	23,290	13,966	37,256	44,791	2,114	84,161	8,633	14,738	23,371	37,657	61,028
Total.....	34,951	25,078	60,029	65,718	4,043	129,790	17,126	30,485	47,611	81,469	129,080

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING AUGUST, 1924, AND DURING JULY AND AUGUST, 1924, BY COUNTRIES

Countries	Immigrant		Emigrant	
	August, 1924	July and August, 1924	August, 1924	July and August, 1924
Albania.....	14	15	45	61
Austria.....	36	44	29	93
Belgium.....	51	70	97	158
Bulgaria.....	8	11	35	53
Czechoslovakia.....	122	136	368	755
Denmark.....	290	300	53	65
Estonia.....	1	11	30	30
Finland.....	15	26	1	42
France, including Corsica.....	276	335	95	225
Germany.....	2,942	3,008	93	212
Great Britain, Ireland:				
Irish Free State.....	1,001	1,021	48	211
Northern Ireland.....	82	91	35	53
England.....	1,259	1,491	459	1,163
Scotland.....	903	963	129	254
Wales.....	88	119	9	14
Greece.....	26	51	740	1,615
Hungary.....	30	42	100	185
Italy, including Sicily and Sardinia.....	191	376	2,907	4,909
Latvia.....			8	15
Lithuania.....	12	22	144	221
Luxemburg.....	1	1		2
Netherlands.....	89	96	37	73
Norway.....	812	839	33	134
Poland.....	61	101	668	1,077
Portugal, including Azores, Cape Verde, and Madeira Islands.....	43	52	260	546
Rumania.....	41	68	249	422
Russia.....	43	59	75	108
Spain, including Canary and Balearic Islands.....	19	37	339	987
Sweden.....	1,185	1,196	70	155
Switzerland.....	148	161	47	106
Turkey in Europe.....	1	7	28	54
Yugoslavia.....	31	44	257	577
Other Europe.....	25	25	18	40
Total Europe.....	9,846	10,818	7,494	14,615

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED TO AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING AUGUST, 1924, AND DURING JULY AND AUGUST, 1924, BY COUNTRIES—Concluded

Countries	Immigrant		Emigrant	
	August, 1924	July and August, 1924	August, 1924	July and August, 1924
Armenia.....		3	6	11
China.....	116	401	159	441
India.....	10	12	17	21
Japan.....	12	226	106	199
Palestine.....	8	26	5	17
Persia.....	4	2	5	15
Syria.....	4	13	57	94
Turkey in Asia.....	1	4		
Other Asia.....	6	10	4	18
Total Asia.....	157	697	359	816
Egypt.....	13	17	1	3
Other Africa.....	22	27	10	33
Total Africa.....	35	44	11	36
Australia.....	37	43	33	64
New Zealand.....	7	9	15	22
Other Pacific Islands.....	3	3	3	7
Total.....	47	55	51	93
Canada.....	10,154	17,922	190	360
Newfoundland.....	87	133	17	46
Mexico.....	2,385	4,386	151	267
Cuba.....	178	269	124	283
West Indies (not specified).....	58	98	104	312
British Honduras.....		3		3
Central America (not specified).....	141	223	59	126
Brazil.....	10	41	16	38
South America (not specified).....	192	262	57	131
Total Western Hemisphere.....	13,205	23,337	718	1,566
Grand total.....	23,290	34,951	8,633	17,126

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING AUGUST, 1924, AND DURING JULY AND AUGUST, 1924, BY RACES OR PEOPLES

Race or people	Immigrant		Emigrant	
	August, 1924	July and August, 1924	August, 1924	July and August, 1924
African (black).....	62	146	52	193
Armenian.....	18	38	21	33
Bohemian and Moravian (Czech).....	110	131	244	481
Bulgarian, Serbian, and Montenegrin.....	40	50	92	177
Chinese.....	105	383	144	424
Croatian and Slovenian.....	17	23	176	381
Cuban.....	133	185	75	173
Dalmatian, Bosnian, and Herzegovinian.....	3	5	23	72
Dutch and Flemish.....	223	336	144	233
East Indian.....	4	8	12	17
English.....	4,945	8,089	566	1,342
Finnish.....	52	76	36	76
French.....	1,976	3,374	105	244
German.....	3,652	4,033	162	380
Greek.....	48	68	746	1,632
Hebrew.....	464	941	36	81
Irish.....	2,392	3,472	133	387
Italian (north).....	103	154	831	1,234
Italian (south).....	184	380	2,089	3,712
Japanese.....	14	220	97	116
Korean.....		1	11	81

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING AUGUST, 1924, AND DURING JULY AND AUGUST, 1924, BY RACES OR PEOPLES—Concluded

Race or people	Immigrant		Emigrant	
	August, 1924	July and August, 1924	August, 1924	July and August, 1924
Lithuanian.....	12	17	146	230
Magyar.....	69	102	127	228
Mexican.....	2,327	4,262	146	275
Pacific Islander.....				3
Polish.....	146	253	639	1,053
Portuguese.....	48	60	260	566
Rumanian.....	32	72	242	402
Russian.....	123	185	120	190
Ruthenian (Russniak).....	40	99	15	22
Scandinavian (Norwegians, Danes, and Swedes).....	2,708	2,932	170	391
Scotch.....	2,672	3,962	178	361
Slovak.....	12	18	115	280
Spanish.....	53	94	389	1,103
Spanish American.....	281	422	101	189
Syrian.....	20	48	63	109
Turkish.....	1	4	29	57
Welsh.....	103	162	13	24
West Indian (except Cuban).....	34	56	33	89
Other peoples.....	64	90	52	95
Total.....	23,290	34,951	8,633	17,126
Male.....	13,145	19,704	6,458	12,432
Female.....	10,145	15,247	2,175	4,694

