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MONTHLY LABOR REVIEW

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Bread Making in the Modern Bakery.

By ROBERT S. BILLUPS, OF THE UNITED STATES BUREAU OF LABOR STATISTICS.

IN JULY and August, 1923, the United States Department of Labor, through its Bureau of Labor Statistics, made a study of bread making as it is done in the modern bakery, for the purpose of showing the average customary or regular full-time hours per week, average number of pounds of bread produced per man per hour, average earnings per hour of employees actually engaged in the production of bread, and average labor or production cost per pound of bread. This study also included baking machinery, processes, and occupations.

The figures presented in this article are limited to the productive employees in the bread-making department of the bakery, beginning with those who receive the flour and other ingredients as they are delivered to the bakery, and ending with those who pack the baked bread in baskets or boxes, or on bread racks ready for drivers of the wagons or for shipment from the bakery. Figures covering bakery officials, clerks, and other office employees, salesmen, bread wagon drivers, maintenance and repair employees, and employees of cake, pie, and pastry departments are excluded.

This study is limited to 3 representative bakeries, with 135 employees, in Baltimore, Md.; to 9 bakeries, with 733 employees, in New York City; to 5 bakeries, with 451 employees, in Philadelphia, Pa.; and to 4 bakeries, with 300 employees, in Washington, D. C. Thus a total of 21 bakeries and 1,619 productive employees is covered.

Agents of the bureau visited the bakeries mentioned above and, selecting a representative weekly pay-roll period in 1923, obtained from pay rolls and other records the occupation of each employee, the number of hours he actually worked and earnings he actually made, and the number of pounds of bread and rolls produced during this particular pay-roll period. These figures were used as the basis for the averages presented in this article.

Customary or regular full-time hours per week are the number of hours that a bakery under normal conditions is in operation in a week, or the number of hours that the employees may expect work each week. The customary or regular full-time hours per week for employees of each of the bakeries covered in Baltimore are 54; in New York and Washington 48; in Philadelphia the hours per week of the different bakeries range from 50 to 55, averaging 51.1 for the employees of all the bakeries covered.

Overtime is time worked in excess of customary or regular full-time hours per week. Practically all the bakeries studied have some overtime work each week, usually on Friday when it is necessary to produce sufficient bread for Saturday and Sunday. In this industry Saturday is the day of rest instead of Sunday, as in other six-day week industries. Overtime is paid for at the regular rate by the bakeries in Baltimore, New York, and Philadelphia, and at rate and one-half by those covered in Washington.

In Baltimore the average number of pounds of bread, including rolls, produced per man per hour ranges from 70 for the bakery with the lowest production to 103 for the bakery with the highest, with an average of 92 for all employees covered; in New York the range is from 52 to 95, with an average of 73; in Philadelphia, from 52 to 68, with an average of 62; and in Washington, from 48 to 72, with an average of 63.

The highest production per man per hour was made in a bakery in which there are very few bench hands, no machine hands except at the divider and one at the molder, and no oven men. This bakery is fully equipped with the best machinery, including traveling ovens, and is modern in every way. Here 90 per cent or more of the dough is carried directly, by machinery operated by electric power, from the fermenting room to and through the divider, rounder, first or preliminary automatic proofer, molder, final automatic steam proofer, and traveling oven.

The lowest production per man per hour was made in a bakery in which there are machine hands at the divider, rounder, revolving proofing cabinet, and molder; in which helpers shove racks loaded with pans of molded dough into the steam proofer and from the proofer to the ovens; and in which there are also bench hands and oven men. In this particular bakery the employees in these occupations form a larger per cent of the total employees than in any other bakery for which averages are presented. It is, therefore, manifest that very large production per man per hour can be obtained only by a bakery having efficient machinery and efficient organization.

Average earnings per hour of employees of bakeries in Baltimore range from 49.7 cents in the bakery with the lowest average to 53.8 cents in the bakery with the highest, with an average of 50.9 cents for all employees covered; in New York the range is from 56.1 to 71.6 cents, with an average of 63.6 cents; in Philadelphia from 50.2 to 60.4 cents, with an average of 56.4 cents; and in Washington from 67.4 to 77.6 cents, with an average of 74.1 cents. The averages for Washington, as compared with those of other cities, are higher, for two reasons: (1) The basic rate per hour in Washington for mixers, bench hands or hand bakers, dividers or scalers, rounders, cabinet men, molders, and oven men is $1 per hour for day work and $1.10 per hour for night work, as compared with rates of 50 to 74.1 cents for these occupations in Baltimore, 50 cents to $1.042 in New York, and 47.9 to 80 cents in Philadelphia; and (2) overtime is paid for at the rate of time and a half, or $1.50 per hour for day work and $1.65 per hour for night work, in Washington, while in other cities all overtime is paid for at regular rates by the bakeries covered. Further, as work in most of the bakeries in Washington begins about

2 p. m. and ends about 10 p. m. or after, practically all overtime is paid for at the night overtime rate of $1.65 per hour.

Average labor or production cost per pound of bread in bakeries in Baltimore ranges from 0.48 cent to 0.77 cent, with an average of 0.55 cent for all bakeries covered; in New York the range is from 0.62 cent to 1.18 cents, with an average of 0.87 cent; in Philadelphia from 0.85 cent to 1.11 cents, with an average of 0.91 cent; and in Washington from 1.07 to 1.59 cents, with an average of 1.17 cents. The statement made regarding the efficiency of the production per man per hour likewise applies to the average labor or production cost.

It should again be emphasized that the figures presented above and in the tables following apply only to the production employees of the bread-making department of the modern bakery.

Averages for "all employees" of all bakeries covered in each city as presented in the table below, have already been discussed. The averages for "bakers (mixers, bench hands, machine hands, and oven men)," are for the key occupations in bread making, the work of all other bread-making occupations being comparatively unimportant.

CUSTOMARY OR REGULAR FULL-TIME HOURS PER WEEK, AVERAGE NUMBER OF POUNDS OF BREAD PRODUCED PER MAN PER HOUR, AVERAGE EARNINGS PER HOUR, AND AVERAGE LABOR COST PER POUND OF BREAD, BY CITY, 1923.

Employees and city.	Number of bakeries.	Number of employees.	Customary or regular full-time hours per week.			Average number of pounds of bread produced per man per hour.		
			Lowest.	Highest.	Average.	Lowest.	Highest.	Average.
All employees:								
Baltimore	3	135	54.0	54.0	54.0	70	103	92
New York	9	733	48.0	48.0	48.0	52	95	73
Philadelphia	5	451	50.0	55.0	51.1	52	68	62
Washington	4	300	48.0	48.0	48.0	48	72	63
Bakers (mixers, bench hands, machine hands, and oven men):								
Baltimore	3	43	54.0	54.0	54.0	138	427	307
New York	9	345	48.0	48.0	48.0	101	266	155
Philadelphia	5	189	50.0	55.0	51.1	87	162	146
Washington	4	117	48.0	48.0	48.0	116	189	165

Employees and city.	Average earnings per hour.			Average labor or production cost per pound of bread.		
	Lowest.	Highest.	Average.	Lowest.	Highest.	Average.
All employees:						
Baltimore	$0.497	$0.538	$0.509	$0.0048	$0.0077	$0.0055
New York	.561	.716	.636	.0062	.0118	.0087
Philadelphia	.502	.604	.564	.0085	.0111	.0091
Washington	.674	.776	.741	.0107	.0159	.0117
Bakers (mixers, bench hands, machine hands, and oven men):						
Baltimore	.548	.696	.641	.0015	.0051	.0021
New York	.643	.782	.717	.0024	.0073	.0046
Philadelphia	.573	.644	.620	.0036	.0072	.0043
Washington	1.067	1.090	1.079	.0057	.0093	.0065

In reading figures for "bakers" in connection with figures for "all employees" it will be observed that in Baltimore only 43, or 32 per cent of the 135 employees covered, are bakers; in New York, 345, or 47 per cent of the 733 covered; in Philadelphia, 189, or 42 per cent of the 451 covered; and in Washington, 117, or 39 per cent of the 300 covered, are bakers. The small percentage of bakers in Baltimore is due principally to the fact that all the bakeries studied there are well equipped with modern automatic machinery, from the dividing or scaling machine to the traveling ovens, while some of the bakeries covered in other cities are not so well equipped. These facts, together with the production of 307 pounds of bread per baker per hour in Baltimore, as compared with 155 in New York, 146 in Philadelphia, and 165 in Washington, and an average earning of 64.1 cents per hour in Baltimore, as compared with 71.7 cents in New York, 62 cents in Philadelphia and $1.079 in Washington, seem to account for the very low labor cost of 0.21 cent per pound of bread for bakers in Baltimore compared with 0.46 cent per pound in New York, 0.43 cent in Philadelphia, and 0.65 cent in Washington.

The table below presents for each of the bread-making occupations (mixers, bench hands or hand bakers, machine hands, oven men, helpers, laborers, wrappers, packers, and other employees) the classified days worked, average full-time hours, average hours actually worked, average hours of overtime work per week, and average earnings, per week and hour. These figures are computed from data, obtained from the bakeries studied, for a one-week pay-roll period in 1923.

Reading line 1 of this table it is seen that in the 3 bakeries covered in Baltimore there were 5 mixers who worked 6 days, or on all the days that there was work during the week covered; that the full-time hours per week were 54, that these mixers actually worked an average of 55 hours, and that they actually worked an average of 1 hour overtime during the week. Their earnings averaged $37.10 for the week and 67.5 cents per hour. Line 2 shows that one of the 32 mixers in New York worked only 3 of the 6 days that the 9 bakeries were in operation. During these 3 days this mixer actually worked only 18 hours. This is the reason that the average hours actually worked (49.7) are less than the total (50.6) of the average full-time hours (48) and average hours of overtime (2.6). Line 3 shows that one of the 19 mixers in Philadelphia worked 4 of the 6 days the 5 bakeries were in operation, while 1 employee worked 7 days, doing work on one day when the bakery as a whole was not in operation. Other lines may be read in like manner and comparisons made between one city and another.

An inspection of the table shows that many of the bench hands or hand bakers and helpers worked fewer than 6 days or less than full time during the week covered, showing that a larger percentage of the employees in these occupations were much less regular in attendance than employees of other occupations.

EMPLOYEES CLASSIFIED BY DAYS WORKED AND AVERAGE HOURS AND EARNINGS, IN ONE WEEK, BY OCCUPATIONS AND CITIES, 1923.

Occupation and city.	Number of bakeries.	Number of employees.	Number of employees working each specified number of days per week.							Average hours (one-week pay period).			Average earnings in one week.	Average earnings per hour.
			1	2	3	4	5	6	7	Full time.	Actually worked.	Overtime.		
Mixers:														
Baltimore	3	5	....	....	....	....	....	5	....	54.0	55.0	1.0	$37.10	$0.675
New York	9	32	....	....	1	....	....	31	....	48.0	49.7	2.6	38.24	.770
Philadelphia	5	19	....	....	....	1	....	17	1	51.3	50.7	.4	33.34	.657
Washington	4	10	....	....	....	....	....	10	....	48.0	49.0	1.0	53.08	1.084
Bench hands or hand bakers:														
Baltimore	2	26	....	1	....	1	....	24	....	54.0	52.6	.7	30.98	.589
New York	9	175	4	....	3	1	8	153	6	48.0	48.2	2.0	33.09	.686
Philadelphia	5	92	1	....	1	....	1	87	2	50.9	50.5	.4	29.82	.591
Washington	4	74	3	2	....	2	21	46	....	48.0	43.8	.9	46.97	1.073
Machine hands:														
Baltimore	3	9	....	....	....	....	1	8	....	54.0	53.2	.2	29.66	.557
New York	9	37	....	....	....	....	1	35	1	48.0	51.4	3.7	33.59	.653
Philadelphia	5	28	....	....	....	....	....	27	1	50.1	50.7	.6	29.65	.584
Washington	4	11	....	....	....	....	1	10	....	48.0	48.6	1.2	52.29	1.075
Oven men:														
Baltimore	1	3	....	....	....	....	....	3	....	54.0	54.0	.....	34.17	.633
New York	9	101	....	1	....	1	3	94	2	48.0	50.5	3.3	39.24	.776
Philadelphia	5	50	....	....	....	2	....	46	2	52.5	52.8	.9	35.82	.678
Washington	3	22	....	....	....	1	1	20	....	48.0	48.7	1.8	53.39	1.097
Helpers:														
Baltimore	3	48	4	....	....	1	3	40	....	54.0	49.3	.2	22.11	.448
New York	9	152	7	4	3	3	5	130	....	48.0	47.0	2.9	23.83	.507
Philadelphia	5	87	1	1	....	6	5	69	5	52.1	49.9	.5	23.32	.467
Washington	4	99	2	2	1	5	9	80	....	48.0	46.6	1.9	22.83	.490
Laborers:														
Baltimore	3	12	....	1	....	....	1	10	....	54.5	51.0	.4	23.07	.452
New York	9	85	....	1	5	3	....	67	9	48.9	49.7	3.0	25.22	.508
Philadelphia	5	74	....	1	....	1	2	69	1	50.7	49.9	.2	23.17	.464
Washington	4	37	....	....	....	3	2	25	7	48.0	48.5	.7	22.88	.472
Wrappers:														
Baltimore	3	14	....	....	....	....	....	14	....	54.0	59.1	5.1	20.99	.355
New York	7	28	1	....	....	....	....	27	....	48.9	50.1	2.9	26.26	.524
Philadelphia	4	17	....	1	2	1	1	12	....	49.6	43.7	.....	22.46	.514
Washington	4	9	1	1	....	....	1	6	....	48.0	38.9	.....	19.88	.510
Packers:														
Baltimore	3	10	....	....	....	....	....	10	....	54.0	54.0	.....	25.80	.478
New York	9	83	2	....	....	1	1	74	5	49.1	50.9	3.1	27.74	.545
Philadelphia	5	49	....	....	1	....	....	48	....	49.9	49.3	.....	26.66	.541
Washington	4	21	....	....	1	....	1	16	3	48.0	47.7	.9	27.59	.578
Other employees: [1]														
Baltimore	3	8	....	....	....	....	....	8	....	53.3	53.7	.5	42.48	.791
New York	9	40	....	....	1	....	....	35	4	48.2	49.4	2.0	47.35	.958
Philadelphia	5	35	....	....	....	....	1	34	....	51.4	51.5	.3	38.92	.756
Washington	4	17	....	....	....	....	1	16	....	48.0	48.4	.9	40.44	.836

[1] Receiving clerks, foremen, oven firemen, and apprentices.

The modern bakery is a thoroughly organized concern equipped with much or all of the latest and most improved bakery machinery. It is the aim of such bakery to supply the public with the very best products at the least possible cost of production. This can be accomplished only by having efficient organization and efficient operation of machinery, thus saving time as well as labor.

An official of one of the bakeries that furnished information for this article said, "I am looking forward confidently to the time when our bakery will be so thoroughly equipped with machinery that it will not be necessary for any employee to handle the dough or the bread until after the bread has been baked and wrapped and is ready for our drivers." Another said, "If we returned to old conditions before the installation of machinery (blenders, sifters, mixers, dividers, rounders, molders, panners, wrappers, and automatic

proofers and traveling ovens) we would have to increase our force of productive employees several times and enlarge our floor space to three or four times its present size in order to produce as much bread per day as we are now producing in that time."

Bread making, like many other industries, had its days of hard, heavy labor. The introduction of machinery has made the work in the bakery comparatively easy and light, has reduced the number of employees required to operate the bakery, especially the number of bench hands or hand bakers, oven men, and helpers, and has greatly increased production. Without entering into the question as to whether or not increased production has under present conditions made any change in the total cost of production, it may also be said that the use of machinery has made it possible for the consumer to buy good, wholesome bread for less than it would cost, including time and fuel, to produce bread of like quality in the home. As has already been stated the average cost of bread per pound as presented in this article is limited to productive employees only. Other items such as capital, including investments in land, buildings, and equipment, along with cost of materials, insurance, taxes, depreciation, salaries of officials and office employees, wages of drivers and all other nonproductive employees not covered in this study, and probably other items not mentioned, should also be included in order to arrive at the total cost of production per pound.

Below is given a description of the machinery, processes, and jobs or occupations found in the making of bread in the modern bakery.

Machinery.

BLENDING machines.—Blending machines are used to mix two or more kinds of flour so thoroughly that an analysis of any portion of the mixture shows approximately the same per cent of each kind of flour in the portion as in the total mixture. Bread made from the blend or mixture of two or more grades of flour (each of which makes good bread) is usually more desirable than bread made from any one of the grades.

Out of the 21 bakeries in question, 20 reported the use of electric power in operating blending machines and 1 reported the use of steam. The capacity of the blending machines in these bakeries ranged from 15 to 45 barrels or about 3,000 to 9,000 pounds of flour per hour, most of the bakeries reporting, however, the blending of 3,000 or 4,000 pounds per hour. As a rule, machinery operated by electric power carries the flour from the blending machine to the sifting machine.

Sifting machines.—Sifting machines are used to remove pieces of cord or string, lint, splinters, or any other foreign substance from the flour, to make the flour less compact by breaking any lumps that may be present, and to lighten and aerate it. As the flour is carried by machinery directly from the blender to the sifter the capacity of the sifting machine is necessarily the same as that of the blending machine.

After the flour has been sifted it is carried by machinery operated usually by electric power to a storage bin which is, as a rule, located in a room directly above the mixing room, so that the flour may be

drawn from the bin into automatic scales used by mixers in weighing flour for batches of dough.

Batches of dough are made up by formulas. In gathering material for this article agents of the bureau made no effort to and did not obtain any bread-making formulas from any of the bakeries. A few of the officials of the bakeries visited were very much afraid that some of their trade secrets or processes which have cost a great deal and are, therefore, guarded most jealously, might in some way fall into the hands of their competitors. It is assumed that each bakery has its own formulas, and that each formula is somewhat different from any of the formulas of other bakeries. Two formulas which were published in the June 9, 1923, issue of the Bakers Weekly are presented below:

FORMULAS FOR BREAD DOUGH.

Ingredient.	Unit.	Formula No. 1.	Formula No. 2.
Flour	Pounds	280	300
Water	do	170	168
Sugar	do	2	8
Salt	do	[1] 5	4½
Milk	do	[1] 11	[2] 6
Lard	do	6	4
Yeast	do	5½	5
Malt	do	[3] ¾	3

[1] Sweetened, condensed, 42° sugar.
[2] Sweetened, condensed.
[3] Quart.

In view of the statement above concerning the officials of a few bakeries, it is not out of place to quote here part of an editorial which appeared in the May 19, 1923, issue of the Bakers Weekly:

The baker who has been given, by public approval, the assurance that his staff of life is all that it ought to be, does not, in fact, perform the service that is expected of him until he informs his brother baker, who perhaps has been less successful in turning out a high-quality product, how he, too, may attain the height of present-day perfection in a scientifically produced loaf of bread. We believe that the days of selfishness are past when a baker, or for that matter the manufacturer of any other article of food, can keep the secret of his success to himself. The bakers are gradually coming to know that the success of one illuminates the career of the other, while the failure of another will bring discredit upon the entire industry. Thus, in serving mankind, that baker serves best who serves his brother bakers. It is indeed gratifying to note that already successful bakers in different sections of the country are exchanging bread with each other, extending the hand of helpfulness with a view to bringing all bread products up to the highest possible level, and thus laying the foundation for a really lasting, universal service to mankind by the baker.

Mixing machines.—The capacity of mixing machines ranges from 1 to 5 barrels. The bakeries visited are equipped principally with machines of 4-barrel capacity, operated by electric power. They reported that batches of dough ranging from 100 to 1,500 pounds were mixed in from 7 to 20 minutes; in the majority of bakeries studied, the mixing period was 12 minutes. Dough is mixed at a temperature of 78 to 82° F. It is generally understood that approximately 300 one-pound loaves of bread can be made from a barrel of flour.

After the dough has been mixed it is transferred to the fermenting room and kept there at a temperature of approximately 80° F. for a

period ranging from one and one-half to six hours. In a great majority of cases the fermentation period lasts from three to four hours. In most cases, also, the dough is punched or worked down two or three times while in the fermenting room, though one bakery reported that the dough was punched only once. The dough then passes from the fermenting room to the hopper of the dividing or scaling machine or to a bench at which bench hands or hand bakers work.

It may be stated that the long as well as expensive period of fermentation has, according to an article in the May 19, 1923, issue of the Bakers Weekly (pp. 38 to 40), been eliminated by a process, recently developed, of conditioning dough while it is being mixed. Dough after being so conditioned is carried directly from the mixing machine to the dividing machine.

Dividing or scaling machines.—Scaling machines divide the batches of dough into pieces of uniform weight for loaves of bread, the weight being determined by the regulator of the machine. In this dividing process the dough passes or is drawn from the hopper of the machine into a box, sometimes called the "top box" and is pressed or rammed from that box into the pockets of the machine until the pressure against the regulator is sufficient to complete the operation of dividing the dough into pieces, after which the pieces drop automatically from the machine to a conveyor or to a stand or table.

Fifteen of the 21 bakeries studied are equipped with six-pocket dividers. Six pieces of dough are scaled by such machines at each operation. Other bakeries covered have 1, 2, 4, or 5 pocket dividers. The machine of lowest capacity scales 30 pieces per minute and the one of highest capacity scales 84 per minute. The capacity of the majority of the machines ranges from 48 to 60 per minute. As it is necessary that the pieces scaled by the dividing machine pass through other machines of the bakery in regular order, the capacity of rounding machines, proofing cabinets, automatic proofers, molding machines, panning machines and final automatic steam proofers are necessarily the same as that of the dividing or scaling machines.

Rounding machines.—After the pieces of dough have been dropped from the dividing machine they are carried by conveyor and dropped automatically into the rounding machine or picked up by hand and placed on it. This machine is circular with a spiral trough and revolves when in operation. The revolving machine rolls the pieces of dough in every direction, balling or rounding them up and then drops them onto conveyors or a small table or stand. The pieces are dusted with flour while in the machine.

After the dough has been divided into pieces and the pieces have been rounded, they are allowed to remain for 10 or 15 minutes in proofing cabinets, or 6 to 15 minutes in automatic proofers in order that the cells may develop under the process known to the industry as proofing. The pressure on the dough in passing through the dividing machine and the rolling of the pieces in passing through the rounding machine tends to "kill" the dough or cause it to fall.

Proofing cabinets.—Proofing cabinets are more like pieces of furniture than machinery. The cabinets are square with a set of drawers arranged one above the other in the left hand half of each side. They are pivoted to a base so they may be revolved. The drawers on side "A" are filled with pieces of rounded dough. The cabinet

is then moved by hand one-quarter way round and then those on side "B," "C," and "D" are filled in order and moved in like manner. As the drawers on side "D" are being filled, those in side "A" are being emptied. The drawers in the other sides are filled and emptied in regular order as the work continues. The cabinets are kept at a temperature of 80° F.

Automatic proofers.—It is desirable that all pieces of dough be given the same time or proof. This is not possible with proofing cabinets, rooms, closets, or other receptacles provided with drawers, racks, or stationary shelves on account of the time taken in placing pieces in and taking them out of cabinets, rooms, closets, etc. The automatic proofer solves this problem as it gives each piece of dough exactly the same time of proof. The operation is continuous. The proofer is provided with an endless chain having buckets or shelves attached which receive the pieces of dough as they come from the rounding machine. The loaded buckets or shelves are carried back and forth through the proof box which is kept at a temperature of 98 to 110° F. and the pieces of dough are automatically dumped at the unloading point into the molding machine. The proof box is usually suspended from the ceiling or attached to the wall of the mixing room.

Molding machines.—The molding machines give the pieces of dough the desired shape for loaves of bread. The pieces drop automatically into the machine from the buckets or shelves of the conveyor of the first automatic proofer, or are picked up by hand and placed in the machine, are molded as they pass through, and dropped automatically into oven pans on a panning machine, or onto a small stand or table.

Panning machines.—Panning machines are equipped with an endless chain or conveyor. Empty oven pans are placed by hand on the conveyor, are carried under the molding machine, receive the molded pieces of dough as they drop from the molding machine, and carry and unload them onto the conveyor of the automatic final steam proofer.

Automatic final steam proofers.—These automatic proofers are equipped with conveyors or endless chains having buckets or shelves attached. Pieces of molded dough after being automatically loaded into the buckets or onto the shelves of the conveyor are carried back and forth through the proofer during the final proofing period of 45 to 60 minutes and unloaded automatically onto the shelves of the conveyor of traveling ovens or to tables or benches at or near the feed end of traveling ovens. The final steam proofing is done at a temperature of 98 to 110° F.

Steam proofing boxes.—Pieces of dough divided, rounded, and molded by bench hands or hand bakers, or by machinery in bakeries not equipped with automatic steam proofers, are proofed in steam proofing boxes or rooms which are kept at a temperature of 98 to 110° F. The pieces are placed on racks, shoved into the proofers, kept there 45 to 60 minutes, and then shoved to ovens.

Ovens.—Ovens as found in the bakeries covered by this article are of three kinds:

(1) Peel ovens, so called because it is necessary to use a peel [1] in placing each pan of dough in the oven and in taking each pan of

[1] A peel is a thin and rather broad board with a long handle.

bread out of the oven. The employees who use the peel are called oven men.

(2) Drawplate ovens, so called because they have baking plates 4 or 5 feet wide and 6 or 7 feet long. One end of the plate has two legs or rollers. When a plate is withdrawn from the chamber of the oven, one end of the plate is partially in and rests on the oven and the other end rests on its legs which are on the floor of the oven room. Many pans of dough are placed on the oven plate. The plate is then returned to the oven chamber and the opening of the oven closed. After the plate has been in the oven the necessary period of time for baking, the plate is withdrawn again and unloaded. The employees who look after the ovens are called oven men.

(3) Traveling or automatic ovens are so called because equipped with endless chains operated by electric power. The chains have conveyors onto which pans of dough are either loaded by hand or are automatically unloaded from the conveyors of automatic steam proofers to the conveyors of the traveling or automatic oven at the feed end of the oven. The pans of dough are carried by the chains through the oven and unloaded from the chain at the delivery end of the oven. There are no oven men at traveling ovens. The employees who work at the two ends of the ovens feeding pans of dough or dumping bread from pans are called helpers.

Nineteen of the 21 bakeries under discussion are equipped with peel or drawplate ovens, or with both. Two are not equipped with either of these. The 3 bakeries covered in Baltimore are equipped with traveling ovens; 4 of the 5 in New York; 1 of the 5 in Philadelphia; and 2 of the 4 in Washington, making a total of 10 having traveling ovens. The capacity of these traveling ovens ranges from 2,000 to 5,000 loaves per hour. The baking period or time in the oven ranges from 25 to 45 minutes.

Wrapping machines.—All except 2 of the 21 bakeries studied are equipped with bread-wrapping machines operated by electric power. The capacity of the machines ranges from 20 to 60 loaves per minute.

Occupations.

RECEIVING clerks.—Receiving clerks receive and check bills of flour and other ingredients used in making bread, and keep a record of the quantity and kind received. In some bakeries they use small hand trucks for moving sacks of flour into the flour storeroom and from there to the hopper or chute leading to the blending machine, cut the cord by which the top or open ends of sacks are fastened, dump the flour into the hopper, clean empty sacks, and sweep and clean the storeroom. In other bakeries laborers perform these jobs.

Mixers.—Mixers in making up a batch of dough weigh or measure according to formula the specified amounts of flour, water, salt, milk, sugar, lard, malt, yeast, and any other ingredient that may be used in making the bread, deposit them in the mixing machine, close the machine, and start it by pressing an electric button or by turning a switch, turn off the power in like manner after the batch has been mixed, open the machine, and dump the dough from it into a dough trough. In bakeries in which there are no mixers' helpers, mixers

also shove the empty dough troughs from the fermenting room to the mixing room and filled troughs from the mixing room to the fermenting room, punch down or knead the dough while it is there as many times as specified in the formula or process, and dump it from the troughs to a chute leading from the fermenting room to a bench at which bench hands or hand bakers work, or to the hopper of the dividing or scaling machine.

In weighing flour for a batch of dough the mixer sets the automatic flour scales which are located between the mixing machine and the flour storage bin in a room above and starts the conveyor which carries the flour from the bin to the scales. When the correct weight has been made, the flow of flour is cut off automatically. Water is weighed in like manner by automatic water scales, which are also located above the mixing machine.

The time of bringing together the ingredients for a batch of dough and depositing them in the mixing machine, ranges as reported by the bakeries studied, from 1 to 10 minutes. Fifteen of the 21 bakeries reported 5 minutes.

Bench hands or hand bakers.—These workers are so called because they do their work by hand at a bench or table. The work consists principally of kneading or pounding dough used in making rye or Vienna bread or rolls; of dividing the dough into pieces of the weight required for loaves of bread or for rolls; of rounding, rolling, and molding these pieces into shape, making them ready for the oven pans; and of placing them in the oven pans.

Machine hands.—Machine hands (including dividers or scalers, rounders, cabinet men, and molders) are so called because they work at, operate, look after, and clean dividing or scaling machines, rounding machines, proofing cabinets, or molding machines.

Dividers or scalers.—These workers set the dividing or scaling machines for the weight desired for loaves of bread, start and stop the machine by pressing an electric button, and occasionally weigh scaled pieces of dough to ascertain whether or not the correct weight is being made.

Rounders.—Rounders are found only in bakeries in which the pieces of dough are not carried by conveyor from the dividing or scaling machine to the rounding machine. These workers pick up the pieces of dough as they drop from the dividing or scaling machine to a stand or table and drop them onto the rounding machines.

Cabinet men.—Cabinet men are found only in bakeries equipped with revolving proofing cabinets. They pick up the pieces of dough as they drop from the rounding machine to a stand or table and place them in the drawers of the proofing cabinet.

Molders.—In bakeries equipped with proofing cabinets molders open the drawers of the cabinets, take the pieces of dough out of the drawers, and drop them into the molding machine, or pick up the pieces as they drop from the molding machine and place them in oven pans. In bakeries not equipped with proofing cabinets or with conveyors which carry the pieces from the molding machine to the steam proofer the molders pick up the pieces as they drop from the molding machine and place them in oven pans. In bakeries equipped with conveyors that carry the pieces of dough from the molding machine these employees watch the pieces as they fall automatically

from the molding machine into the oven pans, and arrange such pieces as do not fall in the correct position in the pans.

Oven men.—In the bakeries studied oven men are divided into two groups. Those in the first group work at peel ovens, where it is necessary to use an instrument called a peel[2] in doing their work. A pan of dough is placed on the broad end of the peel by a helper and the oven man shoves the pan into the oven and pulls the peel from under the pan leaving the pan in the oven and, after the bread has been baked, shoves the peel under the pan and pulls it out of the oven. Those in the second group work at drawplate ovens, pull out the baking plate, load it with pans of dough, shove the loaded plate into the oven and after the bread has been baked pull the plate out of the oven.

Helpers.—In the bakeries covered, helpers are divided into four groups. Those in the first group assist the mixers as shown in the description given of the work of mixers. Those in the second group place the empty oven pans conveniently at hand for the bench hands or machine molders, set the pans filled with dough on the racks, and shove the racks into the steam proofing room. Those in the third group shove the racks from the proofing room to the ovens and assist the oven men in loading and unloading pans of dough or bread on and off the peel, and in dumping bread from oven pans. Those in the last group feed the traveling ovens by placing pans of dough on conveyors at the "feed end" of the ovens, or catch the pans of bread as they come from the "delivery end" of the ovens, and dump the bread from the pans.

Laborers.—Laborers (including blenders, cleaners, dumpers, pan greasers, porters, sack cleaners, sifters, sweepers, and truckers) do various kinds of unskilled work, such as cleaning and sweeping floors, greasing oven pans, and work of like character in the bread-making department of the modern bakery.

Wrappers.—These workers operate the electrical wrapping machines. There are two wrappers at each machine. One places the bread on the machine and starts and stops it by pressing an electric button, and the other takes the wrapped bread off the machine and places it on the bread racks.

Packers.—The packers make up orders of bread for the drivers or for shipment from bakeries, and place the bread on the bread racks, in baskets or shipping boxes. This task completes the preparation of bread in the modern bakery, making it ready for the use of the consumer.

[2] See footnote 1, p. 9.

Protection of Workers Under Mexican State Labor Laws.[1]

By ETHEL C. YOHE, OF THE UNITED STATES BUREAU OF LABOR STATISTICS.

Hygiene and Safety.

ARTICLE 123 of the Federal Constitution of Mexico, promulgated on February 5, 1917, has been called the "bill of rights" of Mexican labor, in that it affords through its labor and social welfare provisions definite protection for the laboring class.

This article prohibits the employment of women and young persons under 16 years of age in dangerous and unhealthful occupations.[2] It requires employers in agricultural, industrial, mining, or similar classes of work to furnish comfortable and sanitary dwellings for their workmen, the annual rent charged for them not to exceed 6 per cent of the assessed value of the property. Employers are also required to provide schools, dispensaries, markets, and other services necessary to the community. The adoption, in factories and shops, of sanitary conditions and safety devices is compulsory. The article provides that a worker may quit his employment before the expiration of the contract without being held liable for breach of contract if the employer, or his subordinates with his consent, maltreats the worker or his family. In such a case the employer shall either perform the contract or pay the worker an indemnity equal to three months' wages.

In this study of the labor and social welfare laws enacted in the several Mexican States dealing with the protection of workers, it will be plainly seen that article 123 forms the basis for these laws. The nine labor codes used in this study are as follows: Campeche, Chiapas, Vera Cruz, and Yucatan, 1918; Coahuila, 1920; Michoacan and Puebla, 1921; and Chihuahua and Querétaro, 1922; also the Hidalgo labor accident law of 1915, the Sonora labor law of 1919, and the labor and social welfare law of Sinaloa of 1920. The section on hygiene and safety regulations is based on a study of 12 laws, while 11 were used for the section on shop regulations, Hidalgo not having enacted any laws on this subject as yet.

Employers' Obligations and Responsibilities.

All of the 11 State labor laws (Campeche, Chiapas, Chihuahua, Coahuila, Michoacan, Puebla, Querétaro, Sinaloa, Sonora, Vera Cruz, and Yucatan) require employers in agricultural, industrial, mining, or similar classes of work to furnish comfortable and sanitary dwellings for their workmen, for which they may charge rents not exceeding 6 per cent annually of the assessed value of the property. This applies only to those establishments employing more than 100 workers. The laws of 10 States (all except Coahuila) further

[1] The following sources were used in the preparation of this article: Campeche, Codigo del trabajo, Campeche, 1918; Chiapas, Ley reglamentaria del trabajo, Tuxtla Gutiérrez, 1918; Chihuahua, Ley del trabajo, Chihuahua, 1922; Coahuila, Ley reglamentaria del artículo 123 de la constitución géneral de la república, Saltillo, 1921; Hidalgo, Ley sobre accidentes del trabajo, Pachuca, 1915; Michoacan de Ocampo, Ley del trabajo número 46, Morelia, 1921; Puebla, Codigo de trabajo, Puebla, 1921; Querétaro, Ley del trabajo, número 34, Querétaro, 1922; Sinaloa, Ley del trabajo y de la previsión social, promulgada en el decreto número 166, Culiacan [1920]; Sonora, Boletín Oficial, Hermosillo, Apr. 29, 1919, and May 4, 1919; Vera Cruz-Llave, Ley del trabajo [1918], Jalapa, 1922; Yucatan, Codigo del trabajo, decreto número 386, Mérida, 1918.

[2] A more detailed study of this provision may be found in MONTHLY LABOR REVIEW, November, 1923, pp. 198 to 201.

specify that the employers shall also provide schools. The establishment of dispensaries and other services necessary to the community are required of employers by the States of Campeche, Chiapas, Chihuahua, Michoacan, Puebla, Querétaro, Vera Cruz, and Yucatan. Five States (Campeche, Chiapas, Chihuahua, Michoacan, and Yucatan) stipulate that when the population in a labor center exceeds 200 inhabitants the employer must provide a tract of land of not less than 5,000 square meters for the establishment of public markets and the construction of buildings designed for municipal services and places of amusement.

According to the laws of Campeche, Coahuila, Hidalgo, Puebla, Querétaro, and Yucatan, all employers must see that the work is done under the most favorable conditions from the standpoint of the safety and health of the workers.

Under the laws of 11 States (Campeche, Chiapas, Chihuahua, Coahuila, Michoacan, Puebla, Querétaro, Sinaloa, Sonora, Vera Cruz, and Yucatan) employers are obliged to observe, in factories, workshops, and other industrial establishments, the legal requirements as to sanitation and health and to adopt adequate measures to prevent accidents in the use of machines and other instruments so as to give the best guaranty for the health and life of the workers compatible with the nature of the work. Employers in Campeche and Yucatan who do not live up to this requirement will be subject to the penalty imposed by the penal code for such an offense, as well as to the civil liabilities involved. The law of Hidalgo states that employers are obligated to use every scientific measure to prevent industrial accidents. The use of defective machinery, tools, and other equipment is prohibited, as well as the employment of incompetent workers. A fine of from 10 to 1,000 pesos ($4.99 to $498.50, par) may be imposed on those employers who do not comply with the law in these respects. An additional requirement is made of employers in the State of Michoacan and Vera Cruz. They shall adopt adequate measures to prevent occupational diseases, heeding just recommendations made by the workers. Employers in Sinaloa and Sonora are obligated to prevent, if possible, the spread of infectious diseases.

In Chihuahua employers are required to give to each worker a printed notice specifying precautions to be taken to avoid accidents in the handling of machinery and other equipment, and the workers must comply with these instructions. The Querétaro law merely stipulates that employers shall notify the workers when the defective condition of a machine endangers their welfare. The directors of an enterprise in Sonora shall post warning notices in all dangerous places. Furthermore, safety devices shall be placed, whenever possible, on machines and other equipment, and all scientific measures shall be used to prevent accidents.

A site selected for a factory or workshop in Chihuahua must be approved by the sanitary authorities and meet the requirements of the sanitary code and police regulations, and must not be damp, dangerous, or unhealthful.

A person employing a worker to operate machines, etc., who has not the certificate required by the technical section of the labor department of Campeche shall be punished by a fine of from 50 to 500 pesos ($24.93 to $249.25, par).

First-aid, Medical, and Hospital Treatment for Employees.

The laws of 11 States (Campeche, Chihuahua, Coahuila, Hidalgo, Michoacan, Puebla, Querétaro, Sinaloa, Sonora, Vera Cruz, and Yucatan) contain provisions requiring employers to provide first-aid treatment immediately, as well as necessary medicines, in case of accident to the workers. Medical treatment by a doctor, at the expense of the employer, for workers who suffer accidental injury is prescribed under the laws of all the States except Michoacan and Querétaro. In establishments in Coahuila employing more than 100 workers, the employer must employ a licensed physician to attend the workers. The States of Campeche, Coahuila, Puebla, Sinaloa, Sonora, Vera Cruz, and Yucatan specify in their laws that employers shall maintain the necessary equipment to aid accident victims. If an accident occurs in a factory, workshop, or other labor center in Chihuahua, the employer must notify the city authorities of that fact within 24 hours.

In the States of Sinaloa and Sonora, hospital service for not more than three months is to be furnished by the employer to those workers who are ill through no fault of their own. The law of Chihuahua relative to hospital service differs from that of Sinaloa and Sonora in that at least 100 must be employed in the factory or workshop and that the hospital treatment is to be furnished for two months instead of three. Hospitals established in accordance with the provisions of this law shall be supplied with medicines and necessary equipment, shall be kept in a sanitary condition, and shall be attended by the company physician, who shall act as an assistant to the superior health council in addition to his regular duties.

Illness of the workers which is not chronic, and which has not been contracted through any fault of their own, may be treated by a physician at the employer's expense in Chiapas (providing this illness does not last more than a month) and Coahuila.

When an enterprise in Michoacan has a capital of 50,000 pesos ($24,925, par) or more and is more than 3 kilometers (1.9 miles) from a town, the employer must provide a physician and medicines free of charge to his employees.

An employer in Chihuahua has the right to require a medical examination of any worker who requests employment of him.

Employees' Obligations.

In case of grave danger in the establishment, or in emergencies, the workers shall give assistance in every possible way, under the laws of Campeche, Chiapas, Chihuahua, Coahuila, Michoacan, Puebla, Querétaro, Sinaloa, Sonora, and Vera Cruz. In these States, as well as in Yucatan, all workers must abstain from imprudent acts which may endanger the safety of themselves, of their fellow workers, or of the factory, shop, or other work place.

In Chihuahua workers suffering with infectious diseases may not be employed. Conflicts arising under this provision shall be settled by the sanitary authorities. A worker who has an infectious disease must be quarantined immediately and not be permitted to work until all danger of contagion has passed.

Employees in factories, workshops, or other industrial establishments in Sonora must not remove, damage, destroy, or prevent the

use of any safety device or means of protection in the establishment. Furthermore, they may not deface, destroy, conceal, or damage any notice intended for the information and protection of the workers.

Specific rules and regulations concerning hygiene and safety in the factories, workshops, and other industrial establishments are given in considerable detail in the State laws and are here considered topically.

Ventilation and Air Space.

All workrooms in factories, workshops, and other industrial establishments shall be provided with proper and sufficient means of ventilation, according to the laws of Campeche, Chihuahua, Michoacan, Puebla, Querétaro, and Yucatan. Two square meters (2.39 square yards) of floor space and 9 cubic meters (11.77 cubic yards) of air space are required for each employee in the State of Chihuahua. The laws of Michoacan and Yucatan place the minimum amount of air space at 10 cubic meters (13.08 cubic yards), while the Puebla law requires 7 cubic meters (9.16 cubic yards) for each employee. The ventilation must be so regulated as to prevent drafts from endangering the health or comfort of the employees, according to the law of Chihuahua. In the State of Puebla, if, owing to the nature of the manufacturing process carried on in the factory workroom, excessive heat be created therein, a sufficient number of windows shall be provided. There shall be posted in all factories, workshops, and other industrial establishments in the State of Yucatan a notice specifying the number of persons who may be employed in any room of a factory.

Sanitation.

Six of the States (Campeche, Chihuahua, Michoacan, Puebla, Querétaro, and Yucatan) require all establishments to be kept in a clean and sanitary condition. The law of Chihuahua further specifies that establishments must be cleaned before work begins and that the premises must be kept free from all garbage and rubbish.

The law of Puebla contains a provision to the effect that floors in factories, workshops, and other industrial establishments shall be washed carefully at least once a day, either before or after working hours but never during that time.

All workshops, factories, offices, and business stores in Chihuahua shall provide sanitary cuspidors and post a conspicuous notice stating the danger of careless expectoration.

Emanations.

The laws of Campeche, Chihuahua, Michoacan, Puebla, Querétaro, and Yucatan stipulate that if, in the course of the business carried on in any workroom of a factory, dust, gases, fumes, vapors, fibers, or other impurities are generated or released in quantities tending to injure the health of the employees, proper devices to remove such impurities from the workroom shall be provided. In Chihuahua if, due to the nature of the industry, smoke is given off, pipes or chimneys shall be maintained for its disposal, so as to prevent fire and its becoming a nuisance to the neighborhood. If necessary, the employer will be obliged entirely to eliminate the smoke.

Drinking Water.

There shall be provided in every factory at all times for the use of employees a sufficient supply of clean, cool, and pure drinking water, according to the laws of Chihuahua, Michoacan, Puebla, Vera Cruz, and Yucatan. In Chihuahua the use of a common glass or cup is prohibited. Sanitary drinking fountains approved by the superior health council may be furnished or a steady stream of water with moderate pressure may be installed.

Waste Water.

Waste water from factories, workshops, and other industrial establishments in Chihuahua, unless purified by a special chemical process, may not be thrown into channels of water which are used for domestic and agricultural use, but must have separate conduits.

Toilets.

There shall be provided in all factories, workshops, or other industrial establishments in the States of Chihuahua, Puebla, and Yucatan a sufficient number of clean and well-ventilated toilets. The laws of Chihuahua and Yucatan require separate toilets for each sex. There shall be at least one toilet for every 25 persons employed, the floors thereof to be of waterproof construction, according to the law of Puebla. In Chihuahua one toilet must be supplied for every 30 persons.

Lavatories and Baths.

The laws of Chihuahua, Michoacan, Puebla, Querétaro, Vera Cruz, and Yucatan require establishments to provide and maintain adequate and convenient wash rooms or washing facilities for employees. In Michoacan and Vera Cruz, if the city authorities have not furnished public baths, employers must provide and maintain them. In industrial, mining, or like enterprises the nature of which makes it necessary that workers take their meals within the establishment, the employers are required to provide lavatories for the benefit of the workers, according to the laws of Michoacan and Querétaro. The law of the latter State stipulates that if the workers do not use these facilities, the city authorities may compel them to do so.

Lighting.

In every factory, workshop, or other industrial establishment in the States of Chihuahua, Vera Cruz, and Yucatan, proper lighting must be provided. In Yucatan the lighting in factory workrooms shall be such as not to cause strain on the vision or glare in the eyes of the workers. The law of Chihuahua stipulates that when the natural light in factories does not suffice, artificial illuminants, preferably electricity, shall be used.

All gas jets and other lights in factories in Puebla must be properly inclosed in glass globes, or in metal coverings, if the establishment uses or produces inflammable materials.

Doors and Exits.

All doors in factories, workshops, and other industrial establishments in the States of Chihuahua, Puebla, and Yucatan shall open outward. No door or other opening shall be obstructed or locked during working hours unless the locks are very simple and easily manipulated, according to the laws of Puebla and Yucatan. In Puebla exits shall be indicated by means of conspicuous signs. In Chihuahua and Puebla entrances to factories shall be large, and an adequate number of doors be provided in all factories, workshops, and other industrial establishments.

Alcoholic Beverages.

The carrying of alcoholic beverages into factories, workshops, or other industrial establishments is strictly prohibited in the States of Michoacan, Querétaro, and Yucatan.

Fire Protection.

The laws of Chihuahua and Yucatan require all factories, workshops, and other industrial establishments to provide and maintain a fire-extinguishing apparatus. The Chihuahua law also requires that in order to prevent fires great care shall be taken in the use of lamps. It further provides that inflammable substances may be manufactured only in buildings of fireproof construction, and stipulates that storage rooms containing raw materials and the finished product shall be separate from workrooms in which inflammable articles are manufactured, wherein electric lights or safety lamps should be used exclusively. The law of Puebla requires gas pipes to be of metal, and lighting fixtures not to be near the inflammable parts of the building, the machinery, or the materials.

The Puebla law prescribes also that inflammable liquids and substances shall be kept in closed metallic receptacles. These, as well as gas meters and oil supplies, shall be stored in a safe place and may not under any condition remain in the corridors or near the staircases. The use of combustible liquids for lighting purposes is prohibited in Puebla, unless the apparatus is equipped with all necessary precautions to prevent the spreading of gases. If used, these liquids must be taken into the factory during the day and before the work begins.

Floors and Stairways.

The law of Chihuahua requires floors in all establishments to be waterproof and smooth.

All stairways in industrial establishments shall be of solid construction and provided with proper handrails, in the States of Chihuahua and Puebla. The law of the last-mentioned State contains the added requirements that the stairways shall be of fireproof construction, and that there shall be an adequate number to permit immediate egress in the event of a fire or other emergency.

Roofs and Walls.

The roof and walls of a factory building should be well constructed, so as to prevent sudden changes in temperature therein, according to the law of Chihuahua.

Dressing Rooms.

According to the law of Yucatan, separate rooms equipped with washstands shall be provided for each sex, when the nature of the work necessitates the changing of clothes. In manufacturing and industrial establishments in Chihuahua the workers shall be provided with dressing rooms.