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING THE MONTH OF AUGUST, 1924, AND DURING JULY AND AUGUST, 1924, BY COUNTRY OR AREA OF BIRTH, AS SPECIFIED

Country or area of birth	Annual quota	Number admitted			Grand total admitted, July and August, 1924
		Charged to quota		Not charged to quota	
		July and August, 1924	August, 1924		
Quota countries:					
Afghanistan.....	100				1
Albania.....	100	13	13	24	58
Andorra.....	100				1
Arabian peninsula.....	100			1	2
Armenia.....	124			5	11
Australia.....	121	28	26	279	548
Austria.....	785	35	34	81	158
Belgium ¹	512	55	49	114	255
Bhutan.....	100				
Bulgaria.....	100	12	12	10	27
Cameroon (British).....	100				3
Cameroon (French).....	100				
China.....	100	1	1	729	1,515
Czechoslovakia.....	3,073	127	124	121	308
Danzig.....	228	14	14	5	20
Denmark.....	2,789	301	297	289	710
Egypt.....	100	15	15	13	41
Estonia.....	124			7	8
Ethiopia (Abyssinia).....	100				
Finland.....	471	23	21	70	114
France ¹	3,954	297	262	379	1,021
Germany.....	51,227	2,960	2,939	884	4,327
Great Britain and Northern Ireland ¹	34,007	2,840	2,450	3,852	9,067
Greece.....	100	9	9	188	291
Hungary.....	473	28	26	48	100

¹ Including colonies, dependencies, or protectorates of this country.

TABLE 4.—ALIENS ADMITTED TO THE UNITED STATES UNDER THE IMMIGRATION ACT OF 1924, DURING THE MONTH OF AUGUST, 1924, AND DURING JULY AND AUGUST, 1924, BY COUNTRY OR AREA OF BIRTH, AS SPECIFIED—Concluded

Country or area of birth	Annual quota	Number admitted			Total admitted, August, 1924	Grand total admitted, July and August, 1924
		Charged to quota		Not charged to quota		
		July and August, 1924	August, 1924	August, 1924		
Quota countries—Continued						
Iceland.....	100	11	11	1	12	13
India.....	100	4	3	61	64	110
Iraq (Mesopotamia).....	100	2	2	2	4	5
Irish Free State.....	28,567	1,144	1,103	458	1,561	1,827
Italy ¹	3,845	57	48	629	677	1,488
Japan.....	100			213	213	398
Latvia.....	142	4	4	7	11	45
Liberia.....	100			1	1	2
Liechtenstein.....	100					
Lithuania.....	344	8	8	47	55	85
Luxemburg.....	100	1	1	4	5	6
Monaco.....	100					1
Morocco.....	100			4		10
Muscat (Oman).....	100					1
Nauru (British).....	100					
Nepal.....	100					
Netherlands ¹	1,648	86	81	208	289	453
New Zealand.....	100	9	9	62	71	188
New Guinea.....	100					
Norway.....	6,453	841	815	278	1,098	1,296
Palestine.....	100			35	35	54
Persia.....	100	1	1	5	6	10
Poland.....	5,982	72	68	172	240	358
Portugal ¹	503	23	23	143	166	206
Ruanda and Urundi.....	100					
Rumania.....	603	33	32	70	102	143
Russia, European and Asiatic.....	2,248	62	59	133	192	319
Samoa, Western.....	100					
San Marino.....	100					
Siam.....	100			4	4	5
South Africa.....	100	18	15	36	51	76
South West Africa.....	100			4	4	7
Spain ¹	131	14	10	372	382	785
Sweden.....	9,561	1,220	1,208	313	1,521	1,671
Switzerland.....	2,081	159	155	160	315	441
Syria and The Lebanon.....	100	3		58	58	119
Tanganyika.....	100					
Togoland (British).....	100					
Togoland (French).....	100					1
Turkey.....	100	5	3	59	62	109
Yap and other Pacific Islands.....	100					
Yugoslavia.....	671	28	27	70	97	132
Total.....	164,667	10,563	9,978	10,708	20,686	28,950
Nonquota countries:						
Canada.....				10,560	10,560	18,708
Newfoundland.....				191	191	313
Mexico.....				3,555	3,555	6,600
Cuba.....				1,060	1,060	2,549
Dominican Republic.....				112	112	217
Haiti.....				27	27	59
Canal Zone.....				22	22	41
Independent countries of Central and South America.....				940	940	1,605
Total.....				16,467	16,467	30,092
Grand total.....	164,667	10,563	9,978	27,175	37,153	²59,042

¹ Including colonies, dependencies, or protectorates of this country.

² Does not include 987 immigrant aliens from quota countries who arrived prior to the close of June 30, 1924, and admitted during July and August, 1924.

Immigrant Aid in Argentina

A RECENT communication from the American ambassador at Buenos Aires, Argentina, dated July 30, 1924, states that a large proportion of the immigrants now arriving in the Republic have exaggerated ideas concerning the Argentine Immigration Department and its undertakings in their behalf. As a consequence thereof, handbills will be distributed among them printed in Spanish, French, Italian, Polish, Russian, English, and German. The substance of the handbill will be as follows:

The Argentine Republic requires working people for the interior. Here, then, is a future for you. Those knowing a craft, industry, or art, as well as agricultural laborers, can apply for work at the employment office situated in the immigrant headquarters. This office will attend to you and endeavor to find work for you. The salaries and wages for the work which this office offers are those currently paid. * * * If you seek employment on your own responsibility you run the risk of being deceived and of having to pay a commission. The service which the employment office renders to immigrants is gratuitous and there is every security that the immigration department will see to it that all promises to laborers are fulfilled.

Report on Juvenile Immigration to Canada

THE following are among the conclusions set forth in a special report on British juvenile immigration to Canada, which was submitted to the annual meeting of the Canadian Council on Child Welfare, held at Toronto, June 23 and 24, 1924:¹

Canada's present juvenile immigration policy is frankly a cheap child-labor program and is dangerously akin to a system of peonage.

Dependent immigrant children are being placed "in private homes under conditions in which Canadian workers refuse to place Canadian children."

Hundreds of dependent juvenile immigrants are being brought to the Dominion at a time when the orphanages and similar institutions of six of the Canadian Provinces already hold 21,557 dependent children.

Hundreds of children are being brought in every year, without thorough medical examination and without any adequate system of mental examination, and are placed in homes which have not been previously inspected, without any real effort at adequate supervision or follow-up work.

Disastrous results have followed, which have augmented the Dominion's social problems, and injustice has been done to hundreds of juvenile immigrants who now hate the Dominion and the rural life with its loneliness, drudgery, and the scant wages, which amount to only a few dollars a year.

If the contemplated plan for heavy juvenile immigration is carried out with no better cooperation from the Provinces and no more systematic administration and supervision in Ottawa than have previously prevailed, the situation will be "fraught with grave national danger."

The present policy leaves to the efficiency and good will of private organizations who receive \$80 for every child they bring into the

¹ Canadian Congress Journal, Montreal, August, 1924, pp. 40, 41.

Dominion, the well-being and destiny of these newcomers into the national life of Canada, which responsibility, the report declares, "is the first duty of the State."

In connection with the above report it is interesting to note that, according to the Canadian Labor Gazette of May, 1924, the medical inspection of juvenile immigrants to the Dominion "has recently been made more stringent" and is made before the children leave Great Britain. The right of inspection and of investigation of the placement of these young immigrants is in the hands of the Government, which inquires into the history of each child.

The Province of Ontario passed an act in May, 1924,² which prohibits the bringing of children into that Province for settlement without the authority of the lieutenant governor in council and provides that all societies and agents engaged in such work shall be under the supervision of an inspector who, with the minister's approval, may authorize the Children's Aid Society to perform the following duties of such inspector:

- (1) To see that every immigrant child is visited at regular intervals and to take action if it is found that any such child is being treated unkindly or unfairly.
- (2) To see that every child is receiving proper education, is not overworked, is properly fed and clothed, and is receiving proper remuneration.
- (3) To see that communication is at all times maintained with the child by the society or agent responsible for bringing the child to Ontario.
- (4) Generally, to see that the conditions of life of every immigrant child are such as to promote his health, well-being, and happiness.

Furthermore, it is not allowable under the act to bring immigrant children into Ontario before application is made for them and the inspector has approved their employment in writing. He must also satisfy himself as to the ability of the applicants to provide proper homes and upbringing for these juvenile immigrants.

The law contains various other protective features.

² International Labor Office. Industrial and Labor Information, Geneva, Aug. 25, 1924.

FACTORY AND MINE INSPECTION

Massachusetts

IN AUGUST, 1924, the Massachusetts Department of Labor and Industries made 1,629 inspections and issued 723 orders in the interest of industrial safety, according to a typewritten report from that office. During that period 55 cases of industrial accidents and 7 occupational-disease cases were investigated. The prosecutions for the month numbered 851. Verdicts of guilty were secured in 47 cases.

Ohio ¹

ALTHOUGH a number of the deputies were on their vacations in August, 1924, others in the personnel of the Ohio division of workshops and factories made 2,358 inspections and issued 528 orders for compliance with the law.

Much of the division's time was given to an important exhibit of safety devices at the Ohio State Fair. The division of mines and mining had demonstrations at the State Fair in first-aid and mine-rescue work which were attended by thousands. Ohio has entered into one of "the most elaborate safety campaigns ever conducted by any State."

Pennsylvania ²

THE report on general inspection work of the Pennsylvania Department of Labor and Industry for June and July, 1924, and July, 1923, is given below:

GENERAL INSPECTION, ORDERS AND PROSECUTIONS IN JULY, 1923, AND JUNE AND JULY, 1924

Item	July, 1923	June, 1924	July, 1924
Regular inspections.....	7,525	5,093	4,829
Special inspections.....	2,001	1,890	1,727
Visits.....	1,366	1,961	1,425
Total.....	10,892	8,944	7,981
Violations reported.....	987	1,311	1,243
Prosecutions authorized.....	36	20	30
Orders issued.....	684	963	1,106
Orders complied with.....	529	855	876

¹ Ohio. Department of Industrial Relations. Industrial Relations. Columbus, September, 1924, p. 2.
² Pennsylvania. Department of Labor and Industry. Labor and Industry, Harrisburg, September, 1924, p. 5.

WHAT STATE LABOR BUREAUS ARE DOING

THE data listed below reported by various State labor offices are published in this issue of the MONTHLY LABOR REVIEW on the pages indicated.