Recreation Halls.

In Querétaro the employer is obliged to furnish recreation rooms for his employees.

Railings.

Two States (Chihuahua and Puebla) require all shafts, openings, deposits, containers of corrosive or scalding fluids, and boilers to be provided with railings or similar protection.

Eating in Workrooms.

Establishments in Puebla which produce poisonous substances or in which injurious gases are emitted may not allow their workmen to eat their lunches inside the workrooms.

Disinfection.

Factories and workshops in Chihuahua shall be disinfected once a year and whenever, in the judgment of a doctor or the sanitary authority, there is any suspicion of the appearance of an infectious disease.

Accident Prevention in the Use of Machinery.

The following provisions contained in the law of Chihuahua have as their object the prevention of accidents, as far as possible, in the use of machines and similar equipment in factories, workshops, and other industrial establishments: Machines shall be so arranged, in large rooms, as to avoid danger to the workers. They shall be firmly placed on a solid foundation away from the partition walls, in order to avoid transmitting vibrations to the adjoining walls. Dangerous machines and those run by electricity shall bear conspicuous placards, marked "Danger." According to the laws of Chihuahua and Puebla, all steam, gas, or electric motors, hydraulic rollers, turbines, and the like shall be so guarded by railings as to be accessible to the operators only and not to the other workers. These States require the aisles between machines to be at least 80 centimeters (2.6 feet) wide and the flooring to be level, not having any weak or yielding parts. In Chihuahua and Puebla all connecting rods, upright posts, balance beams, interlocking wheels, leather belting, transmission cables, rollers, friction cones, and in general all projecting, moving, and dangerous parts of machines shall be substantially guarded. Before the starting and stopping of all machines, effective signals shall give ample warning. An effective device to separate each machine from the general power shaft shall be provided for the use of the manager and machinists in a factory or workshop in Chihuahua and Puebla, and in Puebla emergency stops for the motors shall also be provided. The law of Yucatan contains the following provisions on this subject: All elevators, cranes, and balance beams attached to a steam, oil, or gas motor, as well as all dangerous parts of machinery and transmission apparatus,

shall be guarded for the protection of the workers. All boilers used for generating steam shall be provided with safety valves, manometers, and water gauges to indicate the pressure of the steam and the height of the water in the boiler. The testing faucets shall be kept in good order, and the boilers must be emptied and cleaned weekly. Each boiler must bear a label stating the maximum amount of pressure it can stand.

Inspectors may order defective machines stopped, according to the laws of Campeche and Yucatan. Such machines may be run again only after the machine has been repaired and a new authorization has been obtained. A penalty of from 50 to 500 pesos ($24.93 to $249.25, par) shall be imposed for an infraction of this regulation.

Special Regulations Required in Certain Industries.

The law of Chihuahua gives in detail a list of industries which must observe definite regulations for the prevention of occupational diseases and industrial accidents. Among the more important industries are the following: All chemical, pharmaceutical, and bacteriological laboratories; factories producing gunpowder, cartridges, nitric, sulphuric, and carbonic acids; manufactories of poisonous and alcoholic substances; and printing and engraving shops.

The regulations are as follows: (1) The dry pulverization of irritating and poisonous materials shall be done in a closed machine (Chihuahua and Puebla). (2) Acids shall be kept in well-constructed containers, while explosive and poisonous substances shall be stored in safety boxes labeled "danger" or "poison." (3) In those industries likely to cause occupational diseases the company physician is to keep close watch for the initial symptoms of such diseases, and upon their appearance in any workman, such workman is to be taken off that work and given prompt treatment. (4) The employer shall furnish, at his own expense, work clothes, caps, gloves, eyeglasses, masks, and certain pharmaceutical preparations for the workers, where they are necessary, and the workers shall be obliged to use them. (5) In all factories in which fumes or gases of a poisonous nature are given off, the employers must use every scientific measure to collect and dispose of them. If, in the opinion of the sanitary authority, this is impossible, the condition of the air must be carefully watched and work stopped when any danger appears. (6) Industries using hides, horsehair, old rags, etc., as raw materials must first have them disinfected. If the workers' hands are injured in any way, they shall be protected. (7) In the paper and pasteboard industries, special places shall be designated for the deposit of raw materials, from which they may be removed only after they have been moistened and placed in closed bags or boxes with lids. The workers who do this must be protected by caps, work clothes, and cotton respirators, and must keep their hands and faces clean. (8) In the glass-bottle industry the use of mechanical means for bottle blowing is obligatory. If, however, in the judgment of the sanitary authority, the establishment can not afford to use the mechanical process, the glass blowers' pipe may be used, but by only one person after it has been disinfected, and after the doctor has inspected the operator's mouth. (9) In the tobacco industry pregnant women and nursing mothers shall wear work clothes and

cotton respirators. (10) In those industries in which employees work under high atmospheric pressure and in poison laden air they shall be examined carefully by the doctor. The workday in such industries shall be shorter than the ordinary workday, depending upon the intensity of the pressure. Before going into corridors, shafts, or conduits in which dangerous atmospheric conditions are thought to be present, air should be tested scientifically, and great care should be taken to maintain respirable air in that vicinity. (11) In repairing electric cables and telephones and in the construction of buildings, sewers, and tunnels, employers shall provide the workers with the necessary equipment for their protection and safety.

Regulations passed by other States on this subject are as follows:

(1) In mines, drainage systems, chemical plants, and in general all undertakings in insanitary regions in Michoacan and Vera Cruz, the spread of malarial or infectious diseases should be prevented as far as possible, cooperation being had with the sanitary authorities.

(2) In establishments in Puebla in which organic substances are employed, the floors shall be waterproof and smooth, and the walls shall be of cement or other easily washed material. The floors and walls shall be washed with a disinfectant whenever necessary. Fragments of organic substances may not be left in the workrooms unless immediately placed in closed metallic containers, which must be washed daily.

(3) The law of Puebla requires the installation of apparatus to secure good respiration in flour mills and similar enterprises in which fine dust is emitted to such an extent that it is injurious to the health of the workers. In order to carry off deleterious gases, ventilators shall be attached to the apparatus from which such gases are emitted.

(4) The law of Querétaro requires employers of workers in tunnels, mines, drainage works, cyanid plants, and in general all work which is carried on in unhealthful regions, to take every measure to improve conditions and to prevent the spread of malarial diseases.

Miscellaneous Provisions.

In Chihuahua, in order to install boilers, motors, or cables for light or for motive power, a written permit must be obtained from the municipal authorities, subject to the provisions of the sanitary code and the police regulations. Factories which manufacture inflammable liquids or explosive substances are subject to the provisions of the sanitary code and the police regulations and shall be located outside of towns and observe all precautions prescribed by the superior health council. Factories, workshops, and like buildings must be constructed in accordance with the requirements of the sanitary code. Failure to comply with the sanitary requirements of the labor law and the sanitary code is punishable by fine. In work in coal mines, oil wells, and similar classes of work the storage, transportation, and handling of explosives are subject to the regulations of the police.

In the State of Michoacan the superior health council is authorized to make additional regulations concerning hygiene and safety.

It is left to the municipalities in Puebla to prescribe detailed rules for sanitation and safety, especially as regards ventilation,

light, drinking water, emanations, fire precautions, and special rules for dangerous occupations, but these regulations must accord with the requirements of the superior health council. The municipal authorities, in conjunction with the labor and social welfare department, shall see that these provisions are enforced. The manufacture of explosive materials must be conducted outside the towns, and the precautions prescribed by the labor and social welfare department observed. A fine of from 10 to 100 pesos ($4.99 to $49.85, par) shall be imposed on those not complying with the safety and hygiene provisions.

The superior health council of Querétaro may establish additional regulations concerning hygiene and safety in this State, to which all employers shall conform.

According to the laws of Campeche, Coahuila, and Puebla, any modifications in the regulations pertaining to the improvement in safety and hygiene may be enforced immediately without waiting for the approval of the labor department, or, in the case of Coahuila, the board of conciliation and arbitration.

As in article 123 of the Federal Constitution, all the States allow a worker to quit before the expiration of his contract if his employer or his family or subordinates with his consent, maltreat the worker or his family.

Practically all of the Mexican State laws provide for labor inspectors, whose duty it is to see that all safety and hygiene regulations are carried out.

Shop Regulations.

OF THE 11 available Mexican State labor laws which deal with the protection of workers (Campeche, Chiapas, Chihuahua, Coahuila, Michoacan, Puebla, Querétaro, Sinaloa, Sonora, Vera Cruz, and Yucatan) all contain provisions requiring shop regulations (*reglamentos de los talleres*) in industrial, commercial, and agricultural establishments, in permanent labor camps, and other labor centers. The purpose of this provision is to establish a basis for harmonious relations between employer and employee.

Formation and Approval of Regulations.

The laws of three States (Chihuahua, Sinaloa, and Sonora) stipulate that workshop rules be drawn up by the employers, after which they must be approved by the central boards of conciliation and arbitration. In three States (Michoacan, Querétaro, and Vera Cruz) such rules are drawn up by a commission composed of two representatives each of the employer and the workers, while in Puebla the commission has three representatives each of the employer and workers. In the laws of the other States (Campeche, Chiapas, Coahuila, and Yucatan) the regulations are drawn up by common agreement (*común acuerdo*) of workers and employers. While the laws of Campeche and Puebla require the labor bureau to approve shop rules, Coahuila requires the municipal board of conciliation and arbitration to sanction them, and the other State laws designate the central boards of conciliation and arbitration for this purpose.

Posting of Regulations.

A legible copy of the regulations is to be posted in a conspicuous place on the premises, and the workers are not to be denied the privilege of obtaining copies, according to the laws of Campeche, Chihuahua, Coahuila, Puebla, and Yucatan.

Agreement of Shop Rules with Laws and Contracts.

In seven of the States (Campeche, Chihuahua, Coahuila, Michoacan, Querétaro, Sonora, and Yucatan), the provisions of the regulations must agree with the terms of the individual and collective contracts and with the labor laws.

Workmen who enter the employ of an establishment after the works regulations have been adopted and put into effect are obliged to submit to them, according to the laws of Campeche, Coahuila, Puebla, and Yucatan.

Contents of Regulations.

All 11 State laws agree in a general way that the shop regulations must contain clear and exact rules, to which employers and employees are subject. The laws of Campeche, Chihuahua, Coahuila, Puebla, and Yucatan, however, give in detail the specific points which must be included in the shop rules in their respective States. The following requirements, in substance, are in force in these States: The regulations shall contain a statement of the rate of wages or earnings and the manner of determining them; the time and place of payment; the time of assigning materials and receiving work done outside of the establishment; the hour of beginning and of stopping work; and the time allotted for rest periods and for the noonday meal. There shall be instructions in the shop regulations for the cleaning of machinery, other apparatus, and the interior and exterior of the factories, specifying when this shall be done and indicating precautions to be taken. Workshops should maintain first-aid equipment, and practical instruction in first aid should be included in the shop rules. Under the laws of these States the rights and obligations of the managing personnel and inspection officers are to be clearly defined. The recourse granted the worker in the event of differences or difficulties arising in the relations between employer and worker must be stated in the rules. An act which is detrimental to the worker or which limits his liberty is prohibited by the laws of Coahuila, Michoacan, Puebla, Querétaro, and Sinaloa, and should be so stated in the rules. Any other provisions, common to labor codes, for the better execution of the work, may be added to the regulations.

The following provisions appear less frequently: 1. Stipulation as to giving the employee notice of the termination of his work (Campeche and Coahuila); 2. Provision specifying penalties and fines which may be imposed on account of infraction of the rules, and when and by whom such action is to be taken (Campeche, Puebla, and Yucatan); 3. Provision for a safe and healthful place of employment (Campeche, Coahuila, and Puebla); 4. Provision for the designation of representatives of the employers' interests in the management and inspection of the work and of representatives of the workers'

interests (Chihuahua and Puebla); 5. Statement of the quality of an apprentice's work necessary for promotion to the class of laborer (Coahuila); 6. Regulation prohibiting abuse of the workers, by word or deed, by managers, section bosses, clerks, agents, and caretakers (Chihuahua, Coahuila, Michoacan, and Querétaro); 7. Regulation forbidding managers to bring pressure to bear on workers to quit work or to resign from unions or associations to which they belong (Coahuila, Michoacan, and Querétaro); 8. Statement of the restrictions on the inspection rights of the worker (Puebla); 9. Provision indicating the length of time within which the worker or employer may give notice of his intention to suspend work even if the law or the labor contract does not provide therefor (Puebla); 10. Specification of the duties of each worker in the different departments, as well as those of the department chiefs, from the lowest to the highest (Puebla); 11. Designation of a person to whom the workers may present complaints and the form thereof, and fixing 10 days as the maximum time for a reply, the only exception being in the event of an emergency (Puebla); 12. Designation of the person who shall give the workers orders (Puebla); 13. Provision prohibiting employers from withholding the wages of a worker on the pretext of a fine (Yucatan); 14. Designation of the method by which syndicate representatives may make collections in the workshops for insurance funds, especially invalidity, life, unemployment, and accident insurance (Puebla).

Labor Inspection.

In seven States (Campeche, Chiapas, Chihuahua, Coahuila, Hidalgo, Michoacan, and Yucatan) provision is made in the laws for labor inspectors, whose duty it is to see that the shop regulations are enforced. Under the laws of the State of Campeche, appeal to the chief of the labor department may be had from decisions and orders of labor inspectors which are thought to be unjust.

Procedure in Case of Crimes.

According to the laws of Campeche, Chiapas, Chihuahua, and Sonora, in case of the commission of a crime, if there is no established public authority in the labor center, the employer shall detain the person responsible, furnish the victim with necessary aid, investigate the facts, and make an immediate report to the nearest authority.

Submission of Rules to Labor Department.

The law of Campeche provides that after shop regulations have been drawn up, they shall be sent to the department of labor, which shall specify a period of five days within which the workers may make comments or criticisms. Three days after the termination of this period the department shall give its decision and return the regulations for their observance.

Penalties for Violations of Regulations.

The laws of three States (Campeche, Puebla, and Yucatan) stipulate that no punishment may be imposed on the workers for violations of regulations, unless they have been incorporated in the shop rules.

These laws also contain provisions to the effect that a worker shall be given notice of any punishment imposed on him within three days from the time it is imposed, so that he may appeal his case to the board of conciliation in Puebla and Yucatan or to the department of labor in Campeche. According to the law of Puebla, if the board of conciliation and arbitration decides that the worker has been punished without just cause, any wages which may have been withheld must be paid to him, but on the other hand, if the board decides that the worker's conduct deserves it, his punishment may be increased. In the State of Chihuahua, when the regulations are violated by either the employer, his representative, or an employee, a written notice must be sent to the central board of conciliation and arbitration and the charges confirmed before the punishment is imposed. Every employer in Campeche and Puebla must keep a register of the names of all penalized employees, stating the date and nature of the violation, and the punishment imposed. This register shall always be at the disposition of the labor inspectors, under penalty of from 20 to 100 pesos ($9.97 to $49.85, par) fine, for each refusal.

Modification of the Rules.

The law of Campeche stipulates that any modifications of the rules which are being considered shall be posted in a conspicuous place in the factory or workshop for a week, and then sent to the department of labor for its approval. The States of Coahuila, Puebla, and Yucatan have laws which are practically the same as that of Campeche on this subject, except for the fact that the municipal boards of conciliation and arbitration must approve the modifications, but in Yucatan the modifications must be approved also by the central board of conciliation and arbitration.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS.

Underground Management in Bituminous Coal Mines.

AN ENGINEERING study of the problems of underground management in bituminous coal mines has been made by the United States Coal Commission with a view to discovering the methods by which operating costs can be reduced without any reduction in wage rates, which are said to amount to about 70 per cent of the cost of coal at the mine. The methods outlined in the report for securing this result include (1) development and efficient application of mechanical devices to replace hand loading; (2) better control and coordination of underground operations, particularly cutting, loading, and haulage; (3) standardization and coordination of the work of the individual mine worker; (4) standardization of details of construction and dimensions of mine cars, locomotives, track, and all other equipment; and (5) multiple shifting of work in the mines and preparation plants, thus obtaining greater production with the same plant investment.

The study is confined strictly to a consideration of details of underground management, and the problem of increased production is not correlated in this report to the problem of railroad car supply, excess mines, and the storage of coal, which are treated elsewhere in the report of the commission. While conditions vary in different mines in regard to the thickness and character of the seam, the quantity and nature of slate, and other physical conditions which necessitate differences in operating details, in general the manner of handling work underground is quite uniform, in fact, as much so as in many other large industries. But unlike many of the major lines of industry, in which there have been remarkable developments, there has been comparatively little progress in management methods in bituminous coal mining during recent years.

Type of Management.

IN striking contrast with developments in factory management during recent years, in which the details of laying out the plant, routing materials, and standardizing operations have been worked out so that there is a minimum of waste effort, the operation of underground mine work is usually under the control of the mine foreman or manager with his assistant foremen or face bosses. In some cases the assistant foremen are selected with care and are required to hold certificates of competency, given only after rigid examinations in accordance with the mining law. In many mines, however, these requirements are ignored and the mining experience of the assistant is his only qualification for the position. The need, moreover, is for competent men for these positions, since as many as 150 men may be working under one of these assistant bosses.

The work of the mine foreman and his assistants is practically the same in the common type of room-and-pillar operations and in the long-wall system. The duties of the foreman involve a visit, usually twice a day, to inspect the quality of the work of the men under his supervision. He has to see that coal is properly gobbed; that is, cleaned of slate and other waste and refuse which is thrown out by the miner in spaces where the coal has been cut, and that only clean coal is loaded; advise the men on the location and slant of shot holes and the loading required; examine the track in the room; inspect the timbering; sound the roof; listen to complaints; dicker with the men as to the amount of work, if any, on slate or rock which is to be done by the day or job; come to an agreement on claims for allowances for dead work; and take up grievances with the pit committee. The mine foreman is generally on good terms with the miners, since the miners or loaders (the terms are used interchangeably) and machine cutters are paid by the mine carload or on a tonnage basis, and the foreman is thus relieved of the necessity of driving the men.

The mining is usually done in rooms which vary in width when the coal is cut out from about 18 to 40 feet and in length from 200 to 300 feet, with pillars or walls of coal varying in size according to the physical characteristics of the coal bed, the roof, pavement, overburden, and system of mining, some walls being 12 to 60 feet in width. Rooms in flat mines correspond to stopes or breasts in steep workings. The loaders work alone, one man to a room or an entry (the underground passageway cut through the coal and used for haulage), or two men work alternately in two or three rooms. The assignment of men to their working places is simple, since a miner remains in the same room sometimes for several months before it is completed.

In addition to the duties of the foreman already outlined, he must supervise the cutting machines and coordinate, in the miles of underground workings under his supervision, the blasting, cutting, loading, and hauling of coal in order to avoid delays, and plan and direct the work of the men on a day wage (company men) who excavate rock in entries, lay track, place trolley wire, set timbers, and build permanent walls for roof support and temporary walls and brattices for ventilation. He, with his assistants, must also direct traffic and the removal of pillars in second mining or pillaring operations, and he has the responsibility for such other details as pumps and drainage, ventilation, condition of the roadbed, decision as to the amount and location of timbering, care of the injured, and clean-up of rock falls, while in general he must always consider the safety of the employees, the protection of the mine, and the largest and most economical production. From this enumeration of the duties of the foreman and his assistants it will be clear that the profits of the mine depend largely upon their ability and the quality of service they render. The report says that the responsibilities are too great for any but the best men available, and that the presence of so many incompetent men indicates a pressing need for better underground management. It might be thought that a solution of the problem would be found in a larger number of foremen, but the survey showed that conditions are unsatisfactory even where the fewest men are

under the supervision of a face boss, and that the solution will be found in the use and development of machinery and of methods of planning and control more in line with standards worked out in other industries.

Mining by Machinery.

THE greatest opportunity, not only for lowering costs, but for the improvement of mining conditions and the reduction of accidents, in the bituminous industry lies in the use of machinery to replace the laborious and solitary operation of hand loading. The transition from hand to machine labor in the industry is now going on. The first stage in the use of machinery was the employment of machines for undercutting the coal seam prior to blasting. There are several types of machine used for this purpose, the one most commonly in use at the present time being the short-wall machine which has developed from the breast machine. The breast machine, which is moved about the mine on an electrically-driven truck running on the regular mine track, is removed from the truck over steel bars used as slide rails to a corner of the face which is to be cut. This machine makes a cut 46 inches wide and about 5½ feet deep. A second cut is made slightly overlapping the first and so on until the entire width of the face has been undercut. The short-wall machine is of heavier construction than the breast machine, and the cutting bar is moved laterally across the full width of the working place in one operation. The cutting element of the arc-wall machine is similar to that of the short-wall machine, but it is mounted on a swiveling or turntable device which allows the making of a semicircular cut in the coal without unloading the machine from the truck, the cut also being adjustable in height from the pavement. Where it can be adapted to conditions its use is advantageous, because it eliminates the time wasted in loading and unloading, as compared with other machines.

With the use of other machinery, principally loading machines, there will naturally result a decrease in the amount of human labor required. This reduction in the number of men needed for a given production, however, will not revolutionize the industry, as did, for example, the introduction of automatic machines, such as spinning frames, in the textile industry. The transition will be slow because of the necessity of adapting machinery to the physical condition of different mines, and instead of requiring less skilled labor it will necessitate a higher type, requiring greater initiative than that now demanded from men who use only the pick and shovel. Two of the mines which were studied by the investigators were practically machine operated in the cutting, drilling, and loading operations, only four hand loaders remaining on special work in one of these mines. In several other mines machine loading was used in varying degrees.

It is stated that the cost of coal at the mines may be reduced as much as 30 per cent of the present costs; on the basis of such a reduction in only one-half of the bituminous mines in the country the actual net saving would amount to over $200,000,000 per year. This statement is based not upon theory but upon a thorough analysis involving detailed time studies of the operation of loading machines

and access to the confidential records of several companies. This figure may also be considered conservative, it is stated, as there will be supplementary savings as a result of the further development of the machine.

The studies of machine loaders by the investigators occupied several days in two mines and records of time studies in a third. There are several designs of loading machines. They may be on a truck, a track, or on a caterpillar tractor. The head of the machine is run into the pile of coal which has been shot down. One or two men are needed at the head to assist in collecting the coal on to the lower conveyor, which consists of a chain with suitable flights running on an inclined trough and fed, in some machines, by separate clawlike arms. The upper or discharge conveyor receives the coal from the lower one and discharges it into mine cars. As the pile of coal is taken away the head is moved either forward or sidewise into fresh coal by the aid of jack posts or by the mechanism of the loader itself. It requires one man to operate the machine and another may be required to help the haulage motorman adjust the discharge conveyor to the car. As soon as a room is cleaned up and the loading machine taken to the next room, it is ready for the machine cutter, followed by the electric drill and shot firing, and cleaning up falls of slate. A loader may load the same room twice in the same shift under good conditions.

A study of the actual loading time of large and small machines was made with a stop watch. The operation of three large loading machines, all of the same type, in two mines of the same company showed great uniformity and may be considered normal and representative of regular continuous daily production. The average time required to load a 4-ton car was 3.2 minutes, with a minimum loading time of less than 2 minutes. In one of the mines the loading time of a number of 4-ton cars was a little over 1 minute each. The total loading time, including delays in waiting for cars, averaged 5.6 minutes. The average tonnage per machine in 8 hours was 352 tons (of 2,000 pounds), but of the 480 minutes in 8 hours only 270 minutes, or 56.2 per cent of the time, were used in actually loading coal, the remainder of the time being divided between changing cars (25.1 per cent), moving the loader (13.6 per cent), and miscellaneous delays (5.1 per cent). With more continuous operation a large increase in production would be possible, and if the idle time were reduced to 20 per cent, as is considered possible with improved transportation, the output would be increased to 550 tons in 8 hours. It is evident, therefore, that there is a field for improvement in present methods of planning and operation of machines. The reduction of time spent in waiting for cars will have to be made through improvements in haulage methods. Modified methods of mine development will reduce the time in moving the loader, and saving time now lost through miscellaneous delays will be accomplished through better standardization and maintenance of equipment.

The data on small loading machines showed a smaller percentage of time lost because of various delays, 35.4 per cent instead of 43.8 per cent for the larger machines, but there was an average of 1.9 minutes between loadings waiting for cars instead of 1.4 minutes, showing that there was less efficient haulage in the mine with the small machines.

The average number of tons loaded per machine in 8 hours was 125, which, assuming a 20 per cent increase in efficiency of operation, would become 150 tons in an 8-hour day. It is evident from the data presented, the report states, that loading machines have already reached such a degree of efficient operation and magnitude of tonnage production that their eventual use throughout the industry is certain. In line with the development of machine loading is the necessity for performing the operations of cutting and drilling so as to keep pace with the loads. The arc-wall machine, already mentioned, requires less labor to operate per ton of cutting than any other cutting machine, and it has been found possible with one machine and two operators to cut for a loading capacity of 350 to 400 tons per day. It is necessary in machine loading to have the drilling done by a separate gang of men. The electric drill has been found to be cheaper and quicker than the hand auger, the speed of drilling being about five times greater than by hand.

A comparison of the average daily production of a mine in a two-week period in October, 1922, when the loading was done by hand, and of the same mine during a 6-day period after machine loaders were put in, shows that the average daily production per underground worker in the machine-operated mine was 11.2 tons as against 6.2 tons per underground worker when the loading was done by hand.

Much of the work now done by hand loaders is done by company men after machine loaders are installed, so that timbering, laying track in the rooms, cleaning up after the loader, and removing rock and slate can be done by men specially trained for the work. In addition these men work in a small area and can be more effectively supervised than when they are scattered in workplaces over a large section of the mine.

Loading machines at present are limited to a thickness of coal bed of about 48 inches or over. Satisfactory machines can undoubtedly be devised for thinner beds, although the thinner bed mines fall in the class of higher cost mines, and unless the coal is of exceptional quality should only operate on a market with large demand. Loading machines are best adapted to a sound roof, but are being used even when the roof is poor. The speed of the larger machines is so great that the danger of falls where the roof is poor is said to be appreciably reduced.

The use of the machine in mines having thick layers of shale or slate which can not be picked out of the coal fast enough to avoid delaying the machine loader may necessitate changes in the methods of cleaning. Instead of hand sorting at the face it may be necessary to install more and better cleaning devices at the tipple, and although the cost of such extra cleaning may be large, it will be more than offset in most mines by the saving in loading.

In addition to the saving in the cost of mining by the use of the coal loader, its use benefits the individual miner since it does away with the hardest and most lonesome work in the mine—shoveling coal—and, more important still, increases safety through concentrating and speeding up the work. In a hand-loading mine from 30 to 50 hand loaders may be working in an area of perhaps 25 acres, and these men may advance in their rooms for four months or until the maximum length of 300 feet is reached. With a machine loader working

in 7-foot coal the area being worked at one time can be reduced to about three acres and produce the same output. Under these conditions the foreman, instead of making the rounds once or twice a day, can be in constant touch with all the men and can give much more adequate supervision to all phases of the work.

While the room-and-pillar method can be used successfully in machine loading, the long-wall system, which reduces the time lost in changing cars and moving the loader, is preferable. The plan of operation is difficult to change in mines already being worked, but in new workings the long-wall retreating system is being used. In this system the main entries are carried clear out to the limits of the property, and with the aid of branch entries the cutting is begun on the outside circumference of the property and worked toward the shaft or opening, and the roof is allowed to fall in back of the working face as all of the coal is extracted. For this system a steel portable conveyor has been successfully used. One of the chief factors in long-wall mining, the danger of falls which injure miners or tie up traffic, is greatly lessened with large machine loaders, as the speed of excavating increases the likelihood of getting out of the way before the roof falls.

An enumeration of the accomplishments in the introduction of machinery up to the present time is as follows:

Electric motors with overhead trolleys are universally used for the haulage of trips on main lines and cross entries. The bottoms and partings and first-aid and office rooms underground, and sometimes (although in fewer cases than they should be) the workings themselves are lighted by electric lamps. Storage battery and reel motors and electric room hoists are widely superseding the mule for gathering from the working places. Undercutting of the coal by hand has been largely eliminated by the cutting machine. Drilling is still usually done by hand augers, but in machine-equipped mines the electric drill is coming into use. Ventilation has become a science giving sufficient fresh air in every room and passageway. Drainage is handled by pumps of plunger, piston, and centrifugal type—tandem for higher lifts—of the latest design. Outside machinery at tipples and power plants is sometimes highly developed. Watering with specially designed sprinklers is employed underground in the best equipped mines.

The greatest possibilities, therefore, lie in underground loading and the adaptation of other underground operations to it. Combined cutting and loading machines have so far not proved successful, although one has just been completed for long-wall operation in which the machine advances steadily into the face of the coal, undercutting it, while the coal falls with little or no blasting onto a conveyor with which the machine is equipped. The conveyor carries the coal to a haulage road, where it is loaded into mine cars to be taken to the tipple. Mine conveyors of various types are now being experimented with. Belt conveyors for outside work are frequently used for distances of several thousand feet, so that eventually hauling by cars and locomotives may be entirely eliminated.

The gains in mine operation through the substitution of machine for hand loading are summarized as follows:

Loading is performed at a fraction of the time and cost of hand loading.
Undercutting can be performed more systematically and efficiently.
Drilling is done by electric drills.
Hauling is simplified and trips can be scheduled more definitely and haulage costs reduced.
Timber is reduced in amount.
Roof falls less readily because of speed of progress and, in long-wall work, less working room required.

Concentration of workings produces large tonnage in small areas. Inspection and supervision is more effective because of smaller active area.

Cost of track equipment and maintenance is reduced by fewer rooms or, if long wall, no rooms at all.

Cost of drainage is reduced by the smaller active area.

Cost of ventilation is reduced for similar reasons.

Cost of plant construction per ton and maintenance is reduced through larger production per man.

Waste of coal will be lessened by larger recovery.

Safety—the most important factor in mining—is increased. This is due to concentration of area worked and closer supervision.

Control of Underground Operations.

ONE of the greatest difficulties experienced in the control of underground operations is the proper delivery of pit or mine cars to the miner. The miner's ability to do a good day's work is dependent upon the supply of cars. While the general schemes of transportation and trackage are as a rule well laid out, the actual operation of the system is often in the hands of the assistant foreman or face boss, or still more frequently is at the will of the man driving a mule or gathering locomotive.

The irregularity of distribution of mine cars resulting from this state of affairs has resulted in the equal turn, or "square turn," agreement with the union, which requires that in each period the same number of empty mine cars shall be offered to each loader. This is intended to prevent favoritism and the possibility of one miner being obliged to wait an unreasonable length of time for cars, while another miner in a location where the management wishes to push production might be given all the cars he could load. In nonunion mines the tendency, as shown by conversation with miners, was toward equalizing distribution as far as possible.

Problems of underground haulage are different in many respects from those of railroad transportation. The inside advance of terminals of a large mine often amounts to 1,000 feet daily, though only a few feet at each terminal. Without the complications of changing types and amounts of goods to be carried, perishable articles, blizzards, crop-moving seasons, etc., which the railroads have to meet, the mine railroad has many of the difficulties of the modern railroad and in addition special troubles such as roof falls, explosive gas, and multiplicity of terminals, 400 or 500 being not uncommon.

An analysis of haulage conditions in a number of mines showed great variations in the time elapsing between delivery of empties to the loaders, the number of haulage trips made, and the number of cars carried on a trip. The maximum time lost by the loaders waiting for cars in four representative mines in one day amounted to 2 hours and 45 minutes, and the minimum time 17 minutes, while the average time lost was 1 hour and 50 minutes, or 23 per cent of an 8-hour day. The time lost by gathering locomotives and drivers averaged 44 minutes, or 9 per cent of the working-day, and by the main-line locomotives and drivers 2 hours and 43 minutes, or 34 per cent of the day.

The problem in every mine is the necessity of providing the required number of empty cars to each miner on time, hauling the full cars to the parting and from there to the bottom or to the tipple, and returning the empties into the mine without congestion at any point.

The tendency in most mines, however, is to minimize the importance of traffic control, on the ground that the time lost by the miner due to lack of cars does not cost the mine anything, since the miner is on a tonnage or piecework basis, overlooking the fact that time lost because of car shortage or excessive topping of loads demanded by the management is ultimately reflected in demands for increased rates of pay.

The practice of extreme topping of the cars—that is, piling up the coal above the top by the careful stacking of lumps around the sides—results in a decrease in the number of cars allowed the miners and a small saving in costs to the operator but a decided decrease in the earnings of the miner.

The number of cars in actual use in several of the mines visited is not by any means proportional to the mine capacity and shows extreme variations. This is another question which has been in general given very little consideration from the engineering standpoint. It can be looked at from two opposing points of view. From the miner's viewpoint there should be enough empties so that he can avoid lost time, while the management is interested in sufficient cars to provide coal for continuous tipple operation. Under the present unstandardized operation of the mine transportation systems, when a mine is running at capacity the number of cars necessary to keep the miners supplied is always larger than the number necessary to keep the tipple supplied. With fairly efficient management, however, this condition would show too many men for the mine capacity rather than too few cars. In none of the cases in which there was a study made of the haulage system was there any definite allowance made for storage of coal in mine cars overnight to even up a part of the daily irregularity in railroad car supply. A large supply of mine cars is not, therefore, a solution of the problems of continuous tipple operation or elimination of lost time to the miner, but a proper planning and haulage system will go further toward settling the problem than the purchase of new cars.

In the present study there were large production losses demonstrated at the tipple—one principal cause, occurring over and over, being the incomplete dumping of the car. In one mine, in which the tipple was operating at only 81 per cent of its capacity, a large part of the estimated loss of 670 tons production in a day was due to this cause, which there had been no attempt to correct. Poor tipple design resulted in the loss of 160 tons daily. This loss was due to the necessity of stopping hoisting when a car containing rock was dumped, so that the miner could be docked for loading dirty coal. This condition was remedied so that such cars were taken care of automatically on a separate table. This method was found to be in effect in some of the mines, but it was not in general use.

There was great variation in the number of face bosses or section foremen in relation to the number of men employed. The proportion ranged all the way from 1 face boss to every 31 men in the largest of six mines to 1 to every 175. As has already been indicated, the solution lies in the better training of these men and in better organization generally.

To a large extent the work of all classes of underground workers is interdependent, and a failure on the part of one worker is likely

to tie up the work of a number of others. A surprising lack of knowledge was revealed of the length of time required to do different classes of work. Estimates by foremen, superintendents, and men as to the time necessary for various types of work were largely guesswork. The time necessary for one operation was estimated by different persons to take from 10 to 45 minutes and a member of the pit committee fixed the time for the same operation at 2 hours. In regard to the time required for the work of the company men, estimates varied as much as 50 per cent. Double shifts in several mines have effected an appreciable saving in mining costs, through saving of overhead and indirect labor.

Work of the Individual Miner.

THE skilled miner, in addition to being a trained specialist in shoveling, works between loading cars on drilling and loading, picking, setting props, and gobbing. The cooperation given both to tonnage men and company men by the mine management is said to be inferior to that of other industries. The major causes of dissatisfaction of the miner with his job are due to the failure to supply enough cars, to coordinate the duties of other workers on whom he depends, to furnish supplies as needed, to show him how to perform the work, and in general to make his work as easy as possible. When a miner may lose from one-fifth to one-third of the earnings he wishes to make because of the failure of the car supply, the result is inevitably great dissatisfaction. On the other hand, there are many cases of miners leaving their work before quitting time for trivial causes or because they have earned enough to satisfy them.

An analysis of the working time of the men in four mines is considered to be fairly representative of conditions in mines generally. In one mine 29 machine cutters left before the end of the day because there was no cutting to be done and 80 miners left during the same time because these places were not cut. More than 63 left the mine because they had earned all the money they wanted for that day, and this is said to be typical in varying degrees of most of the mines visited. This is due largely to the fact that existing piece rates have been based largely on the fact that mines operate only part of the year, so that when conditions are such that a miner is able to work steadily throughout the morning he frequently earns a wage which satisfies him in less than the eight hours of the standard workday.

"If it is possible," the report says, "through the elimination of some of the high cost mines, greater regularity of railroad car supply, and coal storage by the consumer, to reduce the daily intermittencies and level the seasonal demand, early quitting due to sufficient earnings will become more and more serious from the standpoint of good management. The development of the planning of the work to give the men the opportunity to work continuously while in the mine involves of necessity a spirit of cooperation on the part of the miners. These things are a matter of education of not only the miner but of the management, and not until both realize that their prosperity and success are interdependent will it be accomplished."

There is also a field for improvement in a study of the best way to perform hand operations so that there will be a minimum of fatigue

and waste effort, as, for instance, the proper way to handle a shovel to get the best leverage and easiest action. The weight of a shovelful of coal which will give with comparatively low lift the largest production per day with least effort has been found to be 21 pounds. Determination of the effects of different heights of throw and the analysis of the operations of drilling, setting props, and other work would be found to be of practical value.

Studies of two types of machine cutters, the short-wall machine and the breast machine, showed the time consumed in cutting the face of a room 26 feet wide and moving the machine 1,000 feet to its next place of work. The time for cutting does not represent standards, but does give a fair comparison of the two types of machines. It had been the custom in one mining district to assign one breast machine to cut for 14 loaders and one short-wall machine for 20 loaders. The first type consumed 82 minutes in the operation, while the second needed only 49.7 minutes to accomplish the same work. Based on the time of performance of the two machines, the short-wall machine should have been cutting for nine more loaders than the breast machine, instead of for only six more, and this because facts and standards for comparison were entirely lacking.

The machine cutters' wages in union districts are a percentage of the total rate per ton paid for mining the coal, and the proportions paid to the loader and the cutter are determined by agreement. Installing a new machine by which a cutter can cut more coal usually does not mean a change in the total mining rate but a readjustment of the proportion that the cutter and loader get of the existing rate. The cutter, naturally desiring to keep his share as large as possible, underrates the increased amount of work he can do with the machine, and the loaders, though far more numerous than the cutters, are willing to help them in keeping down the production per machine.

The tendency exists among miners as among other workers, the writer of the report says, when new machinery is being introduced to combat it and to limit its use wherever possible. The introduction of these machines has met with union opposition either in their use or by attempting to attain a rate of pay so high as to destroy their value from the standpoint of economy. The same conditions have been present in regard to the use of power shovels, a western operator states, the miners offering persistent resistance to their use, backed by the force of their organization.

Because of the variable conditions in different districts and different mines, a revision of wage rates would seem to be necessary, taking into account not only differences in the output of individuals when they are on a daily rate, but between different mines where the physical conditions vary so that there are great differences in the amounts of coal mined. No really scientific study of relative wages or relative rates has been made in the bituminous industry, though in certain other industries the union workers are taking the initiative in obtaining, with the aid of engineering talent, balanced pay for different types of work and the establishment of definite standards of production.

Payment by weight instead of by carload is advocated in the report because it brings an appreciable reduction in haulage costs and the

men are paid for their actual work accomplishment instead of for the average of the work of all the men together.

There are great differences in the different districts and mines in the rates paid loaders for dead work. An example of inequitable wage rates was the inclusion of part of the dead work in the rate per ton in one mine in which a time study was made. The coal seam averaged 5 feet 3 inches in thickness, and taking down and gobbing the slate up to 12 inches in thickness by the miner was included in his tonnage rate. Beyond that he was paid 7.56 cents per inch, lineal yard. When there was no slate, therefore, the miner's earnings were high, while they decreased correspondingly as the amount of slate increased. In fixing the rate it was assumed that conditions would average up to make the mining rate a fair one, but as a matter of fact, even if this is so, the individual miner is more likely to consider only his hourly earnings than to concern himself with the average. The result of this lack of uniformity in earning power is friction between foremen and the men, and difficulty in getting men to work where thick slate is found. Another mine in the same field, although prevented by the union contract from changing the rates, paid the men an additional amount for the extra time spent in taking out slate, with the result that the mine had all the men they needed for capacity production.

Development of Standard Equipment.

THE field for the development of standards of production in coal mining is a large one, since, so far as is known, the report states, no definite results have yet been obtained, although a beginning has been made in a number of different mines.

Standardization of equipment is also greatly needed. The idea that "every mine is different" has been responsible for much of the variation in weights of main-line track, gauge of track, and height and size of cars. In many of the more recently-developed mines in Kentucky, Virginia, and southern West Virginia the outside works, including the tipple, ventilating system, power plant, and repair shops, are planned and built according to the best engineering principles. The engineering features, which in general show the need of study in order to secure economy in operation, are the design of pumps, ventilation layout, kind of hoists, picking tables, transportation of slate, etc. A few of the mines visited were experimenting in regard to mine cars which would combine to the best advantage the elements of the largest practicable load, easiest throw for the men, and maximum freedom from repairs. Standardization of mine cars presents great opportunity for reduction of lost time to the miner, haulage costs, upkeep and repairs, and capital depreciation.

Method of Effecting Improvements.

THE report concludes with the following outline of suggestions for study and analysis. It is implied, not that all of these conditions are met in every bituminous mine, but that there is a very definite need in every mine for more thorough analysis of conditions and standardization of methods and equipment.

1. Machine Loading.

Extension of machine loading to reduce cost, increase safety, and relieve the laborer of hand shoveling.

Selection of type of loader or development of the loader design to fit local conditions.

Adoption of hauling system and control to fit machine loading.

Consideration in new mines of a modified type of development especially adapted to machine loading.

Arrangement of machine cutting, drilling, and loading of shots to fit machine loading.

Development of methods of removing slate and waste rock to avoid hampering loading.

Development of methods of sorting coal, and removing bone, at the tipple, to permit less hand sorting in the mine.

Adjustment of work of company men to small areas.

Redistribution of foremen and training to functional supervision.

Extension of the payment of incentives for standards of production to include miners and as many more of the company men as is found to be practicable.

2. Machine Cutting.

Adjustment of schedule to best advantage to coordinate loaders, either hand or machine, so as to avoid delays.

Analysis of time required in cutting, moving, etc., so as to adjust number of working places per cutter to physical conditions in the mine as regards size of room, height of seam, distance center to center of rooms, etc.

Determination of type and pattern of cutting machine best adapted to the mine with a view to scrapping present machines if substitution is proved economical.

Introduction of mechanical bit sharpening to reduce cost and increase uniformity.

Fixing of standard lengths of time for using bits before resharpening.

Examination of details of cutting and moving by detail job analysis to determine best and easiest methods of operating.

3. Drilling and Shooting.

Determination of best type of drill for the particular coal.

Comparison of power and hand drills as to relative advantages.

Comparison of standard times and methods of sharpening drills.

Formulation of standard instructions for number spacing and slope of shot holes under different conditions.

Specification of amount and kind of powder to use under different conditions based on tests of results in the mine.

4. Haulage.

Examination of present system to see if fundamental changes are needed, perhaps involving such features as shafts, entries, tracking and partings.

Study of local conditions such as hoist, tipple, track capacity, grades, distances, location and character of working places and available equipment to determine first, the most economical and serviceable operating methods, and second, the changes needed to produce these.

Establishment of plan for definite control of car supply to every miner based on character of working place, amount of dead work and ability of miner.

Determine economical cars per trip for different conditions.

Determination, by analyzing local conditions, of the proper number of mine cars to give desired results for miner, tipple supply and surplus.

Development of routine operating plan for dispatching and handling trips so as to give each loader the required amount of work and furnish required supply of cars at bottom or tipple.

Putting this plan of control into operation with proper functional supervision.

Study of various types of haulage, including conveyers, for gathering and other transportation.

Study advantages and disadvantages, both economical and personal, of weighing coal at tipple instead of paying by car.

5. Hand Loading.

Make detail job analysis of all operations, using the results for general study of the operation and for aid in solving the problems which follow.

Determine how many types of work a miner should do to best advantage.

Determine the relative advantages to miner and operator of one man to one room, two men to two rooms, and one man to two rooms.

Experiment upon size and weight and design of shovel to determine the best standard.

Fix upon the best method of handling a shovel and of shoveling to cars.

Instruct loaders as to easiest method of doing each kind of work and the proper sequence to follow and methods of gobbing.

Specify spacing of props for different roof conditions.

Standardize method of setting props and arrangement of wedges, caps or collars.

Develop standards for dead work through job analysis of each class of work, including determination of best method of measurement, these things to be decided in cooperation with the men to form a basis of standards of production and avoid most of the guesswork now in vogue.

Compare by job analysis and time-study the relative advantages of pick mining and machine mining in cases of questions.

Develop quality standards and sampling of coal for maintaining these.

6. Work of Company Men.

Make detail job analysis of all of the operations of company men.

Accumulate enough of this kind of data to formulate standards of production (such as have been effectively introduced in metal mining) for each kind of work handled under various local physical conditions.

Formulate plan of incentive so that the men may be paid on the basis of work accomplished by the individual or group.

Study the timbering to determine the best sizes of props, method of cutting wedges, relative value of wood and steel and concrete girders and of concrete arches, of making and placing concrete at branch entries and other locations.

Examine most economical methods.

Organize the delivery of supplies to miners and company men.

7. Underground Equipment and Maintenance.

Design best standard mine car studying standards adopted in other mines with a view to determining the best height and length for convenient throw, wood vs. steel, standards for wheel base, brakes, bumpers, bearings and couplings.

Record all haulage accidents for a period, including cars off the track, with cause, and location of accident, and, from this, study track conditions that require attention.

Establish method of and best materials for mine car lubrication. Simple apparatus for rerailing cars and with other similar tools.

Fix on best type of trolley shoe.

Determine best weight of track, type of ties, switches, tracks, etc., by study of defects and accidents and of life.

Standardize methods of lining up and maintaining track.

Determine best type of hanger to maintain alignment of wire.

Determine whether leakage in current can be reduced.

See that safety signals are adopted for haulage.

Examine types of automatic doors with a view to saving trappers, and at the same time insuring closing, if necessary even going so far as to install signal lights for the motormen.

Standardize methods of repairs of mine cars, motors and other equipment.

Establish (if not already in operation) running inventories of supplies, control of issues, and maintenance of repair parts.

8. Tipple Design and Operation.

Examine design of tipple with best engineering talent (in case this has not already been employed recently) for the purpose of most economical and safe operation, including in this study the hoisting machinery, the sorting tables, the conveyers, the crushers, the weighing apparatus, loading of railroad cars, handling of railroad cars and handling of waste.

Figure the economic advantage of reconstruction where necessary.

Make exhaustive study of relative advantage to miner and operator of weighing coal at tipple vs. mine car measurement.

Examine details for mechanical faults as regards dumping coal, handling of rock, signaling, etc.

Establish routine methods for examining the cleanliness of coal from individual miners and formulation of some plan to maintain the required quality.

Consider the establishment of methods of sampling coal for economical examination of ash, etc.

Study by job analysis the methods of sorting and throwing out bone with a view to making the work easier and of the required effectiveness.

If special cleaning is necessary, study both dry and wet preparation.

9. Ventilation and Drainage.

If installation is an old one or installed without expert engineering advice, review the entire system with a view to safety and economy of maintenance.

Examine particularly the economy of operation of the fans (since these take a large quantity of power) to see what improvements can be made.

Study various types of pumps in use in different mines and determine whether the best type is being used; if not, scrap the present pumps and replace.

Determine by experiment whether the best material is being used for pump linings.

Arrange in definite system of inspection for fans, pumps, and other running equipment to see that proper alignment and lubrication and repairs and supply of parts are being maintained.

Consider the introduction of mine sprinkling (if not yet established) and determine best method and frequency required for safety and personal comfort.

10. Development.

Study in great detail the present plan of development to see whether incidental or radical improvements are needed.

If a new mine is to be laid out, study economy of different plans, the most economical size of investment, and the type of development best suited to machine loading.

Study in detail the effect of size of rooms, depth of undercut, width of pillars, etc., and economy of operation.

11. Stocking Coal at Mines.

Study the problem of storage at the mine with a view, first, to evening up of railroad car supply on consecutive days and, second, with a view to keeping the mine running during slack periods. Include in this study various types of storage, such as excess mine cars on partings in the mine, trestles at tipple, and separate storage piles.

Reports of German Factory Inspectors for 1922.[1]

THE annual reports of the German factory inspectors have always been read with interest by social economists and all circles interested in the protection of workers, because they contain the personal observations and experiences of officials intrusted with the practical enforcement of protective labor laws.

In Germany each Federal State has its own factory inspection service. The Federal issue of the annual reports of the factory inspectors therefore contains a separate section for each individual State. In 1922, as in preceding years, the Federal minister of labor, in agreement with the State governments, charged the factory inspectors with the more thorough investigation of certain specially selected problems. The reports of the inspectors concerning these problems are briefly summarized below.

[1] Germany. [Statistisches Reichsamt.] Jahresberichte der Gewerbe-Aufsichtsbeamten und Bergbehörden für das Jahr 1922. Berlin, 1923. 4 vols.

General Economic Conditions.

THE prefatory words of the report covering the Free State of Hamburg may be considered as characteristic of the economic situation in all of Germany during 1922. After referring to the steady depreciation of the German mark the report says: "If the German commonwealth and its economic life have been maintained in spite of this depreciation, it was due only to the fact that the German workers, in the widest sense of the word, have shown a steadfast will to work. * * * The following report thus gives a picture of the undaunted industrial activity and the tenacious struggle to which a highly civilized nation is driven if it wants to save its life." Nearly all the reports show, however, what immense difficulties this "tenacious struggle" has to overcome. Thus the report for the State of Saxony speaks of a "pseudoprosperity caused by foreign orders and by purchases of goods by the native population, which, in the absence of a stable currency, invests its savings in commodities. In September, 1922, however, the situation took a turn for the worse, short time and reduced operation of industrial establishments became more frequent, and some establishments were forced to close down entirely." The report covering Berlin complains of the existing irregularity of employment:

> General conclusions that economic conditions are good should not be drawn from the increase in the number of employed workers. The continued and spasmodic depreciation of the mark and the uncertainty in the money market have made all business difficult. Lack of capital and raw materials has in many instances led to temporary dismissals of workers, and the greatly fluctuating unfilled orders on hand did not permit regular employment. Times in which there was hardly enough work to keep the workers busy during an eight-hour day were often followed by times in which overtime work could not be avoided if the employer was to be spared the risk of losing customers through declination of orders or tardy delivery.

In the report covering the inspection district of Dusseldorf there are to be found data indicating an increase in the number of establishments in operation as well as in the number of persons employed. The reporting inspector nevertheless takes a pessimistic view of the situation:

> As gratifying as these figures are in themselves, under existing conditions they can not, as in the preceding year, be considered as indicating a rehabilitation of the economic system. The hollowing out of the German economic system continues to progress rapidly; the steadily increasing impoverishment, the far-reaching lowering of the standard of living of large classes of the population, the selling out of all salable commodities, * * * can not, in spite of apparent prosperity, deceive anybody as to the rapidly progressing consumption and crumbling of the economic substance.

In several inspection districts, as, for instance, in those of Erfurt, Arnsberg, and Dusseldorf, attempts had been made to obtain statistical data as to whether and how much the individual output of the workers had increased. A large metal-working plant in Erfurt had made investigations as to the difference in the output of time-rate and piece-rate workers and found that after the introduction of piecework the individual output of the workers increased by from 50 to 162 per cent over the output under time rates. The report for the district of Arnsberg contains two tables showing the output per shift and per worker in blast furnaces and in a steel works. In the blast furnaces as well as in the steel works the output increased considerably in 1922 as compared with 1921. The reporting inspector

warns, however, against drawing conclusions from such data as to the increased or diminished willingness to work. He points out that too many other factors influence production. There may, for instance, be a lack of raw materials, delaying production, or an establishment may produce a better quality of steel than formerly, which requires more work, and so on. In the Dusseldorf district the increase in individual output that was observed in 1921 continued in 1922. The reporting inspector is, however, of the opinion that the output would increase still more if the rest periods were somewhat longer. In his view the present short rest periods tend to increase fatigue. The workers, however, demand short rest periods so that they may quit work earlier.

Special Problems.

Hours of Labor in Bakeries and Confectioneries.

THE first special problem to be dealt with in the reports of the factory inspectors for the year 1922 related to the enforcement of the decree of November 23, 1918, on the hours of labor in bakeries and confectioneries. The reports, as a rule, discuss separately the hours of labor, the prohibition of night work, and the observance of the Sunday rest.

The eight-hour day has been generally introduced without much difficulty, owing to the fact that bakeries are not so busy now as formerly. In many localities the bakeries did not work even the full legally permissible eight hours. At the week end, however, most bakeries are very busy, and for this reason many owners of bakeries would prefer a 48-hour week to the 8-hour day, because they could then operate on some days with a longer working day and on other days with a shorter working day.

The prohibition of night work has been welcomed not only by the journeymen but also by the overwhelming majority of the employers. This explains why in many localities not only the workers' organizations but also the guilds see to it that the prohibition of night work is strictly enforced. The large bakeries and the consumers' cooperative societies have for some time been demanding the abrogation of the prohibition of night work for bread bakeries, so that such bakeries would be enabled to operate in three shifts of eight hours each. This demand, however, is being strenuously opposed by the majority of employers and journeymen.

Confectioneries have been issuing propaganda that Sunday work should be permitted in them to a restricted extent. In support of this demand they point out that restaurants and cafés are permitted, without any restriction, to make confectionery goods on Sundays.

Protection of Women in Confinement, and Rest Periods for Nursing Mothers.

The provision of the industrial code that woman workers in confinement shall be granted six weeks' leave after parturition is being observed everywhere. The enforcement of the provision that pregnant women shall be granted two weeks' leave before parturition is more difficult. Some of the pregnant women are mistaken about the time of their delivery, while others try to keep the time secret so that they may earn wages up to the last minute. This refers

particularly to unmarried pregnant women. Married pregnant women often quit work as soon as they become entitled to maternity benefits from the sick funds; that is, four weeks before parturition. The reports for several inspection districts state that the works councils make it their business to inform pregnant woman workers as to the legal protective provisions and to see to it that they are employed only at nonfatiguing work. Several factory inspectors praise the work of woman welfare workers in factories who give special attention to pregnant women and women in confinement.

Most of the inspectors report that from the observations made by them as to rest periods for nursing mothers it does not seem advisable that such rest periods should be prescribed by law. In several districts the inspectors found the employers generally willing to grant such rest periods. Objections on the part of employers were made only in those establishments in which the granting of rest periods to nursing mothers would have involved interruption of operation. However, the woman workers themselves do not set great value upon such rest periods. In small localities, where a noon rest long enough to enable mothers to go home is usual, this rest period is fully sufficient to nurse infants once during the working time. In large localities, where the noon rest is short, the distance between the home of the mother and the working place is generally too great for the infant to be brought to his mother for nursing. But even where this is possible or where the infants can be kept in a crêche of the establishment, the granting of nursing rest periods has not had the expected beneficial results. Some mothers become fatigued from their work, which influences lactation unfavorably. Married women, as a rule, stay away from work as long as they nurse their infants, or take up home work.

Conduct of Juvenile Workers at Work, at School, and in Their Spare Time.

The conduct of juvenile workers has been very thoroughly discussed by all the reporting inspectors. Their judgments on the subject vary considerably, but on the whole the favorable ones predominate. Even in districts where questionable conditions prevail, the inspectors state that conditions have somewhat improved as compared with the first years after the war, but that it is more difficult now to handle juvenile workers than in pre-war times. The judgment expressed in the report covering the district of Frankfort on the Oder may, perhaps, hold good for many regions of Germany:

> It can be said that, on the whole, compared with the conditions that had developed during the war and after the revolution, the conduct of juvenile workers has without doubt undergone progressive improvement. This applies to apprentices in factories and handicraft establishments as well as to unskilled juvenile workers. In the handicrafts where the apprentices are subject to the paternal discipline of the master and are often taken into his household, conditions in this respect have especially improved. The generally observed improvement in the conduct of juvenile workers is also due in part to the increasing sense of duty among the working classes themselves and particularly to the influence of the works councils.

Nearly all reports consider the conduct of apprentices in the handicrafts and in factories satisfactory. Unfavorable criticisms relate almost exclusively to unskilled juvenile workers. A report covering a district in central Germany finds more fault with the conduct of the young factory girls than with that of the boy factory workers.

The reports without exception praise the conduct of the juvenile workers in the trade schools, especially of the apprentices. The boys who are working in the special training shops for apprentices maintained by several large works are making a particularly good showing. This may be due to the fact that these large works are very careful in the selection of apprentices.

The conduct of juvenile workers during their spare time has generally given occasion to severer criticism than their conduct at work or at school. It depends essentially upon the influence of the parents upon the young people. Whenever the parents set a good example to their working children and restrict them somewhat in the use of their earnings, the conduct of the latter in their spare time is always proper. Inspectors from rural districts report that juvenile workers in such districts often use their spare time to assist in house or farm work. Where the parental home fails in its duty of exercising a beneficent influence, the wage-earning boys soon acquire various bad habits, such as excessive frequenting of saloons and amusement places, heavy smoking, drinking, and gambling. They assume an overbearing demeanor and squander their relatively high and easily earned wages. The inspectors' reports acknowledge, however, that the numerous existing young people's societies guide the youth more than formerly to athletic sports, hiking, etc.

The reports deplore the absence in juvenile workers of any desire to develop themselves mentally. In order to develop such a desire a large Rhenish iron works has employed a special adviser for juvenile workers.

Influence of the Wage System on the Accident Hazard in Dangerous Occupations.

The question whether and how far the wage system (time or piece rates) exercises any influence upon the frequency of accidents caused by dangerous machines is discussed at great length in some of the inspectors' reports. In several districts they have made careful investigations on this subject. In addition to work on rolls and shears, carding and willowing machines, platen presses, and emery wheels, there was investigated, as involving the greatest accident hazard, chiefly work on stamping and grooving machines, as well as on saws and planing and shaping machines used in the woodworking industries. The machines in the last two groups are generally acknowledged to be the most dangerous and most extensively used machines. For this reason most of the reports discuss in detail only these two groups.

Time rates as well as piece rates are in use in paying workers employed at these two groups of machines. Time rates predominate, however, in the case of work on woodworking machines. This is by no means a new phenomenon, to be ascribed to the provision in the national collective agreement for the German woodworking industry prohibiting piecework at dangerous machines, but rather a matter of extensive custom. The reason for this custom is the great danger connected with the operation of woodworking machines. Piecework was found to be extensively in use only in those woodworking establishments in which production of large quantities of certain articles permits minute subdivision and specialization of labor. In such establishments it is possible to feed the machines automatically or to

make special arrangements that will lessen the danger of accidents. If such establishments manufacture small articles, the production of which requires nimbleness of fingers rather than physical strength, they generally also employ women and juvenile workers at piecework.

In contrast to the situation in the woodworking industries piecework predominates at the stamping and grooving machines in the metal-working industries. In work at these machines there are not encountered the difficulties that are inherent in woodworking owing to the structure of wood. It is, moreover, easier to equip these machines with safety appliances. In addition quantity production of small parts predominates in the metal-working industries. It is due to these facts that many women are employed at the small stamping and grooving machines, while the slower running large stamping and grooving machines are exclusively operated by men.

From what has been said here it can be seen that it is hardly possible to draw any conclusions as to the influence of the wage system on the frequency of accidents solely from the number of piece and time workers employed at the individual machines. The accident risk at the individual operations may vary greatly, while the surroundings of the worker (lighting, ventilation, generation of dust, accumulation of material in the workroom, etc.), as well as the morale in the plant, play a great rôle. To take into account statistically all these influences seems very difficult. The views of employers and workers questioned by the factory inspectors diverged greatly and in some instances appeared even to be contradictory, for the simple reason that each of them judged matters only by the conditions familiar to him. The attempt by the inspectors of several districts to show statistically the relative accident hazard of time and piecework therefore failed. The investigations were nevertheless of value because they have demonstrated the necessity of caution in drawing conclusions and have also shown what factors must be taken into consideration.

Hygiene of Workers in Establishments Dealing in Rags, Raw Materials, and Scrap Metal.

Owing to the existing shortage of raw materials, all kinds of refuse have acquired a relatively high value in Germany, and trade in rags, junk, etc., and the working up of them has increased. Because of this the factory inspectors were charged with an investigation into the health conditions of workers engaged in the sorting and working up of refuse. The sanitary conditions in rag-sorting establishments have already been regulated in most German States by special decrees; in Prussia, for instance, by the decree of the minister of commerce and industry of December 22, 1895. This decree contains detailed provisions as to the equipment of workrooms, the removal of dust, provision of wash rooms and wardrobes, and the equipment of the workers with suitable working clothes. A decree of the imperial chancellor of December 8, 1909, forbids the employment and presence of young persons in rooms in which rags are being opened, sorted, freed from dust, cut, greased, mixed, or packed.

The inspectors report that in large rag-sorting establishments conditions are generally satisfactory but that in small establishments conditions are often very bad. In the latter in certain operations there is an excessive generation of dust, and the workrooms are low

and in many instances dark, dirty, and full of vermin. In spite of these unfavorable conditions the inspectors were unable to obtain any reliable data that would show that the morbidity rate of workers in these establishments is abnormal. Neither were they able to establish that certain diseases, especially contagious diseases such as smallpox, anthrax, and measles, are more frequent among workers in rag-sorting establishments than among other workers.

As regards the working up of scrap metal, the inspectors found two classes of establishments—small establishments which collect both rags and scrap metal and sell them again to larger establishments, and large establishments which melt down the scrap metal and work it up. The sanitary conditions in the first class of establishments are practically the same as in small rag-sorting establishments. Although the workrooms of such establishments are generally insanitary, the morbidity hazard is being somewhat offset by the fact that a great deal of the work is performed in the open air. The collecting and sorting of scrap metal involves, however, one special morbidity hazard, that of blood poisoning through finger lesions caused by the handling of sharp-edged scrap. In larger scrap-metal establishments there have occurred several cases of plumbism among workers employed at melting scrap. The inspectors have seen to it that the usual measures for the prevention of plumbism are being taken in such establishments.

Workers' Education.

The factory inspectors were also asked to investigate whether the workers make any serious efforts to educate themselves. Their investigations on this subject have resulted in greatly varying findings. While some reports state that no endeavors of the workers to continue their education are noticeable, other reports are full of praise for the earnest and zealous attempts of the workers at self-improvement. From a perusal of all the reports one obtains the impression that in large cities these endeavors at self-improvement play a greater rôle than in small towns and in rural communities. This may be due to the fact that workers living in small towns and in the country devote a great part of their spare time to work in their gardens and farms. It seems that among the various institutions for the education of adult workers the general institutions (people's colleges, lecture courses, etc.) are less popular with the working classes than the educational institutions maintained by the trade-unions. Of the latter the schools and lecture courses for works council members generally have a large attendance. The educational institutions of the trade-unions deal chiefly with economic and socio-political problems and problems relating to vocational training. In many localities the Social-Democratic Party and the trade-unions have established educational committees which aim at promoting the general education of workers. Several of these committees maintain libraries and arrange concerts, theatrical performances, moving-picture shows, collective visits to museums, etc.

In Berlin at present all endeavors at workers' education encounter great difficulties because of the high street-car fares, the high prices of books and periodicals, and the high rents of halls. The report covering the Liegnitz district states that continuation schools for

journeymen and employers just starting in business have been established in several localities in connection with the compulsory continuation schools for juvenile workers. The evening courses of the machine-construction school at Görlitz have a good attendance; several large concerns have furnished models, drawings, and other material for these courses. The Upper Silesian committee for technical lectures has established afternoon lecture courses for workers at the State engineering and smelting school. The subjects taught include technical accounting, mathematics, natural history, drawing, mechanics, electrotechnics, etc.

The report for the district of Osnabrück mentions a unique form of lecture courses for works council members arranged by the Christian trade-unions. The trade-union secretary directing the courses assumes for the evening the rôle of the employer and makes the order of the day some practical question relating to the activity of the works council. The question is then discussed in the form of negotiations between the employer and the works council, the secretary guiding the discussion by suitable queries. At the end of the discussion he determines the result of the negotiations. This practical form of instruction is said to have good results.

Hours of Labor, Overtime, and Rest Periods.

THE majority of the reporting inspectors state that the decrees of November 13 and December 17, 1918, which provide an eight-hour day for industrial workers, are being generally enforced in large factories, but that in handicraft establishments and in small factories there is considerable difficulty in enforcing them. Whenever special conditions in an industry required overtime work, the workers were, as a rule, ready to work more than the normal hours of labor.

The introduction of three eight-hour shifts in raw-sugar factories and brick kilns can not, as yet, be carried out generally. On the one hand, it is impossible to obtain the large number of workers required by three-shift operation or, if obtained, to house them, and on the other hand, foreign workers refuse to accept employment if they are not permitted to work 12 hours a day and thus to earn more money.

The report covering the State of Saxony describes the difficulties met by the factory inspection service in enforcing the eight-hour day when employers, in agreement with their workers and even on the demand of the latter, permit the working of overtime. Such cases of violation of the decrees regulating the hours of labor have often been encountered in automobile and motor repair shops. Automobile owners frequently offer tips to workers in such repair shops in order to have their cars repaired as quickly as possible, and the workers do not care to lose such extra earnings, even if they have to work overtime to make them. The report also states that employers as well as workers are often of the erroneous belief that if an employer and the works council of his establishment have agreed to work overtime, no permit from the industrial authorities is needed for such overtime work.

The trade-unions show great interest in the enforcement of the eight-hour day and thereby facilitate considerably the activities of the factory-inspection service in this field of labor protection. Much

greater difficulties are encountered in the enforcement of the decree of March 18, 1919, regulating the hours of labor of salaried employees. This decree is especially hard to enforce in banks, for the work of banks has greatly increased, owing to the increase of checking accounts, the increased trade in foreign drafts, and the general mania for speculation. There is a shortage of experienced bank clerks, and the banking rooms are often too small to take care of the increased business. The managements of banks have therefore continuously requested overtime permits, which as a rule have been granted in pursuance of articles 6 and 10 of the above decree. During 1922, however, the practice in banks of ordering employees to work overtime without having previously obtained permission from the authorities increased. The banks based their right to such a procedure on a decision of the supreme court (Reichsgericht) of June 15, 1922, which in a similar case had decided that the immediate performance of the work had been necessary in the public interest and that therefore overtime work without previous official authorization was justified.

The question whether a short working-day and speeding up of the work or a longer working-day and work at a slower pace is preferable from a hygienic point of view is discussed in the reports covering the districts of Berlin and Hamburg. In Berlin there has developed a species of workers called "overtime grafters" (*Ueberstundenschieber*), who are so skillful in spreading their work that they always require highly remunerated overtime to perform their assigned tasks. During a strike against overtime work in some of the Berlin banks the strike committee had prohibited all overtime work. The management of the banks insisted, however, that all current work must be brought up to date. In order not to come into conflict with the strike committee or with the managements of the banks, the bank clerks finished all current work within the eight-hour day. When the strike committee finally revoked the prohibition of overtime work, the banks declared that they would no longer permit overtime work. The "overtime grafters" claimed, however, that their health would suffer if they had always to work at the great speed at which they worked during the period of the strike. The reverse took place in Hamburg. There the organizations of the bank clerks made the assertion that overtime work is injurious to the health of the clerks. The public health office was requested to render an opinion. After a thorough examination of the sickness statistics of employees of large banks, the health office issued a statement that these statistics showed conclusively that the state of health of bank employees had not been affected injuriously by the longer working hours and that the morbidity rate of bank employees was the same as that of the general population.

With respect to rest periods, the factory inspectors have generally observed that the workers endeavor to have their rest periods fixed as short as possible, so that they may be enabled to quit work early. In several localities it has been found that in the regulation of the rest periods the adult male workers do not take into sufficient consideration the weaker organism of the female and juvenile workers.

Permits for night work of female workers had to be issued in several localities to establishments that had introduced the 3-shift

system, as, for instance, to a large printing establishment in Hanover which had to have three shifts in order to fill quickly large Government orders for paper money.

Operation of the Works Councils.

THE opinion of the majority of the factory inspectors as to the efficiency of the works councils can be best summarized by quoting the following words from the report of the chief inspector of the district of Dusseldorf:

> The works councils are attaining increasing efficiency in performing the tasks assigned to them by the law. Their relations with the employers improve from year to year, as both sides become more familiar with their rights and duties under the law. The works councils generally maintain close relations with the factory inspectors through frequent personal discussions of problems relating to hours of labor, overtime and Sunday work, short time, and the closing down of establishments or of departments of establishments.

Of course, not all of the factory inspectors' reports speak in such a favorable tone of the works councils. There are many complaints that the works councils are too indifferent and do not perform all the duties assigned to them by the law. Some inspectors also report instances in which the works councils had exceeded their rights. The favorable opinions predominate, however. The factory inspectors generally express the view that the works councils are operating with the best results in large industrial establishments, while in small industrial establishments and in establishments that employ chiefly clerical help the works councils operate less efficiently. Such establishments frequently do not even elect a works council, because the workers either do not care to vote or nobody can be found to accept the office of council member. Women have so far played a rather inconspicuous rôle as works council members. With few exceptions they generally decline election to such office. The special works councils for home workers have not developed much activity. The report for the district of Brunswick mentions that a home workers' works council has seen to it that the available work is fairly distributed among the home workers and that they receive relatively high wages.

The works councils are giving their principal attention to acting as intermediators between employers and workers in such ways as supervising the enforcement of collective agreements, protesting against unfair dismissals, intervening in disputes, submitting complaints, etc. They also look after the hygiene of the establishments and show increasing understanding of the need for accident prevention. Several works councils have also successfully endeavored to assist the factory inspectors. In Hamburg, for instance, a committee of the works councils of several shipbuilding companies has drafted safety regulations for the building of scaffolds, which were used by the factory inspection service in drafting final regulations. All reports are unanimous, however, in stating that the works councils as a rule do not perform their duty of "supporting the management with advice in order to assist it to bring the establishment to the highest possible state of efficiency and of cooperating in the introduction of new labor methods."

The report for the district of Hamburg discusses, among other things, the question as to whether and how far establishments are obligated to release works council members entirely from productive work so that they may give their entire time to their duties as council members. In large shipbuilding yards in Hamburg there has developed the practice of releasing from productive work 4 out of each 20 council members. The conciliation boards in Bremen and Kiel have rendered decisions that council members have no legal right to demand release from productive work, but that in individual instances this right may have been acquired by express or tacit agreement.

Wage Problems and Wage Policy.

SEVERAL reports complain that the policy governing all wage agreements, that the performance of the individual worker shall be the exclusive determining factor in fixing wage rates and that his conjugal condition shall not be considered, has resulted in deplorable conditions. The report for the district of Minden says in this respect:

> The current wages, which rose gradually as the mark depreciated in value, make it possible for single workers and for workmen's families in which there are several breadwinners to live fairly confortable, while families with only one breadwinner can make ends meet only with the aid of privations, because the family allowances granted to them are absolutely insufficient. The inspectors of the district are unanimously of the opinion that the present exceedingly favorable remuneration of unskilled workers is all out of proportion to the wages paid highly skilled workers who have served apprenticeship in their trades, and especially that juvenile workers are being paid too high rates. The consequence is an endeavor on the part of the young workers to squander their wages on luxurious clothing and amusements. Complaints as to the waning authority of parents, guardians, teachers, and foremen can be easily understood because of the causal connection of this phenomenon with the high wages of young persons.

The report for the district of Arnsberg also calls attention to the too small difference in the wages of skilled and unskilled workers:

> As a consequence of the small difference in the earnings of skilled and unskilled workers, a development that had begun during the war and has become still more marked in postwar times, there is now a noticeable shortage of highly skilled workers. Prudent managers of large plants view this state of affairs with serious apprehension, because the older skilled workers die off gradually, there is no supply of skilled workers in the best years of their life, and the rising generation does not care to undergo the necessary training. A Siegerland iron and steel works became so alarmed at this shortage of skilled workers that it sent a number of juvenile workers to the State trade school at Siegen to have them trained as molders, and pays them their full wages while they are at school.

With respect to the much-discussed problem of family allowances the report for the State of Saxony says:

> A general introduction of family allowances has taken place only in the case of miners and in that of workers in State or municipal employment. The trade-unions generally oppose family allowances because they fear that the effect of the granting of such allowances will be that employers will hire only young unmarried men and juvenile workers, and on the advent of a business crisis will attempt to discharge the married men.

Home Work.

HOME work has generally increased in Germany according to the factory inspector's reports. The higher figures reported are due in part to the fact that the lists of home workers are now being better kept and in part to the fact that new home industries have

developed and that new classes of the population, above all the women of the impoverished middle class, have taken to home work as a last resort. The report for the State of Wurttemberg speaks of large fluctuations. In the rural districts home work has decreased, but in the large medium-sized cities it has increased. The reason for the retrograde movement of rural home work is to be found in the improvement of the economic situation of the agricultural population. The increase of home work in the cities is due to the influx of workers from the former middle classes. Several reports, among others those for Wurttemberg, Hamburg, Saxony, and Berlin, emphasize how poorly these middle-class home workers are being remunerated. In several localities public-welfare organizations have attempted to procure home work (fine embroidery, knitting, crochet work, etc.) for impoverished women of the middle class, and thus to prevent such work being done for too low wages.

The report for the State of Saxony says that while in many industry branches wages have not kept step with the depreciation of the mark, collective wage agreements in several other branches, such as the hosiery and fabric glove industries and in ribbon weaving, were concluded which provide fair wage rates not only for factory workers but also for home workers. In Konigsberg there was a shortage of skilled seamstresses.

The reports for the State of Saxony and the district of Stettin mention the poor housing conditions of home workers. The efforts of several employers at Stettin to provide special sanitary workshops in which their home workers could work together were unsuccessful. The home workers did not care to surrender their personal liberty, and, moreover, did not want to be bound by the 8-hour day. They want to work longer hours and make correspondingly larger earnings.

Factory Conditions in the Punjab in 1922.

THE annual report for 1922 on the working of the Indian factories act in the Punjab,[1] or northern India, gives some significant data as to conditions in Indian factories. Under the act at present in force all factories employing 20 or more workers on any one day in the year come within the scope of the law. The total number of factories registered as under the act at the close of the year was 366, of which 325 had worked for all or a part of the year, while 41 had remained closed. The total number of workers coming under the law had increased from 42,428 in 1921 to 46,588 in 1922. Apparently there were only two inspectors to cover the whole field, and the report points out that under such conditions it was impossible to enforce strictly the provisions of the law against the small factories whose owners, in many cases, resented legal control and evaded the regulations whenever possible.

In general, the condition of the larger factories which work more or less continuously throughout the year is said to be good; the worst conditions are found in connection with the seasonal industries,

[1] India. [Department of Industries and Land Records. Inspector of factories.] Annual report on the working of the Indian factories act, 1911, in the Punjab, for the year 1922. Lahore, 1923.

these factories requiring much more attention to bring them up to a standard of good sanitation. The water supply was generally good, and lighting was improving. Many owners of seasonal factories, finding the season was a good one, had repaired and used their electric-light installations, "whereas in 1921, when the season lasted for a few weeks only, candles or oil lamps were used." Ventilation showed a marked improvement as compared with conditions in 1921. Skylights ordered in that year had been put in and exhaust fans had been brought into play with advantageous results. The problem of dust removal, however, seemed to remain unsolved.

The ventilation of ginning rooms and the keeping of them free from dust remain a serious problem. Skylights and extra openings in walls were ordered to be made, helping greatly in ventilating the rooms, but the dust problem is not so easily dealt with. Cotton-ginners can be picked out from amongst other workers by their unhealthy appearance; 10 hours daily in the dust-laden atmosphere of a ginning room quickly affects both eyes and throats; it is not unusual to find cotton-ginning workers almost speechless from dust at the end of the day; as 90 per cent of these workers are women and children, of whom nearly 5,000 are in the Punjab alone, the problem should be regarded as sufficiently serious to warrant special efforts on the part of the health department to mitigate the evil.

A strong campaign for safety measures was made, and the number of accidents reported during the year was 320, as compared with 326 in 1921. These statistics are admittedly faulty, yet the inspector believes that accidents are being more regularly reported, and that these figures can be taken as approximately correct. The attitude of the authorities toward this matter is apparently not helpful. The report cites a case in which, during an inspection, it was discovered that a serious accident had occurred in the factory and had not been reported, and a prosecution was accordingly undertaken.

Apart from the irregularity of not reporting the accident, the factory owners and manager tried to cover up the accident, and afterward got the injured person to sign a document saying that the accident never occurred. These facts after much trouble and time were brought to the notice of the court, with the result that all the accused (two occupiers and one manager) were convicted and fined Rs. 50 [$24.33 par] each. The fines appear to be entirely inadequate for such a grave offense and have little or no effect upon the factory owners, who are usually prosperous mill owners; neither does such a lenient judgment help factory inspectors.

Under the law prevailing at the beginning of 1922 the legal hours of work were 12 a day for men, 11 for women, and 6 for children. The act becoming effective in July, 1922, limited the hours for adults, men and women alike, to 11 a day and 60 a week, and left the hours for children unchanged. In the large and well-organized factories the hours were usually well within these limits, but the managers of the seasonal factories greatly resented the new regulations and evaded them when they could.

During the year 1922 the practice of overworking was considerably checked, but it is well known that many ginning factories continuously violate all the sections of the factories act relating to hours of work. To catch these persistent offenders redhanded requires far more time than the present existing small inspection staff has been able to give; factory owners are known to keep chaukidars on the stations continuously on the lookout for factory inspectors; immediately an inspector arrives, a signal is given, with the result that either the factories are closed or children illegally employed are sent away. It is hoped that with the proposed appointments of industrial surveyors as additional factory inspectors this malpractice will be checked to a large extent.

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, October 15, 1922, and September 15 and October 15, 1923, as well as the percentage changes in the year and in the month. For example, the price of milk was 13.3 cents in October, 1922, 14 cents in September, 1923, and 14.1 cents in October, 1923. These figures show an increase of 6 per cent in the year and 1 per cent in the month.

The cost of the various articles of food [2] combined showed an increase of 5 per cent in October, 1923, as compared with October, 1922, and an increase of four-tenths of 1 per cent in October, 1923, as compared with September, 1923.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE OCTOBER 15, 1923, COMPARED WITH OCTOBER 15, 1922, 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 (−) Oct. 15, 1923, compared with—	
		Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.
		Cents.	*Cents.*	*Cents.*		
Sirloin steak	Pound	38.3	41.1	40.0	+4	−3
Round steak	do	33.1	35.5	34.4	+4	−3
Rib roast	do	28.0	29.4	28.9	+3	−2
Chuck roast	do	19.9	21.0	20.8	+5	−1
Plate beef	do	12.8	13.1	13.1	+2	0
Pork chops	do	36.6	36.7	34.2	−7	−7
Bacon	do	40.8	39.4	39.4	−3	0
Ham	do	47.6	46.6	46.4	−3	−0.4
Lamb, leg of	do	35.9	37.5	36.5	+2	−3
Hens	do	34.8	35.0	34.8	0	−1
Salmon, canned, red	do	31.6	31.3	31.4	−1	+0.3
Milk, fresh	Quart	13.3	14.0	14.1	+6	+1
Milk, evaporated	15-16 oz. can	11.2	12.2	12.2	+9	0
Butter	Pound	50.8	55.0	56.3	+11	+2
Oleomargarine	do	27.8	29.3	29.7	+7	+1
Nut margarine	do	26.9	27.7	27.7	+3	0
Cheese	do	34.1	37.0	38.5	+13	+4
Lard	do	17.5	17.9	18.6	+6	+4
Vegetable lard substitute	do	23.2	23.0	23.5	+1	+2

[1] In addition to monthly retail prices of food and coal, the bureau secures prices of gas and dry goods from each of 51 cities and for electricity from 32 cities. These prices are published at quarterly intervals in the MONTHLY LABOR REVIEW.

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

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE OCTOBER 15, 1923, COMPARED WITH OCTOBER 15, 1922, AND SEPTEMBER 15, 1923—Concluded.

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (−) Oct. 15, 1923, compared with—	
		Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.
		Cents.	*Cents.*	*Cents.*		
Eggs, strictly fresh	Dozen	54.3	48.6	54.6	+1	+12
Eggs, storage	do	39.1	.....	41.7	+7	.....
Bread	Pound	8.7	8.7	8.7	0	0
Flour	do	4.8	4.5	4.6	−4	+2
Corn meal	do	3.9	4.2	4.3	+10	+2
Rolled oats	do	8.7	8.8	8.8	+1	0
Corn flakes	8-oz. package	9.7	9.7	9.7	0	0
Wheat cereal	28-oz. package	25.6	24.4	24.4	−5	0
Macaroni	Pound	19.9	19.7	19.7	−1	0
Rice	do	9.6	9.5	9.6	0	+1
Beans, navy	do	10.1	10.9	10.6	+5	−3
Potatoes	do	2.2	3.4	2.9	+32	−15
Onions	do	4.4	6.2	6.3	+43	+2
Cabbage	do	3.5	4.6	4.2	+20	−9
Beans, baked	No. 2 can	13.2	12.9	12.9	−2	0
Corn, canned	do	15.3	15.5	15.5	+1	0
Peas, canned	do	17.4	17.6	17.6	+1	0
Tomatoes, canned	do	12.7	12.9	12.9	+2	0
Sugar, granulated	Pound	7.9	9.6	10.6	+34	+10
Tea	do	68.2	69.7	70.0	+3	+0.4
Coffee	do	36.3	37.6	37.8	+4	+1
Prunes	do	20.6	18.8	18.3	−11	−3
Raisins	do	20.7	17.1	16.8	−19	−2
Bananas	Dozen	35.6	37.8	38.3	+8	+1
Oranges	do	61.1	51.0	51.5	−16	+1
All articles combined [1]		.....	.....	.....	+5	+0.4

[1] See note 2, p. 52.

Table 2 shows for the United States average retail prices of specified food articles on October 15, 1913 and 1914, and on October 15 of each year from 1918 to 1923, together with percentage changes in October of each of these specified years compared with October, 1913. For example, the price per pound of cheese was 22.4 cents in October, 1913; 23.0 cents in October, 1914; 38.5 cents in October, 1918; 42.4 cents in October, 1919; 40.6 cents in October, 1920; 32.9 cents in October, 1921; 34.1 cents in October, 1922, and 38.5 cents in October, 1923.

As compared with the average price in October, 1913, these figures show the following percentage increases: 3 per cent in October, 1914; 72 per cent in October, 1918; 89 per cent in October, 1919; 81 per cent in October, 1920; 47 per cent in October, 1921; 52 per cent in October, 1922, and 72 per cent in October, 1923.

The cost of the various articles of food combined showed an increase of 44 per cent in October, 1923 as compared with October, 1913.

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

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

Article.	Unit.	Average prices Oct. 15.								Per cent of increase (+) or decrease (−) Oct. 15 of each specified year compared with Oct. 15, 1913.						
		1913	1914	1918	1919	1920	1921	1922	1923	1914	1918	1919	1920	1921	1922	1923
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.							
Sirloin steak	Pound	25.7	26.2	41.0	39.8	44.5	37.4	38.3	40.0	+2	+60	+55	+73	+46	+49	+56
Round steak	do	23.1	23.8	39.0	36.9	41.9	32.9	33.1	34.4	+3	+69	+60	+81	+42	+43	+49
Rib roast	do	20.0	20.5	32.3	30.6	33.3	27.6	28.0	28.9	+3	+62	+53	+67	+38	+40	+45
Chuck roast	do	16.4	17.0	27.9	24.5	25.9	19.9	19.9	30.8	+4	+70	+49	+58	+21	+21	+27
Plate beef	do	12.3	12.8	21.5	17.6	17.8	13.2	12.8	13.1	+4	+75	+43	+45	+7	+4	+7
Pork chops	do	22.6	23.0	45.4	44.3	49.9	36.0	36.6	34.2	+2	+101	+96	+121	+59	+62	+51
Bacon	do	27.8	28.6	57.9	52.8	54.6	41.2	40.8	39.4	+3	+108	+90	+96	+48	+47	+42
Ham	do	27.6	28.3	52.0	52.4	59.8	48.3	47.6	46.4	+3	+88	+90	+117	+75	+72	+68
Lamb	do	18.4	19.3	35.2	33.9	37.9	30.0	35.9	36.5	+5	+91	+84	+106	+63	+95	+98
Hens	do	21.2	21.4	39.0	40.3	43.9	37.2	34.8	34.8	+1	+84	+90	+107	+75	+64	+64
Salmon, canned, red	do	.....	.....	[1]30.9	[1]34.8	[1]39.0	34.9	31.6	31.4	.....	.....	.....	.....	.....	.....	.....
Milk, fresh	Quart	9.0	9.0	14.8	16.0	17.3	14.2	13.3	14.1	0	+64	+78	+92	+58	+48	+57
Milk, evaporated	[2]	.....	.....	.....	16.6	15.3	13.4	11.2	12.2	.....	.....	.....	.....	.....	.....	.....
Butter	Pound	38.2	37.6	65.1	71.1	68.9	53.2	50.8	56.3	−2	+70	+86	+80	+39	+33	+47
Oleomargarine	do	.....	.....	.....	42.6	41.5	30.2	27.8	29.7	.....	.....	.....	.....	.....	.....	.....
Nut margarine	do	.....	.....	.....	35.8	35.7	28.3	26.9	27.7	.....	.....	.....	.....	.....	.....	.....
Cheese	do	22.4	23.0	38.5	42.4	40.6	32.9	34.1	38.5	+3	+72	+89	+81	+47	+52	+72
Lard	do	16.0	15.5	34.2	36.1	29.2	17.2	17.5	18.6	−3	+114	+126	+83	+8	+9	+16
Vegetable lard substitutes	do	.....	.....	.....	37.5	32.1	21.5	23.2	23.5	.....	.....	.....	.....	.....	.....	.....
Eggs, strictly fresh	Dozen	41.6	39.0	64.1	72.0	80.8	58.9	54.3	54.6	−6	+54	+73	+94	+42	+31	+31
Eggs, storage	do	.....	.....	.....	61.8	64.2	44.1	39.1	41.7	.....	.....	.....	.....	.....	.....	.....
Bread	Pound	5.6	6.4	9.8	10.1	11.8	9.5	8.7	8.7	+14	+75	+80	+111	+70	+55	+55
Flour	do	3.3	3.7	6.7	7.3	7.8	5.4	4.8	4.6	+12	+103	+121	+136	+64	+45	+39
Corn meal	do	3.1	3.3	6.8	6.6	6.5	4.3	3.9	4.3	+6	+119	+113	+110	+39	+26	+39
Rolled oats	do	.....	.....	.....	9.2	11.6	9.8	8.7	8.8	.....	.....	.....	.....	.....	.....	.....
Corn flakes	[3]	.....	.....	.....	14.1	14.4	12.0	9.7	9.7	.....	.....	.....	.....	.....	.....	.....
Wheat cereal	[4]	.....	.....	.....	25.2	30.4	29.7	25.6	24.4	.....	.....	.....	.....	.....	.....	.....
Macaroni	Pound	.....	.....	.....	19.4	22.0	20.5	19.9	19.7	.....	.....	.....	.....	.....	.....	.....
Rice	do	8.7	8.8	14.0	17.3	16.1	9.3	9.6	9.6	+1	+61	+99	+85	+7	+10	+10
Beans, navy	do	.....	.....	16.7	12.5	10.9	8.2	10.1	10.6	.....	.....	.....	.....	.....	.....	.....
Potatoes	do	1.8	1.5	3.5	3.8	3.4	3.5	2.2	2.9	−17	+94	+111	+89	+94	+22	+61
Onions	do	.....	.....	4.5	6.3	4.7	6.5	4.4	6.3	.....	.....	.....	.....	.....	.....	.....
Cabbage	do	.....	.....	.....	4.5	3.6	4.8	3.5	4.2	.....	.....	.....	.....	.....	.....	.....
Beans, baked	[5]	.....	.....	.....	17.1	16.7	14.0	13.2	12.9	.....	.....	.....	.....	.....	.....	.....
Corn, canned	[5]	.....	.....	.....	19.1	18.5	16.1	15.3	15.5	.....	.....	.....	.....	.....	.....	.....
Peas, canned	[5]	.....	.....	.....	19.1	19.2	17.9	17.4	17.6	.....	.....	.....	.....	.....	.....	.....
Tomatoes, canned	[5]	.....	.....	.....	16.1	14.5	12.9	12.7	12.9	.....	.....	.....	.....	.....	.....	.....
Sugar, granulated	Pound	5.5	7.2	10.6	11.4	13.9	6.9	7.9	10.6	+31	+93	+107	+153	+25	+44	+93
Tea	do	54.5	54.7	67.5	71.0	72.4	69.1	68.2	70.0	+0.4	+24	+30	+33	+27	+25	+28
Coffee	do	29.7	29.6	30.5	48.6	43.4	35.6	36.3	37.8	−0.3	+3	+64	+46	+20	+22	+27
Prunes	do	.....	.....	18.3	29.0	27.9	19.1	20.6	18.3	.....	.....	.....	.....	.....	.....	.....
Raisins	do	.....	.....	15.5	20.9	31.4	27.3	20.7	16.8	.....	.....	.....	.....	.....	.....	.....
Bananas	Dozen	.....	.....	.....	39.3	47.2	38.5	35.6	38.3	.....	.....	.....	.....	.....	.....	.....
Oranges	do	.....	.....	.....	55.3	71.3	56.6	61.1	51.5	.....	.....	.....	.....	.....	.....	.....
All articles combined [6]	.....	.....	.....	.....	.....	.....	.....	.....	.....	+2	+74	+82	+91	+47	+37	+44

[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 52.

Table 3 shows the changes in the retail price of each of 22 articles of food [3] as well as the changes in the amounts of these articles that could be purchased for $1, each year, 1913 to 1922, and for October, 1923.

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

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1, IN EACH YEAR, 1913 TO 1922, AND IN OCTOBER, 1923.

Year.	Sirloin steak.		Round steak.		Rib roast.		Chuck roast.		Plate beef.		Pork chops.	
	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.
	Per lb.	*Lbs.*	*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: October	.400	2.5	.344	2.9	.289	3.5	.208	4.8	.131	7.6	.342	2.9

Year.	Bacon.		Ham.		Lard.		Hens.		Eggs.		Butter.	
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per dz.*	*Dozs.*	*Per lb.*	*Lbs.*
1913	$0.270	3.7	$0.269	3.7	$0.158	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	.488	2.0	.170	5.9	.360	2.8	.444	2.3	.479	2.1
1923: October	.394	2.5	.464	2.2	.186	5.4	.348	2.9	.546	1.8	.563	1.8

Year.	Cheese.		Milk.		Bread.		Flour.		Corn meal.		Rice.	
	Per lb.	*Lbs.*	*Per qt.*	*Qts.*	*Per lb.*	*Lbs.*	*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	.088	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: October	.385	2.6	.141	7.1	.087	11.5	.046	21.7	.043	23.3	.096	10.4

Year.	Potatoes.		Sugar.		Coffee.		Tea.	
	Per lb.	*Lbs.*	*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: October	.029	34.5	.106	9.4	.378	2.6	.700	1.4

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 1922, and by months for 1922,[5] and for January to October, 1923. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1920 was 168, which means that the average money price for the year 1920 was 68 per cent higher than the average money price for the year 1913. The relative price of bacon for the year 1919 was 205 and for the year 1920 it was 194, which figures show a drop of 11 points but a decrease of only 5 per cent in the year.

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

The curve shown in the chart on page 58 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The retail cost of the food articles included in the index has decreased since July, 1920, until the curve is brought down in October, 1923, to approximately where it was in May, 1917. The chart has been drawn on the logarithmic scale,[6] because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

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[4] See note 2, p. 52.

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

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

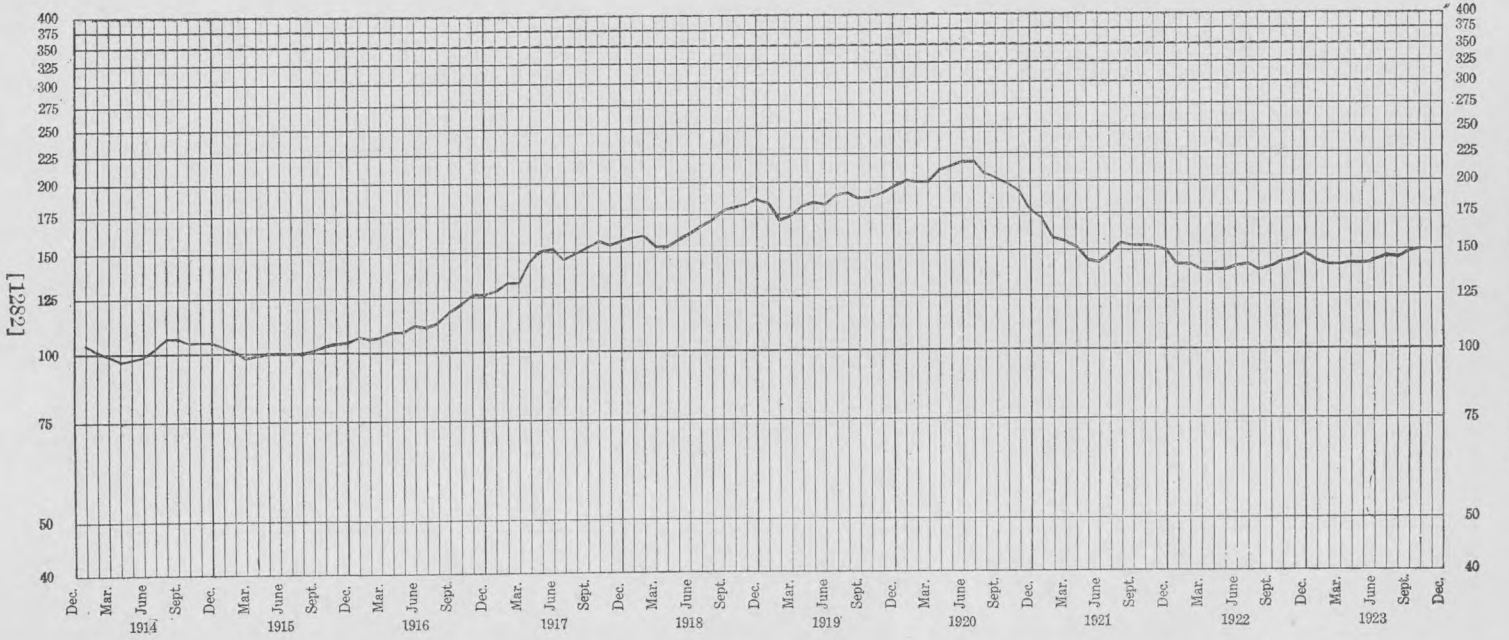
TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS, 1907 TO 1922, BY MONTHS FOR 1922 AND FOR JANUARY TO OCTOBER, 1923.