- California.*—Recent employment statistics, p. 164.
Illinois.—Recent employment statistics, pp. 162 and 164.
Iowa.—Recent employment statistics, pp. 162 and 168.
Maryland.—Recent employment statistics, p. 169.
Massachusetts.—Average weekly earnings of workers, p. 124; recent employment statistics, pp. 162 and 170; factory inspection, p. 263.
New York.—Recent employment statistics, p. 171.
Ohio.—Recent employment statistics, p. 163; safety codes adopted January, 1924, p. 206; factory inspection, p. 263.
Oklahoma.—Average weekly earnings of workers, p. 124; recent employment statistics, pp. 163 and 172.
Pennsylvania.—Recent employment statistics, p. 164; factory inspection, p. 263.
Philippine Islands.—Average retail prices of certain foodstuffs in November, 1923, p. 115; plan for recruiting labor, p. 174.
South Dakota.—Recent report on workmen's compensation, p. —.
Wisconsin.—Average weekly earnings of workers, p. 125; recent employment statistics, pp. 164 and 172.

CURRENT NOTES OF INTEREST TO LABOR

New Commissioner of Labor and Industry of Maine

MR. CHARLES O. BEALS, formerly deputy commissioner of the Department of Labor and Industry of Maine, has recently been appointed commissioner succeeding Mr. Roscoe A. Eddy, who died June 27, 1924.

Change in Personnel of Pennsylvania Department of Labor and Industry

DR. ROYAL MEEKER, Secretary of Labor and Industry of Pennsylvania, has resigned his office, to take effect October 15, 1924. He will engage in research work in China, under private auspices.

Doctor Meeker is succeeded in office by Mr. Richard H. Lansburgh.

Welfare Association in Chile

AN ACCOUNT of a welfare association which has recently been formed in Santiago, Chile, appears in the October, 1924, issue of the Pan American Union Bulletin. One of the aims of the association is the establishment of a low-priced restaurant adjoining the clubroom in a workmen's section of the city. The restaurant will be run on a cooperative plan and will furnish good food as economically as possible. The association plans to provide theatrical performances, illustrated lectures, and other educational features for the working classes, as well as to institute a small clinic for mothers and babies, with the help of physicians and medical students.

Industrial Notes from China

A LETTER to the Bureau of Labor Statistics from a former Chinese student in this country who is now at Tsing Hua College, Peking, states that the Chinese Government is planning to make a large-scale cost-of-living survey. It is also stated that the Chinese Government Economic Information Bureau, which issues a series of index numbers on prices, intends to adopt the method used by the United States Bureau of Labor Statistics in the computation of index numbers, not being satisfied with the method now in use by the Bureau of Markets in Shanghai.

Chinese Tin-Foil Manufacture

The September 6 issue of the Chinese Economic Bulletin, published by the Chinese Government Bureau of Economic Information, con-

tains an article on tin-foil manufacture in China. Tin foil is used chiefly for sacrificial purposes and many thousands of persons are employed in its manufacture. In the Province of Chekiang alone it is estimated there are more than 100,000 adults and children engaged in the industry, the process of beating the blocks of tin to a paper-like thinness being still done by hand according to old-time methods.

Chinese tin foil is made of tin containing only a small percentage of alloy, instead of using a foundation of lead as is done in other countries. The tin is purchased in slabs weighing from 50 to 100 pounds each. It is estimated 70,000 large slabs of tin are used yearly in three cities of Chekiang alone. These slabs are melted and poured into molds containing many holes about 1 inch square, and the 1-inch ingots when cold are taken from the molds and beaten into a finished paper about 2½ feet square. It requires tremendous pounding with hammers and steel plates to beat the ingots to the desired thinness. When the foil is sufficiently thin paper is attached to it by moisture, after which the paper and metal are baked together over a fire. The edges are then trimmed and the material is cut into pieces of a certain size and made up into books of 1,000 sheets each. The pieces when sold by the retailers are about the size of a post card.

The tin used is entirely imported from other countries and for many years tin imports from Hongkong maintained a standard quality of 93.5 per cent tin, the size of the standard ingot being 96 pounds. The standard quality has not been maintained in recent imports, however, and a company has been formed in Shanghai to melt and market metal of a standard alloy which will contain 93.5 per cent of pure tin.

Steps Toward Collection of Labor Statistics in Colombia ¹

THE Colombian Government issued regulations on May 2, 1924, requiring all employers in specified industries to report figures on the following subjects: (1) Number and classes of their clerks and workers; (2) days and hours of labor; (3) number of women and children employed and class of labor they perform; (4) amount of night work and pay therefor; (5) number of accidents; (6) individual or collective insurance carried for employees; (7) monthly rent paid by tenant farmers and computation of rent payments in labor; (8) profit sharing; (9) compliance with Sunday rest laws; (10) strikes, number of workers participating, and duration.

Organization of Imperial Economic Council of Japan ²

THE organization of the Japanese Imperial Economic Council (*Teikoku Keizai Kwaigi*) was announced April 1, 1924. The council, which is under the direct control of the Prime Minister, is formed to study the question of the promotion of the economic progress of the Empire, to supply information for the ministers concerned, and to formulate plans for the ministries dealing with these matters.

¹ Pan American Union Bulletin, Washington, October, 1924, pp. 1041, 1042.

² Industrial and Labor Information, Geneva, Aug. 18, 1924, pp. 17, 18.