[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	68	76	.....	.....	74	74	76	81	81	84	85	.....	87	.....	95	88	.....	105	105	.....	.....	82
1908	73	71	78	.....	.....	76	77	78	80	83	86	86	.....	90	.....	102	92	.....	111	108	.....	.....	84
1909	77	74	81	.....	.....	83	83	82	90	89	93	90	.....	91	.....	109	94	.....	112	107	.....	.....	89
1910	80	78	85	.....	.....	92	95	91	104	94	98	94	.....	95	.....	108	95	.....	101	109	.....	.....	93
1911	81	79	85	.....	.....	85	91	89	88	91	94	88	.....	96	.....	102	94	.....	130	117	.....	.....	92
1912	91	89	94	.....	.....	91	91	91	94	93	99	98	.....	97	.....	105	102	.....	135	115	.....	.....	98
1913	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1914	102	106	103	104	104	105	102	102	99	102	102	94	104	100	113	104	105	101	108	108	100	100	102
1915	101	103	101	101	100	96	100	97	93	97	99	93	105	99	125	126	108	104	89	120	101	100	101
1916	108	110	107	107	106	108	106	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114
1917	124	130	126	131	130	152	152	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	146
1918	153	165	155	166	170	186	196	178	211	177	165	151	162	156	175	203	227	148	188	176	102	119	168
1919	164	174	164	169	167	201	205	199	234	193	182	177	193	174	179	218	213	174	224	205	145	129	186
1920	172	177	168	164	151	201	194	206	187	210	197	183	188	188	205	245	217	200	371	353	158	135	203
1921	153	154	147	133	118	166	158	181	114	186	148	135	154	164	177	176	150	109	182	145	122	128	153
1922: Av. for year	147	145	139	123	106	157	147	181	108	169	129	125	149	147	155	155	130	109	165	133	121	125	142
January	139	136	135	119	106	138	139	164	97	173	145	118	149	153	157	148	130	107	194	113	120	126	142
February	139	135	134	118	106	140	140	173	101	173	140	120	149	148	154	155	130	107	194	116	119	125	142
March	141	138	136	121	107	149	144	185	109	177	92	120	149	146	155	161	130	107	182	118	119	124	139
April	143	141	138	122	107	157	147	188	107	177	92	118	145	143	155	161	130	108	171	122	120	124	139
May	148	146	141	124	107	164	147	191	108	177	97	117	139	140	157	161	127	109	176	120	120	125	139
June	151	150	142	126	107	161	150	193	109	173	99	117	141	140	157	161	130	110	206	129	121	125	141
July	154	153	144	127	106	164	150	194	109	168	104	119	143	144	157	158	130	110	212	138	121	125	142
August	154	153	142	125	104	167	150	189	109	164	103	115	144	146	155	155	130	110	153	147	121	126	139
September	152	151	142	125	104	173	150	180	109	164	130	122	145	147	155	148	130	110	135	144	121	125	140
October	151	148	141	124	106	174	151	177	111	163	157	133	154	149	155	145	130	110	129	144	122	125	143
November	147	144	139	123	105	157	151	172	111	159	187	143	161	151	155	145	130	109	124	147	122	126	145
December	145	141	138	121	105	140	149	169	111	158	193	157	166	154	154	148	133	109	124	151	123	126	147
1923: January	146	142	139	123	107	140	147	168	110	162	161	154	169	154	155	148	133	109	124	151	124	126	144
February	146	141	139	122	106	137	146	167	110	167	134	151	170	154	155	148	133	108	124	158	126	127	142
March	147	142	139	122	106	135	145	167	110	168	112	150	168	153	155	145	133	108	129	185	127	127	142
April	149	145	140	123	105	135	145	168	111	169	100	150	164	153	155	148	133	108	147	193	128	127	143
May	152	148	142	124	105	143	145	168	109	170	102	136	161	152	155	145	133	108	159	204	128	127	143
June	158	155	145	128	104	142	144	169	109	166	103	131	163	152	155	145	133	108	188	202	127	128	144
July	161	159	148	130	105	149	144	171	108	163	108	128	163	153	157	142	137	108	247	191	127	127	147
August	162	159	147	130	105	153	145	172	108	162	120	135	164	154	155	136	137	108	218	175	126	128	146
September	162	159	148	131	108	175	146	173	113	164	141	144	167	157	155	136	140	109	200	175	126	128	149
October	157	154	146	130	108	163	146	172	118	163	158	147	174	158	155	139	143	110	171	193	127	129	150

TREND IN RETAIL COST OF ALL ARTICLES OF FOOD, COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1914, TO OCTOBER, 1923.

[1913=100.]



Retail Prices of Food in 51 Cities on Specified Dates.

AVERAGE retail food prices are shown in Table 5 for 40 cities for October 15, 1913 and 1922, and for September 15 and October 15, 1923. For 11 other cities prices are shown for the same dates with the exception of October, 1913, as these cities were not 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.			
		Oct. 15—		Sept. 15, 1923.	Oct. 15. 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
		1913	1922			1913	1922			1913	1922		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24.2	33.7	35.7	36.1	23.5	36.4	40.5	39.1	28.5	33.9	38.0	37.2
Round steak	do	21.3	30.5	32.2	32.5	22.0	33.8	37.6	35.8	23.0	30.3	33.7	33.4
Rib roast	do	19.7	26.6	27.9	27.5	17.3	29.0	31.3	30.2	20.5	25.6	27.8	27.0
Chuck roast	do	15.4	18.1	20 5	20.8	15.3	18.9	20.6	20.4	16.5	20.1	22.4	22.1
Plate beef	do	9.6	13.4	12.1	11.7	12.6	12.5	13.5	13.4	10.4	12.6	13.9	13.6
Pork chops	do	25.0	35.5	33.6	33.0	19.6	35.1	36.8	32.8	24.6	34.3	33.2	33.1
Bacon, sliced	do	32.2	40.3	36.8	36.5	22.5	36.9	34.9	34.4	35.0	42.0	39.7	40.0
Ham, sliced	do	30.8	45.9	46.3	47.3	28.5	51.3	51.9	52.2	32.0	46.9	47.5	46.4
Lamb, leg of	do	20.2	38.3	36.7	36.1	18.0	36.6	37.2	37.3	21.9	37.2	39.5	39.0
Hens	do	20.8	32.2	31.0	32.5	20.8	38.0	37.0	36.9	20.0	30.3	30.7	31.7
Salmon, canned, red	do	.....	29.5	29.9	29.5	.....	26.3	26.2	26.6	.....	30.4	30.0	30.2
Milk, fresh	Quart	10.6	16.7	16.7	16.7	8.7	12.0	14.0	14.0	10.0	19.0	18.5	18.5
Milk, evaporated	15-16-oz. can.	.....	13.3	14.4	14.2	.....	10.5	12.1	12.1	.....	12.3	13.2	13.3
Butter	Pound	39.0	49.9	56.9	57.3	38.8	54.8	58.9	60.6	40.0	50.0	56.2	58.1
Oleomargarine	do	.....	30.2	32.4	33.4	.....	25.3	27.9	27.9	.....	32.6	34.2	34.6
Nut margarine	do	.....	27.0	26.7	27.3	.....	27.1	27.7	27.8	.....	28.8	31.6	32.0
Cheese	do	25.0	34.1	36.2	36.1	23.3	33.8	37.2	37.3	23.0	33.1	37.6	38.0
Lard	do	15.4	18.2	18.8	19.3	14.8	17.4	17.9	18.6	15.2	18.4	18.2	18.5
Vegetable lard substitute	do	.....	21.5	21.6	22.1	.....	21.9	22.4	23.3	.....	21.5	20.1	20.0
Eggs, strictly fresh	Dozen	34.1	40.5	42.2	43.8	36.3	52.8	47.3	52.6	35.0	45.0	46.3	45.2
Eggs, storage	do	.....	.....	.....	39.3	.....	35.4	.....	41.3	.....	40.0	.....	40.5
Bread	Pound	5.9	9.6	9.1	9.1	5.5	8.1	8.7	8.8	5.4	9.0	8.8	8.8
Flour	do	3.5	5.2	5.0	5.0	3.2	4.7	4.3	4.3	3.6	5.6	5.5	5.5
Corn meal	do	2.7	2.9	3.8	4.0	2.6	3.1	3.4	3.6	2.4	2.9	3.4	3.5
Rolled oats	do	.....	9.8	9.1	9.1	.....	8.3	8.5	8.5	.....	9.5	9.3	9.3
Corn flakes	8-oz. pkg	.....	9.6	9.8	9.8	.....	8.9	8.8	8.9	.....	9.9	10.0	10.0
Wheat cereal	28-oz. pkg	.....	26.0	26.6	26.8	.....	24.5	22.3	22.2	.....	27.2	26.4	26.5
Macaroni	Pound	.....	21.6	21.1	21.2	.....	19.4	18.8	19.6	.....	19.6	18.9	19.1
Rice	do	8.6	9.0	8.8	8.8	9.0	9.2	9.2	9.2	8.2	9.4	9.2	9.5
Beans, navy	do	.....	11.8	13.1	13.0	.....	9.7	10.4	10.3	.....	11.2	11.9	11.8
Potatoes	do	2.3	3.2	4.9	4.6	1.8	2.0	4.0	3.2	2.2	3.2	4.5	4.1
Onions	do	.....	6.3	7.8	8.1	.....	4.6	6.4	6.7	.....	5.7	6.8	7.1
Cabbage	do	.....	4.6	5.7	5.3	.....	3.7	4.7	4.3	.....	4.8	5.8	5.5
Beans, baked	No. 2 can	.....	13.5	13.6	13.6	.....	11.6	11.5	11.7	.....	15.1	14.0	14.2
Corn, canned	do	.....	15.6	15.6	15.7	.....	14.0	14.7	14.1	.....	16.2	16.9	16.9
Peas, canned	do	.....	17.5	17.6	17.7	.....	15.5	16.7	16.6	.....	19.8	20.6	20.6
Tomatoes, canned	do	.....	12.5	13.3	13.4	.....	10.7	12.1	11.7	.....	11.1	11.9	12.0
Sugar, granulated	Pound	5.8	8.2	9.8	11.1	4.9	7.3	8.9	10.0	5.7	7.9	9.9	11.0
Tea	do	60.0	87.3	93.7	93.7	56.0	64.1	68.0	67.9	61.3	82.1	85.9	85.9
Coffee	do	32.0	35.9	37.5	37.5	24.4	32.5	32.7	32.6	28.8	37.0	39.1	38.7
Prunes	do	.....	21.8	18.5	18.5	.....	19.4	17.4	16.7	.....	23.3	20.9	20.7
Raisins	do	.....	20.8	18.8	18.8	.....	18.5	14.6	14.4	.....	25.5	19.2	19.0
Bananas	Dozen	.....	26.4	28.3	28.6	.....	27.5	27.7	27.3	.....	35.5	38.1	37.6
Oranges	do	.....	45.8	45.2	40.7	.....	60.0	57.7	56.9	.....	54.2	51.0	49.0

[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.

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.			
Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
1913	1922						1913	1922						1913	1922		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 35.0	[1] 62.6	[1] 64.9	[1] 63.7	44.7	49.7	48.3	22.3	37.4	40.1	39.0	30.2	29.6	28.0	21.8	32.5	35.6	33.2
35.0	51.5	56.2	53.9	38.9	43.0	41.3	19.3	31.2	33.8	32.6	27.1	24.8	24.1	20.4	31.3	31.9	30.5
25.6	36.6	40.2	38.9	34.0	38.5	36.5	16.5	27.8	28.5	28.3	24.1	22.8	22.1	20.0	27.5	28.8	26.8
18.0	24.5	26.3	26.2	24.3	27.5	25.9	15.0	19.9	21.1	21.4	16.8	16.6	15.8	15.0	20.2	21.3	20.2
.....	16.2	17.2	16.8	10.4	11.0	11.5	11.5	12.0	12.1	12.4	11.3	10.5	10.0	12.1	13.5	14.1	13.2
24.4	41.8	39.4	37.9	38.2	39.2	35.9	21.0	39.7	39.7	37.2	34.8	34.0	32.8	26.0	35.3	33.8	31.8
25.4	38.5	37.4	37.7	44.6	44.7	45.1	22.3	35.2	33.4	32.7	47.7	48.2	48.2	26.6	37.1	35.3	35.0
31.3	54.6	52.7	53.2	55.6	54.4	54.2	26.7	47.2	46.6	46.4	53.4	51.8	51.4	28.8	46.1	40.8	42.7
20.5	38.7	40.8	39.1	36.4	40.9	37.6	15.3	31.8	33.2	32.1	32.5	33.5	31.7	22.5	42.2	41.7	41.7
25.6	40.3	39.2	39.5	39.4	39.0	39.9	21.0	34.8	35.0	35.4	30.5	30.1	29.0	21.8	37.3	36.6	36.4
.....	29.7	29.2	29.9	32.9	29.9	29.6	.....	27.4	27.2	27.1	36.4	38.5	38.5	.....	27.3	25.8	26.8
8.9	14.5	14.9	14.9	14.0	15.0	15.0	8.0	14.0	13.3	13.3	14.0	14.3	14.3	12.0	18.5	18.0	18.0
.....	11.7	12.8	12.7	10.9	12.5	12.3	.....	10.9	11.8	11.9	12.1	12.5	12.5	.....	11.1	12.0	12.0
38.0	49.4	55.0	56.8	48.7	55.7	56.5	37.1	52.7	55.1	55.5	51.8	55.5	56.3	38.2	46.5	53.1	54.7
.....	28.2	30.7	30.2	26.5	28.3	28.3	.....	27.6	28.4	28.2	30.0	.....	.....	.....	27.3	29.0	29.0
.....	26.3	26.4	26.0	24.3	26.3	26.3	.....	26.2	27.1	27.4	30.2	32.7	32.7	.....	28.0	28.5	28.5
23.1	35.2	38.6	38.4	33.3	39.0	39.4	21.5	32.8	36.7	37.1	35.8	38.3	38.8	21.0	31.0	34.9	36.1
15.7	17.4	18.1	19.3	17.0	17.2	18.1	14.4	16.8	17.0	17.7	21.4	20.2	21.2	15.3	18.6	18.9	19.3
.....	23.9	24.3	24.8	22.9	23.3	23.8	.....	21.8	22.5	22.7	26.8	26.3	25.6	.....	21.6	22.2	22.2
53.3	80.1	71.6	78.1	74.7	66.3	74.7	36.6	63.2	50.9	57.1	60.0	54.5	62.8	35.0	37.4	37.5	44.2
.....	42.8	.....	45.0	43.8	.....	45.9	.....	37.3	.....	39.2	39.7	.....	40.8	.....	34.4	.....	38.3
6.0	8.4	8.4	8.4	8.4	8.6	8.6	5.6	8.5	8.4	8.4	9.7	9.6	9.6	5.9	9.7	10.2	10.2
(3.6	5.3	5.0	5.0	4.9	4.5	4.6	3.0	4.1	4.0	4.0	5.5	5.1	5.1	3.8	5.9	5.9	5.8
[3.5	4.9	5.2	5.0	6.9	7.1	7.1	2.5	3.5	3.7	3.7	3.8	4.0	4.0	2.6	3.0	3.1	3.5
.....	8.3	8.8	8.9	8.3	8.3	8.2	.....	7.7	7.7	7.8	6.7	6.8	6.9	.....	9.4	9.5	9.4
.....	10.2	9.5	9.5	9.5	9.5	9.4	.....	9.2	9.1	9.1	12.1	11.9	12.1	.....	10.0	10.0	10.0
.....	26.0	24.6	24.8	25.3	23.5	23.5	.....	25.2	23.9	23.8	28.8	28.3	27.9	.....	25.0	25.0	25.0
.....	23.6	23.4	23.1	24.5	24.0	24.0	.....	22.1	21.5	21.5	22.7	21.3	21.0	.....	19.8	20.2	20.2
9.4	11.1	11.1	10.6	10.0	10.1	10.1	9.3	9.3	8.9	9.1	9.9	10.1	10.1	5.6	6.5	6.6	6.8
.....	9.9	10.4	10.3	11.0	11.4	10.9	.....	10.0	10.9	10.5	9.3	11.0	10.8	.....	10.9	11.8	11.8
1.7	2.0	3.3	2.6	2.0	3.8	3.2	1.7	1.8	3.7	2.5	1.2	2.6	2.0	2.2	2.4	3.6	3.1
.....	4.4	7.0	6.7	4.3	6.6	7.5	.....	4.6	6.9	7.0	3.8	4.8	5.4	.....	5.1	5.4	6.3
.....	4.7	5.0	5.0	3.6	6.1	5.5	.....	2.2	5.4	4.3	3.0	3.5	3.6	.....	3.8	5.7	5.0
.....	14.6	14.7	14.6	11.9	11.8	11.6	.....	11.0	11.2	11.1	18.1	17.5	17.5	.....	11.4	11.0	10.9
.....	18.2	19.5	19.0	18.1	18.9	18.9	.....	14.8	14.6	14.9	16.4	15.0	15.0	.....	14.7	14.3	14.3
.....	21.2	21.4	21.2	19.8	21.5	21.4	.....	16.4	15.6	15.6	16.0	16.0	16.0	.....	19.7	17.9	18.1
.....	13.8	12.7	12.4	13.1	13.5	13.8	.....	13.1	13.4	13.6	15.0	14.9	15.0	.....	10.3	10.8	10.6
5.4	7.7	9.5	10.9	7.6	9.5	10.3	5.4	7.6	9.4	10.4	9.8	11.9	12.5	5.0	7.3	9.0	10.2
58.6	68.9	69.7	70.1	57.4	58.3	58.0	45.0	60.9	62.4	62.6	79.5	82.5	82.5	50.0	72.6	70.7	70.7
33.0	43.1	43.2	43.2	34.3	35.7	36.1	29.3	34.6	35.2	35.0	45.0	45.4	45.5	26.8	32.9	33.1	32.5
.....	20.8	18.9	18.8	19.9	18.3	18.5	.....	19.1	18.9	18.7	22.3	20.0	18.5	.....	21.4	18.7	18.1
.....	19.3	16.0	15.6	19.5	16.7	15.9	.....	18.4	15.0	14.8	22.9	20.0	20.0	.....	20.8	17.0	16.7
.....	41.1	48.8	50.0	34.1	37.0	36.0	.....	41.7	45.0	46.4	[2] 14.4	[2] 15.2	[2] 15.2	.....	30.6	40.7	40.7
.....	68.4	54.3	56.8	64.2	54.2	54.3	.....	66.8	54.4	52.8	65.0	50.0	50.0	.....	46.4	46.3	42.5

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1922.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
		1913	1922			1913	1922			1913	1922		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24.8	38.9	43.0	41.6	23.3	32.7	36.5	34.9	25.4	34.7	38.2	37.5
Round steak	do	21.6	30.1	32.7	32.3	21.0	29.8	32.8	31.2	22.9	28.8	31.6	30.9
Rib roast	do	20.1	29.5	31.4	31.6	19.2	27.1	28.7	28.2	18.7	24.9	26.4	25.8
Chuck roast	do	15.8	19.7	21.0	21.1	16.1	17.4	18.8	18.1	16.9	19.1	20.7	20.4
Plate beef	do	12.0	11.8	12.0	12.2	12.2	13.1	14.1	13.9	12.2	10.9	11.0	11.5
Pork chops	do	21.0	34.3	34.6	31.7	23.7	36.2	37.3	31.5	23.0	36.9	40.5	35.2
Bacon, sliced	do	32.7	46.9	44.9	44.8	26.0	36.4	33.9	33.8	28.1	39.9	40.3	40.4
Ham, sliced	do	32.0	49.5	48.8	49.0	30.0	49.4	47.9	48.1	35.7	48.5	49.3	50.5
Lamb, leg of	do	19.8	35.2	37.4	36.4	17.8	32.3	32.9	33.3	18.7	33.8	35.4	34.4
Hens	do	18.4	32.3	33.8	32.6	22.7	33.4	36.4	34.9	20.9	34.4	36.6	35.5
Salmon, canned, red	do	.....	32.5	33.5	33.4	.....	27.8	28.0	28.1	.....	30.1	29.3	29.4
Milk, fresh	Quart	8.0	12.0	14.0	14.0	8.0	12.0	12.0	14.0	8.0	13.0	14.0	14.0
Milk, evaporated	15–16-oz. can	.....	10.0	11.5	11.5	.....	10.5	11.6	11.5	.....	10.6	11.7	11.9
Butter	Pound	35.4	49.3	53.1	54.3	37.8	48.4	53.5	54.5	39.2	54.7	57.0	57.5
Oleomargarine	do	.....	23.6	25.9	26.1	.....	28.5	30.5	30.8	.....	28.2	29.6	30.3
Nut margarine	do	.....	22.4	24.7	25.1	.....	26.8	27.8	27.6	.....	25.8	27.6	28.6
Cheese	do	25.7	35.8	40.0	40.1	21.0	34.6	38.6	39.0	24.0	33.1	35.3	36.2
Lard	do	15.0	16.9	17.1	18.2	14.2	15.6	17.4	18.1	16.4	17.8	18.9	19.0
Vegetable lard substitute	do	.....	22.6	24.3	24.4	.....	22.0	23.8	24.5	.....	23.2	24.5	24.4
Eggs, strictly fresh	Dozen	33.3	47.9	46.1	49.8	32.6	47.9	42.2	47.0	42.7	56.7	50.6	59.7
Eggs, storage	do	.....	36.6	.....	35.3	.....	40.3	.....	36.4	.....	43.6	.....	42.4
Bread	Pound	6.1	9.7	9.7	9.8	4.8	8.4	8.4	8.4	5.6	7.9	7.9	7.9
Flour	do	2.9	4.2	4.1	4.1	3.3	4.5	4.5	4.4	3.1	4.5	4.6	4.6
Corn meal	do	2.8	5.1	5.5	5.4	2.8	2.9	3.4	3.6	3.0	3.5	3.9	4.0
Rolled oats	do	.....	8.0	8.6	8.6	.....	8.4	8.7	8.7	.....	8.6	8.6	8.7
Corn flakes	8-oz. pkg	.....	9.4	9.2	9.1	.....	9.4	9.3	9.2	.....	10.0	9.9	9.9
Wheat cereal	28-oz. pkg	.....	24.3	23.4	23.4	.....	24.6	22.8	23.5	.....	25.6	24.5	24.8
Macaroni	Pound	.....	18.5	18.5	18.2	.....	16.4	16.6	16.6	.....	20.1	19.4	20.2
Rice	do	9.0	9.7	10.2	10.1	8.8	8.9	9.0	9.4	9.0	9.0	9.0	9.5
Beans, navy	do	.....	9.9	10.6	10.6	.....	9.3	10.0	9.8	.....	9.2	10.4	9.9
Potatoes	do	1.7	2.0	3.3	2.4	1.8	2.3	3.0	2.4	1.9	2.2	4.0	2.8
Onions	do	.....	4.1	5.9	5.8	.....	4.4	6.0	5.9	.....	3.8	5.9	6.1
Cabbage	do	.....	3.5	3.8	3.5	.....	3.7	4.7	4.3	.....	3.2	4.6	4.4
Beans, baked	No. 2 can	.....	12.6	12.9	12.9	.....	11.6	11.4	11.4	.....	12.3	12.9	13.1
Corn, canned	do	.....	13.7	15.4	15.4	.....	13.8	13.8	14.4	.....	16.2	15.6	16.2
Peas, canned	do	.....	15.6	16.8	16.8	.....	16.5	16.9	16.8	.....	17.1	16.7	17.0
Tomatoes, canned	do	.....	13.6	14.0	14.2	.....	12.6	12.7	12.5	.....	13.6	13.6	13.8
Sugar, granulated	Pound	5.2	7.4	9.1	9.8	5.4	7.7	9.6	10.3	5.5	7.7	9.5	10.6
Tea	do	55.0	66.6	72.6	72.7	60.0	69.3	72.5	72.2	50.0	68.4	68.1	67.0
Coffee	do	30.7	34.5	38.0	38.2	25.6	31.3	32.9	33.4	26.5	37.3	39.4	40.4
Prunes	do	.....	21.0	20.6	19.2	.....	19.7	18.5	18.3	.....	19.8	18.8	19.0
Raisins	do	.....	21.6	17.3	17.1	.....	20.5	17.1	16.7	.....	20.7	16.7	17.0
Bananas	Dozen	.....	36.0	39.0	37.7	.....	33.9	42.3	45.6	.....	42.9	51.9	53.8
Oranges	do	.....	67.9	52.7	56.1	.....	52.2	50.2	46.7	.....	58.9	52.6	52.3

[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.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

Columbus, Ohio.			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Oct. 15, 1922.	Sept 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
			1913	1922			1913	1922			1913	1922			1913	1922		
Cts.	Cts	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
34.8	37.1	37 9	23.3	35.3	33.9	33.9	23.9	30.7	32.4	30.7	25.4	36.2	40.4	38.6	[1]35.3	[1]56.6	[1] 61.3	[1]61.0
30.5	32.6	32.7	21.3	32.1	30.3	29.8	21.4	26.5	28.5	26.1	20.8	29.1	32.3	30.6	28.0	41.8	44.6	44.5
26.6	27.8	27.7	20.1	26.6	26.4	26.4	17.8	22.6	23.3	22.5	20.0	25.8	28.4	27.1	23.3	27.0	30.6	29.9
20.9	21.1	21.3	16.9	21.9	21.1	21.1	15.8	16.4	17.3	17.0	15.4	18.6	21.1	20.4	18.0	20.6	22.1	21.9
14.3	13.0	13.0	13.6	16.8	16.9	16.9	10.0	9.8	10.3	9.7	11.0	12.0	12.0	12.2	.....	11.9	12.7	13.1
34.0	33.1	33.4	22.5	37.1	33.8	31.9	20.8	35.7	36.4	31.5	21.6	37.7	40.4	35.2	23.2	35.8	34.1	34.2
38.3	38.3	39.3	38.3	44.6	37.9	37.9	28.0	44.8	42.9	43.3	23.5	41.5	41.5	40.2	25.7	37.7	36.9	36.5
47.1	46.6	46.6	32.5	54.5	50.0	50.0	31.7	52.7	50.5	49.7	27.0	50.7	51.3	50.3	31.2	47.6	48.1	47.8
35.9	35.3	38.0	23.3	40.0	41.3	41.3	14.6	34.1	35.9	34.8	16.4	36.7	39.0	37.3	18.3	39.2	41.0	39.6
33.4	32.0	32.1	19.3	31.2	28.6	28.7	19.4	28.1	28.9	29.1	19.8	34.9	36.3	35.5	24.6	42.8	42.9	42.6
32.2	31.6	32.4	.....	31.7	30.2	30.2	.....	34.4	33.4	32.7	.....	30.4	30.1	30.0	.....	30.4	31.6	31.8
11.0	13.0	13.0	11.6	15.0	15.0	15.0	8.4	9.8	11.7	11.7	9.0	13.0	15.0	15.0	9.0	13.0	14.0	14.0
11.0	11.8	11.9	.....	12.5	14.0	14.0	.....	11.2	11.7	11.9	.....	10.7	11.8	11.8	.....	12.5	13.4	13.5
49.8	53.3	55.3	42.5	48.0	54.4	56.8	39.0	46.9	50.5	51.2	37.0	50.8	55.5	56.5	35.9	46.7	52.5	54.8
25.3	28.0	28.8	.....	27.3	30.0	30.0	.....	29.0	29.3	30.0	.....	27.0	29.0	29.6	.....	30.0	31.7	31.7
24.7	25.9	26.8	.....	29.4	31.3	31.1	.....	27.7	28.7	29.0	.....	25.9	26.8	27.5	.....	31.3	27.7	28.3
33.9	35.6	38.0	20.0	34.9	35.9	37.7	26.1	36.6	39.2	39.7	21.7	34.2	37.9	37.2	23.6	35.1	38.8	39.1
16.2	15.8	17.3	16.8	20.6	21.4	22.6	16.1	19.4	19.0	19.4	16.5	17.3	18.5	19.0	15.3	16.5	17.6	18.3
22.5	22.6	23.9	.....	21.6	20.3	20.4	.....	24.6	21.5	21.3	.....	23.0	23.7	24.1	.....	23.0	24.6	25.3
51.9	39.7	47.6	.....	40.8	40.9	43.0	37.1	45.6	43.6	47.9	35.6	52.6	48.1	56.1	52.7	76.0	70.2	78.5
39.0	.....	39.0	.....	34.0	.....	35.0	.....	36.8	.....	38.6	.....	38.1	.....	40.0	.....	41.2	.....	45.5
7.6	7.7	7.7	5.3	8.8	8.7	8.7	5.5	8.3	7.8	7.8	5.6	8.6	8.6	8.6	6.2	9.2	9.1	9.1
4.5	4.1	4.2	3.2	4.6	4.4	4.4	2.6	3.7	3.7	3.7	3.1	4.4	4.0	4.1	3.3	5.1	4.9	4.9
2.9	3.3	3.5	3.3	3.7	3.7	4.0	2.6	3.0	3.2	3.3	2.8	4.3	4.5	4.5	3.7	6.3	6.1	6.9
9.0	9.1	9.0	.....	10.3	10.7	10.7	.....	8.8	9.1	9.0	.....	9.3	8.8	9.0	.....	9.3	9.7	9.6
9.5	10.6	10.1	.....	11.8	11.0	11.0	.....	10.1	9.9	9.9	.....	9.0	9.1	8.9	.....	10.0	10.0	10.1
26.2	24.2	25.0	.....	25.6	25.1	25.1	.....	25.2	24.7	24.5	.....	24.9	24.3	24.0	.....	27.7	26.7	26.4
19.0	19.4	19.1	.....	21.2	21.1	21.1	.....	20.7	20.6	20.7	.....	19.4	19.1	19.7	.....	24.2	23.3	23.0
10.4	10.2	10.1	9.3	10.8	10.0	9.9	8.6	9.9	9.6	9.8	8.4	9.5	9.4	9.5	10.0	10.2	10.2	10.3
9.3	9.7	9.8	.....	10.7	11.5	11.3	.....	10.5	12.4	12.3	.....	8.9	9.6	9.4	.....	10.5	10.7	10.6
2.1	3.2	2.6	2.5	3.3	4.2	4.0	1.4	1.8	2.9	2.6	1.6	1.6	3.2	1.9	1.8	2.0	3.7	3.0
5.4	7.4	7.0	.....	6.0	7.0	7.0	.....	4.2	4.7	5.2	.....	3.8	6.1	5.8	.....	4.7	6.9	7.1
4.0	4.5	4.6	.....	5.0	5.4	5.4	.....	2.1	2.3	2.4	.....	2.7	5.0	4.1	.....	3.8	4.7	4.8
13.2	13.6	14.0	.....	15.8	14.4	14.4	.....	14.7	14.5	14.5	.....	12.3	11.9	11.8	.....	12.9	13.0	12.8
13.1	12.6	12.9	.....	17.3	16.1	16.1	.....	14.7	14.8	15.0	.....	15.3	14.8	14.5	.....	15.2	16.1	17.1
14.9	14.7	14.8	.....	21.1	21.1	21.1	.....	16.2	16.4	16.5	.....	16.8	16.5	16.7	.....	17.4	17.7	18.3
13.7	13.5	13.8	.....	14.0	14.2	14.0	.....	13.4	13.4	13.2	.....	13.2	12.7	12.6	.....	13.2	13.8	13.9
8.0	9.8	10.6	5.8	8.4	10.2	11.3	5.4	8.6	10.2	11.3	5.4	7.5	9.5	11.0	5.3	8.0	9.8	10.8
78.4	77.5	77.7	66.7	92.7	92.3	92.3	52.8	69.3	66.9	66.5	43.3	64.1	62.4	64.6	44.2	60.2	59.4	59.1
36.0	36.9	36.8	36.7	41.5	42.5	42.5	29.4	35.7	36.2	36.5	29.3	36.4	38.0	37.8	33.0	38.5	39.8	39.8
22.5	19.5	20.9	.....	23.8	20.5	20.0	.....	21.5	20.3	18.5	.....	20.7	18.2	18.3	.....	18.1	17.5	16.8
19.8	15.9	17.6	.....	22.2	18.2	17.5	.....	21.3	18.1	17.5	.....	19.3	16.5	16.4	.....	21.6	18.0	18.4
36.7	39.4	40.4	.....	35.7	33.3	34.0	.....	[2]12.1	[2]12.4	[2]14.1	.....	31.7	36.9	39.0	.....	[2]10.0	[2]11.0	[2]10.9
57.4	50.3	51.8	.....	67.2	53.6	55.0	.....	64.2	50.2	51.1	.....	61.7	51.7	52.8	.....	50.0	48.9	53.5

[2] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Oct. 15, 1922.	Sept 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept 15, 1923.	Oct. 15, 1923.
					1913	1922			1913	1922		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	29.6	29.6	29.3	26.0	36.2	38.9	38.1	25.5	34.2	33.8	33.9
Round steak	do	27.8	28.9	28.9	24.7	34.4	38.1	36.2	21.0	28.8	28.8	28.9
Rib roast	do	23.4	23.9	23.9	17.8	25.9	26.3	25.6	21.3	26.5	26.0	26.4
Chuck roast	do	19.2	18.9	20.0	16.3	21.9	22.7	22.3	14.6	17.2	17.0	17.7
Plate beef	do	14.3	15.3	15.7	12.9	14.1	14.4	14.0	11.6	10.3	10.7	10.1
Pork chops	do	33.8	31.8	31.2	22.2	35.4	35.6	32.9	24.0	34.5	30.0	30.6
Bacon, sliced	do	46.6	44.7	45.1	29.7	38.6	36.9	36.8	31.0	37.9	35.0	35.0
Ham, sliced	do	47.1	45.4	45.0	31.2	48.7	50.0	50.0	30.2	45.0	43.8	44.4
Lamb, leg of	do	32.9	35.0	35.0	20.7	38.1	39.2	38.3	21.6	36.6	35.0	35.0
Hens	do	33.9	33.8	32.8	21.0	31.9	33.3	32.4	23.8	35.2	33.5	34.4
Salmon, canned, red	do	30.6	30.6	30.4	.....	38.2	36.1	36.6	.....	30.7	30.8	31.2
Milk, fresh	Quart	15.3	15.3	15.3	8.0	10.0	12.0	12.0	12.3	17.7	16.3	18.7
Milk, evaporated	15-16-oz. can	11.8	12.8	12.8	.....	10.4	11.6	11.6	.....	11.4	12.7	12.8
Butter	Pound	49.2	54.3	54.9	36.8	47.4	55.1	55.7	39.3	48.8	53.9	56.0
Oleomargarine	do	31.8	32.5	34.3	.....	26.6	29.4	29.8	.....	29.6	29.4	28.6
Nut margarine	do	29.0	29.3	30.0	.....	26.0	27.2	28.5	.....	27.4	27.0	27.6
Cheese	do	33.5	34.6	35.7	21.3	35.1	36.5	37.7	22.5	31.8	34.9	35.5
Lard	do	18.6	19.9	20.7	15.0	15.3	15.3	16.8	15.8	17.3	18.0	18.6
Vegetable lard substitute	do	23.2	17.3	17.3	.....	22.2	24.0	24.4	.....	22.4	23.4	23.3
Eggs, strictly fresh	Dozen	39.6	38.4	39.0	32.2	45.0	40.8	43.7	40.0	60.4	51.5	53.6
Eggs, storage	do	35.8	.....	35.4	.....	38.0	.....	.....	.....	41.5	.....	40.0
Bread	Pound	6.6	7.1	7.1	5.1	7.3	8.5	8.5	6.2	10.6	10.3	10.3
Flour	do	4.9	4.5	4.5	3.2	4.5	4.4	4.3	3.7	5.6	5.3	5.3
Corn meal	do	3.3	3.8	3.9	2.5	3.1	3.4	3.5	2.9	3.1	3.6	3.8
Rolled oats	do	8.3	8.7	8.7	.....	7.9	7.6	7.7	.....	9.3	8.9	9.4
Corn flakes	8-oz. pkg	9.7	9.7	9.7	.....	9.1	8.8	8.9	.....	9.7	9.7	9.7
Wheat cereal	28-oz. pkg	24.8	23.9	24.1	.....	25.6	23.9	23.9	.....	25.6	24.4	24.7
Macaroni	Pound	19.7	19.9	19.6	.....	18.8	18.5	18.6	.....	19.3	19.4	19.7
Rice	do	7.7	7.7	7.7	9.2	10.0	10.2	10.3	6.6	8.9	8.6	8.9
Beans, navy	do	9.6	10.6	10.8	.....	9.7	10.0	10.2	.....	10.6	11.1	11.3
Potatoes	do	3.6	4.4	4.1	1.7	2.0	3.2	2.1	2.5	2.6	4.4	4.2
Onions	do	5.1	6.3	6.5	.....	5.0	7.0	6.8	.....	4.8	7.5	7.6
Cabbage	do	5.0	4.9	5.1	.....	4.0	4.5	4.1	.....	4.7	5.4	5.2
Beans, baked	No. 2 can	14.2	13.2	13.2	.....	13.0	13.2	13.7	.....	12.6	11.5	12.2
Corn, canned	do	13.6	13.8	13.8	.....	13.9	13.6	13.9	.....	15.9	16.4	15.7
Peas, canned	do	18.2	17.8	17.8	.....	15.6	16.0	16.0	.....	17.2	16.9	16.8
Tomatoes, canned	do	11.8	11.9	11.8	.....	13.7	14.1	14.0	.....	10.4	11.0	11.1
Sugar, granulated	Pound	7.8	9.1	10.0	5.7	8.3	9.9	10.0	5.9	7.8	9.7	10.8
Tea	do	72.4	70.8	70.8	60.0	74.4	77.1	77.1	60.0	84.1	86.5	86.8
Coffee	do	31.6	32.9	32.9	30.0	37.1	38.2	38.5	34.5	37.1	38.5	39.1
Prunes	do	21.1	17.2	17.2	.....	21.6	19.6	19.5	.....	20.2	19.6	19.7
Raisins	do	20.8	16.9	16.8	.....	22.6	17.8	17.7	.....	23.3	18.8	18.3
Bananas	Dozen	29.5	30.5	33.2	.....	29.3	31.3	31.4	.....	31.1	33.0	34.2
Oranges	do	56.6	45.3	44.0	.....	61.1	48.9	49.4	.....	35.1	59.7	49.3

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

CLES OF FOOD IN 51 CITI ES ON SPECIFIED DATES—Continued.

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
1913	1922			1913	1922			1913	1922			1913	1922			1913	1922		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
24.9	35.7	39.2	38.4	25.0	32.7	35.0	34.6	24.0	35.0	33.9	34.9	23.0	30.7	32.8	32.1	[1]37.0	[1]53.1	[1]59.2	[1]57.6
22.3	30.6	33.8	32.7	20.0	30.0	31.1	30.7	21.0	28.7	27.9	28.1	20.0	28.1	29.7	29.0	29.5	44.5	48.8	47.5
18.0	24.2	27.0	26.3	20.0	25.9	26.7	27.1	19.4	28.5	27.7	28.0	18.2	23.0	23.2	23.5	20.5	25.9	29.3	28.4
15.6	17.5	18.7	18.2	17.5	18.4	20.0	19.2	15.8	17.8	17.0	17.8	15.9	17.2	17.7	18.0	17.0	21.8	22.9	22.6
12.2	10.8	10.8	11.1	12.5	14.1	15.8	14.5	13.3	12.1	12.6	12.8	13.1	13.4	13.4	13.2	.....	14.9	16.1	16.0
23.1	34.7	35.3	30.7	21.3	35.3	33.9	33.3	25.4	39.5	37.5	40.4	21.9	33.9	32.5	30.1	22.8	38.4	36.8	35.4
31.3	44.3	42.6	42.7	36.7	42.4	42.0	41.3	33.1	50.7	49.8	51.4	29.5	37.9	33.5	33.5	23.5	34.6	33.9	33.9
29.4	49.3	46.9	47.1	30.0	50.3	47.7	46.7	35.0	59.1	57.2	59.5	29.0	41.9	41.3	40.9	29.0	44.6	40.9	41.1
18.3	30.9	32.3	32.0	18.8	35.7	40.0	36.7	18.6	32.3	33.3	33.6	18.2	32.0	34.6	35.0	20.0	36.9	39.3	37.1
16.1	28.5	28.9	28.3	19.0	29.8	28.4	28.7	26.2	39.8	38.9	39.6	21.8	28.9	30.9	31.8	24.5	41.9	42.4	42.1
....	31.6	33.0	33.2	....	30.8	31.4	31.4	....	40.2	37.8	38.3	....	29.0	29.3	28.8	.....	30.8	29.8	29.8
9.3	12.7	13.3	13.3	10.0	15.0	15.3	15.7	10.0	14.0	15.0	15.0	8.8	12.0	13.0	13.0	8.0	13.0	13.8	13.8
....	11.4	12.0	12.2	....	11.6	13.3	13.3	....	10.5	10.7	10.9	....	10.7	12.2	12.3	.....	12.8	14.0	13.9
38.8	47.8	54.2	55.4	45.0	49.8	54.5	56.6	39.5	63.2	59.8	60.3	39.2	51.9	55.8	56.5	42.0	53.2	56.8	59.1
....	26.6	27.2	27.0	....	29.5	31.0	30.3	....	31.7	33.3	33.7	....	27.2	29.3	30.0	.....	27.8	29.2	27.5
....	27.0	27.7	27.8	....	28.6	28.7	29.4	....	28.5	29.8	28.9	....	25.6	25.1	27.3	.....	23.3	22.3	20.7
21.8	35.3	38.3	38.5	23.3	34.3	37.6	37.7	19.5	36.5	37.5	38.6	22.5	32.9	34.7	36.7	22.0	33.9	36.7	37.6
16.4	18.0	18.7	18.7	16.5	19.7	19.1	19.4	17.9	19.5	19.2	20.4	16.1	15.8	16.1	17.4	16.3	17.5	18.0	18.8
....	24.5	23.8	24.1	....	22.7	21.3	21.2	....	23.6	22.9	23.6	....	22.4	23.7	24.0	.....	23.1	20.6	21.2
35.0	41.9	38.8	41.1	35.0	39.1	40.7	41.5	52.5	61.8	54.1	62.1	30.0	43.8	39.3	41.0	47.3	68.1	60.6	67.7
....	34.3	.....	.....	....	35.0	.....	38.3	....	41.6	.....	42.7	....	35.0	.....	.....	.....	41.1	.....	44.2
6.0	7.9	7.9	7.9	6.0	8.3	8.1	8.1	6.0	9.0	9.0	9.0	95.7	8.8	8.4	8.4	5.9	7.7	8.4	8.4
3.0	4.5	4.1	4.2	3.6	5.2	4.8	4.9	3.4	4.8	4.6	4.6	3.5	4.9	4.8	5.0	3.4	5.2	4.8	4.8
2.8	4.5	4.5	4.5	2.8	3.0	3.3	3.6	3.4	4.3	4.3	4.4	2.4	2.4	3.0	3.3	3.5	4.6	4.6	4.6
....	8.3	8.9	8.8	....	10.3	10.1	9.8	....	10.0	9.7	9.9	....	8.6	8.4	8.3	.....	9.0	8.6	8.6
....	9.9	10.2	10.2	....	9.8	9.8	9.8	....	9.9	9.5	9.8	....	9.3	9.1	9.0	.....	9.7	9.8	9.8
....	26.6	25.4	24.9	....	25.8	25.1	25.1	....	24.4	23.2	23.5	....	24.7	23.8	24.4	.....	26.1	24.3	24.1
....	21.3	21.4	21.8	....	21.6	20.3	20.3	....	16.6	15.6	16.4	....	17.6	16.7	16.9	.....	24.7	24.2	24.5
8.7	9.6	9.2	9.6	8.3	8.0	7.8	8.0	7.7	9.7	9.8	10.2	8.7	8.8	8.5	7.9	8.8	9.2	9.3	9.0
....	10.5	10.5	10.5	....	9.9	11.5	10.7	....	8.8	9.9	9.8	....	9.1	9.8	9.7	.....	10.2	10.2	10.3
1.9	2.3	2.7	2.2	2.4	3.0	3.8	3.1	1.7	2.6	3.9	3.8	2.2	2.0	3.6	2.4	1.6	1.8	3.1	2.4
....	5.1	6.7	6.9	....	5.7	7.0	7.7	....	4.6	5.6	5.8	....	3.8	6.0	6.9	.....	3.9	6.8	6.5
....	3.7	4.5	3.9	....	4.3	5.4	5.1	....	4.3	4.1	3.8	....	3.3	4.8	4.2	.....	3.9	4.7	4.5
....	14.5	14.3	14.1	....	13.3	13.2	12.4	....	14.3	13.0	13.1	....	11.8	11.3	11.5	.....	15.1	14.5	14.4
....	13.6	14.0	14.0	....	14.7	15.3	15.3	....	17.3	16.5	16.5	....	14.2	13.5	13.6	.....	18.0	17.4	17.3
....	15.5	15.4	15.3	....	18.7	18.8	18.5	....	19.3	18.4	18.5	....	15.5	15.5	15.6	.....	20.8	20.9	20.9
....	13.1	13.8	13.8	....	13.1	12.9	12.7	....	[2]15.7	[2]14.9	[2]14.9	....	11.3	11.7	12.1	.....	[3]19.2	[3]20.7	[3]20.7
5.7	8.2	9.8	11.0	5.5	8.8	10.6	11.7	5.5	8.1	9.9	10.7	5.4	7.7	9.5	10.8	5.3	8.0	9.8	11.1
54.0	80.2	79.6	80.4	50.0	91.8	92.3	92.3	54.5	70.8	69.4	69.8	65.0	73.9	73.4	72.7	47.5	57.4	57.7	57.7
27.8	37.8	39.4	39.4	30.8	39.7	41.0	41.3	36.3	38.4	38.9	39.8	27.5	34.9	36.3	36.0	32.0	39.3	39.5	39.5
....	20.7	18.6	17.7	....	22.6	19.8	19.3	....	19.2	18.3	18.2	....	18.7	18.5	17.2	.....	20.4	18.4	17.8
....	22.7	18.9	18.1	....	23.4	19.9	19.4	....	20.3	17.1	16.8	....	21.2	16.0	15.3	.....	19.4	15.7	15.6
....	[4]11.8	[4]12.9	[4]13.1	....	[4]10.0	[4]10.7	[4]11.0	....	[4]11.0	[4]11.8	[4]11.8	....	31.7	39.7	37.5	.....	[4]10.0	[4]11.9	[4]11.2
....	61.1	50.3	52.1	....	66.3	48.3	45.0	....	49.0	38.3	35.6	....	45.1	41.6	44.8	.....	64.3	48.3	51.4

[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.			
		Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
		1913	1922			1913	1922			1913	1922		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24.0	31.6	34.8	33.2	23.6	37.6	39.6	38.0	23.0	30.9	32.9	30.7
Round steak	do	20.0	28.4	31.0	29.6	21.6	33.0	35.1	33.8	21.3	27.1	29.7	26.5
Rib roast	do	21.0	23.8	25.7	24.3	18.8	26.7	28.3	27.5	20.0	24.2	25.0	24.2
Chuck roast	do	15.4	17.3	19.0	18.3	16.4	22.1	23.0	22.7	17.0	17.8	18.9	18.7
Plate beef	do	11.9	12.1	14.5	13.8	12.1	12.3	12.6	13.5	10.1	9.4	10.1	10.2
Pork chops	do	20.5	31.4	31.7	28.1	21.2	36.2	38.3	32.1	20.8	34.8	34.5	30.6
Bacon, sliced	do	31.0	37.6	37.7	36.2	28.6	41.8	41.6	41.1	27.7	43.6	41.8	40.6
Ham, sliced	do	29.0	47.3	45.8	44.3	29.0	45.5	45.1	44.9	32.7	48.1	47.3	46.5
Lamb, leg of	do	20.0	36.4	36.3	34.1	19.5	36.2	37.5	36.2	14.8	32.1	33.7	33.1
Hens	do	19.5	29.4	29.0	28.8	18.8	30.2	32.0	29.1	17.2	27.3	28.4	27.5
Salmon, canned, red	do		35.5	36.0	36.1		32.6	35.3	34.4		39.2	36.6	36.6
Milk, fresh	Quart	10.0	15.0	15.0	15.0	7.0	9.0	11.0	11.0	8.0	11.0	12.0	12.0
Milk, evaporated	15-16-oz. can		11.1	13.0	13.0		10.6	11.5	11.6		11.6	12.6	12.6
Butter	Pound	38.8	47.0	51.9	52.8	35.0	50.0	53.5	53.5	35.5	46.7	50.2	51.5
Oleomargarine	do		30.0	30.0	28.3		25.0	26.9	27.5		25.7	27.1	28.3
Nut margarine	do		27.2	24.2	25.0		24.3	26.0	26.5		25.1	25.7	26.3
Cheese	do	20.8	32.3	35.8	36.7	22.0	33.6	36.2	37.0	20.8	32.5	35.8	36.0
Lard	do	16.3	16.1	17.6	17.6	15.8	17.7	18.3	19.0	15.7	16.9	17.6	18.2
Vegetable lard substitute	do		21.1	22.9	23.2		22.4	23.5	24.2		24.1	24.7	25.3
Eggs, strictly fresh	Dozen	29.6	42.0	40.2	41.1	35.0	45.5	39.0	43.9	34.0	42.9	36.9	41.3
Eggs, storage	do				38.5		36.5		38.2		34.0		34.0
Bread	Pound	6.0	9.0	8.9	9.2	5.7	8.9	8.9	8.8	5.6	9.0	9.0	9.0
Flour	do	3.5	5.2	5.1	5.1	3.0	4.2	4.1	4.2	2.8	4.5	4.3	4.4
Corn meal	do	2.5	2.7	3.4	3.6	3.7	3.7	3.9	4.1	2.5	3.8	3.8	4.0
Rolled oats	do		8.9	9.3	9.2		6.8	7.5	7.4		7.9	8.7	8.6
Corn flakes	8-oz. pkg		9.5	9.8	9.9		9.0	9.2	9.3		10.2	10.2	10.2
Wheat cereal	28-oz. pkg		25.7	24.6	24.3		24.5	24.2	24.5		25.2	24.4	24.3
Macaroni	Pound		17.6	17.7	18.0		17.3	17.6	17.5		17.9	17.6	17.4
Rice	do	8.1	8.5	8.0	8.1	9.0	10.3	10.2	10.4	8.6	9.6	9.4	9.6
Beans, navy	do		10.0	10.9	9.9		9.7	10.5	10.1		9.6	10.4	10.5
Potatoes	do	2.1	2.6	3.8	3.3	1.6	1.5	2.6	2.1	1.3	1.4	1.8	1.6
Onions	do		4.0	5.2	5.4		3.4	6.0	6.3		3.9	6.0	5.6
Cabbage	do		3.0	3.9	3.6		1.8	2.8	2.4		2.1	3.8	2.8
Beans, baked	No. 2 can		13.5	13.2	12.8		11.3	11.7	11.7		15.2	13.9	13.9
Corn, canned	do		14.4	15.0	14.9		15.1	15.4	15.4		14.0	13.3	13.4
Peas, canned	do		17.5	17.9	17.3		15.7	15.6	15.5		15.3	15.9	15.9
Tomatoes, canned	do		12.2	13.1	12.6		13.7	14.0	14.0		15.2	14.8	14.9
Sugar, granulated	Pound	5.6	8.1	9.6	11.0	5.5	7.6	9.4	10.1	5.6	8.1	10.0	10.3
Tea	do	58.8	85.9	84.0	84.2	50.0	68.9	70.4	70.4	45.0	63.7	65.3	65.3
Coffee	do	27.5	36.6	37.9	37.4	27.5	32.3	34.4	34.3	30.8	40.2	42.0	42.3
Prunes	do		22.8	19.8	18.3		21.4	19.8	18.9		21.1	20.4	19.1
Raisins	do		21.8	19.2	18.0		19.8	16.9	16.7		20.5	17.7	17.6
Bananas	Dozen		30.6	35.6	36.7		[3] 9.4	[3] 10.9	[3] 11.4		[3] 10.4	[3] 13.0	[3] 13.0
Oranges	do		55.6	41.4	44.8		71.2	52.1	54.0		64.4	52.8	52.0

[1] Whole. [2] No. 3 can. [3] Per pound.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
			1913	1922			1913	1922			1913	1922			1913	1922		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
29.6	32.1	31.5	27.7	44.5	48.0	47.1	31.8	49.7	54.2	53.8	21.5	30.8	33.1	31.5	26.1	42.3	45.0	44.3
29.3	31.3	31.2	27.7	42.2	45.6	44.2	29.6	41.4	44.6	43.9	19.0	27.6	29.7	28.1	25.5	40.9	43.5	42.8
25.0	26.5	25.2	21.0	33.7	36.7	36.0	24.2	35.3	36.6	36.4	18.4	27.8	28.9	27.5	21.6	36.1	37.3	36.9
19.0	19.8	20.2	18.6	22.2	25.4	25.3	20.0	25.6	28.6	27.7	15.5	19.9	19.9	20.1	16.0	22.3	23.3	23.5
15.8	15.0	15.2	12.0	12.3	13.3	12.5	.....	15.5	15.4	15.3	11.2	15.6	15.4	15.5	14.8	17.5	18.5	18.6
35.8	38.3	38.8	24.0	38.5	41.0	36.7	23.6	39.6	38.8	35.8	25.0	40.1	37.4	35.0	22.9	38.5	38.5	36.5
41.8	39.5	39.6	25.8	38.9	39.8	39.1	29.7	41.1	40.5	40.3	30.4	41.8	39.7	40.0	25.7	40.2	38.1	38.3
46.2	45.5	43.8	[1]20.8	[1]28.3	[1]29.6	[1]28.6	32.8	54.9	55.2	54.4	26.0	47.1	43.9	43.6	29.5	54.8	52.1	51.7
33.6	35.6	35.0	19.0	37.5	39.9	37.7	18.3	38.2	42.1	39.1	21.0	40.7	40.5	39.3	15.2	33.7	37.1	35.6
35.5	33.0	35.0	23.0	38.0	37.5	37.4	23.5	40.9	39.9	40.6	21.0	36.7	36.6	36.5	21.8	36.9	36.3	36.6
30.3	28.4	27.9	.....	29.6	27.4	26.7	.....	33.8	34.3	34.6	.....	37.8	42.0	42.0	.....	28.5	29.1	29.3
15.0	15.0	15.0	9.0	16.5	16.0	16.5	9.0	15.0	16.0	16.0	9.5	14.0	14.0	15.0	9.0	15.0	15.0	15.3
11.8	13.0	12.8	.....	10.7	12.0	11.9	.....	10.8	12.5	12.5	.....	11.0	12.1	12.1	.....	10.6	11.7	11.8
50.8	56.9	57.9	39.2	53.7	55.1	57.5	36.8	46.6	52.9	54.8	37.5	49.1	53.5	54.8	37.5	52.0	54.9	56.5
30.2	30.3	30.0	.....	28.4	29.7	29.8	.....	28.6	31.0	31.8	.....	28.2	29.9	30.3	.....	28.3	29.3	29.7
27.1	27.5	27.3	.....	25.3	26.9	27.3	.....	27.0	28.0	28.5	.....	27.3	27.6	28.4	.....	26.3	26.7	27.6
33.4	37.3	37.4	24.8	35.1	40.4	40.2	23.5	33.4	36.7	37.5	21.4	34.2	36.1	36.3	19.8	33.1	38.4	38.7
17.5	17.8	18.3	16.3	17.3	17.5	18.7	15.7	17.4	17.8	18.2	14.9	16.8	17.2	17.7	16.3	17.6	17.8	19.1
23.0	19.6	20.0	.....	22.3	23.4	24.4	.....	22.2	22.6	23.1	.....	22.4	22.4	22.1	.....	22.7	23.9	24.6
43.3	43.7	48.8	52.7	72.9	61.4	68.9	52.9	75.7	64.8	74.2	34.3	40.6	39.5	42.7	47.9	66.3	59.7	65.9
39.4	.....	42.0	.....	42.8	.....	46.0	.....	41.6	.....	55.3	.....	34.2	.....	37.3	.....	40.8	.....	42.8
8.2	8.9	8.7	5.6	8.6	8.5	8.5	6.0	8.1	8.0	8.0	5.0	7.7	7.6	7.6	6.0	9.8	9.6	9.6
5.2	5.0	5.1	3.6	4.9	4.6	4.5	3.2	4.7	4.4	4.5	3.8	5.5	5.3	5.4	3.2	5.0	4.5	4.6
2.9	3.5	3.7	3.6	6.1	6.1	6.4	3.2	5.9	5.9	6.0	2.9	3.1	3.6	3.8	3.5	5.3	5.1	5.4
9.0	8.5	8.4	.....	7.9	8.3	8.1	.....	8.8	8.7	8.7	.....	8.7	8.7	8.7	.....	7.9	8.2	8.2
9.4	9.3	9.3	.....	8.9	8.9	8.9	.....	9.4	9.5	9.6	.....	9.5	9.4	9.5	.....	8.6	8.8	8.9
24.2	23.5	23.5	.....	25.4	23.8	23.5	.....	24.8	23.4	23.4	.....	24.5	24.0	24.0	.....	24.7	22.9	22.7
20.0	20.1	19.4	.....	21.1	21.0	21.0	.....	21.8	22.7	22.8	.....	9.7	8.8	8.9	.....	20.4	20.3	20.3
8.2	8.8	8.6	9.0	9.1	9.4	9.4	9.3	10.2	9.8	9.8	7.5	8.6	9.1	9.2	8.0	9.1	9.5	9.5
11.3	11.4	11.0	.....	10.2	10.9	10.9	.....	10.2	10.3	10.3	.....	10.1	9.9	10.0	.....	10.2	11.7	11.7
3.2	4.1	3.1	2.5	2.1	4.1	3.7	1.7	2.0	3.8	3.1	2.1	3.1	3.9	3.5	2.4	2.2	3.7	3.4
4.5	6.0	6.1	.....	4.9	6.6	6.5	.....	5.2	6.8	6.9	.....	4.2	5.0	5.2	.....	4.2	6.2	6.5
4.0	4.5	4.3	.....	4.1	6.1	4.9	.....	3.7	6.6	5.9	.....	4.3	4.0	4.0	.....	3.1	5.7	5.4
13.2	12.1	11.9	.....	11.2	11.1	11.1	.....	12.4	12.0	12.0	.....	12.8	12.8	12.9	.....	11.5	11.8	11.8
15.1	15.3	14.9	.....	14.8	15.5	15.5	.....	18.2	18.1	17.9	.....	13.1	13.2	13.2	.....	14.3	15.4	15.4
16.0	15.7	16.0	.....	17.2	18.1	18.0	.....	21.2	20.9	20.7	.....	16.9	17.4	17.3	.....	16.3	17.2	17.2
12.3	12.3	11.9	.....	11.0	11.9	11.9	.....	[2]22.3	[2]21.8	[2]22.1	.....	12.0	11.7	11.7	.....	10.8	11.6	11.5
8.1	9.8	11.3	5.2	7.2	9.0	10.1	5.5	7.5	9.5	10.6	5.1	7.6	9.0	10.4	4.9	7.2	8.9	9.9
75.3	73.9	75.5	53.8	49.5	54.9	54.9	55.0	57.7	56.9	57.2	62.1	72.3	69.9	69.9	43.3	47.9	57.2	57.8
35.6	37.2	36.9	29.3	33.0	35.8	35.9	33.8	38.2	39.8	40.3	25.0	30.9	31.1	31.0	27.2	32.6	34.5	34.5
21.7	22.6	18.6	.....	18.3	16.3	16.5	.....	19.8	17.6	17.2	.....	22.4	19.3	19.4	.....	19.2	16.8	16.1
23.3	18.7	16.7	.....	17.9	15.6	15.8	.....	18.8	15.8	15.6	.....	22.0	17.5	16.3	.....	18.2	15.5	15.5
26.5	31.1	30.0	.....	37.5	39.4	39.5	.....	33.5	32.7	32.9	.....	25.0	20.0	22.0	.....	41.7	42.5	43.3
55.0	50.5	44.2	.....	73.5	56.8	55.5	.....	64.3	49.1	52.8	.....	55.7	53.8	48.8	.....	76.6	55.6	57.8

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.
					1913	1922					
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	37.9	42.7	41.8	25.6	36.8	38.7	36.8	33.6	34.3	33.7
Round steak	do	32.1	36.1	35.9	22.8	33.8	35.6	33.4	31.9	33.4	32.3
Rib roast	do	30.0	33.3	32.8	19.4	25.4	26.1	26.8	24.4	23.6	23.6
Chuck roast	do	20.0	21.6	21.0	16.1	19.9	21.4	20.7	20.1	20.1	20.2
Plate beef	do	14.1	14.6	14.4	11.8	11.3	10.7	10.5	12.8	12.9	13.3
Pork chops	do	33.3	34.9	32.7	21.9	33.7	35.9	33.3	34.4	35.7	33.1
Bacon, sliced	do	37.7	35.0	34.8	28.6	46.3	45.6	45.0	42.9	41.4	41.4
Ham, sliced	do	40.4	41.4	41.8	30.0	51.7	49.1	49.4	47.9	48.9	46.1
Lamb, leg of	do	38.2	40.0	40.0	16.3	38.0	36.9	36.3	35.2	35.1	34.8
Hens	do	37.3	36.9	36.8	16.3	28.8	29.3	28.7	30.0	29.9	29.8
Salmon, canned, red	do	29.6	29.3	29.3	.....	33.8	33.7	33.2	33.1	32.3	32.2
Milk, fresh	Quart	17.0	17.0	17.0	8.2	11.0	12.3	12.3	10.4	11.6	11.6
Milk, evaporated	15-16-oz. can	10.4	11.4	11.5	.....	10.8	12.0	12.0	11.2	12.0	12.0
Butter	Pound	49.7	55.9	56.5	37.0	47.3	50.1	50.5	46.6	52.1	53.3
Oleomargarine	do	28.4	28.3	27.5	.....	28.4	28.9	28.8	27.9	29.5	29.7
Nut margarine	do	25.6	26.8	26.8	.....	27.3	28.4	28.6	27.2	27.4	28.1
Cheese	do	30.9	33.3	34.0	23.3	33.1	35.5	36.8	34.4	36.8	37.5
Lard	do	17.1	17.4	17.5	17.6	19.1	19.6	19.5	17.5	17.9	18.3
Vegetable lard substitute	do	21.6	17.5	17.9	.....	24.3	24.2	23.8	24.2	24.2	24.4
Eggs, strictly fresh	Dozen	46.0	47.9	50.1	30.0	38.8	36.4	39.0	45.9	38.0	41.4
Eggs, storage	do	35.8	.....	42.8	.....	28.5	.....	35.0	36.0	.....	35.0
Bread	Pound	8.0	7.8	7.8	5.2	9.8	9.8	9.8	8.5	8.0	8.4
Flour	d	4.8	4.4	4.5	2.7	4.0	3.8	3.9	4.7	4.5	4.5
Corn meal	do	3.5	3.7	3.8	2.5	3.4	3.8	3.9	3.6	3.7	3.9
Rolled oats	do	8.2	8.0	7.9	.....	10.7	10.1	10.1	8.8	9.4	9.1
Corn flakes	8-oz. pkg	9.6	9.4	9.3	.....	9.8	10.3	10.6	10.0	10.0	10.0
Wheat cereal	28-oz. pkg	25.8	23.8	23.6	.....	25.7	24.2	24.2	27.3	26.1	25.3
Macaroni	Pound	20.3	20.0	19.4	.....	20.5	20.0	20.0	19.5	19.5	19.5
Rice	do	9.9	9.9	9.9	8.5	9.8	9.2	9.4	10.1	9.5	9.5
Beans, navy	do	9.6	10.8	10.3	.....	10.8	11.8	11.0	10.6	10.9	10.6
Potatoes	do	2.3	3.3	2.8	1.8	1.6	2.4	2.0	2.0	2.6	2.1
Onions	do	4.8	6.4	6.3	.....	4.0	5.3	5.7	4.8	7.3	7.5
Cabbage	do	3.8	4.9	4.6	.....	2.8	3.8	3.5	3.3	4.1	3.7
Beans, baked	No. 2 can	10.9	9.8	9.9	.....	15.0	15.2	15.3	13.4	12.9	12.7
Corn, canned	do	14.8	15.7	15.5	.....	16.1	16.3	16.3	14.6	14.6	14.5
Peas, canned	do	18.7	18.8	18.2	.....	16.6	17.3	17.4	17.0	17.2	17.6
Tomatoes, canned	do	11.0	10.8	10.8	.....	15.0	14.6	14.4	14.2	14.1	14.1
Sugar, granulated	Pound	7.5	8.8	9.9	5.8	8.2	9.9	10.3	8.5	10.1	10.9
Tea	do	75.4	82.1	81.5	56.0	76.7	75.2	75.4	61.9	60.6	61.0
Coffee	do	36.9	37.9	37.4	30.0	38.8	41.1	41.1	35.6	36.6	36.6
Prunes	do	19.5	17.5	17.0	.....	23.2	20.3	19.8	22.6	21.1	20.8
Raisins	do	20.9	16.9	15.6	.....	22.8	19.8	19.4	24.3	18.9	17.7
Bananas	Dozen	34.6	35.4	36.7	.....	[1] 10.2	[1] 12.6	[1] 13.2	[1] 10.2	[1] 11.8	[1] 11.6
Oranges	do	54.5	53.4	48.1	.....	59.5	48.2	48.5	60.0	45.3	44.6

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

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.			
Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
1913	1922			1913	1922						1913	1922			1913	1922		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 31.2	[1] 48.2	[1] 51.3	[1] 50.2	27.7	41.1	45.0	44.3	[1] 57.7	[1] 60.8	[1] 59.6	23.5	28.4	28.1	27.8	[1] 40.2	[1] 66.9	[1] 69.9	[1] 69.9
26.4	38.5	40.8	40.4	23.7	33.9	36.9	36.7	46.1	47.6	46.4	21.0	25.8	25.1	24.6	31.6	48.8	51.2	49.3
22.1	32.8	34.6	33.5	21.7	31.3	32.5	32.5	29.3	29.7	29.5	19.6	24.5	24.3	24.1	24.2	36.7	39.2	37.9
18.2	20.2	21.4	21.1	17.8	21.1	22.3	22.4	19.1	20.4	20.1	16.9	16.0	16.3	16.1	18.8	26.6	29.8	27.0
11.5	9.8	10.1	10.5	12.8	11.1	11.6	11.6	14.3	15.7	15.0	13.8	12.0	11.9	11.7	.....	16.4	17.9	17.9
23.3	37.9	38.6	36.1	23.2	36.8	40.5	35.3	38.4	36.7	37.1	23.4	34.9	33.5	32.7	22.0	42.8	40.8	39.4
27.5	38.8	36.6	36.2	30.6	42.4	42.2	41.4	38.4	36.9	36.3	31.5	45.3	46.0	45.6	22.2	37.0	36.7	37.1
31.9	53.8	52.9	51.8	29.9	53.8	54.3	53.8	53.3	48.4	47.3	30.8	48.6	47.8	46.5	33.3	54.5	53.7	52.3
19.1	38.5	39.6	38.9	20.0	38.3	39.7	38.6	37.2	39.5	37.7	16.9	31.0	32.4	32.4	18.7	40.2	43.5	41.6
23.1	39.9	38.1	37.5	25.5	40.5	40.2	40.6	39.8	40.6	40.1	21.3	30.0	30.9	31.6	24.8	41.3	41.5	41.8
.....	27.5	26.3	26.2	.....	28.7	28.9	29.3	28.4	28.1	28.0	.....	39.0	34.6	35.8	.....	31.9	31.0	30.9
8.0	12.0	13.0	13.0	8.8	13.0	14.0	15.0	14.0	14.0	14.0	9.7	12.6	13.0	13.0	9.0	15.0	15.0	15.0
.....	11.0	12.2	12.2	.....	10.4	12.1	12.1	12.1	13.5	13.7	.....	11.8	12.0	11.9	.....	12.0	12.5	12.7
43.1	55.8	58.6	61.3	39.5	52.8	56.1	58.0	52.9	57.8	58.8	42.0	54.0	55.8	57.7	38.6	48.7	54.2	54.9
.....	27.3	29.7	29.7	.....	26.4	28.0	29.3	29.9	30.8	30.7	.....	29.2	29.8	31.0	.....	30.4	29.2	30.0
.....	27.0	28.2	27.7	.....	26.0	26.5	27.0	28.7	27.5	27.2	.....	28.6	27.5	29.4	.....	28.2	29.1	28.3
25.0	35.5	38.0	38.6	24.5	34.0	37.5	38.3	34.7	39.4	40.1	20.8	36.2	37.9	39.3	22.0	33.3	36.0	36.6
15.6	16.5	17.5	17.8	15.7	15.9	16.4	17.7	17.8	17.9	18.4	18.3	19.8	19.5	20.0	15.7	17.3	17.5	17.8
.....	22.7	23.1	23.7	.....	23.2	23.7	24.2	24.0	22.8	23.2	.....	25.3	25.0	26.3	.....	23.6	23.9	24.6
42.5	57.4	51.2	57.3	38.0	53.8	46.2	55.4	67.5	61.6	69.0	49.0	53.8	45.9	57.7	53.0	75.1	66.4	78.1
.....	41.2	.....	42.0	.....	38.5	.....	40.0	43.2	.....	42.7	.....	42.2	.....	44.2	.....	38.6	.....	41.9
4.8	8.6	8.4	8.4	5.5	8.2	8.5	8.5	9.4	9.3	9.3	5.6	9.4	9.2	9.2	5.9	8.9	8.8	8.8
3.2	4.9	4.5	4.6	3.2	4.8	4.4	4.4	4.9	4.5	4.5	2.9	4.3	4.3	4.1	3.5	5.1	4.9	4.9
2.8	3.6	3.9	4.1	3.0	3.9	4.4	4.8	4.3	4.7	4.6	3.4	3.5	3.6	3.8	3.1	3.7	4.1	4.2
.....	8.0	8.3	8.3	.....	8.8	8.9	8.9	6.9	6.9	6.9	.....	9.9	9.3	9.3	.....	9.5	9.4	9.4
.....	8.8	8.8	8.8	.....	9.6	9.5	9.5	9.8	9.7	9.7	.....	11.0	11.4	11.4	.....	9.8	9.7	9.8
.....	25.0	23.9	23.7	.....	25.4	24.9	25.0	25.8	24.5	24.6	.....	28.6	25.7	26.3	.....	26.7	24.1	24.1
.....	21.1	20.5	20.5	.....	20.2	21.8	21.3	23.4	23.4	23.6	.....	16.4	18.4	18.1	.....	22.1	22.4	22.4
9.8	10.3	10.2	10.3	9.2	9.5	9.6	10.0	10.7	10.5	10.4	8.6	10.1	9.4	9.9	9.3	9.5	9.4	9.4
.....	9.5	11.2	11.3	.....	9.8	10.4	10.3	10.5	10.6	10.3	.....	9.2	9.9	10.1	.....	10.4	10.6	10.8
2.3	2.3	4.3	3.8	1.9	2.1	3.9	3.1	1.9	3.0	2.5	1.3	1.6	2.1	2.3	1.7	2.1	3.7	2.8
.....	4.2	6.2	5.9	.....	4.3	6.7	6.6	4.1	6.4	6.3	.....	3.3	4.6	4.8	.....	4.6	6.3	6.6
.....	3.2	5.1	4.5	.....	3.6	4.7	4.7	2.7	2.9	3.0	.....	2.2	3.1	3.0	.....	3.6	4.2	4.2
.....	11.8	11.2	11.2	.....	12.8	12.8	12.8	15.2	15.7	15.7	.....	17.4	14.8	15.0	.....	13.0	12.1	12.2
.....	14.9	14.9	14.7	.....	14.0	15.0	15.5	15.9	16.2	16.2	.....	17.1	17.4	18.2	.....	17.5	16.9	16.9
.....	16.3	16.6	16.5	.....	15.5	16.4	16.9	20.4	20.4	20.4	.....	17.6	17.0	18.8	.....	19.9	20.0	19.7
.....	11.9	12.5	12.0	.....	12.4	12.6	12.6	[2] 23.1	[2] 22.3	[2] 22.0	.....	[3] 15.7	[3] 16.4	[3] 16.9	.....	14.3	13.8	13.7
5.0	7.2	8.8	10.0	5.7	7.7	9.5	10.7	8.1	9.6	10.9	6.2	8.1	9.9	10.5	5.1	7.8	9.3	10.3
54.0	59.4	59.1	59.2	58.0	74.4	74.8	76.5	56.5	57.5	57.5	55.0	63.8	65.7	69.7	48.3	58.8	61.1	60.7
24.5	31.1	31.6	30.7	30.0	35.9	38.0	38.7	40.4	41.4	41.4	35.0	37.4	37.1	38.8	30.0	40.2	41.7	41.7
.....	18.6	16.3	15.7	.....	20.9	19.5	19.5	20.6	17.7	17.2	.....	14.9	12.3	10.7	.....	20.1	19.4	19.7
.....	20.1	16.1	16.2	.....	21.0	16.6	16.3	19.7	15.4	15.4	.....	20.2	16.4	16.1	.....	20.1	16.6	16.3
.....	30.9	32.9	34.0	.....	41.7	44.1	45.3	[4] 9.9	[4] 11.7	[4] 11.8	.....	[4] 13.7	[4] 15.4	[4] 15.6	.....	33.5	36.9	35.6
.....	57.9	49.6	49.7	.....	56.4	56.0	58.8	69.9	52.2	54.4	.....	63.1	51.8	49.9	.....	77.5	60.8	61.2

[2] No. 3 can. [3] No. 2½ can. [4] Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Richmond, Va.				Rochester, N.Y.			St. Louis, Mo.			
		Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
		1913	1922						1913	1922		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	22.2	37.9	40.8	39.4	38.7	41.1	40.1	26.0	34.3	36.0	35.8
Round steak	do	20.0	33.8	35.1	34.6	33.7	34.5	34.0	24.3	31.7	33.6	32.9
Rib roast	do	18.9	29.5	30.7	30.9	27.7	30.0	29.7	19.5	26.8	27.6	28.9
Chuck roast	do	15.9	21.8	21.9	21.8	22.3	23.5	23.4	15.6	18.3	18.2	19.1
Plate beef	do	12.6	15.0	15.4	15.5	12.3	12.0	12.3	11.9	12.9	12.1	12.7
Pork chops	do	22.0	36.0	35.8	33.7	38.8	39.3	37.2	19.8	32.5	35.4	30.5
Bacon, sliced	do	27.2	37.2	33.9	34.1	35.4	34.7	34.4	26.9	39.9	39.0	39.7
Ham, sliced	do	25.0	42.2	40.0	39.0	48.7	46.8	46.4	27.3	44.1	43.8	44.1
Lamb, leg of	do	19.3	42.5	42.1	42.3	35.9	38.2	36.8	18.3	32.5	35.0	34.4
Hens	do	20.4	35.2	33.3	34.7	38.3	38.8	37.9	16.8	29.6	30.2	30.2
Salmon, canned, red	do	.....	32.4	31.2	32.0	27.7	28.9	28.9	.....	31.9	31.6	31.8
Milk, fresh	Quart	10.0	13.0	14.0	14.0	13.0	13.0	13.3	8.8	12.0	13.0	13.0
Milk, evaporated	15-16-oz. can	.....	12.3	13.6	13.6	11.3	12.1	12.1	.....	10.2	11.4	11.5
Butter	Pound	40.2	53.6	58.9	60.3	49.9	54.5	56.3	37.9	52.8	56.4	58.2
Oleomargarine	do	.....	28.2	30.2	29.6	28.6	30.2	30.8	.....	26.3	26.3	27.7
Nut margarine	do	.....	27.6	28.8	29.3	26.3	28.0	28.4	.....	24.6	24.7	24.7
Cheese	do	22.3	34.2	37.0	37.6	34.5	37.6	38.3	19.5	33.6	35.1	36.3
Lard	do	15.4	17.7	17.9	19.0	17.3	17.2	18.0	13.1	14.7	14.6	15.1
Vegetable lard substitute	do	.....	23.1	23.1	23.6	22.6	19.7	20.2	.....	22.3	23.0	24.0
Eggs, strictly fresh	Dozen	34.5	49.5	43.8	46.7	56.6	47.0	55.8	31.0	43.4	40.9	42.9
Eggs, storage	do	.....	38.8	.....	41.8	38.8	.....	38.8	.....	34.6	.....	35.8
Bread	Pound	5.4	9.1	8.7	8.6	8.0	8.0	8.0	5.6	9.0	8.9	8.9
Flour	do	3.2	5.0	4.6	4.6	5.0	4.4	4.5	2.9	4.1	4.0	4.2
Corn meal	do	2.3	3.9	4.7	4.5	4.6	4.7	4.7	2.5	3.0	3.4	3.8
Rolled oats	do	.....	9.5	9.1	9.1	6.5	8.4	8.4	.....	8.3	8.3	8.5
Corn flakes	8-oz. pkg	.....	9.9	9.6	9.6	9.8	9.5	9.5	.....	8.9	8.8	8.9
Wheat cereal	28-oz. pkg	.....	26.5	25.5	25.5	24.9	24.0	23.9	.....	24.2	23.2	24.2
Macaroni	Pound	.....	20.3	21.1	21.1	18.9	18.6	18.6	.....	19.9	19.1	20.0
Rice	do	10.0	11.6	11.0	11.0	9.6	9.4	9.5	8.2	8.9	8.9	9.3
Beans, navy	do	.....	10.4	12.4	11.4	10.3	10.8	10.8	.....	9.9	9.9	9.9
Potatoes	do	2.1	2.7	4.8	3.9	1.5	3.4	2.3	1.9	2.5	3.0	2.6
Onions	do	.....	5.1	7.9	7.5	4.5	6.1	5.8	.....	4.0	5.9	5.8
Cabbage	do	.....	3.9	5.7	5.3	3.1	4.6	3.9	.....	3.4	3.6	3.6
Beans, baked	No. 2 can	.....	12.0	11.6	11.4	11.4	11.2	11.2	.....	11.4	11.0	11.3
Corn, canned	do	.....	15.0	15.0	15.0	15.7	16.5	16.5	.....	14.7	15.2	15.3
Peas, canned	do	.....	18.9	20.2	19.5	18.8	19.1	19.1	.....	16.3	16.6	16.5
Tomatoes, canned	do	.....	12.5	11.7	12.0	12.4	12.4	12.4	.....	11.6	11.9	12.0
Sugar, granulated	Pound	5.4	8.0	9.5	10.6	7.5	9.4	10.5	5.3	7.9	9.7	10.6
Tea	do	56.0	78.4	83.0	81.7	61.3	62.2	62.5	55.0	66.8	66.6	69.7
Coffee	do	27.4	35.4	38.3	37.8	34.0	35.2	35.3	24.4	35.0	35.5	36.5
Prunes	do	.....	23.2	21.7	21.2	20.0	20.9	21.1	.....	22.2	21.2	21.4
Raisins	do	.....	20.8	17.8	16.9	19.1	15.3	15.4	.....	21.4	17.0	17.0
Bananas	Dozen	.....	36.9	39.2	39.2	40.0	42.8	42.8	.....	30.0	33.0	31.6
Oranges	do	.....	58.5	52.7	52.3	71.3	50.7	51.3	.....	49.0	46.5	46.5

[1] No. 2½ can.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

St. Paul, Minn.				Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
1913	1922			1913	1922			1913	1922						1913	1922		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
26.4	34.0	36.8	34.6	22.6	28.3	27.9	26.5	21.4	30.3	30.4	31.0	28.7	31.7	30.4	26.0	46.9	50.7	49.3
23.0	27.2	30.9	29.3	20.0	25.7	24.0	23.7	19.7	27.3	27.6	27.4	24.9	25.8	25.4	22.0	37.8	41.6	40.3
20.4	26.9	28.9	27.7	19.4	22.3	20.8	20.8	21.3	28.5	29.2	29.6	22.4	24.6	23.3	23.0	35.5	36.5	36.1
16.8	20.0	21.6	21.3	15.0	17.0	16.9	16.3	15.2	17.7	17.8	18.5	15.5	15.7	15.0	17.6	25.9	26.7	26.9
10.8	10.6	11.3	11.5	12.5	11.8	11.6	11.7	14.2	14.2	13.8	14.3	13.1	12.7	13.2	11.9	11.5	11.1	11.1
20.4	34.2	34.4	29.0	24.3	35.2	34.3	33.2	24.2	38.5	38.2	38.5	34.0	29.8	29.3	22.8	39.9	41.6	39.1
27.0	41.6	39.6	38.9	30.0	39.5	37.9	37.5	34.4	53.9	50.8	51.2	36.7	35.4	34.2	27.5	43.1	41.8	41.7
28.8	45.7	44.3	42.9	30.0	48.6	42.9	42.5	34.0	55.0	53.5	53.1	39.6	36.5	37.0	30.0	55.3	54.0	53.8
16.1	33.1	33.3	31.1	16.9	30.7	31.8	30.8	16.7	34.4	35.6	36.6	37.5	36.3	36.3	17.3	42.5	46.6	45.2
18.0	25.9	28.6	27.2	23.3	33.4	31.6	31.5	24.5	39.0	39.6	39.8	33.3	32.4	34.2	21.8	42.4	42.3	41.3
.....	35.2	34.8	34.4	.....	33.0	34.7	34.7	.....	28.2	27.4	27.2	35.3	35.1	36.4	.....	36.4	35.1	35.2
7.8	11.0	12.0	12.0	8.7	9.0	10.0	10.0	10.0	13.0	13.0	13.0	17.3	17.5	17.5	8.8	13.0	14.0	14.0
.....	11.3	12.1	12.1	.....	11.0	10.9	10.9	.....	10.5	10.9	10.9	10.8	11.5	11.3	.....	11.6	12.3	12.2
36.5	45.3	50.3	51.1	39.0	48.9	53.6	52.9	40.0	63.5	60.5	60.9	51.1	56.3	57.7	36.6	47.7	53.5	54.7
.....	28.3	27.7	28.6	.....	.....	.....	.....	.....	27.8	28.0	28.6	31.7	33.7	33.2	.....	26.6	31.0	29.5
.....	26.8	26.3	26.4	.....	28.8	27.3	28.1	.....	27.8	28.3	27.8	29.0	30.4	30.8	.....	23.0	24.0	25.0
21.0	32.3	34.9	35.2	24.2	28.9	31.7	32.2	21.0	38.3	38.4	39.7	32.5	35.6	36.5	18.3	31.9	35.8	36.4
15.3	17.7	17.8	18.9	20.0	20.1	19.5	20.2	18.0	19.2	19.2	19.5	18.0	17.4	18.1	16.0	17.7	17.8	18.5
.....	24.8	24.0	22.3	.....	26.2	27.4	28.4	.....	25.4	25.6	26.1	21.6	18.5	19.7	.....	23.2	22.8	23.5
32.3	42.9	37.7	41.3	42.0	49.3	41.1	55.0	56.4	66.6	53.7	66.8	47.2	49.4	52.6	45.8	60.0	49.1	56.3
.....	37.6	.....	35.7	.....	38.1	.....	42.4	.....	42.4	.....	44.1	37.8	.....	40.8	.....	37.9	.....	41.2
6.0	9.4	9.4	9.4	5.9	9.5	9.8	9.8	5.9	9.1	9.2	9.2	8.7	8.5	8.5	5.6	8.7	9.1	8.9
2.9	4.9	4.4	4.4	2.4	3.2	3.2	3.3	3.4	5.1	4.8	4.8	5.3	5.2	5.2	3.6	5.5	5.1	5.1
2.5	3.4	3.6	3.7	3.4	3.6	3.7	3.8	3.5	4.4	4.9	4.8	2.7	3.2	3.4	.....	6.0	5.8	5.8
.....	9.3	9.9	9.8	.....	9.2	9.1	9.2	.....	9.6	9.2	9.3	8.7	8.8	8.7	.....	9.6	9.6	9.6
.....	10.0	10.0	10.0	.....	11.5	11.5	11.5	.....	10.7	10.5	10.4	9.0	9.1	9.1	.....	9.9	10.1	10.1
.....	26.2	25.0	25.0	.....	26.3	24.9	24.9	.....	25.1	23.2	23.0	24.7	24.2	23.5	.....	26.5	25.6	25.6
.....	19.0	18.7	18.8	.....	21.0	18.9	19.2	.....	13.7	14.3	15.3	17.9	17.5	17.1	.....	22.7	22.7	22.6
10.0	9.5	9.6	9.5	8.2	9.0	8.6	8.8	8.5	9.2	9.2	9.2	8.1	8.1	8.4	8.5	9.7	9.4	9.6
.....	10.4	11.4	10.9	.....	10.2	10.9	10.6	.....	8.7	9.8	9.7	11.1	11.8	11.6	.....	11.1	12.6	12.4
1.3	1.3	1.8	1.5	1.4	1.1	2.3	2.2	1.8	2.6	3.5	3.5	2.2	3.3	2.9	1.9	1.9	3.6	2.9
.....	3.4	5.8	6.0	.....	2.8	4.9	4.7	.....	2.7	4.1	4.0	6.3	6.9	7.0	.....	4.6	6.6	6.3
.....	1.9	2.9	3.4	.....	2.9	3.0	2.9	.....	.....	.....	.....	4.5	5.1	4.8	.....	2.9	4.6	3.6
.....	14.5	14.2	14.2	.....	16.8	15.5	15.4	.....	15.1	14.7	14.3	12.6	12.3	12.3	.....	12.6	12.1	12.2
.....	14.6	14.5	14.6	.....	14.6	14.4	14.3	.....	16.0	16.6	16.7	14.3	14.6	14.8	.....	16.3	16.2	16.1
.....	16.3	16.5	16.5	.....	16.0	15.6	15.4	.....	17.3	17.7	17.5	16.3	17.3	17.5	.....	17.9	18.4	18.4
.....	14.6	14.2	14.1	.....	14.4	13.4	13.4	.....	[1]14.5	[1]13.8	[1]14.4	10.1	10.6	10.6	.....	13.3	13.0	13.1
5.6	8.1	10.0	10.5	5.8	8.9	10.5	11.0	5.4	7.9	9.6	10.3	7.6	9.2	10.3	5.5	8.0	9.4	10.5
45.0	64.2	67.1	67.1	65.7	79.1	82.6	83.4	50.0	57.0	58.0	57.5	67.9	66.9	66.9	52.5	58.7	60.7	60.7
30.0	40.7	40.4	40.4	35.8	44.1	44.1	44.1	32.0	35.6	36.1	37.4	32.8	34.9	35.1	31.3	37.7	39.7	39.7
.....	22.1	20.8	19.9	.....	19.6	17.5	17.3	.....	19.4	16.7	16.3	19.9	18.7	17.0	.....	18.8	17.9	17.5
.....	22.7	18.3	18.3	.....	20.4	16.9	15.7	.....	19.5	15.5	14.8	19.8	15.8	15.4	.....	20.9	16.7	16.6
.....	[2]11.4	[2]12.9	[2]13.6	.....	[2]14.4	[2]15.2	[2]15.8	.....	36.3	33.6	32.9	33.2	35.9	37.5	.....	32.8	32.4	35.0
.....	68.8	56.8	57.7	.....	56.0	44.1	41.4	.....	66.3	50.9	50.7	53.3	48.5	42.3	.....	61.5	52.1	53.7

[2] Per pound.

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

Article.	Unit.	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15, 1922.	Sept. 15, 1923.	Oct. 15, 1923.	Oct. 15—		Sept. 15, 1923.	Oct. 15, 1923.
		1913	1922						1913	1922		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	24.3	30.3	30.7	31.3	32.2	34.8	34.3	27.4	44.7	47.2	45.7
Round steak	do	20.7	26.5	26.4	26.4	32.2	34.2	33.2	23.5	38.3	41.1	40.3
Rib roast	do	19.3	24.3	24.1	24.2	21.9	23.7	23.2	20.7	34.4	34.8	34.4
Chuck roast	do	16.0	15.9	16.1	16.3	19.1	19.9	19.9	17.3	23.7	23.6	24.0
Plate beef	do	13.0	12.4	12.5	12.6	12.8	13.1	13.0	12.7	13.7	13.1	13.2
Pork chops	do	24.3	37.1	38.6	37.4	34.5	34.5	31.4	23.5	39.8	40.7	37.2
Bacon, sliced	do	32.5	49.3	49.8	49.0	40.3	40.0	39.9	27.1	40.5	37.1	37.0
Ham, sliced	do	30.0	52.0	52.0	51.0	46.1	47.1	46.1	30.0	56.9	55.0	54.7
Lamb, leg of	do	17.7	31.5	32.2	32.6	36.9	38.1	38.1	19.1	40.6	42.1	41.4
Hens	do	24.3	29.8	32.0	30.7	32.5	31.8	32.5	22.5	40.6	40.6	40.7
Salmon, canned, red	do	.....	31.2	31.0	30.9	33.8	34.0	34.4	.....	29.1	28.3	28.4
Milk, fresh	Quart	9.7	12.0	13.0	13.0	11.1	12.5	12.5	9.0	14.0	14.0	14.0
Milk, evaporated	15-16-oz. can	.....	10.7	10.9	10.9	11.7	12.8	12.9	.....	11.0	12.3	12.3
Butter	Pound	40.0	55.2	54.5	56.9	50.5	54.1	55.7	40.3	52.2	57.3	58.5
Oleomargarine	do	.....	28.8	28.8	30.0	28.1	29.0	29.3	.....	26.6	28.4	29.8
Nut margarine	do	.....	28.9	29.0	29.4	26.8	28.1	28.7	.....	26.9	27.6	28.8
Cheese	do	22.7	33.8	36.3	36.1	36.7	38.6	39.6	23.5	35.9	38.0	39.4
Lard	do	17.1	19.3	19.2	19.8	17.5	17.8	18.2	15.1	17.7	18.6	19.0
Vegetable lard substitute	do	.....	25.5	24.8	25.7	23.1	25.1	26.9	.....	23.0	23.8	24.2
Eggs, strictly fresh	Dozen	50.0	56.2	47.8	61.5	49.2	38.9	44.4	36.9	56.8	49.0	55.6
Eggs, storage	do	.....	42.0	.....	45.0	39.2	.....	36.3	.....	39.5	.....	40.5
Bread	Pound	5.2	9.9	9.9	9.9	9.7	9.3	9.3	5.7	8.5	9.0	9.0
Flour	do	2.9	4.4	4.3	4.2	5.1	4.7	4.7	3.8	5.1	4.8	4.8
Corn meal	do	3.3	3.8	4.2	4.2	4.2	4.5	4.6	2.7	3.7	3.9	3.9
Rolled oats	do	.....	8.4	8.1	8.3	9.9	10.6	10.6	.....	9.3	9.3	9.3
Corn flakes	8-oz. pkg.	.....	11.7	11.7	11.6	9.7	10.1	10.1	.....	9.4	9.5	9.5
Wheat cereal	28-oz. pkg.	.....	26.9	24.7	24.6	26.8	25.2	25.3	.....	25.3	24.1	24.1
Macaroni	Pound	.....	18.2	18.3	18.3	20.5	19.6	19.6	.....	21.6	20.8	21.1
Rice	do	7.7	11.0	11.1	11.6	10.3	10.1	10.2	9.4	10.6	10.2	10.4
Beans, baked	No. 2 can	.....	15.9	15.2	15.4	14.1	13.2	13.0	.....	11.9	11.6	11.6
Beans, navy	do	.....	9.6	10.5	10.6	10.9	10.5	9.9	.....	10.6	10.7	10.4
Potatoes	do	1.4	1.9	2.4	2.4	2.0	2.6	2.1	2.0	2.7	4.1	3.6
Onions	do	.....	3.3	4.8	4.9	4.6	7.0	6.8	.....	4.8	7.3	6.9
Cabbage	do	.....	3.2	4.6	3.5	3.7	4.7	3.6	.....	3.9	5.4	5.5
Beans, baked	No. 2 can	.....	15.9	15.2	15.4	14.1	13.2	13.0	.....	11.9	11.6	11.6
Corn, canned	do	.....	17.5	15.5	17.5	14.5	14.8	14.4	.....	14.3	14.9	14.9
Peas, canned	do	.....	19.3	18.6	19.3	17.9	17.8	17.4	.....	16.3	15.5	15.4
Tomatoes, canned	do	.....	[1] 16.0	[1] 15.4	[1] 15.0	15.0	14.9	14.7	.....	11.2	11.7	11.6
Sugar, granulated	Pound	6.4	8.3	10.1	11.0	8.7	10.5	11.6	5.1	7.6	9.1	10.3
Tea	do	50.0	66.2	68.2	70.4	71.1	75.7	77.4	57.5	75.5	76.8	75.9
Coffee	do	28.0	38.8	38.6	38.6	35.9	38.1	37.5	28.8	34.0	35.3	34.9
Prunes	do	.....	20.9	16.1	16.2	21.7	20.2	19.2	.....	22.1	20.1	20.3
Raisins	do	.....	21.0	17.2	17.3	24.2	19.8	19.0	.....	21.4	17.1	16.2
Bananas	Dozen	.....	[2] 13.8	[2] 15.9	[2] 15.7	[2] 10.3	[2] 12.1	[2] 12.3	.....	35.8	38.9	38.3
Oranges	do	.....	66.4	48.2	51.3	60.0	49.2	51.5	.....	62.1	55.3	57.5

[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[7] in October, 1923, compared with the average cost in the year 1913, in October, 1922, and in September, 1923. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.[8]

[7] For list of articles, see note 2, p. 52.

[8] The consumption figure used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY LABOR REVIEW for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the MONTHLY LABOR REVIEW for March, 1921 p. 26.

Effort has been made by the bureau each month to have perfect reporting cities. For the month of October 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 36 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages:

Birmingham, Bridgeport, Buffalo, Butte, Chicago, Cincinnati, Dallas, Denver, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Little Rock, Los Angeles, Louisville, Manchester, Memphis, Minneapolis, Newark, New Haven, New Orleans, Norfolk, Omaha, Peoria, Philadelphia, Portland, Me., Portland, Oreg., Richmond, St. Louis, St. Paul, San Francisco, Savannah, Scranton, Seattle, Springfield, Ill.

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

RETAIL PRICE REPORTS RECEIVED DURING OCTOBER, 1923.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received	99	98	97	99	99.5	99.5
Number of cities in each section from which every report was received	36	9	4	10	7	6

TABLE 6.—PERCENTAGE CHANGES IN THE RETAIL COST OF FOOD IN OCTOBER, 1923, COMPARED WITH THE COST IN SEPTEMBER, 1923, OCTOBER, 1922, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

City.	Percentage increase October, 1923, compared with—			City.	Percentage increase October, 1923, compared with—		
	1913	October, 1922.	September, 1923.		1913	October, 1922.	September, 1923.
Atlanta	47	6	1	Milwaukee	50	6	[1] 1
Baltimore	57	7	[1] 0.3	Minneapolis	45	4	[1] 1
Birmingham	51	5	[1] 0.1	Mobile	.....	5	[1] 0.4
Boston	55	4	0.1	Newark	50	5	1
Bridgeport	.....	8	0	New Haven	54	6	1
Buffalo	54	2	[1] 1	New Orleans	46	3	1
Butte	.....	3	0.3	New York	57	5	1
Charleston	49	5	0.4	Norfolk	.....	5	[1] 0.4
Chicago	55	7	[1] 1	Omaha	44	5	[1] 1
Cincinnati	48	6	1	Peoria	.....	3	[1] 0.1
Cleveland	49	7	[1] 1	Philadelphia	54	6	0.4
Columbus	.....	6	1	Pittsburgh	54	9	2
Dallas	45	2	1	Portland, Me.	.....	3	1
Denver	37	6	0.3	Portland, Oreg.	40	4	3
Detroit	56	7	[1] 2	Providence	57	4	0.2
Fall River	54	7	1	Richmond	58	4	[1] 1
Houston	.....	3	0.4	Rochester	.....	5	0.1
Indianapolis	44	8	[1] 2	St. Louis	49	5	0.3
Jacksonville	43	5	2	St. Paul	.....	4	[1] 1
Kansas City	41	3	[1] 1	Salt Lake City	31	6	2
Little Rock	41	3	0	San Francisco	51	2	3
Los Angeles	47	4	3	Savannah	.....	4	0.4
Louisville	39	5	[1] 1	Scranton	56	6	[1] 0.4
Manchester	52	6	0.2	Seattle	46	5	3
Memphis	40	5	[1] 1	Springfield, Ill.	.....	3	[1] 0.4
				Washington, D.C	59	4	0.4

[1] Decrease.