The council consists of a chairman (the Prime Minister), two vice chairmen (the Minister of Finance and the Minister of Agriculture and Commerce), and other members appointed by the cabinet from among officials and others not connected with the Government. Among the 137 members who have been appointed are the presidents of the Japanese Seamen's Union, and of the General Federation of Japanese Labor, a leader of the Japanese Farmers' Union, and other social workers. Seven departments have been established in the council to deal with monetary circulation, trade, agriculture, industry, social affairs, colonization, and communications. The following questions which are of importance from the standpoint of industry and labor have been submitted to the council: The protection or encouragement of basic industries, improvement of medium and small-scale industries, promotion of the mechanical engineering industry, improvement and increase in the number of dwelling houses, and protection of emigrants and the encouragement of migration.

PUBLICATIONS RELATING TO LABOR

Official—United States

MASSACHUSETTS.—Department of Public Welfare. Division of Housing and Town Planning. *Annual report for the year ending November 30, 1923.* [Boston, 1924.] 13 pp. Public document No. 103.

A brief summary of this report is given on page 188 of this issue of the MONTHLY LABOR REVIEW.

NEW YORK.—State Commission to Examine Laws Relating to Child Welfare. *Third annual report.* Albany, 1924. 130 pp. Legislative document No. 88.

Gives an outline of previous legislative recommendations of the commission, describes the investigations undertaken during the year (including that of the conditions under which children are employed in the tenement manufacturing industry), and presents a series of recommendations concerning laws and procedure in cases relating to children. An appendix containing laws passed by the legislature of 1924, recommended by the commission, is included.

OHIO.—Department of Industrial Relations and Industrial Commission. *General safety standards for workshops and factories.* Columbus, 1924. 10 pp.

— — — *Specific requirements covering the operation of metal-working machinery.* Columbus, 1924. 4 pp.

— — — *Specific requirements covering the operation of wood-working machinery.* Columbus, 1924. 4 pp.

— — — *Specific requirements covering polishing and grinding machines.* Columbus, 1924. 5 pp.

— — — *Specific requirements for building and construction work.* Columbus, 1924. 27 pp.

— — — *Specific requirements for conducting fire drills in factories and lofts.* Columbus, 1924. 7 pp.

— — — *Specific requirements for potteries.* Columbus, 1924. 6 pp.

— — — *Specific requirements for steel mills.* Columbus, 1924. 11 pp.

— — — *Specific requirements governing blowers and exhausters.* Columbus, 1924. 7 pp.

— — — *Specific requirements in foundries and core rooms. Regulations for the employment of women in core rooms.* Columbus, 1924. 10 pp.

— — — *Specific requirements relating to passenger and freight elevators.* Columbus, 1924. 17 pp.

SOUTH DAKOTA.—Office of Industrial Commissioner. *Seventh annual report for the 12 months ending June 30, 1924.* Pierre [1924]. 46 pp.

A summary of that part of the report which relates to workmen's compensation is published on pages 213 and 214 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—Department of the Interior. Bureau of Mines. *Coal-mine fatalities in the United States, 1923,* by William W. Adams. Washington, 1924. vi, 88 pp. Bulletin 241.

This report is reviewed on pages 204 to 206 of this issue of the MONTHLY LABOR REVIEW.

— — — Department of Labor. Bureau of Labor Statistics. *Labor relations in the Fairmont, W. Va., coal field,* by Boris Emmet. Washington, 1924. iii, 86 pp. Bulletin No. 361. Miscellaneous series.

A summary of this bulletin is given on pages 50 to 52 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—Department of Labor. Bureau of Labor Statistics. *Safety code for laundry machinery and operations. Washington, 1924. 12 pp. Bulletin No. 375. Safety code series.*

— — — — *Safety code for mechanical power-transmission apparatus. Washington, 1924. vi, 30 pp. Bulletin No. 364. Safety code series.*

A short summary of this report is given on page 206 of this issue of the MONTHLY LABOR REVIEW.

— — — — *Wages and hours of labor in lumber manufacturing, 1923. Washington, 1924. vii, 32 pp. Bulletin No. 363. Wages and hours of labor series.*

Advance data from this bulletin were published in the MONTHLY LABOR REVIEW for January, 1924 (pp. 77-80).

— — — — Women's Bureau. *Women in Missouri industries. Washington, 1924. viii, 127 pp. Bulletin No. 35.*

A summary of some of the data given in this report will be found on pages 130 to 132 of this issue of the MONTHLY LABOR REVIEW.

Official—Foreign Countries

AUSTRIA.—Bundesamt für Statistik. *Statistisches Handbuch für die Republik Österreich. Vienna, 1924. IX, 154 pp. Charts. IV Jahrgang.*

The fourth volume of the statistical yearbook of the Austrian Republic, covering the year 1922 and in part also the year 1923. Of special interest to labor are the statistical tables on cooperative societies, prices and cost of living, collective agreements, employment exchanges, labor disputes, unemployment relief, social insurance, trade-unions, and civil service.

CANADA.—Department of Labor. *National conference regarding winter employment in Canada. Official report of proceedings and discussions. Ottawa, 1924. 138 pp. Industrial relations series, Bulletin No. 8.*

— (BRITISH COLUMBIA).—Minister of Mines. *Annual report 1923, being an account of mining operations for gold, coal, etc. Victoria, 1924. 409 pp. Plates and maps.*

In 1923 the total coal production for British Columbia was 2,542,987 long tons, and the total number of males employed in the collieries of the Province exclusive of the supervisory and clerical forces was 5,729.