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; October 15, 1922; and September 15 and October 15, 1923, 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 bins 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, OCTOBER 15, 1922, AND SEPTEMBER 15 AND OCTOBER 15, 1923.

City, and kind of coal.	1913		1922	1923	
	Jan. 15.	July 15.	Oct. 15.	Sept. 15.	Oct. 15.
United States:					
Pennsylvania anthracite—					
Stove	**$7.99**	**$7.46**	**$15.39**	**$15.26**	**$15.83**
Chestnut	**8.15**	**7.68**	**15.37**	**15.21**	**15.79**
Bituminous	**5.48**	**5.39**	**11.26**	**9.99**	**10.12**
Atlanta, Ga.:					
Bituminous	5.87	4.83	10.79	8.29	8.21
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove	[1] 7.70	[1] 7.24	[1] 15.75	[1] 15.92	[1] 16.75
Chestnut	[1] 7.93	[1] 7.49	[1] 15.75	[1] 15.75	[1] 16.50
Bituminous	.....	.....	10.92	8.20	8.40
Birmingham, Ala.:					
Bituminous	4.22	4.01	7.77	8.03	8.36
Boston, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.50	15.00	15.50	16.00
Chestnut	8.25	7.75	15.00	15.50	16.00
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove	.....	.....	15.63	16.25	16.00
Chestnut	.....	.....	15.63	16.00	16.00
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	6.75	6.54	13.24	13.11	13.66
Chestnut	6.99	6.80	13.24	13.11	13.66
Butte, Mont.:					
Bituminous	.....	.....	11.53	11.32	11.39
Charleston, S. C.:					
Pennsylvania anthracite—					
Stove	[1] 8.38	[1] 7.75	.....	[1] 17.00	[1] 17.00
Chestnut	[1] 8.50	[1] 8.00	.....	[1] 17.05	[1] 17.10
Bituminous	[1] 6.75	[1] 6.75	12.00	12.00	12.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove	8.00	7.80	15.98	16.44	17.00
Chestnut	8.25	8.05	15.65	16.44	17.00
Bituminous	4.97	4.65	10.94	8.73	8.77

[1] Per ton of 2,240 pounds.

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

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, OCTOBER 15, 1922, AND SEPTEMBER 15 AND OCTOBER 15, 1923—Continued.

City, and kind of coal.	1913		1922	1923	
	Jan. 15.	July 15.	Oct. 15.	Sept. 15.	Oct. 15.
Cincinnati, Ohio:					
Bituminous	$3.50	$3.38	$9.60	$8.58	$8.58
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove	7.50	7.25	15.66	14.75	15.48
Chestnut	7.75	7.50	15.66	14.75	15.48
Bituminous	4.14	4.14	10.57	9.56	9.57
Columbus, Ohio:					
Bituminous	.....	.....	9.58	7.54	7.49
Dallas, Tex.:					
Arkansas anthracite—					
Egg	.....	.....	17.50	16.92	17.25
Bituminous	8.25	7.21	15.41	13.79	13.79
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	8.88	9.00	17.00	16.75	17.00
Stove, 3 and 5 mixed	8.50	8.50	17.00	16.75	17.00
Bituminous	5.25	4.88	11.16	10.72	10.70
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove	8.00	7.45	15.56	16.25	16.63
Chestnut	8.25	7.65	15.56	16.19	16.63
Bituminous	5.20	5.20	12.19	10.29	10.20
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.43	15.58	15.50	16.17
Chestnut	8.25	7.61	15.33	15.42	16.08
Houston, Tex.:					
Bituminous	.....	.....	12.75	12.50	13.00
Indianapolis, Ind.:					
Pennsylvania anthracite—					
Stove	8.95	8.00	15.75	16.00	17.00
Chestnut	9.15	8.25	15.75	16.00	16.25
Bituminous	3.81	3.70	9.71	8.13	8.19
Jacksonville, Fla.:					
Bituminous	7.50	7.00	15.00	13.00	13.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace	.....	.....	17.00	16.14	16.36
Stove, No. 4	.....	.....	17.81	17.06	17.25
Bituminous	4.39	3.93	9.91	8.40	8.56
Little Rock, Ark.:					
Arkansas anthracite—					
Egg	.....	.....	15.00	14.00	15.00
Bituminous	6.00	5.33	13.29	10.54	11.25
Los Angeles, Calif.:					
Bituminous	13.52	12.50	16.50	15.50	15.50
Louisville, Ky.:					
Bituminous	4.20	4.00	10.34	8.62	8.57
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove	10.00	8.50	17.00	17.17	18.00
Chestnut	10.00	8.50	17.00	17.17	17.50
Memphis, Tenn.:					
Bituminous	[2] 4.34	[2] 4.22	9.50	7.43	7.45
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove	8.00	7.85	16.11	16.00	16.77
Chestnut	8.25	8.10	16.08	16.00	16.71
Bituminous	6.25	5.71	12.35	10.29	10.88
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove	9.25	9.05	17.50	17.50	18.03
Chestnut	9.50	9.30	17.47	17.38	18.09
Bituminous	5.89	5.79	13.82	11.96	11.92
Mobile, Ala.:					
Bituminous	.....	.....	10.47	9.79	11.07
Newark, N. J.:					
Pennsylvania anthracite—					
Stove	6.50	6.25	12.75	12.75	13.45
Chestnut	6.75	6.50	12.75	12.75	13.53
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove	7.50	6.25	15.13	15.75	15.92
Chestnut	7.50	6.25	15.13	15.75	15.92

[2] Per 10-barrel lots (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, OCTOBER 15, 1922, AND SEPTEMBER 15 AND OCTOBER 15, 1923—Continued.

City, and kind of coal.	1913		1922	1923	
	Jan. 15.	July 15.	Oct. 15.	Sept. 15.	Oct. 15.
New Orleans, La.:					
Pennsylvania anthracite—					
Stove	$10.00	$10.00	$19.50	$20.75	$20.75
Chestnut	10.50	10.50	19.50	20.75	20.75
Bituminous	[2] 6.06	[2] 6.06	10.33	9.72	10.13
New York, N. Y.:					
Pennsylvania anthracite—					
Stove	7.07	6.66	13.83	14.50	14.58
Chestnut	7.14	6.80	13.83	14.50	14.58
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove	.....	.....	16.00	15.00	16.13
Chestnut	.....	.....	16.00	15.00	16.13
Bituminous	.....	.....	11.62	11.36	11.38
Omaha, Nebr.:					
Bituminous	6.63	6.13	12.60	10.85	10.85
Peoria, Ill.:					
Bituminous	.....	.....	8.48	6.46	6.35
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove	[1] 7.16	[1] 6.89	[1] 14.54	[1] 15.43	[1] 16.14
Chestnut	[1] 7.38	[1] 7.14	[1] 14.54	[1] 15.00	[1] 16.00
Pittsburgh, Pa.					
Pennsylvania anthracite—					
Stove	[1] 7.94	[1] 7.38	[1] 17.00	[1] 17.00	[1] 18.50
Chestnut	[1] 8.00	[1] 7.44	[1] 17.00	[1] 17.00	[1] 18.50
Bituminous	[3] 3.16	[3] 3.18	8.38	7.54	7.54
Portland, Me.:					
Pennsylvania anthracite—					
Stove	.....	.....	15.84	15.84	16.56
Chestnut	.....	.....	15.84	15.84	16.56
Portland, Oreg.:					
Bituminous	9.79	9.66	14.31	13.20	13.89
Providence, R. I.:					
Pennsylvania anthracite—					
Stove	[4] 8.25	[4] 7.50	[4] 15.50	[4] 15.30	[4] 16.25
Chestnut	[4] 8.25	[4] 7.75	[4] 15.50	[4] 15.30	[4] 16.25
Richmond, Va.:					
Pennsylvania anthracite—					
Stove	8.00	7.25	15.42	16.50	16.63
Chestnut	8.00	7.25	15.42	16.50	16.63
Bituminous	5.50	4.94	12.60	11.91	11.78
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove	.....	.....	13.45	13.45	14.10
Chestnut	.....	.....	13.45	13.45	14.10
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove	8.44	7.74	16.19	16.38	17.13
Chestnut	8.68	7.99	16.25	16.56	17.38
Bituminous	3.36	3.04	8.66	7.08	7.26
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove	9.20	9.05	17.75	17.50	18.15
Chestnut	9.45	9.30	17.73	17.35	18.09
Bituminous	6.07	6.04	13.94	12.39	12.37
Salt Lake City, Utah.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	11.00	11.50	20.00	17.50	17.50
Stove, 3 and 5 mixed	11.00	11.50	20.00	17.50	17.50
Bituminous	5.64	5.46	9.50	8.30	8.81
San Francisco, Calif.:					
New Mexico anthracite—					
Cerillos egg	17.00	17.00	26.75	26.50	26.50
Colorado anthracite—					
Egg	17.00	17.00	24.25	24.50	24.50
Bituminous	12.00	12.00	17.90	16.80	16.90

[1] Per ton of 2,240 pounds.
[2] Per 10-barrel lots (1,800 pounds).
[3] 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.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, OCTOBER 15, 1922, AND SEPTEMBER 15 AND OCTOBER 15, 1923—Concluded.

City, and and kind of coal.	1913		1922	1923	
	Jan. 15.	July 15.	Oct. 15.	Sept. 15.	Oct. 15.
Savannah, Ga.:					
Pennsylvania anthracite—					
Stove	.....	.....	[5] $18.10	[5] $17.05	[5] $17.05
Chestnut	.....	.....	[5] 17.10	[5] 17.05	[5] 17.05
Bituminous	.....	.....	[5] 12.18	[5] 11.72	[5] 11.90
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove	$4.25	$4.31	9.78	9.82	10.53
Chestnut	4.50	4.56	10.27	9.82	10.53
Seattle, Wash.:					
Bituminous	[6] 7.63	[6] 7.70	[6] 10.21	[6] 10.10	[6] 10.21
Springfield, Ill.:					
Bituminous	.....	.....	5.73	4.50	4.53
Washington, D. C.:					
Pennsylvania anthracite—					
Stove	[1] 7.50	[1] 7.38	[1] 15.63	[1] 15.33	[1] 16.20
Chestnut	[1] 7.65	[1] 7.53	[1] 15.63	[1] 15.21	[1] 15.98
Bituminous	.....	.....	[1] 11.24	[1] 9.77	[1] 9.10

[1] Per ton of 2,240 pounds.
[5] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.
[6] Prices in Zone A. The cartage charges in Zone A were as follows: January and July, 1913, $0.50; October, 1922, $1.25 to $1.75; September and October, 1923, $1.25. These charges have been included in the prices

Index Numbers of Wholesale Prices in October, 1923.

A SLIGHT downward tendency in the general trend of wholesale prices is shown for October by information gathered by the United States Department of Labor through the Bureau of Labor Statistics. The bureau's index number, which includes 404 commodities or price series weighted according to their commercial importance, declined to 153 compared with 154 for September.

The lowering of the general price level was due mainly to further declines in fuels and metals. Among fuel and lighting materials there were appreciable decreases in prices of bituminous coal, coke, crude oil, and gasoline. Anthracite coal averaged higher than in September. Decreases in pig iron, steel billets, copper, and lead brought the level for metals well below that of the month before. In the cloths and clothing group the strong reaction in raw silk from the high prices of the preceding month, together with the lower prices of worsted yarns, forced the price level downward despite rising costs of cotton goods. A small decrease took place also in the group of miscellaneous commodities, due to declines in sole leather and rubber.

Among farm products decreases in cattle, hogs, sheep, poultry, onions, and potatoes were offset by advances in grain, cotton, eggs, flaxseed, hides, and alfalfa and clover hay, the price level remaining unchanged. No change was reported for building materials and house-furnishing goods, also, while small increases took place among foods and chemicals and drugs.

Of the 404 commodities or series of quotations for which comparable data for September and October were collected, increases were shown in 136 instances and decreases in 104 instances. In 164 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES.

[1913=100.]

Group.	October, 1922.	1923	
		September.	October.
Farm products	138	144	144
Foods	140	147	148
Cloths and clothing	188	202	199
Fuel and lighting	226	176	172
Metals and metal products	135	144	142
Building materials	183	182	182
Chemicals and drugs	124	128	129
House-furnishing goods	176	183	183
Miscellaneous	120	121	120
All commodities	154	154	153

Comparing prices in October with those of a year ago, as measured by changes in the index numbers, it is seen that the general price level has declined less than 1 per cent. Fuel and lighting materials averaged 24 per cent lower than in October, 1922, while building materials were slightly lower. The group of miscellaneous commodities showed no change in the price level. In all other groups prices were appreciably higher than in October of last year.

Wholesale Prices in the United States and Foreign Countries, 1913 to September, 1923.

IN THE following table the more important index numbers of wholesale prices in the United States and several foreign countries, as compiled by recognized authorities, have been reduced to a common base, in order that the trend of prices in the several countries may be directly compared. The results here shown have been obtained by merely shifting the base for each series of index numbers to the year 1913; i. e., by dividing the index for each year or month on the original base by the index for 1913 on that base. These results are therefore to be regarded only as approximations of the correct index numbers in the case of series constructed by averaging the relative prices of individual commodities.[1] This applies to the index numbers of the Statistique Générale of France, the series for Italy constructed by Prof. Riccardo Bachi, and the series here shown for Japan. The index numbers of the United States Bureau of Labor Statistics, those of the Bureau of Statistics of Canada, and those of the Census and Statistics Office of New Zealand are built on aggregates of actual money prices, or relatives made from such aggregates of actual prices, and therefore can readily be shifted to any desired base. The series here shown for Sweden, Germany, Canada, the United Kingdom, and Australia are reproduced as published, the last three series being rounded off to three figures. It should be understood also that the validity of the comparisons here made is affected by the wide difference in the number of commodities included in the different series of index numbers.

[1] For a discussion of index numbers constructed according to this method, see Bulletin No. 181 of the U. S. Bureau of Labor Statistics, pp. 245–252.

WHOLESALE PRICES IN THE UNITED STATES AND CERTAIN FOREIGN COUNTRIES.

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

Year and month.	United States: Bureau of Labor Statistics (revised);[1] 404 commodities (variable).	Canada: Dominion Bureau of Statistics; 238 commodities.	United Kingdom: Board of Trade (revised); 150 commodities.	France: Statistique Générale; 45 commodities.	Germany: Statistisches Reichsamt; 38 commodities.	Italy: Riccardo Bachi; 100 commodities.[2]	Japan: Bank of Japan, Tokyo; 56 commodities.	Sweden: Göteborgs Handelstidning; 47 commodities.	Australia: Bureau of Census and Statistics; 92 commodities.	New Zealand: Census and Statistics Office; 140 commodities.
1913	100	100	100	100	100	100	100	[3] 100	.....	100
1914	98	.....	.....	102	.....	95	96	116	[4] 100	102
1915	101	.....	.....	140	.....	133	97	145	141	121
1916	127	.....	.....	188	.....	201	117	185	132	131
1917	177	.....	.....	262	.....	299	147	244	146	148
1918	194	.....	.....	339	.....	409	192	339	170	172
1919	206	208	.....	356	.....	364	236	331	180	175
1920	226	241	307	510	1486	624	259	347	218	208
1921	147	170	197	345	1911	578	200	211	167	197
1922	149	150	159	327	34180	562	196	162	154	174
1920										
January	233	233	297	487	1256	508	301	319	203	190
February	232	238	310	522	1685	557	314	342	206	194
March	234	241	319	554	1709	602	322	354	209	202
April	245	251	325	588	1567	664	300	354	217	205
May	247	257	326	550	1508	660	272	361	225	206
June	243	255	322	493	1382	632	248	366	233	205
July	241	256	317	496	1367	604	239	364	234	215
August	231	250	313	501	1450	625	235	365	236	215
September	226	245	311	256	1498	655	231	362	230	216
October	211	236	302	502	1466	659	226	346	215	218
November	196	224	287	461	1509	670	221	331	208	214
December	179	212	264	435	1440	655	206	299	197	214
1921										
January	170	202	246	407	1439	642	201	267	196	212
February	160	191	225	377	1376	613	195	250	192	206
March	155	186	211	360	1338	604	191	237	181	204
April	148	181	205	347	1326	584	190	229	171	201
May	145	171	202	329	1308	547	191	218	166	198
June	142	164	198	325	1366	509	192	218	162	196
July	141	163	194	330	1428	520	196	211	159	196
August	142	166	190	331	1917	542	199	198	160	193
September	141	162	187	344	2067	580	207	182	160	193
October	142	156	181	331	2460	599	219	175	156	191
November	141	154	173	332	3416	595	214	174	151	187
December	140	154	168	326	3487	595	209	172	148	185
1922										
January	138	150	164	314	3665	577	206	170	147	182
February	141	152	162	306	4102	562	204	166	147	178
March	142	151	160	307	5433	533	201	164	146	176
April	143	151	160	314	6355	527	197	165	148	176
May	148	152	161	317	6458	524	194	164	155	174
June	150	151	160	325	7030	537	197	164	156	172
July	155	152	160	325	10059	558	201	165	157	174
August	155	150	156	331	19202	571	195	163	155	174
September	153	145	154	329	28698	582	193	158	158	171
October	154	146	155	337	56601	601	190	155	159	171
November	156	150	158	352	115101	596	188	154	162	173
December	156	151	156	362	147430	580	183	155	161	169
1923										
January	156	151	157	387	278480	575	184	156	163	168
February	157	153	158	422	558500	582	192	158	161	170
March	159	155	160	424	488800	586	196	162	163	171
April	159	156	161	415	521200	588	196	159	167	171
May	156	155	160	406	817000	580	199	158	170	173
June	153	155	159	409	1930500	568	198	160	178	174
July	151	154	157	407	7478700	566	192	157	180	173
August	150	153	155	413	94404100	567	.....	163	175	172
September	154	155	158	424	39000000	569	.....	155	172	.....

[1] For particulars concerning revised index numbers, see MONTHLY LABOR REVIEW for July, 1922, pp. 59 and 60.
[2] 38 commodities prior to 1920: 76 commodities in 1921.
[3] July, 1913, to June, 1914.
[4] July, 1914.

House Rents in Christiania, Norway, 1900 to 1922.

SOCIALE Meddelelser No. 7, 1923, issued by the Norwegian Department for Social Affairs (*Departement for Sociale Saker*), contains a brief account of house rents in Christiania, 1900–1922. During the last year (information was received for 88 per cent of the apartments in 1922) house rents increased for all apartments except in the two largest apartment types. Increases were irregular, the two and three room apartments increasing 0.5 per cent and the three to five room apartments increasing on an average of 4 per cent.

The table following gives rents in Christiania for apartments with from 2 to 11 rooms for the period 1900–1922. It also shows the percentage of increase since 1910, the period before the large increase in house rents, and since 1914.

Compared with 1910 the increases range from 67 to 87 per cent, being smallest for the 2-room apartments and highest for the 8 and 9 room apartments. The percentage of increase since 1914 has been considerably less, being less for the 2 and 3 room apartments than for the others. A weighted average for all size types shows an increase in house rents of 37 per cent since February 1, 1914.

AVERAGE YEARLY RENT IN CHRISTIANIA, NORWAY, 1900–1922, AND PER CENT OF INCREASE FROM DECEMBER 1, 1910, TO DECEMBER 1, 1922, AND FROM FEBRUARY 1, 1914, TO DECEMBER 1, 1922.

[Krone at par=26.8.]

Date.	Average yearly rental of apartments with—									
	2 rooms.	3 rooms.	4 rooms.	5 rooms.	6 rooms.	7 rooms.	8 rooms.	9 rooms.	10 rooms.	11 rooms.
	Kroner.	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*	*Kroner.*
Dec. 3, 1900	165	260	388	545	763	1,006	1,298	1,619	1,839	1,951
Dec. 31, 1905	132	204	301	428	595	799	1,068	1,328	1,718	1,827
Dec. 1, 1910	154	242	358	513	727	947	1,193	1,406	1,690	1,740
Feb. 1, 1914	198	313	457	657	908	1,180	1,477	1,791	2,026	2,135
Feb. 1, 1920	232	372	548	811	1,169	1,525	1,936	2,309	2,873	2,670
Dec. 1, 1921	256	413	604	902	1,294	1,685	2,166	2,609	3,082	3,303
Dec. 1, 1922	257	416	633	935	1,335	1,708	2,221	2,636	3,000	3,026
	Per cent of increase.									
Dec. 1, 1910, to Dec. 1, 1922	67	72	77	82	84	80	86	87	78	74
Feb. 1, 1914, to Dec. 1, 1922	30	33	39	42	47	45	50	47	48	42

WAGES AND HOURS OF LABOR.

The 48-hour Week in Industry.

By J. C. Bowen, of the United States Bureau of Labor Statistics.

FROM the time when the manual worker toiled from daylight until dark down to the present he has been hoping for, demanding, and slowly getting a reduction of hours of labor. It took many years, centuries in fact, to advance from a 12 and 14 hour day to a 10-hour day. Years more elapsed before he got even a touch on the 9-hour day, then, as the 9-hour day became in part a realization, a start was made for an 8-hour day.

This reduction of hours of labor has come mainly to the building mechanic, the factory employee, the miner, and the railroad man. Practically no statistical data are available to show the extent to which the agricultural wage earner has been affected.

Prior to the World War the 8-hour day was enjoyed by comparatively few workers, and these were mainly in the building and printing trades and in Federal and State Government employ. The 8-hour movement, however, has grown so rapidly since 1914 that there is now scarcely an industry or trade that does not contain a greater or less number of 8-hour workers. Several State legislatures have established by law the 8-hour workday in public employment, and many cities have adopted the 8-hour day for their employees.

The principle of the 8-hour day was accepted by the War Labor Board and has since been recognized by nearly every labor board or commission.

The practice of working fewer hours on Saturday than on other days of the week, thus reducing the hours of many employees to 44 or even less per week, is also making progress.

Quite an amount of statistical information is available concerning hours of labor, but it is scattered through various reports. The most important of the material available is assembled in this article so as to give as far as possible a comparatively recent survey of working hours in the different industrial fields of the United States. The greatest sources of information are the United States Census Office reports and reports of the United States Bureau of Labor Statistics, though considerable information is also found in State reports. As nearly all of the material herein used comes from published reports few figures are available for 1923. Prewar and postwar conditions are brought into comparison in some of the tables.

Most of the information here presented is in the form of hours per week rather than in the form of hours per day, but the hours per day may very generally be inferred from the hours per week. A 60-hour week generally means a 10-hour day; a 54-hour week a 9-hour day; and a 48-hour week an 8-hour day. There are exceptions, however; for example, there may be a 9-hour day from Monday to Friday with 5 hours on Saturday, making a 50-hour week, and quite often there may be a day of $8\frac{2}{3}$ hours with $4\frac{2}{3}$ hours on Saturday, making a 48-hour week. This latter combination of hours is frequently looked upon as an 8-hour day. In a few instances the 8-hour day is followed by a full Saturday holiday, making a week of only 40 hours.

Of the 6,615,046 wage earners covered by the Census of Manufactures in 1909, only 523,652 or 7.9 per cent, worked 48 hours or less per week, while by 1919 the working time had been so far reduced that 4,418,693, or 48.6 per cent, of the 9,096,372 wage earners covered in that year were on that basis. The number of wage earners whose working time was less than 48 hours per week is not available for 1909 or 1914, but, in 1919, 1,111,107 employees, or 12.2 per cent, had a working week of 44 hours or under, and 346,179, or 3.8 per cent, were reported between 44 and 48 hours.

Combining the figures shown in the table following it is seen that only 30.6 per cent of the wage earners had a week of 54 hours or less in 1909, while in 1914 the percentage was 51.1, or more than one-half of the whole number covered, and in 1919 the percentage had increased to 74.1 or nearly three-fourths of all wage earners in manufacturing industries. Space does not permit the presentation of figures for each industry, but percentages are shown for industries having 100,000 or more wage earners in 1919.

Figures are not available for all the industries for 1909, owing to the differing classifications of industries, but a comparison as between 1914 and 1919 is shown for each industry. Some combination of Census Office industry classifications has been necessary in order to make them comparable from year to year. Employees were classified by the Census Office according to the prevailing hours of the establishment in which they worked, no attempt being made to classify each individual employee, because in most establishments practically all the employees worked the same number of hours, so that the figure for any given group would represent to a large extent the classification of individuals.

To some extent the 8-hour basic day does not necessarily mean an actual working-day of 8 hours; occasionally longer hours are worked, with an increased rate for all time in excess of 8 hours.

PER CENT OF WAGE EARNERS IN THE UNITED STATES IN 1909, 1914, AND 1919, IN ESTABLISHMENTS WORKING EACH CLASSIFIED NUMBER OF HOURS PER WEEK: ALL MANUFACTURING INDUSTRIES AND SELECTED INDUSTRIES EMPLOYING IN 1919 OVER 100,000 WAGE EARNERS.

[Source: Reports of the Census of Manufactures for 1909, 1914, and 1919.]

Industry.	Year.	Total average wage earners.	Per cent of employees whose prevailing hours of labor per week were—								
			48 and under.	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60.	48 and under, in detail.		
									44 and under.	Over 44 and under 48.	48
All manufacturing industries combined.	1909	6,615,046	7.9	7.3	15.4	30.2	30.5	8.7	(1)	(1)	(1)
	1914	7,036,247	11.9	13.4	25.8	21.9	21.1	5.8	(1)	(1)	(1)
	1919	9,096,372	48.6	16.4	9.1	13.7	9.1	3.0	12.2	3.8	32.6
Industries employing over 100,000 wage earners in 1919.											
Automobiles (including bodies and parts).	1909	75,721	.4	3.0	30.0	35.2	29.4	1.9	(1)	(1)	(1)
	1914	127,092	11.3	22.0	14.0	42.8	9.9	(2)	(1)	(1)	(1)
	1919	343,115	44.0	36.7	5.3	13.0	.8	(2)	2.5	1.7	39.9
Boots and shoes [3]	1909	198,297	.4	3.3	24.0	57.3	14.9	.1	(1)	(1)	(1)
	1914	206,088	2.7	12.2	40.9	41.2	3.0	.....	(1)	(1)	(1)
	1919	229,705	62.8	22.4	9.8	4.6	.5	(2)	8.5	12.2	42.1

[1] Not reported in detail.
[2] Less than one-tenth of 1 per cent.
[3] Includes boots and shoes, cut stock, and findings, 18,656 in 1919.

PER CENT OF WAGE EARNERS IN THE UNITED STATES IN 1909, 1914, AND 1919, IN ESTABLISHMENTS WORKING EACH CLASSIFIED NUMBER OF HOURS PER WEEK: ALL MANUFACTURING INDUSTRIES AND SELECTED INDUSTRIES EMPLOYING IN 1919 OVER 100,000 WAGE EARNERS—Concluded.

Industry.	Year.	Total average wage earners.	Per cent of employees whose prevailing hours of labor per week were—								
			48 and under.	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60.	48 and under, in detail.		
									44 and under.	Over 44 and under 48.	48
Industries employing over 100,000 wage earners in 1919—Concluded.											
Bread and other baking products.	1909	100,216	6.4	3.1	18.6	11.2	49.8	10.9	(1)	(1)	(1)
	1914	124,052	11.7	5.6	39.2	8.3	30.1	5.1	(1)	(1)	(1)
	1919	141,592	60.0	8.6	17.9	3.7	7.8	1.8	2.9	14.7	42.4
Cars and general shop construction and repairs by steam railroads.	1909	282,174	7.5	7.9	35.6	20.1	15.6	13.3	(1)	(1)	(1)
	1914	339,518	21.9	14.9	29.7	13.7	4.9	14.9	(1)	(1)	(1)
	1919	484,437	73.3	2.2	1.5	22.4	.4	.3	.6	9.4	63.3
Clothing, men's [4]	1914	173,747	20.2	50.6	21.7	6.0	1.5	.1	(1)	(1)	(1)
	1919	175,270	90.4	5.9	2.4	1.1	.1	.1	75.6	4.6	10.8
Clothing, women's	1909	153,743	4.8	43.9	24.1	21.6	5.0	.6	(1)	(1)	(1)
	1914	168,907	7.0	72.9	17.0	2.8	.3	(2)	(1)	(1)	(1)
	1919	165,649	89.5	9.2	1.0	.3	(2)	(2)	72.7	5.6	11.2
Cotton goods and small wares.	1909	378,880	.1	.8	.2	50.4	31.5	17.1	(1)	(1)	(1)
	1914	385,964	.3	.5	39.8	18.2	40.7	.4	(1)	(1)	(1)
	1919	440,362	39.3	3.8	14.2	31.9	10.7	.1	.4	.1	38.8
Electrical machinery, apparatus and supplies.	1909	87,256	1.3	15.9	23.8	52.2	6.7	(2)	(1)	(1)	(1)
	1914	118,078	3.5	25.9	32.9	35.3	2.5	(2)	(1)	(1)	(1)
	1919	212,374	59.0	25.1	5.1	9.3	1.4	.1	9.2	3.6	46.2
Foundry and machine-shop products.[5]	1914	398,316	4.5	11.9	30.8	36.8	13.2	.4	(1)	(1)	(1)
	1919	661,163	37.5	25.9	13.1	19.0	4.2	.3	8.0	2.5	26.8
Furniture (including refrigerators).	1909	128,452	4.4	4.1	12.7	22.5	56.1	.2	(1)	(1)	(1)
	1914	133,498	8.1	9.6	22.5	28.0	31.6	.2	(1)	(1)	(1)
	1919	144,117	18.2	29.3	15.6	28.3	8.1	.5	6.3	.6	11.3
Iron and steel:											
Blast furnaces [6]	1909	38,429	.....	.....	.....	.5	3.0	96.5	(1)	(1)	(1)
	1914	29,356	(2)	.3	5.3	(2)	15.2	79.1	(1)	(1)	(1)
	1919	41,660	7.0	.....	.1	6.3	19.6	67.0	3.5	.....	3.5
Steel works and rolling mills.	1909	240,076	7.6	1.7	10.0	12.1	34.2	34.4	(1)	(1)	(1)
	1914	248,716	8.0	7.7	10.3	18.5	31.3	24.2	(1)	(1)	(1)
	1919	375,088	31.8	3.3	3.7	19.2	21.9	20.2	15.0	2.3	14.5
Knit goods and hosiery	1909	129,275	.7	2.6	3.7	50.6	38.6	3.8	(1)	(1)	(1)
	1914	150,520	2.4	5.2	58.2	22.8	11.0	.4	(1)	(1)	(1)
	1919	172,572	38.9	26.7	17.6	13.9	2.7	.2	4.5	2.7	31.7
Lumber and timber products.[4]	1914	479,786	2.7	2.3	4.5	5.1	74.1	11.3	(1)	(1)	(1)
	1919	480,945	23.9	3.8	5.6	7.5	56.7	2.4	2.3	.5	21.1
Paper and wood pulp	1909	75,978	7.4	8.0	4.5	8.7	30.2	41.2	(1)	(1)	(1)
	1914	88,457	12.0	6.3	14.4	11.8	21.5	34.1	(1)	(1)	(1)
	1919	113,759	61.7	6.2	10.0	3.3	7.0	11.8	3.5	1.1	57.1
Printing and publishing (newspaper, periodical, book and job).	1909	258,434	53.7	16.1	18.3	7.4	4.2	.3	.....	.....	.....
	1914	227,496	70.4	11.9	12.8	2.8	1.9	.1	.....	.....	.....
	1919	243,386	86.4	6.8	4.0	1.9	.7	.2	8.7	3.1	74.6
Rubber tires, tubes, etc	1909	26,521	.6	4.5	20.4	54.6	19.8	(2)	.....	.....	.....
	1914	50,220	6.4	19.2	16.0	50.6	7.1	.8	.....	.....	.....
	1919	119,848	65.4	15.3	1.0	16.1	2.1	.....	2.8	21.0	41.6
Shipbuilding, steel and wood, including boat building.	1909	40,506	9.5	6.6	24.4	24.8	34.7	(2)	.....	.....	.....
	1914	44,489	33.1	17.2	27.7	3.4	17.5	1.1	.....	.....	.....
	1919	387,446	98.3	.5	.6	.1	.5	(2)	67.1	1.2	30.0
Silk goods	1909	99,037	.1	2.3	2.3	82.2	13.0	.....	.....	.....	.....
	1914	108,170	1.1	4.5	52.4	40.0	2.0	(2)	.....	.....	.....
	1919	126,782	47.9	37.3	11.2	2.6	.6	.4	24.9	2.3	20.6
Slaughtering and meat packing.	1909	89,728	5.5	4.6	11.7	4.8	72.2	1.3	.....	.....	.....
	1914	98,832	4.8	3.3	13.3	8.8	68.8	.9	.....	.....	.....
	1919	160,996	84.2	3.6	3.1	2.5	6.4	.2	3.0	1.2	80.0
Tobacco, cigars, and cigarettes.	1909	166,810	29.0	10.4	8.5	38.6	13.1	.4	.....	.....	.....
	1914	152,892	29.4	12.7	30.6	20.2	5.5	1.6	.....	.....	.....
	1919	138,773	38.7	30.2	22.2	6.8	1.8	.3	14.3	5.9	18.5
Woolen and worsted [4]	1914	158,692	.7	1.4	55.6	35.9	6.4	(2)	.....	.....	.....
	1919	166,787	74.9	7.1	10.8	6.0	1.1	.2	.4	6.0	68.6

[1] Not reported in detail.
[2] Less than one-tenth of 1 per cent.
[4] Comparable figures not available for 1909.
[5] Comparable figures not available for 1909; including engines; power pumps; iron and steel tempering and welding; machine tools; steel barrels, drums, etc.; and textile machinery.
[6] Has less than 100,000 employees, but included for comparison with the next item.

For several years the Bureau of Labor Statistics has conducted periodic investigations into the hours of labor, wage rates, and earnings of employees in the principal manufacturing industries of the United States. These data were obtained from representative establishments in each industry, and the number of employees reported was the actual number appearing on the pay rolls of the establishments covered at the time of the investigation. The results of these investigations have been published from time to time in the various bulletins of the bureau. In the following tables, taken from past and forthcoming bulletins, the individual employee has been classified according to his regular full-time hours per week rather than the full-time hours of the plant as a whole. In comparing these tables with the same industries in the reports of the Census of Manufactures it must be remembered that the bureau's tables classify individuals while the census figures classify employees according to the prevailing hours of the plants in which they work.

The 8-hour day has increased rapidly since 1914 in all industries shown in the table following. The percentage of employees working 48 hours or under per week increased from less than 1 per cent in 1914 to 33.7 in 1922 in cotton goods manufacturing; to 39.2 in the hosiery and underwear industry; and to 68.4 in the boot and shoe industry. No employees worked on a 48-hour-per-week basis in 1915 in the lumber industry, but in 1921, 21.5 per cent were on or under that basis. The number of employees on an 8-hour-day basis in the woolen and worsted goods manufacturing industry in 1914 is not available, but in 1922, 88.4 per cent worked 48 hours or less per week. In the men's clothing industry 12.1 per cent of the workers had a 48-hour week in 1914, while an additional 1 per cent worked under 48 hours; in 1922 the hours of labor had decreased to such an extent that all employees were on an 8-hour-day basis and 94.9 per cent had a 44-hour week. While the iron and steel industry does not show any considerable increase in 8-hour-day work in 1922 as compared with 1914, the employment records received currently by the Bureau of Labor Statistics state that since August of 1923 the industry is being placed to a large extent on an 8-hour basis. The percentage of employees who have actually been changed to an 8-hour day, however, is not available. Figures for the automobile industry are presented for 1922 only, and for foundries and machine shops for 1923 only. No satisfactory comparison with earlier years is available for either of these industries.

The hours of labor of males and females do not vary to any great extent. In cotton goods and woolen and worsted goods manufacturing the number of females employed is so large that a separate classification is presented for each sex.

PER CENT OF EMPLOYEES WORKING SPECIFIED NUMBER OF FULL-TIME HOURS PER WEEK.

[Source: Bulletins of the Bureau of Labor Statistics.]

Industry.	Year.	Number of employees covered.	Per cent of employees whose full-time hours per week were—							
			Under 48.	48	Over 48 and under 54.	54	Over 54 and under 57.	Over 57 and under 60.	60	Over 60.
Cotton manufacturing:										
All employees	1914	79,258	0.5	(1)	.....	33.2	23.3	5.7	36.0	1.3
	1920	59,565	3.9	44.0	0.8	8.0	35.1	.1	7.8	.2
	1922	62,833	2.1	31.6	2.8	14.3	43.7	.1	4.5	.9
Males	1914	45,726	.5	(1)	.....	28.9	22.4	5.0	41.2	2.1
	1920	31,384	3.4	36.5	.8	7.0	43.0	.2	8.7	.4
	1922	34,791	2.0	26.5	2.5	11.3	50.4	.1	5.7	1.5
Females	1914	33,532	.5	.....	.....	39.0	24.5	6.7	29.0	.3
	1920	28,181	4.5	52.4	.9	9.1	26.4	.....	6.7	(1)
	1922	28,042	2.2	38.0	3.3	18.1	35.3	.....	3.0	.....
Woolen and worsted manufacturing:										
All employees	1914	40,061	.....	.....	[2] 1.4	62.2	22.4	7.0	5.7	1.3
	1920	38,164	2.0	91.2	1.4	4.1	.2	.6	[3] .6	.....
	1922	39,430	1.6	86.8	1.3	7.6	.4	.9	.7	.8
Males	1914	23,145	.....	.....	[2] 1.0	60.0	18.3	8.5	9.9	2.3
	1920	19,852	1.5	91.7	1.7	3.2	.3	.5	[3] 1.1	.....
	1922	21,980	1.4	86.2	1.5	6.3	.6	1.2	1.3	1.5
Females	1914	16,824	.....	.....	[2] 2.0	64.8	28.2	5.0	.....	.....
	1920	18,312	2.5	90.7	1.1	5.1	.....	.6	.....	.....
	1922	17,450	1.9	87.5	1.0	9.1	.....	.4	.....	.....
Hosiery and underwear:										
All employees	1914	31,989	(1)	.....	6.6	56.5	21.5	10.2	4.2	(1)
	1922	32,178	1.7	37.5	30.4	11.1	18.1	(1)	(1)	(1)
Men's clothing:										
All employees	1914	24,597	.5	12.1	69.9	17.1	.4	.....	.....	.....
	1922	25,013	[4] 97.2	2.8	.....	.....	.....	.....	.....	.....
Boots and shoes:										
All employees	1914	53,071	(1)	(1)	17.3	34.1	33.1	13.0	[3] 2.2	.....
	1920	51,235	13.4	57.9	18.8	8.1	1.4	.4	.....	.....
	1922	47,374	9.4	59.0	21.8	8.6	1.0	(1)	[5]	.....
Lumber:										
All employees	1915	58,845	.....	.....	(1)	.....	[6] 1.8	.....	70.9	27.2
	1921	45,667	.....	[7] 21.5	(1)	1.3	[6] 3.5	.....	66.4	6.9
Foundries:										
All employees	1923	32,166	2.7	26.1	26.7	23.5	[6] 10.3	.....	7.1	3.5
Machine shops:										
All employees	1923	58,914	9.3	27.3	36.8	7.4	[6] 17.3	.....	1.1	.9
Automobiles:										
All employees	1922	56,309	5.4	25.8	50.2	5.4	[8] 13.3	.....	.....	.....

[1] Less than one-tenth of 1 per cent.
[2] Reported as "under 54."
[3] Reported as "60 and over."
[4] 94.9 per cent worked 44 hours.
[5] Reported as "60 and over." Less than one-tenth of 1 per cent.
[6] Reported as " over 54 and under 60."
[7] Reported as "48 and under."
[8] Reported as "55 and over."

PER CENT OF EMPLOYEES WORKING SPECIFIED NUMBER OF FULL-TIME HOURS PER WEEK—Concluded.

Industry.	Year.	Number of employees covered.	Per cent of employees whose full-time hours per week were—							
			48 and under.	Over 48 and under 60.	60	Over 60 and under 72.	72	Over 72 and under 84.	84	Over 84.
Iron and steel:										
Blast furnaces	1914	9,253	(9)	5	13	12	22	7	41	(9)
	1920	12,083	1	18	7	11	16	17	29	(9)
	1922	10,556	1	7	13	10	39	13	17	(9)
Bessemer converters	1914	2,267	12	9	4	11	40	13	12	.....
	1920	2,888	14	7	2	14	25	17	21	.....
	1922	2,294	11	6	6	10	53	5	9	.....
Open-hearth furnaces	1914	5,415	(9)	7	6	9	23	32	24	(9)
	1920	8,007	1	32	2	9	14	38	6	(9)
	1922	7,954	3	15	4	15	28	20	16	(9)
Puddling mills	1914	4,606	27	55	6	9	1	1	(9)	.....
	1920	3,262	24	41	12	15	7	(9)	1	(9)
	1922	2,758	41	33	10	15	(9)	1	1	(9)
Blooming mills	1914	2,476	3	8	5	8	59	9	9	(9)
	1920	3,571	12	12	2	12	35	18	8	(9)
	1922	4,132	4	21	7	12	27	18	12	(9)
Plate mills	1914	2,301	.....	3	4	44	39	6	4	.....
	1920	3,227	(9)	5	4	41	42	4	3	.....
	1922	3,545	(9)	22	16	22	28	4	7	(9)
Standard rail mills	1914	1,725	5	(9)	3	13	74	1	4	.....
	1920	1,344	33	4	2	20	37	2	2	.....
	1922	1,270	32	12	3	19	26	2	6	.....
Bar mills	1914	8,802	4	31	12	44	7	2	1	.....
	1920	6,685	9	28	8	40	12	3	(9)	.....
	1922	6,399	6	39	4	35	14	1	1	.....
Sheet mills	1914	6,304	62	2	8	10	13	2	2	.....
	1920	8,527	64	6	8	9	9	2	1	.....
	1922	9,242	60	8	10	10	7	2	3	(9)
Tin-plate mills	1914	6,033	59	17	9	12	2	(9)	1	(9)
	1920	10,366	58	18	6	10	7	1	(9)	.....
	1922	8,992	61	18	5	9	5	1	(9)	(9)

9 Less than 1 per cent.

While the 8-hour day has made rapid gains generally in the United States, it is found to a far greater extent among organized workers. With but few exceptions, the members of the organized trades have been successful in establishing the 8-hour day and to a large extent the 44-hour week with a Saturday half holiday.

The United States Bureau of Labor Statistics recently made a survey of the union scale of wages and hours of labor of over 860,000 members of the organized trades and occupations in 66 of the principal cities of the United States as of May, 1923. Of the total number of members covered, 89 per cent had written or oral agreements providing for an 8-hour day, and 68 per cent worked 44 hours or less per week. The remaining 11 per cent varied between a week of "over 48 and under 54 hours" and one of "over 60 hours," and was largely made up from the chauffeurs and teamsters and drivers' unions. The building trades and granite and stone trades were almost entirely on a 44-hour-week basis, and 89 per cent of the members in the book and job printing trades also had a 44-hour week. The newspaper printing trades worked slightly more hours per week, although less than 1 per cent worked more than 48 hours.

Sometimes more than 8 hours a day are worked from Monday to Friday in exchange for a Saturday half holiday, but when the hours

total 48 per week such pooling of hours is generally considered an 8-hour day.

In the following table the full-time hours per week of individuals have been classified, except in rare instances where employees may work less than the scale hours:

PER CENT OF LABOR-UNION MEMBERS WORKING EACH SPECIFIED NUMBER OF HOURS PER WEEK, MAY, 1923.

[From forthcoming bulletin of Bureau of Labor Statistics, covering 66 representative cities of the United States and more than 860,000 union members.]

Trade or occupation.	Per cent of members whose hours per week were—								
	44 and under.	Over 44 and under 48.	48	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60.	Irregular.
Bakery trades.									
Bakers	3	7	84	1	3	(1)	.....	.....	(1)
Building trades.									
Asbestos workers	100	.....	.....	.....	.....	.....	.....	.....	.....
Bricklayers	96	4	(1)	.....	.....	.....	.....	.....	.....
Sewer, tunnel, and caisson	100	.....	.....	.....	.....	.....	.....	.....	.....
Building laborers	91	(1)	2	6	(1)	.....	.....	.....	.....
Carpenters	96	4	(1)	.....	.....	.....	.....	.....	.....
Millwrights	98	.....	.....	.....	.....	.....	2	.....	.....
Parquetry-floor layers	100	.....	.....	.....	.....	.....	.....	.....	.....
Wharf and bridge	100	.....	.....	.....	.....	.....	.....	.....	.....
Cement finishers	89	7	1	2	.....	.....	.....	.....	.....
Cement finishers' helpers	100	.....	.....	.....	.....	.....	.....	.....	.....
Composition roofers	97	2	(1)	.....	.....	.....	.....	.....	.....
Composition roofers' helpers	100	.....	.....	.....	.....	.....	.....	.....	.....
Elevator constructors	98	.....	2	.....	.....	.....	.....	.....	.....
Elevator constructors' helpers	99	.....	1	.....	.....	.....	.....	.....	.....
Engineers, portable and hoisting	99	.....	1	.....	(1)	.....	.....	.....	.....
Glaziers	99	.....	1	.....	.....	.....	.....	.....	.....
Hod carriers	95	4	.....	1	.....	.....	.....	.....	.....
Inside wiremen	98	2	(1)	.....	.....	.....	.....	.....	.....
Fixture hangers	92	6	.....	2	.....	.....	.....	.....	.....
Lathers	98	2	(1)	.....	.....	.....	.....	.....	.....
Marble setters	100	(1)	.....	.....	.....	.....	.....	.....	.....
Marble setters' helpers	100	.....	.....	.....	.....	.....	.....	.....	.....
Mosaic and terrazzo workers	100	.....	.....	.....	.....	.....	.....	.....	.....
Painters:									
Building	100	.....	(1)	.....	.....	.....	.....	.....	.....
Fresco	100	.....	.....	.....	.....	.....	.....	.....	.....
Sign	100	.....	(1)	.....	.....	.....	.....	.....	.....
Plasterers	96	4	(1)	.....	.....	.....	.....	.....	.....
Plasterers' laborers	97	3	(1)	.....	.....	.....	.....	.....	.....
Plumbers and gas fitters	100	.....	.....	.....	.....	.....	.....	.....	.....
Plumbers' laborers	89	.....	11	.....	.....	.....	.....	.....	.....
Sheet-metal workers	97	.....	3	(1)	.....	.....	.....	.....	.....
Ship carpenters	87	.....	13	.....	.....	.....	.....	.....	.....
Slate and tile roofers	98	.....	2	.....	.....	.....	.....	.....	.....
Steam fitters	100	.....	.....	.....	.....	.....	.....	.....	.....
Steam fitters' helpers	100	.....	.....	.....	.....	.....	.....	.....	.....
Stonemasons	91	7	.....	2	.....	.....	.....	.....	.....
Structural-iron workers	99	1	.....	.....	.....	.....	.....	.....	.....
Finishers	100	.....	.....	.....	.....	.....	.....	.....	.....
Finishers' helpers	100	.....	.....	.....	.....	.....	.....	.....	.....
Tile layers	100	.....	.....	.....	.....	.....	.....	.....	.....
Tile layers' helpers	100	.....	.....	.....	.....	.....	.....	.....	.....
All building trades	97	2	(1)	(1)	(1)	.....	(1)	.....	.....
Chauffeurs and teamsters and drivers.									
Chauffeurs	.....	1	7	5	23	27	21	15	.....
Teamsters and drivers	1	.....	15	2	25	12	38	8	.....
All chauffeurs, teamsters, and drivers	1	(1)	12	3	24	19	31	10	.....
Freight handlers.									
Longshoremen	.....	1	91	7	.....	.....	1	.....	.....

[1] Less than 1 per cent.

PER CENT OF LABOR-UNION MEMBERS WORKING EACH SPECIFIED NUMBER OF HOURS PER WEEK, MAY, 1923—Concluded.

Trade or occupation.	Per cent of members whose hours per week were—								
	44 and under.	Over 44 and under 48.	48	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60.	Irregular.
Granite and stone trades.									
Granite cutters	100	.....	.....	.....	.....	.....	.....	.....	.....
Stone cutters	100	.....	.....	(1)	.....	.....	.....	.....	.....
All granite and stone trades	100	.....	.....	(1)	.....	.....	.....	.....	.....
Laundry workers.									
Laundry workers	.....	.....	95	4	1	.....	.....	.....	.....
Linemen.									
Linemen	49	.....	38	7	4	2	.....	(1)	.....
Metal trades.									
Blacksmiths	88	.....	12	.....	.....	.....	.....	.....	.....
Blacksmiths' helpers	91	.....	9	.....	.....	.....	.....	.....	.....
Boilermakers	48	2	41	4	5	.....	.....	.....	.....
Boilermakers' helpers	48	.....	38	4	9	.....	.....	.....	.....
Coppersmiths	80	.....	20	.....	.....	.....	.....	.....	.....
Core makers	1	(1)	98	(1)	.....	.....	(1)	.....	.....
Machinists	36	2	53	6	3	(1)	.....	.....	.....
Machinists' helpers	42	(1)	57	.....	.....	.....	.....	.....	.....
Metal polishers and buffers	24	.....	61	15	.....	.....	.....	.....	.....
Molders, iron	4	(1)	94	1	(1)	.....	(1)	.....	.....
Pattern makers	65	1	20	14	(1)	.....	.....	.....	.....
All metal trades	35	1	56	5	2	(1)	(1)	.....	.....
Millwork.									
Carpenters	74	1	22	2	1	.....	.....	.....	.....
Glaziers	95	4	1	.....	.....	.....	.....	.....	.....
Painters: Hardwood finishers	90	.....	10	.....	.....	.....	.....	.....	.....
All millwork trades	77	1	20	2	(1)	.....	.....	.....	.....
Printing and publishing, book and job.									
Bindery women	75	.....	25	.....	.....	.....	.....	.....	.....
Bookbinders	80	.....	20	.....	.....	.....	.....	.....	.....
Compositors	99	.....	1	.....	.....	.....	.....	.....	.....
Electrotypers:									
Batterymen and builders	5	10	84	.....	.....	.....	.....	.....	.....
Finishers and molders	77	2	21	.....	.....	.....	.....	.....	.....
Machine operators	97	(1)	3	.....	.....	.....	.....	.....	.....
Machine tenders (machinists)	99	.....	1	.....	.....	.....	.....	.....	.....
Machinist operators	98	.....	2	.....	.....	.....	.....	.....	.....
Photo-engravers	100	.....	.....	.....	.....	.....	.....	.....	.....
Press assistants and feeders	89	.....	11	.....	.....	.....	.....	.....	.....
Pressmen:									
Cylinder	84	.....	16	.....	.....	.....	.....	.....	.....
Platen	84	.....	16	.....	.....	.....	.....	.....	.....
All book and job trades	89	1	10	.....	.....	.....	.....	.....	.....
Printing and publishing, newspaper.									
Compositors:									
Daywork	8	34	58	.....	.....	.....	.....	.....	.....
Night work	10	51	39	.....	.....	.....	.....	.....	.....
Machine operators:									
Daywork	18	31	51	.....	.....	.....	.....	.....	.....
Night work	19	39	43	.....	.....	.....	.....	.....	.....
Machine tenders (machinists):									
Daywork	5	57	38	.....	.....	.....	.....	.....	.....
Night work	5	69	27	.....	.....	.....	.....	.....	.....
Machinist operators:									
Daywork	20	16	64	.....	.....	.....	.....	.....	.....
Night work	13	35	52	.....	.....	.....	.....	.....	.....
Photo-engravers:									
Daywork	86	7	7	.....	.....	.....	.....	.....	.....
Night work	93	6	1	.....	.....	.....	.....	.....	.....
Pressmen, web presses:									
Daywork	(1)	3	97	.....	.....	.....	.....	.....	.....
Night work	45	3	52	(1)	.....	1	.....	.....	.....
Stereotypers:									
Daywork	8	7	85	.....	.....	(1)	.....	.....	.....
Night work	50	20	29	1	.....	.....	.....	.....	.....
All newspaper trades	18	29	53	(1)	.....	(1)	.....	.....	.....
All trades	68	3	18	2	3	2	3	1	(1)

[1] Less than 1 per cent.

In addition to what is shown in the above table covering union hours of labor in the 66 principal cities of the United States, the bureau has available the official reports of three international unions covering the hours of labor of the different locals throughout those organizations.

A statement made by the International Typographical Union in 1922 lists approximately 675 local unions in the United States, having a total membership of approximately 70,000. Of the 675 locals 629 reported the union scale of hours of labor per week applying to their members. The reports contained separate scales for hand work and machine work and for day work and night work in the two branches of the trade—book and job and newspaper.

A study of the scale of hours reported by the various locals shows that the entire organization has a working-day of 8 hours or less. The 44-hour and 48-hour week, however, shows a wide variation in the two different branches. Approximately 95 per cent of the unions reporting book and job work had a 44-hour week, while in the newspaper branch about 65 per cent had a 48-hour week. Very little difference is noticed between hand and machine workers, and day and night work did not vary to any considerable extent.

A summary of the various local reports has been made by the Bureau of Labor Statistics and is presented herewith. Each local did not have each classification of work, hence no one class shows 629 locals reporting. A few of the locals reported a range of weekly hours instead of one common scale, such as 39 to 48, 40 to 48, etc. The average of the range given has been used in each case. For example, the report 39 to 48 has been tabulated as 43½, 40 to 48 as 44, etc.

The locals shown in this summary include the unions from which information was received in the union wage investigation of the Bureau of Labor Statistics, the figures for which appear elsewhere in this article, on pages 87 and 88.

UNION SCALE OF HOURS OF LABOR OF THE INTERNATIONAL TYPOGRAPHICAL UNION AS REPORTED JULY, 1922.

Classification.	Number of locals reporting.	Per cent of locals whose weekly scale of hours were—						
		Under 42.	42	43½	44	45	Over 45 and under 48.	48
Newspaper offices.								
Hand compositors:								
Day	609	0.5	1.5	0.2	20.0	8.5	1.5	67.8
Night	534	.7	4.1	.2	15.4	14.2	1.5	63.9
Machine operators:								
Day	608	.7	2.1	.2	20.1	8.2	1.2	67.6
Night	541	1.1	4.3	.4	15.5	14.2	1.3	63.4
Book and job offices.								
Hand compositors:								
Day	601	.....	.3	.....	97.3	.....	.....	2.3
Night	346	1.2	2.3	.....	94.5	.....	.....	2.0
Machine operators:								
Day	597	.2	.7	.....	96.8	.....	.....	2.3
Night	355	1.4	2.3	.....	94.4	.....	.....	2.0

A supplement to the August, 1923, issue of The Carpenter, the official publication of the United Brotherhood of Carpenters and Joiners of America, contains a list of all the local unions of the organization with a statement opposite each of the hours of work per day, and whether or not it is the custom to work a half day on Saturday. This report has been summarized and is presented below. Of the 2,072 local unions in the United States at that time 1,724 furnished information as to the hours of labor, although only 1,370 reported the custom of the union with regard to Saturday practice. Of the 1,724 locals reporting, 1,522 had an 8-hour day, 149 had a 9-hour day, 24 had one of 10 hours, and 29 reported a day which varied in length from 8 to 10 hours.

UNION SCALE OF HOURS OF THE UNITED BROTHERHOOD OF CARPENTERS AND JOINERS OF AMERICA, 1923.

Number of unions reporting.	Number of hours per day.	Number of hours on Saturday.	Number of hours per week.
7	8	None	40
855	8	One-half day	44
357	8	Eight	48
303	8	Not reported	.....
43	9	One-half day	.....
75	9	Nine	54
31	9	Not reported	.....
4	10	One-half day	55
7	10	Ten	60
13	10	Not reported	.....
18	8–10	One-half day	.....
4	8–10	Full day	.....
7	8–10	Not reported	.....

The Plasterer, the official journal of the International Association of Plasterers and Cement Finishers, in its July, 1923, issue gave reports for 254 local unions in the United States in addition to those located in the 66 cities already mentioned. Six of these locals report the hours of plasterers as 40 per week, 191 as 44, 7 as "over 44 and under 48," 47 as 48, and 3 report "over 48 and under 54."

The Bureau of Labor Statistics has available 136 agreements of individual local unions in localities other than the 66 cities covered by the union wage inquiry, and of the 33 bakers' agreements examined 30 provide for a 48-hour week. Eleven agreements for bricklayers show 7 at 44 hours per week and 4 at 48. Electrical workers were divided between a 44 and a 48 hour week, 12 of the 25 agreements in hand showing 44 hours, 12 showing 48 hours, and 1 reporting a week of 54 hours. Of the 8 agreements of hod carriers and building laborers, 7 fix the hours at 44 and 1 at 48. Two of the agreements for painters and paper hangers provide for 5 days of 8 hours or 40 hours per week, 36 for a 44-hour week, and 1 for 48 hours. Plumbers, gas, steam, and sprinkler fitters and helpers show 44 hours per week in the 8 agreements examined, and of the 12 agreements received for molders and core makers 8 show 48 hours, one "over 48 and under 54," two 54, and one alternated from 44 hours one week to 48 the next.

The following are extracts from the report of the executive council of the American Federation of Labor to the forty-third annual convention:

The granite cutters have not only maintained the 44-hour week but in some localities have secured the five-day work week * * *

* * * the International Ladies' Garment Workers' Union reduced the working week in the dress and waist industry from 44 to 40 hours.

The 48-hour week was also maintained for most of the [textile] industry.

A statement issued by the international president of the Granite Cutters' Union for October, 1921, shows that the 44-hour week has been universally accepted for that trade. This report includes the granite cutters at the quarries as well as in cities, and includes those employed in the cities covered by the union-wage investigation of the United States Bureau of Labor Statistics.

The 8-hour day and 44-hour week for photo-engravers have been almost universally established. The report of the twenty-first annual meeting of International Photo-Engravers Union of North America in August, 1920, shows that the standard working time for commercial establishments was 8 hours per day and 44 hours per week in 63 of the 64 cities reported. In one city engravers still worked a full day on Saturday or 48 hours per week. In those cities having night work the prevailing hours were 7 to 8 per night and 40 to 42 per week.

The extent of the 8-hour day in 1921 in bituminous coal mining and the changes in the hours of labor since 1903 are set forth in the table following. According to the table 56.4 per cent of the mines had an 8-hour day in 1903, as compared with 96.6 per cent in 1921.

PER CENT OF MEN EMPLOYED IN BITUMINOUS COAL MINES HAVING WORKING-DAYS OF 8, 9, AND 10 HOURS.[1]

[From report of the U. S. Geological Survey.]

Year.	Per cent of total employees in—			Weighted average working day (hours).
	8-hour mines.	9- hour mines.	10-hour mines.	
1903	56.4	17.1	26.5	8.7
1904	62.1	13.8	24.1	8.6
1905	61.1	13.6	25.3	8.6
1906	63	13.5	23.5	8.6
1907	64	11.6	24.4	8.6
1908	63.5	11.1	25.4	8.6
1910	62.1	11.3	26.6	8.6
1911	62.9	10.9	26.2	8.6
1912	61.6	11.5	26.9	8.6
1913	61.9	15.2	22.9	8.6
1914	60.7	15.4	23.9	8.6
1915	59.6	17	23.4	8.6
1916	58.6	17.4	24	8.6
1917	79	12.6	8.4	8.3
1918	90.6	6.7	2.7	8.12
1919	95.5	3.5	1	8.06
1920	97.1	2	.9	8.04
1921	96.6	2.9	.5	8.04

[1] Percentages are calculated on base of total number of men in mines definitely reported as having 8-hour, 9-hour, or 10-hour day. A small number of mines that work more than 10 hours or less than 8 hours have been excluded, as have also all mines for which the reports were defective or which changed their working day during the year.

The October, 1923, MONTHLY LABOR REVIEW, page 19, contains a digest of the report of the committee appointed by the United States Coal Commission to study labor relations in the anthracite industry. The committee consisted of H. S. Dennison, W. E. Hotchkiss, and J. H. Willits.

The following quotation from the report is here reprinted:

The 8-hour day prevails in the industry. The Coal Commission's study of wage rates indicates that in 148 colleries about 2 per cent of the employees in 55 specified occupations work in excess of 8 hours per day, and that about 70 per cent of these 2 per cent work on a 12-hour basis. The sense of unfairness among the relatively few men working 10 to 12 hours keeps up irritations which cost more than the saving, if any, from the longer hours. The committee therefore recommends the elimination of the long day.

The anthracite wage agreement [1] which was concluded between the representatives of the operators and of the miners on September, 1923, has three clauses relating to the 8-hour day. By this agreement outside and inside company men working on the basis of a day in excess of 10 hours are placed on the basis of an 8-hour day, those working on the basis of a 9 or 10 hour day were also placed on the basic 8-hour day as well as monthly men coming under the agreement of September 2, 1920, who were working on a basis in excess of 8 hours.

The following extracts are drawn from the Fourteenth Census, volume 9, Mines and Quarries. The statements relate to the year 1919.

(Page 279.)

Coal.—The normal hours of labor in the coal mining industry generally were 44 to 53 per week, and in fact were [2] 48—the 8-hour day and the 6-day week prevailing. Among the anthracite enterprises the exceptions to these prevailing hours were almost entirely reported by those who operated only culm washeries and dredges. In bituminous-coal mining other hours than those generally prevailing were reported by a considerable number of enterprises in fully half of the States, but the wage earners employed in such enterprises were relatively quite few in number except in West Virginia, eastern Kentucky, northeastern Tennessee, Alabama, Arkansas, Texas, Utah, and South Dakota.

(Page 320.)

Petroleum and natural gas.—The table shows that the prevailing hours of labor were quite generally more than 54 per week, about 60 per cent of the enterprises employing wage earners reporting 54 or more hours per week. The hours per day in the petroleum and natural-gas industry were commonly 9 or 10, and very frequently longer. Furthermore, the 7-day week was the rule in many enterprises. The reason for prevalence of long hours in this industry is that drilling operations are usually conducted continuously, 24 hours per day and 7 days per week, and also because where there is large volume of production uninterrupted attendance is required.

(Page 346.)

Iron ore.—In the industry as a whole 44 to 53 hours per week; that is, the 8-hour day and 6-day week prevailed for a majority of the enterprises employing wage earners, but only for 44.4 per cent of the total average number of wage earners. In 43.5 per cent of the enterprises employing wage earners and for 53.9 per cent of the wage earners, the prevailing hours of labor were 54 to 62 per week with the 10-hour day and 6-day week ruling.

In Michigan and Wisconsin the 48-hour week prevailed, but in Minnesota a large majority of the wage earners worked 60 hours per week, and as a consequence 60 hours was the prevailing time in the Lake Superior Region. In the Northeastern Region the prevailing hours were 44 to 53 per week and the 8-hour day and 6-day week were most common. In the Southeastern Region longer hours prevailed, chiefly 10 a day and 60 a week.

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[1] See MONTHLY LABOR REVIEW, October, 1923, p. 83.
[2] Evidently should read "in fact were mainly."

(Page 373.)

Gold, silver, copper, lead, and zinc.—For the combined producing and nonproducing industries in the United States, for nearly three-fifths of the enterprises employing wage earners and for one-half of the total average number of wage earners the prevailing hours of labor were 54 to 62 per week; and for approximately two-fifths of the enterprises and nearly one-half of the wage earners the prevailing hours were 44 to 53 per week. Enterprises and wage earners for which less than 44 and more than 63 hours per week prevailed were very few. In the Western Region hours ranging from 54 to 62 per week, resulting principally from the 9 or 10 hour day and 6-day week, but also from the 8-hour day and 7-day week in many enterprises, were most frequently reported, while hours ranging from 44 to 53 per week, indicating the 8-hour day and 6-day week, were reported by about a third of the enterprises. In the Lake Region the hours 44 to 53 per week and the 8-hour day and 6-day week was the rule. These hours prevailed in the Central Region for more than four-fifths of the enterprises, but a considerable number of the wage earners employed in mills in these enterprises worked longer hours.

(Page 404.)

Stone.—For the combined quarrying industries and for limestone, sandstone, slate, basalt, and marble the hours prevailing for a majority of the enterprises were 54 to 62 per week. These hours were those for 69.8 per cent of all the wage earners in the quarrying industries. For the five industries separately considered the proportion of wage earners working 54 to 62 hours was as follows: Limestone, 81.3 per cent; sandstone, 86 per cent; slate, 61.8; basalt, 77.5; marble, 86.2. The hours per day in these industries were most commonly 10, and the 6-day week was the rule. In the granite industry a majority of the enterprises and 60 per cent of the wage earners were in the class reporting working hours as 44 to 53 per week. The 8-hour day and 6-day week prevailed in the granite industry.

(Page 422.)

Phosphate rock.—In the United States as a whole, for a majority of the enterprises and for 84.2 per cent of the wage earners employed, the hours of labor were 54 to 62 per week and the 10-hour day and 6-day week prevailed. The same hours ruled in all States except Idaho and Utah, where the hours of labor were 8 per day and 48 per week.

(Page 430.)

Gypsum.—In the industry as a whole, for a majority of the enterprises and for 60 per cent of the wage earners employed, the hours of labor were 54 to 62 per week; that is, the 10-hour day and 6-day week prevailed. In Iowa, however, the prevailing hours of labor were 44 to 53 per week, and the 8-hour day and 6-day week was the rule.

The basic 8-hour day for railroad train-service employees was fixed by the Adamson Act. The basic 8-hour day in railroad service is, however, more a method of wage payment than an actual 8-hour day. General rules governing hours in train service are determined by agreement. The day's work is based on mileage made as well as hours on duty. The following table, drawn from a report of the Interstate Commerce Commission, shows the average hours per day worked by train-service employees during June, 1923. No data were available from which to classify the hours per day of each employee, so averages only are shown.

AVERAGE HOURS WORKED BY TRAIN-SERVICE EMPLOYEES IN JUNE, 1923, BY OCCUPATION.

Occupation.	Passenger service.	Freight service.	Yard.
Conductors	7.8	9.4	8.6
Engineers and motormen	7.1	8.8	8.5
Firemen and helpers	6.9	8.2	.....
Brakemen and flagmen	7.5	8.9	.....
Baggagemen	8.1	.....	.....

The principle of the basic 8-hour day for other classes of railroad employees was recognized by the Railroad Administration during Government operation of the roads and later by the Railroad Labor Board in various decisions. Maintenance of way employees averaged 8.7 hours per day during June, 1923, and the shop crafts ranged from an average of 8.28 hours per day for blacksmiths to 9.3 hours for firemen and oilers during the same period. Clerks, freight handlers, station employees, etc., were usually on duty between 8½ and 9 hours per day.

A number of States, through their labor departments, have accumulated and published data covering the hours of labor of their employees in manufacturing, construction, and other industries.

These data have been presented in various ways, but all give a fairly good idea of the hours worked by employees in their respective States. A summarization of these reports has been made by the Bureau of Labor Statistics and is herewith presented.

According to the Eighteenth Biennial Report of the Colorado Bureau of Labor Statistics, 94 labor unions in that State, having a membership of 13,194, had an 8-hour day in 1921–22. Two unions with 156 members had a 9-hour day, while 10 unions with 652 members were on a 10-hour basis. One union comprising 36 members worked 12 hours.

According to a general summary of the union scale of hours of employment of various classes of labor in Louisiana as of December 31, 1921, practically all of the building trades worked 8 hours per day and 44 hours per week. Building laborers and hod carriers were on a 9-hour day and a 50-hour week basis and plasterers worked 8 hours per day and 45 hours per week. The metal trades, except molders and helpers, also worked an 8-hour day and 44-hour week. Molders and helpers worked a full day on Saturday or 48 hours per week. The printing trades all varied between 8 and 9 hours per day and 48 and 52 hours per week.

Data as of December, 1921, collected by the Industrial Commissioner of New York and published in the Industrial Bulletin of that State, cover 1,648 representative firms with over 460,000 employees, or more than one-third of the factory workers in the State. Hours are reported for shop employees only, since office employees were not included in the inquiry. While only one-third of the factory workers in the State were included in the investigation, information was received from a sufficient number of representative plants in each industry to be thoroughly representative of conditions in that industry. The total at the end of the table following shows that 60.2 per cent of the men in New York factories had a week of 48 hours or less, and that 61.9 per cent of the women had a week of 48 hours or less.

NUMBER OF HOURS CONSTITUTING A STANDARD WEEK FOR SHOP EMPLOYEES IN MANUFACTURING INDUSTRIES OF NEW YORK STATE, DECEMBER, 1921.

[Source: Industrial Bulletin of New York State, January and February, 1922.]

Industry.	Number of reports.	Men.						Women.				
		Number.	Per cent.					Number.	Per cent.			
			44 hrs. or less.	45 to 48 hrs.	49 to 51 hrs.	52 to 54 hrs.	Over 54 hrs.		44 hrs. or less.	45 to 48 hrs.	49 to 51 hrs.	52 to 54 hrs.
Stone, clay, and glass products	57	8,263	10.7	12.8	24.6	32.0	19.9	867	0.2	2.2	64.4	33.2
Miscellaneous stone and mineral products	14	1,658	34.5	.....	60.6	.....	4.9	77	2.6	.....	97.4	.....
Lime, cement, and plaster	9	1,788	.....	.....	.....	24.2	75.8	21	.....	.....	.....	100.0
Brick, tile, and pottery	24	2,234	6.6	3.6	40.9	43.5	5.4	483	.....	.....	100.0	.....
Glass	10	2,583	6.6	37.6	4.5	47.9	3.4	286	.....	6.6	.....	93.4
Metals, machinery and conveyances	294	91,001	2.4	56.0	21.1	10.1	10.4	6,317	3.3	59.8	29.8	7.1
Gold, silver, and precious stones	8	602	38.7	36.2	25.1	.....	.....	84	16.7	23.8	59.5	.....
Brass, copper, aluminum, etc.	27	6,824	9.4	21.4	30.8	15.7	22.7	353	46.7	30.3	9.1	13.9
Pig iron and rolling mill products	10	3,923	.....	.....	22.9	7.7	69.4	86	.....	.....	.....	100.0
Structural and architectural ironwork	9	694	.....	47.7	15.6	.....	36.7	.....	.....	.....	.....	.....
Sheet-metal work and hardware	35	7,277	.5	29.0	33.0	27.4	10.1	1,127	.....	53.2	33.6	13.2
Firearms, tools, and cutlery	17	2,491	.....	38.7	50.3	11.0	.....	288	1.0	52.1	39.9	7.0
Cooking, heating, and ventilating apparatus	12	6,460	6.6	55.0	3.0	35.4	.....	46	28.3	13.0	.....	58.7
Machinery (including electrical apparatus)	80	24,568	.2	69.5	16.3	8.8	5.2	2,520	.2	85.1	10.2	4.5
Automobiles, carriages, and aeroplanes	27	7,474	4.8	70.3	22.7	2.2	.....	29	6.9	65.5	10.3	17.3
Cars, locomotives, and railway repair shops	33	20,354	.5	67.6	13.9	3.7	14.3	55	.....	92.7	5.5	1.8
Boat and ship building	7	2,754	14.8	80.5	.....	4.7	.....	2	.....	.....	.....	.....
Instruments and appliances	29	7,580	.....	52.4	47.0	.....	.6	1,727	.1	39.4	60.5	.....
Wood manufactures	116	14,922	9.8	35.1	28.8	9.3	17.0	1,762	10.9	53.4	23.6	12.1
Sawmill and planing mill products	40	3,890	11.6	16.8	42.1	13.4	16.1	211	13.3	20.9	50.2	15.6
Furniture and cabinetwork	42	5,607	11.9	24.5	25.0	12.2	26.4	477	10.4	36.3	40.9	12.4
Pianos, organs, and other musical instruments	18	3,652	.....	67.5	26.4	.....	6.1	300	.....	46.0	27.0	27.0
Miscellaneous wood and allied products	16	1,773	19.1	41.9	16.4	10.4	12.2	774	14.7	75.7	4.4	5.2
Furs, leather, and rubber goods	113	18,426	11.3	66.8	14.1	6.2	1.6	8,199	9.9	67.1	16.4	6.6
Leather	11	1,811	.....	19.7	37.5	42.2	.6	99	.....	7.0	67.7	25.3
Furs and fur goods	7	618	76.1	23.9	.....	.....	.....	317	80.4	19.6	.....	.....
Boots and shoes	29	13,089	9.2	82.0	8.2	.6	.....	5,523	6.5	81.5	11.1	.9
Miscellaneous leather and canvas goods	33	1,250	26.2	35.3	8.2	10.5	19.8	913	8.7	55.2	6.3	29.8
Rubber and gutta-percha goods	8	559	.....	66.4	33.6	.....	.....	183	.....	65.0	35.0	.....
Pearl, horn, bone, celluloid, hair, etc	25	1,099	7.7	23.4	50.7	14.8	3.4	1,164	10.1	26.8	46.3	16.8
Chemicals, oils, paints, etc	51	15,184	2.1	64.6	15.0	6.4	11.9	4,054	2.3	67.1	19.5	11.1
Drugs and chemicals	12	1,308	.....	15.8	50.8	15.8	17.6	574	2.8	27.5	50.0	19.7
Paints, dyes, and colors	12	2,079	.....	60.0	31.1	8.9	.....	255	.....	8.2	40.4	51.4
Animal and mineral oil products	16	6,859	4.7	66.6	11.4	3.4	13.9	1,278	6.1	68.4	24.9	.6
Miscellaneous chemical products	11	4,938	.....	76.7	3.8	7.0	12.5	1,947	.....	85.6	4.2	10.2
Paper	22	5,947	.7	74.4	1.4	16.0	7.5	243	1.2	52.7	17.7	28.4
Printing and paper goods	110	15,975	41.5	46.5	8.7	2.4	.9	7,110	27.0	48.8	20.9	3.3
Paper boxes and tubes	14	1,008	.....	45.2	24.5	19.3	11.0	1,069	.....	40.6	49.0	10.4
Miscellaneous paper goods	19	1,635	2.1	26.5	69.7	.....	1.7	1,618	.....	41.7	58.3	.....
Printing and bookmaking	77	13,332	49.5	49.1	.....	1.4	.....	4,423	43.4	53.3	.5	2.8
Textiles	139	23,561	1.9	53.3	15.2	21.8	7.8	23,496	1.9	59.0	19.1	20.0
Silk and silk goods	28	2,871	11.5	61.2	14.8	10.3	2.2	5,800	4.4	73.9	16.9	4.8
Wool manufactures	19	7,343	1.1	54.5	8.6	35.2	.6	4,735	2.8	60.2	16.8	20.2
Cotton goods	5	2,911	.....	82.5	.....	9.2	8.3	1,729	.....	82.8	.....	17.2
Cotton and woolen hosiery and knit goods	56	5,098	.....	44.0	17.5	19.0	19.5	8,225	.....	46.3	19.2	34.5
Other textiles and allied products	31	5,338	.8	40.6	30.3	19.1	9.2	3,007	2.0	49.6	37.8	10.6

NUMBER OF HOURS CONSTITUTING A STANDARD WEEK FOR SHOP EMPLOYEES IN MANUFACTURING INDUSTRIES OF NEW YORK STATE, DECEMBER, 1921—Concl'd.

Industry.	Number of reports.	Men.						Women.				
		Number.	Per cent.					Number.	Per cent.			
			44 hrs. or less.	45 to 48 hrs.	49 to 51 hrs.	52 to 54 hrs.	Over 54 hrs.		44 hrs. or less.	45 to 48 hrs.	49 to 51 hrs.	52 to 54 hrs.
Clothing, millinery, laundering, etc	285	12,700	56.1	18.2	8.0	15.4	2.3	23,886	28.0	30.5	34.1	7.4
Men's clothing	60	6,498	90.8	6.3	2.3	.1	.5	4,727	78.8	17.0	3.0	1.2
Men's shirts and furnishings	47	3,294	7.9	25.9	5.5	53.6	7.1	9,321	3.5	16.8	64.2	15.5
Women's clothing	86	762	75.1	9.7	11.4	3.8	.....	2,920	56.0	22.4	21.6	.....
Women's underwear and furnishings	30	631	13.3	80.5	.2	5.9	.1	2,859	14.3	78.8	1.9	5.0
Women's headwear	20	186	80.6	15.6	3.8	.....	.....	797	.....	31.6	56.8	11.6
Miscellaneous sewing	17	355	.....	81.1	16.1	.....	2.8	1,365	.....	70.9	27.3	1.8
Laundering, cleaning, dyeing, etc	25	974	15.8	16.4	54.4	12.1	1.3	1,897	17.4	31.4	45.7	5.5
Food, beverages, and tobacco	129	17,001	3.5	41.8	11.3	16.3	27.1	8,638	6.3	43.4	15.0	35.3
Flour, feed, and other cereal products	10	1,685	9.1	47.7	.....	32.1	11.1	279	.....	14.7	19.7	65.6
Fruit and vegetable canning and preserving	10	360	.....	12.5	21.7	28.9	36.9	400	.....	6.5	22.5	71.0
Groceries not elsewhere classified	10	4,469	.....	16.2	31.4	9.3	43.1	643	.....	14.3	51.5	34.2
Meat and dairy products	16	3,015	.....	35.9	.....	10.8	53.3	214	10.3	7.9	.5	81.3
Bread and other bakery products	19	1,884	.....	55.0	7.2	28.6	9.2	517	.....	36.6	25.7	37.7
Confectionery and ice cream	14	2,019	.....	52.8	12.7	13.9	20.6	2,628	.....	64.7	26.2	9.1
Beverages	27	1,662	10.4	77.0	2.0	4.9	5.7	13	76.9	7.7	.....	15.4
Cigars and other tobacco products	23	1,907	14.4	56.3	.9	25.2	3.2	3,944	12.9	42.7	.....	44.4
Water, light, and power	10	2,731	27.5	8.1	5.8	14.1	44.5	3	.....	.....	.....	.....
Total	1,326	225,711	10.0	50.2	17.1	11.9	10.8	84,575	12.9	49.0	24.2	13.9

The department of industrial relations of the State of Ohio made a canvass of the union scale of wages and hours of labor in force in the organized trades in 16 of the principal cities in the State, as of May 15, 1921. The total of the membership of all local unions covered in the investigation was approximately 90,000, although the exact number has not been reported.

As the union membership of each organized trade was not reported, the number of reports sent to the department of industrial relations have been classified. Of the 939 reports received, 721, or 76.8 per cent, show an 8-hour day or 48 hours or less per week. The largest number of reports in any group, or 35.6 per cent, appears under the heading 44 hours per week. The next largest number, or 34 per cent, reports a 48-hour week. The summary of the weekly hours of labor reported follows:

UNION SCALE OF HOURS OF LABOR IN OHIO ON MAY 15, 1921, BY TRADES.

[Source: Ohio. Department of industrial relations. Division of Labor Statistics Report No. 1, Aug. 25, 1921.]

Trade.	Number of reports.	Number of reports showing hours of labor per week of—											
		40 and under.	Over 40 and under 44.	44	Over 44 and under 48.	48	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60 and under 72.	72	Over 72.
Bakery	51	.....	.....	.....	3	45	.....	3	.....	.....	.....	.....	.....
Building trades	285	.....	1	219	25	31	6	3	.....	.....	.....	.....	.....
Metal trades	102	.....	.....	20	5	50	21	2	3	1	.....	.....	.....
Printing (book and job)	202	.....	4	92	15	91	.....	.....	.....	.....	.....	.....	.....
Printing (newspapers)	99	2	2	3	11	80	.....	.....	1	.....	.....	.....	.....
Street car employees (conductors and motormen)	12	.....	.....	.....	.....	.....	.....	.....	.....	1	11	.....	.....
Teamsters and chauffeurs	188	.....	.....	.....	.....	22	4	10	30	72	43	1	6
Total	939	2	7	334	59	319	31	18	34	74	54	1	6

The prevailing hours of labor in the organized industries and trades in Massachusetts in 1921 are shown in the twelfth annual report on the union scale of wages and hours of labor in Massachusetts.

Reports were obtained from practically all local labor organizations in the State as of July 1, 1921. The membership of the various locals was not reported so the number of reports from the different locals have been classified in the following summary. Of the 2,024 reports received, 1,734, or 85.7 per cent, show an 8-hour day or a week of 48 hours or less. Approximately 43 per cent, or 863, report 48 hours per week, and 708, or 35 per cent, show a 44-hour week. The table follows:

UNION SCALE OF HOURS OF LABOR IN MASSACHUSETTS, 1921.

[Source: Massachusetts. Bureau of labor statistics. Labor Bul. No. 137, June, 1922. Number of employees not available so the number of reports have been classified.]

Trade.	Number of reports.	Number of agreements specifying hours of labor per week of—											
		40 and under.	Over 40 and under 44.	44	Over 44 and under 48.	48	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60 and under 72.	72	Over 72.
Boots and shoes	300	.....	.....	2	90	183	25	.....	.....	.....	.....	.....	.....
Building trades	372	30	.....	334	.....	8	.....	.....	.....	.....	.....	.....	.....
Clothing and garment trades	56	.....	.....	46	1	9	.....	.....	.....	.....	.....	.....	.....
Food and beverages	180	4	.....	.....	.....	120	.....	40	7	7	1	.....	1
Metal and machinery	149	.....	.....	53	4	83	7	2	.....	.....	.....	.....	.....
Paper and pulp	83	.....	.....	.....	.....	65	18	.....	.....	.....	.....	.....	.....
Printing and allied trades	137	.....	2	46	4	85	.....	.....	.....	.....	.....	.....	.....
Stoneworking and quarrying	58	1	.....	24	9	24	.....	.....	.....	.....	.....	.....	.....
Teaming and trucking	167	.....	.....	12	4	41	54	29	14	10	3	.....	.....
Telephone and telegraph service	39	.....	7	32	.....	.....	.....	.....	.....	.....	.....	.....	.....
Textile operatives	71	.....	.....	.....	.....	69	2	.....	.....	.....	.....	.....	.....
Woodworking	40	.....	.....	8	.....	22	10	.....	.....	.....	.....	.....	.....
Miscellaneous trades	239	.....	.....	74	7	103	12	7	27	2	4	1	2
Municipal service	133	.....	.....	77	.....	51	5	.....	.....	.....	.....	.....	.....
Total	2,024	35	9	708	119	863	133	78	48	19	8	1	3

The sixth biennial report of the Bureau of Labor Statistics of the State of Texas, 1919–1920, contains a very comprehensive study of the prevailing hours of labor of employees in that State. The data were compiled from 1,873 representative establishments. While the survey includes only a limited part of the industries in any particular city or locality, the inquiry was always so distributed as to get statistics from all classes of establishments from the largest to the smallest, and practically every section of the State is represented. In the following summary table made by the United States Bureau of Labor Statistics the males and females have not been presented separately. No females, however, were found who worked more than 9 hours per day or 54 hours per week. Approximately 42 per cent of the employees reported worked an 8-hour day and a small percentage worked less than 48 hours per week. Of the remaining 58 per cent 41.2 worked 54 hours per week and 6.9 worked 60 hours per week. Only 1 per cent of the employees worked more than 60 hours per week.

CLASSIFIED HOURS OF LABOR OF EMPLOYEES IN TEXAS MANUFACTURING INDUSTRIES, 1919–20.

[Source: Texas. Bureau of labor statistics. Sixth biennial report, 1919–1920.]

Industry.	Number of employees.	Per cent of employees whose full time hours per week were—											
		40 and under.	Over 40 and under 44.	44	Over 44 and under 48.	48	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60 and under 72.	72	Over 72.
Automobiles	275	.....	.....	.....	.....	100.0	.....	.....	.....	.....	.....	.....	.....
Bakeries [1]	195	.....	.....	.....	.....	3.6	22.1	43.4	13.8	16.4	0.5	.....	.....
Box making	1,413	.....	.....	.....	.....	1.1	3.5	7.1	21.0	67.2	.....	.....	.....
Candy and confectionery	2,248	.....	.....	0.9	0.5	5.6	5.9	62.1	3.4	20.0	1.4	.....	[2] 0.2
Cigars and tobacco	1,068	.....	.....	.....	.....	.....	.....	100.0	.....	.....	.....	.....	.....
Clothing, duck, bag, and mattress	3,722	0.2	.....	49.3	.4	6.7	28.9	8.9	.....	5.6	.....	.....	.....
Compress and cotton ginning	574	.....	.....	.....	.....	.....	.....	.2	.....	99.8	.....	.....	.....
Department stores and mercantile establishments	12,830	.....	.....	.....	.....	21.0	10.9	64.3	[3]	3.6	.....	0.1	.....
Foundries and machine shops	1,381	.1	0.8	2.2	.1	30.7	1.0	45.5	.1	19.6	.....	.....	.....
Furniture and cabinetmakers	230	.....	.....	.....	.....	.....	.....	99.6	.....	.....	.....	.4	.....
Hotels and restaurants	1,229	.3	.....	.....	5.5	1.8	4.1	48.8	1.1	7.8	22.3	1.3	[4] 7.7
Laundries	6,037	.....	.....	.....	[3]	.6	18.4	76.9	.....	3.9	.....	.....	[5] .1
Mill and elevator	295	.....	.....	.....	.....	9.8	.....	4.7	.....	66.8	.....	18.6	.....
Mines	617	.....	.....	.....	.....	97.4	.3	.....	.....	2.3	.....	.....	.....
Miscellaneous manufactures	2,105	.....	.....	[3]	.....	5.9	20.4	49.4	4.9	16.8	.3	2.1	[5] .1
Newspaper and printing offices	1,306	.8	.....	8.6	.2	72.1	11.9	5.4	.....	1.0	.....	.....	.....
Oil and refining	6,590	.....	.1	.....	.....	98.4	.....	.1	.....	.....	1.1	.3	.....
Packing plants	2,616	.....	.....	28.6	.....	71.4	.....	.....	.....	.....	.....	.....	.....
Railroad companies	3,032	.....	.....	1.2	.....	98.0	.....	.....	.8	.....	.1	.....	.....
Telephone and telegraph	9,641	.....	.....	.....	.....	48.6	.....	51.4	.....	.....	.....	.....	.....
Textiles	937	.....	1.4	.5	.....	13.8	.....	80.4	.....	3.9	.....	.....	.....
All others	361	5.0	3.6	.....	.....	5.3	10.0	8.0	1.7	43.8	18.8	.....	[6] 3.3
Total	58,702	.1	.1	4.7	.2	37.0	7.7	41.2	.9	6.9	.6	.3	.2

[1] Reported as "Bakery and confectionery" in one city.
[2] 77 hours per week.
[3] Less than one-tenth of 1 per cent.
[4] 45 working 73 hours and 50 working 84 hours.
[5] 84 hours per week.
[6] Part at 77 and part at 84 hours per week.

The twentieth biennial report of the Bureau of Labor Statistics of the State of California, 1921–1922, contains a study of the prevailing hours of labor of organized workers in that State in 1922. Questionnaires were sent out to all labor unions, but on account of strikes and other industrial disturbances not all reported. Altogether only 279 unions, having a membership of 59,770, furnished information. In reporting the hours of labor for each organized trade or occupation, however, the number of members affected was not shown, and in the summary presented below the number of reports received have been classified rather than individuals. Of the 829 reports received, 377, or 45.5 per cent, show a 48-hour week and 337, or 40.7 per cent, report a week of 44 hours. Ninety-one per cent show a week of 48 hours or under. Separate information for males and females has not been summarized, but a statute provides that females shall not be permitted to work more than eight hours per day.

UNION SCALE OF HOURS OF LABOR IN CALIFORNIA JANUARY, 1922.

[Source: California. Bureau of labor statistics. Twentieth biennial report, 1921–1922, pp. 102 to 131, inclusive. Number of employees not available, so the number of reports have been classified.]

Industry.	Number of reports.	Number of reports showing hours of labor per week of—										
		40 hours and under.	Over 40 and under 44.	44	Over 44 and under 48.	48	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60 and under 72.	72
Building, stone-working, etc	178	3	.....	147	.....	28	.....	.....	.....	.....	.....	.....
Transportation	95	.....	.....	1	.....	68	12	10	2	1	1	.....
Clothing and textiles	104	.....	.....	44	.....	60	.....	.....	.....	.....	.....	.....
Metals, machinery, and shipbuilding	68	3	.....	44	.....	20	1	.....	.....	.....	.....	.....
Printing, binding, etc	158	.....	.....	89	14	55	.....	.....	.....	.....	.....	.....
Woodworking and furniture	10	.....	.....	5	.....	5	.....	.....	.....	.....	.....	.....
Food and liquors	51	.....	.....	.....	1	35	.....	15	.....	.....	.....	.....
Theaters and music	47	1	.....	.....	.....	45	.....	.....	1	.....	.....	.....
Tobacco	5	.....	.....	3	.....	2	.....	.....	.....	.....	.....	.....
Restaurants and trades	58	.....	.....	.....	.....	30	1	7	12	.....	7	1
Public employment	35	21	.....	3	.....	11	.....	.....	.....	.....	.....	.....
Stationary enginemen	8	.....	.....	1	.....	7	.....	.....	.....	.....	.....	.....
Miscellaneous	12	.....	.....	.....	.....	11	.....	.....	1	.....	.....	.....
Total	829	28	.....	337	15	377	14	32	16	1	8	1

The Missouri Bureau of Labor Statistics has published, in the Missouri Red Book for 1922, detailed copies of actual returns as of 1921 made by 38 of the largest employers and manufacturers of the State. These reports contain in part the actual daily and weekly hours of labor prevailing for all wage earners, by occupations. The weekly hours of these wage earners have been classified for each industry represented. Approximately 55 per cent of the male employees and

85 per cent of the female employees reported worked 48 hours or less per week. The summarization follows:

PREVAILING HOURS OF LABOR PER WEEK OF EMPLOYEES IN MISSOURI MANUFACTURING ESTABLISHMENTS, BY INDUSTRY AND SEX, 1921.

[Source: Missouri. Bureau of labor statistics. Red Book, 1922.]

Industry.	Number of employees.	Per cent of employees whose hours of labor per week were—											
		Under 40.	40 and under 44.	44	Over 44 and under 48.	48	Over 48 and under 54.	54	Over 54 and under 60.	60	Over 60 and under 72.	72	Over 72.
Males.													
Boots and shoes	1,597	.....	.....	.....	.....	57.7	3.8	38.4	.....	.....	(1)	.....	.....
Car shops	4,164	.....	.....	.....	.....	4.1	51.8	.....	27.9	16.1	.....	(1)	.....
Clothing	335	.....	.....	97.9	2.1	.....	.....	.....	.....	.....	.....	.....	.....
Flour milling	336	.....	.....	1.2	.....	36.3	.....	2.1	0.9	52.4	2.4	2.4	2.4
Foundry shops	1,545	.....	.....	18.5	.....	81.5	.....	.....	.....	.....	.....	.....	.....
Hats and caps	47	.....	.....	4.3	.....	95.7	.....	.....	.....	.....	.....	.....	.....
Meat packing and slaughtering	2,141	.....	4.3	.....	.....	95.7	.....	.....	.....	.....	.....	.....	.....
Printing	475	.....	.....	.....	.....	100.0	.....	.....	.....	.....	.....	.....	.....
Publishing	1,133	10.6	1.6	.....	37.4	47.2	.....	1.0	2.2	.....	.....	.....	.....
Total[2]	11,800	1.0	1.0	6.2	3.7	46.5	18.8	5.4	10.1	7.2	.1	.1	.1
Females.													
Boots and shoes	946	.....	.....	.....	.....	56.9	2.2	40.9	.....	.....	.....	.....	.....
Clothing	877	.....	.....	85.3	14.7	.....	.....	.....	.....	.....	.....	.....	.....
Hats and caps	84	.....	.....	4.8	95.2	.....	.....	.....	.....	.....	.....	.....	.....
Meat packing and slaughtering	149	.....	14.1	.....	.....	85.9	.....	.....	.....	.....	.....	.....	.....
Millinery	254	.....	.....	100.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing	381	.....	.....	.....	.....	100.0	.....	.....	.....	.....	.....	.....	.....
Total[3]	2,737	.....	.8	33.6	8.1	42.1	1.0	14.4	.....	.....	.....	.....	.....

[1] Less than one-tenth of 1 per cent.
[2] Including 27 males not shown separately, as they were found in an industry which employed females almost entirely.
[3] Including a few females not shown separately, as they were found in industries employing males almost entirely.

The fourth biennial report of the Department of Labor and Industry of Montana, 1919–1920, contains a very comprehensive report of the manufacturing industries in the State. All manufacturing in the State has been included and daily hours of labor were stated separately for male and female employees. The weekly hours are not shown and employees have been classified according to the hours per day in the following summarization. Approximately 85 per cent of the 12,346 employees reported had an 8-hour day. Only two industries, lumber and slaughtering and meat packing, reported less than 50 per cent of the employees working on that basis. Information for males and females has not been separated in this summary, although no females were found working more than 8 hours per day.

CLASSIFIED FULL-TIME HOURS PER DAY OF ACTUAL EMPLOYEES IN THE MANUFACTURING INDUSTRIES OF MONTANA, 1919-20.

[Source: Montana. Department of labor and industry. Biennial report, 1919-1920.]

Industry.	Number of employees.	Per cent of employees whose hours of labor per day were—					
		Under 8.	8	9	10	11	12
Lumber	1,822	.....	43.1	27.1	29.7	.....	.....
Flour and feed	463	2.8	65.4	6.0	24.2	0.4	1.1
Bakery products	335	.....	85.7	11.7	2.7	.....	.....
Laundering	1,037	6.3	92.3	1.6	.....	.....	.....
Cigar manufacturing	102	21.6	78.4	.....	.....	.....	.....
Creameries (butter)	168	1.2	58.3	26.8	13.7	.....	.....
Cheese factories	22	.....	77.3	.....	22.7	.....	.....
Bottle works	114	.9	91.2	6.1	1.8	.....	.....
Smelters, concentrators, and cyanide plants	5,376	.....	100.0	.....	.....	.....	.....
Foundries, repair and machine shops	519	.2	99.8	.....	.....	.....	.....
Planing mills	423	.....	74.0	22.0	4.0	.....	.....
Monumental works	72	18.1	81.9	.....	.....	.....	.....
Brick and clay products	308	.....	89.6	.....	10.4	.....	.....
Meat packing and slaughtering	163	.....	48.5	51.5	.....	.....	.....
Miscellaneous industries	1,422	.....	86.2	3.4	1.9	8.5	.....
Total	12,346	.9	84.9	6.9	6.2	1.0	(1)

[1]Less than one-tenth of 1 per cent.