CHILE.—Oficina del Trabajo. *Los Organismos Técnicos del Trabajo, por Moisés Poblete Troncoso. Santiago, 1923. 431 pp. Boletín núm. 20, Año 1923.*

This bulletin contains a detailed study of the labor bureaus, their organization, etc., in the following countries: Argentina, Austria, Belgium, Brazil, Chile, Denmark, France, Germany, Great Britain, Greece, Hungary, Italy, Mexico, New Zealand, Norway, Poland, Porto Rico, Portugal, Russia, Spain, Sweden, Switzerland, United States, and Uruguay.

DENMARK.—Indenrigsministeriet. Arbejdsdirektøren. *Indberetning til Indenrigsministeriet for Regnskabsaaret 1922-23 (fra 1. April 1922 til 31. Martz 1923). Copenhagen, 1924. 51 pp.*

Report issued by the Director of Labor in Denmark on operations of employment exchanges, unemployment insurance, the unemployment fund, and the unemployment committee.

FRANCE.—Commission Supérieure de la Caisse Nationale des Retraites pour la Vieillesse. *Rapport sur les opérations et la situation de cette caisse. Année 1922. Paris, 1924. 110 pp.*

The report of the French National Old-age Retirement Fund for the year 1922.,

GREAT BRITAIN.—Home Office. Factory Department. *Report on the grinding of metals and cleaning of castings, with special reference to the effects of dust inhalation upon the workers, by E. L. Macklin and E. L. Middleton. London, 1923. 100 pp.*

A digest of this report is given on pages 210 to 212 of this issue of the MONTHLY LABOR REVIEW.

GREAT BRITAIN.—Mines Department. Miners' Lamps Committee. *Final report*. London, 1924. 24 pp. Memorandum No. 11.

— — — *Minutes of evidence with index, and an appendix on the law of foreign countries in regard to safety lamps and their upkeep*. London, 1922. vi, 521 pp.

The committee was appointed in 1919 to consider what improvements might be possible in the construction and operation of miners' lamps, and what, if any, additional safeguards should be thrown around their use. Each of the 10 earlier memoranda takes up some particular aspect of the problem, discusses what is the usual practice in regard to it, and gives the committee's recommendations, while the 11th memorandum sums up the findings of the whole inquiry.

— — — Safety in Mines Research Board. *Flameproof electrical apparatus for use in coal mines. First report—flange protection*, by I. C. F. Statham and R. V. Wheeler. London, 1924. 50 pp. Paper No. 5.

The problem of constructing the casings of an electrical apparatus so that it will be safe for general use in coal mines is the subject of this study which deals with the investigation of the factors governing the propagation of flames within closed and partially closed vessels.

INDIA (AJMER-MERWARA).—[Registrar of Cooperative Societies.] *Report on the working of the cooperative societies in the district of Ajmer-Merwara for the year ending June 30, 1923*. Delhi, 1923. 34 pp.

— (BENGAL).—[Registrar of Cooperative Societies.] *Report on the working of the Cooperative Societies in Bengal, 1922-23*. Calcutta, 1924. Various paging.

— (BIHAR AND ORISSA).—[Registrar of Cooperative Societies.] *Report on the working of the cooperative societies in Bihar and Orissa for the year 1922-23*. Patna, 1923. xxiv, 20, 4 pp., map.

— (BURMA).—[Registrar of Cooperative Societies.] *Report on the working of the cooperative societies act in Burma for the year ended June 30, 1923*. Rangoon, 1924. 97 pp.

Figures from these reports are given on pages 239 and 240 of this issue of the MONTHLY LABOR REVIEW.

INTERNATIONAL LABOR OFFICE.—Australia (Western Australia). *Act: Dangerous trades*. Geneva [1923?]. 2 pp. Legislative series, 1923—Austral. 6.

The text of an amendment to the factories and shops act, 1920, regulating working conditions in factories where lead, mercurial, or arsenical preparations are manufactured or produced.

— *Act: Miner's phthisis*. Geneva [1923?]. 4 pp. Legislative series, 1923—Austral. 3.

This act, dated February 22, 1923, relates to the physical examinations of workers employed in and about mines, and the provision of suitable work for such persons who are found to have developed miner's phthisis.

— Belgium. *Order: Dangerous trades*. Geneva [1923?]. 7 pp. Legislative series, 1923—Bel. 1.

This order relates to the inspection of establishments scheduled as dangerous, unhealthy, or noxious.

— Hongkong. *Ordinance: Female domestic service*. Geneva [1923?]. 3 pp. Legislative series, 1923—H. K. 1.

This ordinance, dated February 15, 1923, regulates the employment in Hongkong of a certain class of female domestic servants who were formerly practically sold into slavery when children by their parents or guardians. By this ordinance no female domestic servant under the age of 10 years may be employed hereafter and no property rights in children can be sold. Certain of the provisions of this ordinance are given on pages 40 and 41 of this issue of the MONTHLY LABOR REVIEW.

NETHERLANDS (AMSTERDAM).—Bureau van Statistiek der Gemeente Amsterdam. *De Uitgaven van 114 ambtenaars en arbeidersgezinnen. Amsterdam, 1924. 80*, 108 pp. Statistische Mededeelingen van het Bureau van Statistiek der Gemeente Amsterdam, No. 73.*

This bulletin contains the results of an investigation made by the municipal statistical office of Amsterdam into the household expenditures of 82 municipal and Government employees' families and 32 workmen's families. In the case of the former the investigation covered the period from September, 1918, to September, 1919, and in that of the latter the month of March, 1919. In an appendix are given the results of an inquiry made in March, 1922, into the household expenditures of 32 workmen's families. The various investigations covered only the expenditures and not the income of the families.

NORWAY.—[Departementet for Sociale Saker]. Riksforsikringsanstalten. *Ulykkesforsikringen for Industriarbeidere m. v. 1920. Christiania, 1923. 21*, 109 pp. Norges Offisielle Statistikk, VII, 83.*

Annual report on accident insurance for industrial workers in Norway in 1920. The report is issued by the State insurance office.

— — — Statistiske Centralbyrå. *Arbeidslønnen i Jordbruket. Driftsåret 1923–1924. Christiania, 1924. 27 pp. Norges Offisielle Statistikk, VII, 122.*

This is a report on wages in agriculture in Norway, 1923–1924, issued by the Central Statistical Bureau of Norway. A summary of this report is given on pages 127 to 129 of this issue of the MONTHLY LABOR REVIEW.

— — — Statistisk Årbok for Kongeriket Norge. *43de årgang, 1923. Christiania, 1924. 288 pp.*

Statistical Yearbook of Norway for 1923. Contains statistics on social insurance, social conditions (unemployment, trade-unions, agreements, etc.), etc.

— (CHRISTIANIA).—Arbeidskontor. *26de aarsberetning. Christiania, 1924. 31 pp. Norges offentlige arbeidsformidling.*

Annual report of the Christiania employment agency.

SWEDEN.—[Socialdepartementet]. Socialstyrelsen. *Arbetsinställelser och Kollektivavtal samt Förlökningsmännens Verksamhet år 1923. Stockholm, 1924. 168 pp. Sveriges Officiella Statistik. Socialstatistik.*

This volume contains the annual reports by the Swedish Social Board on labor disputes, collective agreements, and activities of the State conciliator.

SWITZERLAND.—Volkswirtschaftsdepartement. Eidgenössisches Arbeitsamt. *Vorentwurf und Motive zu einem Bundesgesetz über die berufliche Ausbildung. Bern [1924]. 91 pp.*

Among the various duties of the Swiss Federal Labor Office is included the drafting of labor laws. The present volume contains the draft of a federal law on vocational training. A list of the various cantonal laws and decrees on educational training so far enacted is given in an appendix.

UNION OF SOUTH AFRICA (TRANSVAAL).—Chamber of Mines. *Annual report, year 1923. Johannesburg, 1924. 216 pp.*

Data from this report are given on page 129 of this issue of the MONTHLY LABOR REVIEW.

Unofficial

BERNET, FRIEDRICH. *Lehrlingsausbildung und Lehrlingsfürsorge in einigen Grossbetrieben der schweizerischen Metall- und Maschinenindustrie. Zurich, Art. Institut Orell Füssli, 1923. xi, 97 pp.*

A monograph giving the results of a personal investigation made in 1922 into the training of and welfare work for apprentices in several large establishments of the Swiss metal and machinery industry. The author, after giving a brief review of the historical evolution of the apprenticeship system in this industry, describes present methods of selection and employment of apprentices, their

[1215]

practical training in the shops, their theoretical training in works schools, and their supervision. He then discusses the aims of welfare work for apprentices and the various kinds of welfare work. The text of the resolutions on the efficient training of machinists' apprentices adopted by the Association of Swiss Machinery Manufacturers on October 2, 1885, and of the standard apprenticeship contract now in use by the Federation of Swiss Metal Goods and Machinery Manufacturers are given in an appendix. The volume also contains a bibliography on the subject covered.

BUELL, RAYMOND LESLIE. *Japanese immigration*. Boston, World Peace Foundation, 40 Mt. Vernon Street, 1924. 100 pp.

The purpose of this pamphlet is to show the effect of the Japanese exclusion law of 1924 on the previously friendly relations between the United States and Japan. The operation of the gentlemen's agreement, the question of the policy of racial discrimination, the Japanese and American reaction to the exclusion law, and the treatment of foreigners by Japan and of Japanese by other countries are discussed. The appendixes contain various State documents, including part of the immigration act of 1924 and the official correspondence of Secretary Hughes and the Japanese ambassador relative to the law.

CARNEGIE ENDOWMENT FOR INDUSTRIAL PEACE. Division of Economics and History. *The industries of the Clyde Valley during the War*, by W. R. Scott and J. Cunnison. Oxford, Clarendon Press, 1924. xii, 224, 12 pp.

A study of the effect of war demands upon the interrelated industries of the Clyde region, and of the difficulties, when war ceased, of adapting the increased productive energy of the district to the changed conditions. The process of converting the varied industries to a war basis is described, the adjustments due to the labor situation are discussed, and figures are presented showing that the condition of the working population was materially improved during the war. Pauperism fell off, school children suffering from underfeeding and insufficient clothing were fewer than in normal years, infantile mortality rates declined, and the Glasgow Savings Bank showed an increase in the number of new depositors and in the amount of deposits. Necessarily, during this period the energy of the district was concentrated upon the manufacture of war materials, and when the postwar depression arrived it was felt with special severity because of the lack of a variety of industries, not all of which would be affected in the same degree. The study is carried only to the beginning of 1922, at which time the depression was intense, and the extent to which the changing over from war to peace industries could be carried was still problematic.

COMMISSION SYNDICALE DE BELGIQUE. *Rapport annuel pour 1923*. Brussels, Imprimerie Bruzelloise Lucifer, 1924. 228 pp.

This report of the Trade-Union Committee of Belgium for the year 1923 gives an account of trade-union activities during the year and a statement of the finances and membership of the affiliated organizations.

FARNER, HANS. *Die Geschichte des Schweizerischen Arbeiterbundes*. Zurich, Grülli-Buchhandlung, 1923. 116 pp.

A history of the Swiss Federation of Labor from its foundation in 1887 to its dissolution in 1920.

FULLER, EDWARD. *International yearbook of child care and protection*. London, Longmans, Green and Co., 1924. 448 pp.

This yearbook, issued by the English Save the Children Fund, is intended to be "a record of State and voluntary effort for the welfare of the child, including education, the care of the delinquent and destitute child, and conditions of juvenile employment throughout the world." The information was obtained, as far as possible, from official sources, and covers some 350 states, colonies, and dependencies, making a more thorough compilation than has yet been attempted in regard to this subject.

GARY, ELBERT H. *Workers' partnership in industry*. Reprinted from the "World's Work" magazine for June, 1924. 7 pp.

The policy of the United States Steel Corporation in selling stock to the employees on a subscription basis, the profit-sharing plan which is based upon merit in service, and the safety work of the corporation are described in this article.

INSTITUT LANNELONGUE D'HYGIÈNE SOCIALE. *Dix conférences sur l'orientation professionnelle*. Paris, Félix Alcan, 1923. 131 pp. Notes et Mémoires No. 4. Illustrated.

The principal addresses presented at ten conferences on vocational guidance held by the Lannelongue Institute in Paris. The subjects of the conferences were: Scientific basis of vocational guidance; the rôle of physiology in vocational guidance; the rôle of psychology in vocational guidance; technical organization of labor and vocational guidance; and vocational guidance in Belgium.

NATIONAL COMMITTEE FOR THE PREVENTION OF BLINDNESS (INC.). *Eye hazards in industrial occupations*. New York, 130 E. 22nd St., 1924. xix, 247 pp.

A summary of this report is given on pages 207 to 210 of this issue of the MONTHLY LABOR REVIEW.

NATIONAL CONFERENCE OF CATHOLIC CHARITIES. *Proceedings of the ninth session, September 9-14, 1923, Philadelphia*. [Washington, 1924.] viii, 352 pp.

Among the papers collected in this volume the following are along labor lines: An interpretation of the work of the United States Children's Bureau; child labor and its effect on family life; family responsibility of wage-earning women; and the girl in the school, in the home, and in industry.

NATIONAL HEALTH COUNCIL. *Health of the worker—how to safeguard it*, by Lee K. Frankel. New York, Funk and Wagnalls Co., 1924. 78 pp.

This booklet belongs to a series of publications on health problems published by the National Health Council. The progress in safeguarding the health of workers, as well as the field yet to be covered, are dealt with under the subjects of working conditions, process hazards, and keeping the worker fit.

PHILADELPHIA HOUSING ASSOCIATION. *Housing in Philadelphia*, by Bernard J. Newman. Annual report for 1923. Philadelphia [1924]. 50 pp.

Some of the findings of this report are given on pages 189 to 191 of this issue of the MONTHLY LABOR REVIEW.

SLESSER, SIR HENRY, AND HENDERSON, ARTHUR. *Industrial Law*. London, Ernest Benn (Ltd.), 1924. xxxvi, 947 pp.

This volume presents the industrial law of Great Britain with comment and annotations. The first part (153 pages) is entitled "Common law," but embodies a number of statutes. The general principles underlying the employment contract are discussed, followed by a chapter on the legal consequences following from such contracts. The remaining chapters of this section are devoted to the liability of employers for injuries at common law as fixed by compensation and the liability of strangers for interfering with the contract of employment.

Under the heading "Statute law" the authors present the text of the various statutes; first, those of a miscellaneous nature; second, those relating to special classes of employment, as factories, workshops, mines, railways, and ships; third, the laws relating to special classes of employees, including women, young persons, and children. Laws regulating remuneration and working conditions in special employments follow, the two concluding chapters being devoted to health insurance and unemployment insurance, respectively.

The volume is up to date, statute and case law contained therein having been brought up to the month of April, 1924. It is a valuable compilation of material, but so arranged as to make it difficult to discriminate between introduction and comment and the text of the laws presented, the type and leading being uniform throughout.

SPERO, STERLING DENHARD. *The labor movement in a Government industry.* New York, George H. Doran Co., 1924. xii, 320 pp.

The first three chapters contain a general discussion of the character and status of unionism in the civil service and serve as a basis for the account of the history and activities of the union organizations among postal clerks in this country.

VERBAND DER BUCHBINDER UND PAPIERARBEITER—DEUTSCHLANDS. *Bericht des Vorstandes, 1923.* Berlin, 1924. 90 pp.

The annual report of the directorate of the Federation of German Bookbinders and Paper Workers for the year 1923, containing general and local news as to the development of the federation and its affiliated unions and data on collective agreements concluded, wage rates, and the finances of the federation.

VILLEY, ÉTIENNE. *L'Organisation professionnelle des Employeurs dans l'Industrie française—État—Activité—Tendances.* Abbeville, G. Cadet, 1923. xxii 395 pp.

An account of the organization of employers in France and of their activities along economic and social lines. In order to furnish a standard for comparison, an outline of employer and trade-union organizations in other countries before and since the war is also given.

WASHINGTON STATE FEDERATION OF LABOR. *Proceedings of the 23d annual convention, Olympia, July 14-18, 1924.* Spokane, 1924. 71 pp.

Among the resolutions adopted at this meeting were those favoring the inclusion of culinary crafts under the State industrial insurance act; collective bargaining for municipal employees; the organization of school-teachers; apprenticeship training by the State vocational board; and the establishment by the Washington Federation of Labor of a permanent educational department.