The twenty-fourth annual report of the Bureau of Labor Statistics of the State of Virginia contains a summary covering all industries in the State for the year 1920. The average daily hours of labor of wage earners are classified for each industry for males and females separately. Only 45 per cent of the 99,728 male employees and 25.8 per cent of the 21,986 female employees worked 8 hours or less per day. The industries of shipbuilding and coal mining were the only ones reported which were entirely on an 8-hour basis. The classification follows:

DAILY HOURS OF LABOR OF EMPLOYEES IN VIRGINIA MANUFACTURING ESTABLISHMENTS, 1921.

[Source: Virginia. Bureau of labor and industrial statistics. Twenty-fourth annual report, 1921.]

Industry.	Number of employees.	Per cent of employees whose hours of labor per day were—					
		8 and under.	9 and over 8.	10 and over 9.	11 and over 10.	12 and over 11.	Over 12.
Males.							
Building operations	8,265	34.7	65.3	.....	.....	.....	.....
Cannery products	1,348	46.7	11.6	41.7	.....	.....	.....
Cotton mill products	4,508	2.0	.2	97.9	.....	.....	.....
Fertilizer and guano	2,194	2.1	1.3	96.0	.....	0.6	.....
Iron and machinery	11,383	54.5	30.3	13.0	0.1	2.1	0.1
Lime, cement, and limestone	2,359	3.5	3.3	93.1	.....	.....	.....
Garments (clothing, shirts, etc.)	291	87.6	10.3	2.1	.....	.....	.....
Sash, doors, and blinds	1,885	9.4	35.1	55.4	.....	.....	.....
Sawmill products	4,633	3.0	7.3	87.0	2.4	.3	.....
Shipbuilding	12,070	100.0	.....	.....	.....	.....	.....
Tobacco products	5,041	1.7	47.7	50.5	.....	.1	.....
Wood products	3,700	6.8	4.5	88.1	.5	.....	.....
Coal mining	14,780	100.0	.....	.....	.....	.....	.....
Miscellaneous industries	27,266	26.3	16.7	48.1	4.2	4.8	.....
Total	99,728	45.0	17.3	34.8	1.3	1.6	(1)
Females.							
Cannery products	1,536	53.7	11.1	34.8	.4	.....	.....
Cotton mill products	2,580	4.0	6.1	90.0	.....	.....	.....
Garments (clothing, shirts, etc.)	1,873	76.2	21.1	2.7	.....	.....	.....
Tobacco products	8,414	1.9	61.4	36.7	.....	.....	.....
Miscellaneous industries	7,583	41.6	26.3	31.9	.....	.3	.....
Total	21,986	25.8	35.9	38.3	(1)	.1	.....

[1] Less than one-tenth of 1 per cent.

The statistics of manufactures of the State of Iowa, 1920 and 1922, include a classification of employees in factory industries by hours of labor per day, in 1919 and 1921. The reports for a few establishments could not be included in this summary because of incomplete data.

HOURS OF LABOR IN FACTORIES IN IOWA IN 1919 AND 1921.

[Source: Iowa. Bureau of labor statistics. Statistics of manufactures of Iowa, 1919 and 1921.]

	Year.	Number of establishments.	Number of employees.	Per cent of employees whose full-time hours per week were—								
				8	8½	8¾	9	9½	10	10½ and 11	12	Over 12
Total employees	1919	2,747	91,454	37.4	1.4	0.8	24.9	1.8	27.4	0.1	5.4	0.8
	1921	2,877	76,203	45.1	1.3	.4	23.3	3.6	20.8	.....	3.4	2.0
Males	1919	.....	75,023	39.5	.7	.5	23.6	1.5	27.4	.1	6.3	.5
	1921	.....	63,131	47.6	1.1	.1	21.5	3.0	21.3	.....	3.4	2.1
Females	1919	.....	16,431	27.5	4.7	2.4	31.0	3.0	27.5	.2	1.3	2.3
	1921	.....	13,072	33.4	2.5	2.0	32.0	6.4	18.7	.....	3.8	1.3

The fourth biennial report of the Commissioner of Labor of the State of Nevada, 1921–1922, contains the average daily hours of labor of employees in that State, classified by industries. The total number of firms reporting was 2,540, which employed 21,011 wage earners. The number of women employed was 2,214, and with but few exceptions averaged 8 hours or less per day. Nurses, matrons, cooks, and farm workers, totaling 242 females, averaged slightly above the 8-hour day. The averages indicate the prevalence of the 8-hour day. The summary follows:

AVERAGE HOURS OF LABOR PER DAY OF EMPLOYEES IN NEVADA, 1921–22.

[Source: Nevada. Commissioner of Labor, Fourth biennial report.]

Industry.	Number of employees.	Average hours per day.
Farming and stock raising	3,845	9.3
Mines, mills, and quarries	4,658	8.0
Manufacturing industries	1,024	8.0
Railroads	5,706	8.1
Trades and merchandise	2,369	8.0
Public service	1,478	7.5
Professional service	162	8.3
Hotels, cafes, and saloons	970	8.3
Telegraph and telephones	227	7.9
Transfers and garages	385	8.4
Laundries, dyers, cleaners	187	8.5
All industries	21,011	8.4

Union Scale of Wages and Hours of Labor as of May 15, 1923.

THE Bureau of Labor Statistics has just completed the compilation of the union scales of wages and hours of labor of 862,621 members of organized trades in 66 of the principal cities of the United States as of May 15, 1923, which will be published later in bulletin form. The present article is a summary of this report.

In all trades taken collectively the hourly union wage rate on May 15, 1923, was higher in the United States than in any preceding year, being 9 per cent higher than on the same date in 1922, 84 per cent higher than in 1917, 111 per cent higher than in 1913, 123 per cent higher than in 1910, and 135 per cent higher than in 1907.

All hourly rates have been converted to equivalent weekly rates and all weekly rates have been reduced to equivalent hourly rates. Taken collectively, weekly rates in 1923 were 9 per cent higher than in 1922, 77 per cent higher than in 1917, 99 per cent higher than in 1913, 109 per cent higher than in 1910, and 117 per cent higher than in 1907. Because of reductions in hours of labor, weekly rates have not increased to the same extent as hourly rates. In 1923 the regular hours of labor were at the same level as in 1922, 4 per cent lower than in 1917, 6 per cent lower than in 1913, 7 per cent lower than in 1910, and 8 per cent lower than in 1907.

In the trades the weekly rates changed during the year, May, 1922, to May, 1923, as follows: Bakers' wages increased 3 per cent; building trades changes ranged from no change for parquetry-floor layers to an increase of 18 per cent for stonemasons; chauffeurs' wages showed an increase of 4 per cent; those of teamsters and drivers an increase of 5 per cent; those of freight handlers an increase of 11 per cent; those of granite cutters an increase of 3 per cent; those of stonecutters an increase of 9 per cent; those of laundry workers a decrease of 1 per cent; and those of linemen an increase of 4 per cent. In the metal trades, the changes ranged from an increase of 2 per cent for blacksmiths' helpers, boilermakers' helpers, and pattern makers, to an increase of 14 per cent for core makers.

Millwork carpenters gained 8 per cent, while glaziers and painters (hardwood finishers) in the millwork group gained 4 per cent. In book and job printing, weekly rates of platen pressmen remained unchanged, while in all other occupations in this group the increases ranged from 1 per cent for compositors, machine tenders (machinists), machinist operators, and photo-engravers to 11 per cent for press assistants and feeders. In the newspaper printing trades, the weekly rates for machine tenders (machinists) on day and night work, photo-engravers on night work, and web pressmen on night work remained unchanged, while in all other occupations the changes ranged from a decrease of 5 per cent for machinist operators on night work to an increase of 3 per cent for stereotypers on night work.

The average money rate of wages per hour as of May 15, 1923 and 1922, for the country as a whole, is given for each trade in the table following. Averages are also given for trade groups and for all trades combined. The grand average at the end of the table shows an increase for all trades, collectively, from 87.3 cents in 1922 to 95.2 cents in 1923.

TABLE 1.—AVERAGE UNION RATE OF WAGES PER HOUR IN TRADES SPECIFIED, FOR THE UNITED STATES, AS OF MAY 15, 1922 AND 1923.

Occupation.	May 15, 1923.	May 15, 1922.
Bakers	$0.921	$0.891
Building trades.		
Asbestos workers	1.005	.968
Bricklayers	1.321	1.164
Sewer, tunnel, and caisson	1.534	1.432
Building laborers	.728	.714
Carpenters	1.084	.973
Millwrights	1.164	1.061
Parquetry-floor layers	1.262	1.254
Wharf and bridge	.994	.877
Cement finishers	1.113	1.017
Cement finishers' helpers	.805	.781
Composition roofers	.977	.964
Composition roofers' helpers	.695	.678
Elevator constructors	1.115	1.050
Elevator constructors' helpers	.806	.769
Engineers, portable and hoisting	1.141	1.033
Glaziers	1.041	.983
Hod carriers	.788	.721
Inside wiremen	1.079	1.042
Fixture hangers	1.065	.996
Lathers:		
Piece work	[1] 7.720	[1] 6.920
Time work	1.188	1.076
Marble setters	1.188	1.050
Marble setters' helpers	.873	.808
Mosaic and terrazzo workers	.978	.955
Painters	1.108	1.009
Fresco	1.125	1.074
Sign	1.330	1.231
Plasterers	1.306	1.173
Plasterers' laborers	.872	.792
Plumbers and gas fitters	1.151	1.043
Plumbers' laborers	.879	.841
Sheet-metal workers	1.065	.989
Ship carpenters	.935	.833
Slate and tile roofers	1.224	1.098
Steam fitters	1.052	1.004
Steam fitters' helpers	.751	.707
Stone masons	1.297	1.097
Structural-iron workers	1.109	1.036
Finishers	1.086	1.046
Finishers' helpers	.838	.831
Tile layers	1.140	1.043
Tile layers' helpers	.798	.780
Average for building trades	1.068	.966
Chauffeurs and teamsters and drivers.		
Chauffeurs	.574	.555
Teamsters and drivers	.590	.558
Average for chauffeurs and teamsters and drivers	.583	.557
Freight handlers	.722	.651
Granite and stone trades.		
Granite cutters	1.089	1.068
Stonecutters	1.151	1.055
Average for granite and stone trades	1.119	1.062
Laundry workers	.414	.417
Linemen	.898	.868
Metal trades.		
Blacksmiths, manufacturing and jobbing shops	.997	.971
Blacksmiths' helpers, manufacturing and jobbing shops	.853	.838
Boiler makers, manufacturing and jobbing shops	.812	.775
Metal trades—Continued.		
Boiler makers' helpers, manufacturing and jobbing shops	$0.606	$0.591
Coppersmiths	.966	.933
Core makers	.848	.743
Machinists, manufacturing and jobbing shops	.823	.791
Machinists' helpers, manufacturing and jobbing shops	.650	.613
Metal polishers and buffers	.934	.861
Molders, iron	.843	.746
Pattern makers	1.028	1.009
Average for metal trades	.839	.794
Millwork trades.		
Carpenters	.935	.865
Glaziers	1.030	.986
Painters: Hardwood finishers	1.068	1.030
Average for millwork trades	.956	.896
Printing and publishing: Book and job.		
Bindery women	.507	.485
Bookbinders	.907	.855
Compositors	1.024	1.001
Electrotypers:		
Battery men and builders	.818	.821
Finishers and molders	1.193	1.121
Machine operators:		
Piece work	[2] .150	[2] .146
Time work	1.062	1.042
Machine tenders	1.088	1.078
Machinist operators	1.028	1.011
Photo-engravers	1.043	1.033
Press assistants and feeders	.781	.698
Pressmen:		
Cylinder	1.052	.975
Platen	.859	.825
Average for printing and publishing, book and job	.926	.892
Printing and publishing: Newspaper.		
Compositors:		
Day work	1.013	1.004
Night work	1.151	1.138
Machine operators, day work:		
Piece work	[2] .139	[2] .134
Time work	1.031	1.017
Machine operators, night work:		
Piece work	[2] .160	[2] .151
Time work	1.130	1.121
Machine tenders (machinists):		
Day work	1.064	1.060
Night work	1.179	1.175
Machinist operators:		
Day work	1.007	.999
Night work	1.040	1.104
Photo-engravers:		
Day work	1.085	1.087
Night work	1.289	1.278
Pressmen, web presses:		
Day work	.871	.861
Night work	.987	.976
Stereotypers:		
Day work	.922	.906
Night work	1.082	1.046
Average for printing and publishing, newspaper	1.047	1.036
Grand average for all trades herein covered	.952	.873

[1] Per 1,000 laths.

[2] Rate per 1,000 ems.

A total of 5,011 wage quotations were tabulated for 1923, for which, in 119 instances, no comparable data were obtained for 1922, either because there was no effective union scale in 1922 or because the unions were not then organized.

Of the 4,892 wage quotations for 1923 for which there are comparable data for 1922, 2,667 had no change during the year and 2,225 had changes in rates or hours or both of these items.

A table is given summarizing the 2,225 changes as they affected each of the three phases of the scale—wages per hour, earnings per week, and hours per week. With 2,032 instances of increases in wages per hour as against only 173 decreases out of a total of 5,011 wage quotations, the increase of wage rates in 1923 becomes significant.

TABLE 2.—NUMBER OF UNION SCALE QUOTATIONS FOR 1923, NUMBER OF SUCH SCALES COMPARABLE WITH 1922, AND NUMBER IN WHICH CHANGES OCCURRED IN WAGE RATES PER HOUR, EARNINGS PER WEEK, AND HOURS PER WEEK.

Industry or occupation.	Union scale quotations, 1923.			Rate of wages per hour.		
	Number.	Number comparable with 1922.	Number having changes from 1922.	Increase.	Decrease.	No change.
Bakery trades	274	271	104	93	11	.....
Building trades	1,538	1,513	953	929	18	6
Chauffeurs and teamsters and drivers	493	464	222	219	3	.....
Freight handlers	50	50	29	27	2	.....
Granite and stone trades	115	114	39	34	.....	5
Laundry workers	54	54	.....	.....	.....	.....
Linemen	42	42	18	18	.....	.....
Metal trades	425	409	215	185	21	9
Millwork	67	66	30	29	1	.....
Printing and publishing:						
Book and job	845	836	272	244	28	.....
Newspaper	904	890	250	217	33	.....
Street railways [1]	204	183	93	37	56	.....
Total	5,011	4,892	2,225	2,032	173	20

Industry or occupation.	Full time earnings per week.			Hours per week.		
	Increase.	Decrease.	No change.	Increase.	Decrease.	No change.
Bakery trades	92	9	3	2	3	99
Building trades	930	22	1	14	13	926
Chauffeurs and teamsters and drivers	214	3	5	7	15	200
Freight handlers	27	2	.....	.....	1	28
Granite and stone trades	37	2	.....	6	2	31
Laundry workers	.....	.....	.....	.....	.....	.....
Linemen	17	.....	1	.....	1	17
Metal trades	189	26	.....	15	15	185
Millwork	28	2	.....	.....	2	28
Printing and publishing:						
Book and job	215	37	20	6	38	228
Newspaper	218	29	3	6	25	219
Street railways [1]	.....	.....	.....	.....	.....	.....
Total	1,967	132	33	56	115	1,961

[1] The hours per week and earnings per week were not reported in the 93 cases where changes in the wages per hour were reported for street railways.

Owing to the many variations of hours of work and to the shifting of trips, the hours per week and rates per week of motormen and conductors are omitted from the report.

Reduced to percentages of the total changes in scales, 91.3 per cent of the changes resulted in increases and 7.8 per cent in decreases in wages per hour; 88.4 per cent made increases and 5.9 per cent decreases in earnings per week; and 2.5 per cent made increases and 5.2 per cent decreases in hours per week.

The next table shows for each trade, and for each year for which data are available, the per cent of increase or decrease in full-time rates of wages per week in 1923 as compared with each of the last 16 preceding years in all cities covered, taken collectively.

TABLE 3.—PER CENT OF INCREASE IN FULL-TIME RATES OF WAGES PER WEEK IN 1923, AS COMPARED WITH EACH OF THE LAST 16 YEARS PRECEDING.

Occupation.	Per cent of increase in full-time rates of wages per week in 1923 as compared with—															
	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
Bakery trades.																
Bakers	186	179	169	164	156	151	143	139	137	131	113	79	43	4	[1] 1	3
Building trades.																
Asbestos workers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	82	79	71	53	27	[1] 2	[1] 3	4
Bricklayers	95	95	94	94	95	92	89	85	84	83	77	65	49	9	11	13
Sewer, tunnel, and caisson	[2]	[2]	[2]	[2]	[2]	60	60	60	60	60	54	44	41	5	4	7
Building laborers	115	114	114	112	112	109	101	100	101	93	80	54	38	[1] 4	[1] 4	3
Carpenters	120	118	116	111	109	105	102	99	96	91	76	62	41	5	4	11
Millwrights	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	82	79	73	62	34	6	4	9
Parquetry-floor layers	[2]	[2]	[2]	[2]	[2]	[2]	108	96	95	93	79	68	47	1	1	[3]
Wharf and bridge	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	73	57	47	[1] 9	1	13
Cement finishers	98	101	95	93	86	86	84	83	81	81	73	57	41	4	1	9
Cement finishers' helpers	153	151	142	138	124	124	122	121	120	119	110	81	59	[1] 1	[1] 1	3
Composition roofers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	106	101	99	90	68	51	7	2	7
Composition roofers' helpers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	82	82	70	69	54	40	[1] 3	[1] 1	3
Elevator constructors	[2]	[2]	[2]	[2]	[2]	[2]	[2]	81	80	76	66	56	35	5	[1] 1	6
Elevator constructors' helpers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	101	100	96	87	75	45	4	[3]	5
Engineers, portable and hoisting	[2]	[2]	[2]	[2]	[2]	79	76	74	74	73	66	47	36	5	3	10
Glaziers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	60	50	4	6	6
Hod carriers	121	120	120	118	117	117	114	112	111	104	84	57	35	[1] 7	[1] 9	9
Inside wiremen	113	102	101	98	96	94	91	86	83	81	71	54	35	3	[1] 2	4
Fixture hangers	[2]	[2]	[2]	[2]	101	102	97	88	88	85	73	57	42	6	2	7
Lathers	[2]	[2]	[2]	[2]	[2]	100	96	92	91	86	80	67	50	6	4	11
Marble setters	93	91	92	89	88	88	76	75	73	73	73	64	48	12	11	13
Marble setters' helpers	[2]	[2]	[2]	[2]	[2]	129	116	115	115	115	102	94	70	[3]	[3]	8
Mosaic and terrazzo workers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	78	69	62	51	2	[3]	2
Painters:																
Building	140	132	131	124	121	118	109	103	102	86	80	64	40	7	3	10
Fresco	[2]	[2]	[2]	[2]	[2]	94	92	84	84	67	65	59	36	1	[3]	5
Sign	[2]	[2]	[2]	[2]	[2]	[2]	103	103	103	99	91	75	46	8	5	6
Plasterers	97	99	98	96	95	92	90	89	89	84	80	71	48	14	8	12
Plasterers' laborers	128	119	117	116	116	114	109	105	104	101	88	63	44	[1] 1	[1] 3	10
Plumbers and gas fitters	101	99	96	95	88	88	82	80	79	78	73	57	39	8	2	8
Plumbers' laborers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	71	42	5	4	5
Sheet-metal workers	126	121	119	113	107	105	97	90	88	85	78	53	39	4	[3]	8
Ship carpenters	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	67	54	25	14	1	3	12
Slate and tile roofers	[2]	[2]	[2]	[2]	[2]	[2]	[2]	109	101	96	88	71	51	17	6	11
Steam fitters	95	93	89	84	78	76	71	70	66	63	57	45	29	[1] 2	3	5
Steam fitters' helpers	178	175	173	155	149	141	136	132	125	123	110	84	53	6	9	6
Stonemasons	122	119	118	120	119	117	110	104	102	100	92	75	58	13	10	18
Structural-iron workers	96	94	92	87	83	81	76	74	73	71	62	41	25	[1] 1	[1] 3	7
Finishers	[2]	[2]	[2]	[2]	[2]	78	75	71	71	69	61	44	28	[1] 3	[1] 5	4
Finishers' helpers	[2]	[2]	[2]	[2]	[2]	106	103	101	101	101	87	68	40	1	[3]	1
Tile layers	[2]	[2]	[2]	[2]	[2]	78	71	70	69	68	61	56	44	7	8	10
Tile layers' helpers	[2]	[2]	[2]	[2]	[2]	121	117	115	111	104	101	95	62	[1] 1	[1] 3	3
Chauffeurs and teamsters and drivers.																
Chauffeurs	[2]	[2]	[2]	[2]	[2]	[2]	73	72	72	67	59	41	19	[3]	[1] 1	4
Teamsters and drivers	[2]	[2]	[2]	[2]	[2]	[2]	102	98	97	91	79	58	28	3	1	5
Freight handlers.																
Freight handlers	[2]	[2]	[2]	[2]	[2]	[2]	78	73	73	53	50	28	20	[3]	[1] 2	11

[1] Lower. [2] No data. [3] No change.

TABLE 3.—PER CENT OF INCREASE IN FULL-TIME RATES OF WAGES PER WEEK IN 1923, AS COMPARED WITH EACH OF THE LAST 16 YEARS PRECEDING—Concluded.

Occupation.	Per cent of increase in full-time rates of wages per week in 1923 as compared with—															
	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
Granite and stone trades.																
Granite cutters	129	128	125	123	122	120	111	111	110	101	94	63	38	12	2	3
Stone cutters	103	103	103	102	102	101	96	89	87	86	78	68	41	8	5	9
Laundry workers.																
Laundry workers	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	66	56	28	4	(3)	[1] 1
Linemen.																
Linemen	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	2	[1] 3	4
Metal trades.																
Blacksmiths	103	98	97	91	92	89	85	82	81	76	65	21	14	[1] 4	[1] 1	3
Blacksmiths' helpers	166	144	141	130	131	129	124	122	116	109	89	33	23	2	1	2
Boiler makers	98	97	95	87	76	75	73	73	73	68	57	19	9	[1] 1	[1] 5	4
Boiler makers' helpers	117	117	117	112	105	92	90	89	89	81	71	27	14	3	[1] 7	2
Coppersmiths	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	59	31	10	[1] 5	[1] 2	3
Core makers	127	127	129	118	108	106	95	92	91	81	60	26	17	[1] 8	(3)	14
Machinists	104	101	101	93	91	91	89	86	86	68	54	19	9	[1] 3	[1] 2	4
Machinists' helpers	(2)	(2)	(2)	(2)	(2)	(2)	91	91	91	78	63	30	20	[1] 5	[1] 6	6
Metal polishers and buffers	(2)	(2)	(2)	(2)	(2)	(2)	126	125	124	114	94	57	37	1	7	9
Molders, iron	117	117	117	108	105	104	94	92	92	81	61	29	18	[1] 7	1	13
Pattern makers	119	115	111	109	106	104	97	97	98	85	66	27	11	[1] 11	[1] 7	2
Millwork.																
Carpenters	(2)	(2)	(2)	(2)	(2)	115	113	117	115	109	99	80	55	8	[1] 1	8
Glaziers	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	125	111	96	46	12	7	4
Painters: Hardwood finishers	(2)	(2)	(2)	(2)	(2)	132	130	121	113	90	88	78	47	7	3	4
Printing and publishing: Book and job.																
Bindery women	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	131	128	112	90	47	6	[1] 1	4
Bookbinders	124	122	121	119	115	114	109	105	105	105	93	72	35	2	(3)	5
Compositors	135	135	134	125	119	114	109	104	103	99	95	76	44	10	1	1
Electrotypers:																
Batterymen and builders	155	154	153	142	129	125	119	108	103	98	90	75	50	[1] 1	[1] 19	5
Finishers and molders	140	140	139	138	127	124	120	112	107	102	96	89	66	18	11	7
Machine operators	104	104	104	99	97	93	88	86	86	85	80	67	37	7	[1] 4	2
Machine tenders (machinists)	(2)	(2)	(2)	(2)	(2)	87	84	84	83	80	78	62	32	5	1	1
Machinist operators	(2)	(2)	(2)	(2)	(2)	(2)	60	59	59	56	54	48	30	5	3	1
Photo-engravers	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	85	70	61	38	8	2	1
Press assistants and feeders	174	173	170	165	155	152	146	139	138	135	123	91	48	8	7	11
Pressmen:																
Cylinder	127	126	112	110	106	103	100	96	96	93	89	71	42	9	4	7
Platen	139	138	134	130	126	123	119	115	114	110	100	82	48	9	(3)	(3)
Printing and publishing: Newspaper.																
Compositors:																
Day work	100	99	97	92	87	83	79	78	77	76	72	64	37	12	3	1
Night work	94	94	92	89	86	83	80	79	79	78	74	67	38	14	5	1
Machine operators:																
Day work	101	97	97	93	90	87	84	82	81	80	75	68	38	10	6	1
Night work	91	89	89	85	84	82	79	78	77	76	72	66	36	10	5	1
Machine tenders (machinists):																
Day work	(2)	(2)	(2)	(2)	(2)	82	82	81	80	80	77	68	32	6	2	(3)
Night work	(2)	(2)	(2)	(2)	(2)	75	74	73	73	73	71	63	29	5	2	(3)
Machinist operators:																
Day work	(2)	(2)	(2)	(2)	(2)	(2)	64	64	64	61	58	54	47	33	2	1
Night work	(2)	(2)	(2)	(2)	(2)	(2)	57	57	57	57	53	46	33	10	[1] 2	[1] 5
Photo-engravers:																
Day work	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	78	70	59	37	16	3	[1] 1
Night work	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	84	77	65	38	24	6	(3)
Pressmen, web presses:																
Day work	109	106	103	95	93	90	86	85	84	82	78	64	36	9	1	1
Night work	95	95	94	92	92	90	86	84	83	82	80	68	34	10	1	(3)
Stereotypers:																
Day work	99	94	92	88	87	85	74	73	72	70	66	60	42	17	3	2
Night work	93	92	91	89	89	86	76	74	74	72	69	62	44	18	3	3

[1] Lower. [2] No data. [3] No change.

In the table of index numbers presented below are combined the data for all localities and for all occupations except street railway motormen and conductors. The data of preceding reports have been used so as to produce a series of index numbers from 1907 to 1923. In this table the year 1913 is taken as the base or 100 per cent.

TABLE 4.—INDEX NUMBERS OF UNION WAGE RATES AND HOURS OF LABOR IN THE UNITED STATES AS OF MAY EACH YEAR, 1907 TO 1923.

[1913=100.]

Year.	Rates of wages per hour.	Full-time hours per week.	Rates of wages per week, full time.
1907	90	103	92
1908	91	102	93
1909	92	102	93
1910	94	101	95
1911	96	101	96
1912	98	100	98
1913	100	100	100
1914	102	100	102
1915	103	99	102
1916	107	99	106
1917	114	98	112
1918	133	97	130
1919	155	95	148
1920	199	94	189
1921	205	94	193
1922	193	94	183
1923	211	94	199

The organized trades herein covered have nearly reached the 8-hour day; 89 per cent of all the union members reported had a week of 48 hours or less. In the building trades, 97 per cent of the membership also have the Saturday half-holiday with a week of 44 hours or less; and in all trades combined 68 per cent of the membership had a week of 44 hours or less. Similar figures are given for each trade on pages 87 and 88 of this issue of the MONTHLY LABOR REVIEW.

Wage Scales in the Building Trades, November 1, 1923.

THE following table of wage scales in the building trades as of November 1, 1923, compiled by the National Association of Builders' Exchanges appeared in the American Contractor of November 10, 1923. Where two figures are shown, they are the minimum and maximum rates. All the rates are hourly rates, except where otherwise noted:

WAGE SCALES IN THE BUILDING TRADES, AS OF NOVEMBER 1, 1923.

City.	Carpenters.	Cement finishers.	Electricians.	Hod carriers.	Laborers.	Lathers.	Painters.	Plasterers.	Plasterers' helpers.
Akron, Ohio	$0.70	$0.70	$0.75	$0.60	$0.40	$1.00	$0.75	.....	$0.60
	.90	.80	1.00	.75	.55	1.25	.90	$1.25	.75
Atlanta, Ga	.....	.....	.50	.30	.25	.....	.50	[1] 1.25	.35
	.70	1.25	1.00	.45	.30	.90	.75	.....	.45
Baltimore, Md	.....	.....	.....	.....	.35	.....	.....	.....	.....
	.90	1.25	1.00	.87½	.40	1.25	.80	1.50	.....
Boston, Mass	1.10	1.10	1.10	.70	.65	1.17½	1.10	1.25	.95
Buffalo, N. Y	.70	.60	.....	.50	.40	.....	.75	.....	.....
	1.00	.85	1.00	.60	.50	1.25	.87½	1.50	(2)
Chicago, Ill	1.15	1.10	1.25	.....	.82½	1.12½	.....	1.25	.88¾
Cincinnati, Ohio	1.10	1.02½	1.10	.87½	.50	1.10	1.02½	1.25	.87½
Cleveland, Ohio	1.25	1.25	1.25	.87½	.87½	1.25	1.20	1.25	.87½
Columbia, S. C	.40	.....	.90	.....	.15	[3] 3.50	.....	.90	.....
	.60	.90	1.00	.20	.20	.....	.50	1.00	.25
Columbus, Ohio	.....	.....	.70	.....	.35	.....	.65	1.25	.....
	1.00	.80	.80	.80	.40	1.10	.85	1.37½	.80
Dayton, Ohio	.....	.....	.....	.....	.40	.....	.....	.....	.60
	1.00	1.00	1.15	.85	.50	1.17½	1.00	1.37½	.75
Des Moines, Iowa	1.00	1.12½	1.00	.87½	.65	1.25	1.00	1.37½	.60
Detroit, Mich	.85	.70	1.00	.....	.50	.....	.75	[4] 1.50	.....
	.90	.85	1.12½	.90	.60	1.25	.85	.....	1.00
Dubuque, Iowa	.....	.50	.....	.70	.45	.90	.75	.....	.....
	.92½	.60	1.00	.75	.55	1.00	.90	1.37½	.75
Duluth, Minn	.....	.....	.....	.45	.35	.....	.....	.....	.55
	.87½	.87½	.87½	.60	.45	.87½	.87½	1.12½	.65
Erie, Pa	.....	1.10	.80	.45	.45	.....	.....	.....	.....
	.95	1.12½	.85	.55	.50	1.25	.85	1.25	.55
Fitchburg, Mass	.95	.....	1.00	.....	.60	.....	.90	1.25	.....
Grand Forks, N. Dak	.....	.....	.....	.....	.....	.....	.....	.....	.50
	.80	.60	1.00	.45	.40	1.00	.80	1.00	.65
Grand Rapids, Mich	.85	.....	.80	.....	.45	.....	.....	.....	.....
	1.00	1.00	.90	.50	.55	1.25	.80	1.25	.75
Greensboro, N. C	.65	.80	.....	.....	.30	.....	.65	.....	.....
	.70	1.00	.75	.50	.40	[5] .06	.70	1.00	.40
Hamilton, Ohio	.....	.....	.....	.....	.....	[3] 6.00	.....	[6] 10.00	.....
	1.00	.85	1.00	.85	.40	.....	1.00	.....	.85
Houston, Tex.[7]	.....	.....	.....	.....	[8] .30	.....	.....	.....	.....
	8.00	9.00	10.00	6.00	[8] .35	11.00	8.00	13.00	6.00
Indianapolis, Ind	.....	.....	.....	.72½	.35	.....	.....	.....	.....
	.97½	.95	1.10	.75	.45	1.02½	.97½	1.37½	.75
Johnstown, Pa	.65	.70	.....	.....	.40	.80	.76½	.....	.....
	.90	.90	1.00	.75	.50	1.00	.80	1.25	.75
Kansas City, Mo	1.12½	1.12½	1.12½	.90	.70	1.20	1.00	1.37½	.90
Lima, Ohio	.60	.70	.....	.....	.35	.....	.75	.90	.50
	.80	.80	.75	.60	.40	.90	.80	1.00	.75
Los Angeles, Calif.[7]	7.00	.....	7.00	.....	.....	.....	.....	.....	.....
	8.00	8.00	8.00	9.00	4.00	10.00	7.00	12.00	.....
Louisville, Ky	.....	.60	.75	.....	.35	[6] 7.90	.50	.....	.....
	.90	1.00	.87½	1.00	.50	.....	.87½	1.50	1.00
Memphis, Tenn	.60	.70	.80	.75	.25	1.00	.....	.....	.75
	.90	1.00	.87½	.87½	.30	1.25	.87½	1.37½	.87½
Milwaukee, Wis	.....	.65	.....	.....	1.50	.....	.....	.....	.....
	.95	.75	1.00	.80	.....	1.12½	.85	1.25	.85
Minneapolis, Minn	.....	.....	.....	.....	.45	.....	.....	.....	.....
	.87½	.87½	.87½	.71½	.55	.87½	.87½	1.12½	.....
Nashville, Tenn	.....	.....	.....	.....	.30	.87½	.62½	1.25	.....
	.65	.60	.75	.40	.40	1.00	.75	1.50	.44
New Haven, Conn	.....	.....	.....	.....	.50	[7] 8.00	.....	.....	.....
	.90	.....	.85	.60	.60	[7] 9.00	.80	1.12½	.....
New York City, N. Y	.....	.....	.....	.....	.87½	.....	.....	.....	.....
	1.12½	1.12½	1.25	1.00	.93¾	1.12½	1.12½	1.50	1.06¼
Norfolk, Va	.65	.50	.65	.50	.30	.....	.65	.87½	.50
	.75	.65	.75	.60	.35	.75	.75	1.00	.60
Oklahoma City, Okla.[7]	8.00	8.00	7.00	5.00	3.50	10.00	8.00	12.00	5.00
Omaha, Nebr	.....	.....	.....	.65	.....	.....	.90	.....	.....
	1.00	1.25	1.12½	.75	.50	1.12½	1.00	1.25	.70
Philadelphia, Pa	.....	.....	1.00	.70	.45	1.25	.....	1.25	.....
	1.12½	1.00	1.12½	1.00	.50	1.37½	.90	1.75	1.00
Phoenix, Ariz.[7]	7.00	.....	.....	.....	2.50	.....	.....	.....	6.00
	8.00	7.00	7.00	5.00	3.00	7.00	7.00	10.00	7.00
Pittsburgh, Pa	1.20	1.12½	1.25	1.00	.70	1.62½	1.25	1.62½	1.00
Portland, Me	.....	.....	.....	.....	.....	[3] 4.00	.....	.....	.....
	.90	1.00	.90	.65	.50	.....	.85	1.12½	.80
Reading, Pa	.....	.....	.....	.....	.45	.....	.....	.....	.....
	.90	.90	.90	.90	.50	1.00	.85	1.25	1.00

[1] And up.
[2] Sliding scale.
[3] Per M.
[4] Plus bonus.
[5] Per yard.
[6] Per day.
[7] 8-hour day; rate per day.
[8] Per hour.

WAGE SCALES IN THE BUILDING TRADES, AS OF NOVEMBER 1, 1923—Continued.

City.	Carpenters.	Cement finishers.	Electricians.	Hod carriers.	Laborers.	Lathers.	Painters.	Plasterers.	Plasterers' helpers.
Redfield, S. Dak.	$0.65				$0.35				
	.70	$0.80	$1.00	$0.60	.45	$0.75	$0.75	$1.00	$0.60
Richmond, Ind.					.25				
	.85	1.15	.75	.70	.50	1.00	.75	1.25	.70
Richmond, Va.			.75	.45	.25		.60	1.00	
	.80	.75	.87½	.50	.30	.75	.75	1.25	
Rochester, N. Y.					.60				
	1.00	1.25	1.08	.65	.65	1.00	1.00	1.25	
Saginaw, Mich.					.35				.35
	.80	.70	.80		.45	.87½	.70	1.12½	.45
San Francisco, Calif.[9]					.56¼				
	1.00	1.06¼	1.00	.81¼	.62½	1.00	1.00	1.25	.87½
Savannah, Ga.	.60		.75						
	.75	.75	1.00	.25	.25	.75	.75	1.00	.25
Sharon, Pa.					.35				
	1.00		1.00		.75	1.00	1.00	1.25	
Sioux City, Iowa.					.45		.90		.65
	.90	.90	1.00	.50	.50	1.25	1.00	1.25	.75
Shreveport, La.	1.00	1.25	1.12½	.50	.35	1.25	1.00	1.50	.50
St. Joseph, Mo.	.75		.75				.75		
	.87½	.65	.87½	.55	.40	.87½	.87½	1.00	.60
St. Louis, Mo.	1.25	1.25	1.25	1.25	.67½	1.25	1.25	1.75	1.25
St. Paul, Minn.				.55	.45				
	.87½	.87½	.87½	.71½	.55	.87½	.87½	1.12½	.71½
St. Petersburg, Fla.		[6] 5.00			[6] 3.00	[3] 4.50		1.12½	
	1.00	[6] 9.00	[6] 8.00	[6] 4.00	[6] 4.00	[3] 5.50	.90	1.25	.50
Tucson, Ariz.[7]	7.20		8.00		[10] 2.50	[3] 7.00	7.00	8.00	(9)
	9.00	8.00	9.00	5.00			8.00	10.00	
Washington, D. C.				.50	.35			[6]12.00	.50
	1.12½	1.12½	1.12½	.75	.50	1.37½	1.12½		.75
Webster City, Iowa.	.75	1.00	.60	.40	.40	1.00	.60	1.25	.45
Youngstown, Ohio.					.50				
	1.15	1.00	1.00	.80	.55	1.25	1.12½	1.25	

City.	Brick layers.	Elevator constructors.	Gas fitters.	Hoisting engineers.	Marble setters.	Masons.	Ornamental iron workers.	Pipe coverers.
Akron, Ohio.			$0.85	$0.65			$0.70	
	$1.25	$1.06	1.00	.80	$1.00	$1.25	.80	
Atlanta, Ga.	1.00		.75					$0.75
	1.25	1.00	.90		1.25	1.00	1.00	.90
Baltimore, Md.	1.25	1.06	1.00	1.12½	1.25	1.25	1.10	.90
Boston, Mass.	1.25	1.15	1.10	1.10	1.10	1.25	1.10	1.10
Buffalo, N. Y.	1.25	1.15	1.00	1.00	1.00	1.25	.75	1.00
Chicago, Ill.				1.00				
	1.25	1.25	1.15	1.25	1.25		1.25	
Cincinnati, Ohio.	1.25	1.10	1.10	1.10	1.12½	1.12	1.10	1.02½
Cleveland, Ohio.					[6] 9.00	[6] 9.00		
	1.40	1.32		1.25			1.37½	1.12½
Columbia, S. C.	.90							
	1.00	.90	.50	.50	1.00	1.00		1.25
Columbus, Ohio.	1.37½	.90	1.00	.90	.95	1.12½	1.00	.93
Dayton, Ohio.								.75
	1.35	1.00	1.00	1.10	1.12½	1.00	1.15	.80
Des Moines, Iowa.	1.25	1.00	1.12½	1.00	1.00	1.25	1.00	1.12½
Detroit, Mich.				.80			.75	
	1.50	1.30	1.00	.95	1.12½	1.50	1.00	1.00
Dubuque, Iowa.				.50				
	1.25		1.00	.60	1.25	1.25		
Duluth, Minn.				.65				
	1.12½		.87½	.87½	1.10	.87½	.87½	.87½
Erie, Pa.		.75	[5] 7.75		1.00	1.00		.75
	1.25	.95		1.00	1.10	1.10	1.00	.80
Fitchburg, Mass.	1.25					1.25		
Grand Forks, N. Dak.				.50				
	1.25			.60		1.25		
Grand Rapids, Mich.							1.00	
	1.25	.95	.70	.90	1.26¼	1.25	1.25	1.00
Greensboro, N. C.	1.25				1.12½	1.25		
Hamilton, Ohio.	1.37½							
Houston, Tex.[7]	12.00	8.00	11.00	8.50	9.00	11.00	8.50	8.00

[3] Per M.
[6] Per day.
[7] 8-hour day; rate per day.
[8] American or open-shop plan.
[10] Minimum.

WAGE SCALES IN THE BUILDING TRADES, AS OF NOVEMBER 1, 1923—Continued.

City.	Brick layers.	Elevator constructors.	Gas fitters.	Hoisting engineers.	Marble setters.	Masons.	Ornamental iron workers.	Pipe coverers.
Indianapolis, Ind				$1.15				
	$1.35	$1.25	$1.22½	1.25	$1.12½	$1.35	$1.25	$0.90
Johnstown, Pa				.50		.80	.75	
	1.25	1.00	.85	.75	1.00	.90	.85	.75
Kansas City, Mo		1.00		1.12½				
	1.37½	1.25	1.25	1.25	1.12½	1.12½	1.15	1.00
Lima, Ohio	1.25	.60	.85	.70	1.00	1.25	1.00	.85
Los Angeles, Calif.[7]				7.00				
	10.00	8.00	8.00	8.00	8.00	10.00	7.00	8.00
Louisville, Ky	1.50		1.25					1.00
Memphis, Tenn							.75	
	1.50	1.00		1.00	1.25	1.37½	1.00	1.00
Milwaukee, Wis								.60
	1.25	1.12½	.90	1.00	1.06¼	1.25	1.00	.85
Minneapolis, Minn	1.12½			.87½	1.10	.87½	.87½	
Nashville, Tenn		.75						.50
	1.25	1.00	.50	.65	1.25	.85	.75	.60
New Haven, Conn	1.12½	1.00		.90	1.12½	1.12½	1.06¾	
New York City				1.25				
	1.50	1.12½	1.25	1.50	1.31¼	1.50	1.12½	1.12½
Norfolk, Va							.75	
	1.12½	.92½	.57½			1.12½	.85	
Oklahoma City, Okla.[7]	12.00	7.00	8.00	8.00	8.50		8.00	8.00
Omaha, Nebr	1.25	1.00	1.12½	1.12½	1.12½	1.12½	1.12½	1.00
Philadelphia, Pa			.90		1.25			
	1.50	1.19	1.00	[11] 45.00	1.37½	1.25	.90	.90
Phoenix, Ariz.[7]	10.00	8.00	5.50	6.00	8.00	10.00	8.00	5.00
Pittsburgh, Pa	1.40	1.16⅛	1.15⅝	1.12½	1.12½	1.25	1.25	1.12½
Portland, Me	1.12½	.80	.75	1.00	1.00	1.12½	.90	.90
Reading, Pa	1.25	1.00	1.00	1.25	1.10	1.00	.80	1.00
Redfield, S. Dak	1.12½					1.12½		
Richmond, Ind	1.25							
	1.40							
Richmond, Va			.75	.75	.85		.85	
	1.25		.80	.90	1.00	1.25	1.00	.80
Rochester, N. Y	1.25	1.00	1.05	1.10	1.12½	1.25	1.06¾	1.00
Saginaw, Mich	1.12½		.90	.90		1.12½	.90	
San Francisco, Calif.[9]				1.00				
	1.25	1.00	1.12½	1.12½	1.00	1.06¼	.87½	.87½
Savannah, Ga	1.00	.90	1.00	1.00	1.00	1.00		
Sharon, Pa	1.25					1.25		
Sioux City, Iowa	1.25			1.00	1.00	1.25	1.00	.75
Shreveport, La			1.00					
	1.50		1.25	1.00	1.25	1.50	1.12½	
St. Joseph, Mo	1.25	1.12½	1.25		1.00	1.00		.65
St. Louis, Mo				1.25				
	1.75	1.20	1.00	1.37½	1.00	1.50	1.06¼	1.25
St. Paul, Minn	1.12½	1.05	.87½	.87½	1.12½	.87½	.87½	.85
St. Petersburg, Fla	[6] 9.00							
	[6] 10.00		1.25					
Tucson, Ariz.[7]						6.50		
	10.00					8.50		
Washington, D. C	1.25	1.25	1.06¼	1.25	1.12½	1.25	1.25	.90
Webster City, Iowa	1.37½			.75		1.12½		
Youngstown, Ohio	1.25		1.00	.80	1.25	1.25	1.25	1.25

City.	Plumbers.	Roofers.	Sheet metal workers.	Steamfitters.	Steamfitters' helpers.	Stonecutters.	Structural iron workers.	Tile setters.
Akron, Ohio	$0.85	$0.75	$0.80	$0.85			$0.80	
	1.00	.85	.90	1.00		$1.00	1.00	$1.12½
Atlanta, Ga	.70		.70	.70	$0.35			
	1.00	.80	.90	1.00	.40	1.00	.75	1.12½
Baltimore, Md	1.00	1.12½	.90	1.00	.75	1.12½	1.25	1.12½
Boston, Mass	1.10	1.10	1.10	1.10	.80	1.10	1.10	1.12½
Buffalo, N. Y		.40			[2]		1.00	.85
	1.00	1.00	1.00	1.00		1.00	1.12½	1.00
Chicago, Ill		1.10						
	1.15	1.15	1.15	1.25		1.25	1.25	1.30
Cincinnati		.85						
	1.10	1.10	.95	1.10	.66	1.25	1.10	1.12½
Cleveland, Ohio		1.10						
	1.31¼	1.37½	1.25	1.25	.65	1.25	1.37½	1.25

[2] Sliding scale.
[6] Per day.
[7] 8-hour day; rate per day.
[9] American or open-shop plan.
[11] Per week.

WAGE SCALES IN THE BUILDING TRADES, AS OF NOVEMBER 1, 1923—Concluded.

City.	Plumbers.	Roofers.	Sheet metal workers.	Steamfitters.	Steamfitters helpers.	Stonecutters.	Structural iron workers.	Tile setters.
Columbia, S. C.		$0.80	$0.80					
Columbus, Ohio	$1.25	1.00	1.00	$1.25	$0.50	$1.00	$0.90	$1.00
Dayton, Ohio	1.00	.70	.80	1.00	.40	1.10	.70	1.00
Des Moines, Iowa	1.15	.80	1.10	1.15	.40	1.00	.90	1.00
Detroit, Mich	1.25	.85	1.00	1.25	.50	1.00	1.15	1.12½
Dubuque, Iowa	1.00	.65		1.00	.65	.90	1.00	1.00
Duluth, Minn	1.25	.80	.90	1.12½	[10].60		[12] 1.00	
Erie, Pa	1.00	.85	.87½	1.00	.60	1.12½		1.12½
Fitchburg, Mass	.87½	.82½	.87½	.87½	.50	1.00	1.00	1.25
Grand Forks, N. Dak		.70			.75	.87½	.87½	1.10
Grand Rapids, Mich	1.00	.80	.90	.80	.50	1.10	1.00	1.12½
Greensboro, N. C	1.00	1.00				1.00		
Hamilton, Ohio	.85			.95	.55	.75		
Houston, Tex.[7]		.60			.50			1.06¼
Indianapolis, Ind	.90	.65	.90	.90	.60	1.00	1.12½	1.15
Jamestown, Pa	1.00	.90	.95	1.00	.40	1.00		1.00
Kansas City, Mo		.65	.75				1.00	
Lima, Ohio	1.00	.90	.80	1.00			1.25	1.00
Los Angeles, Calif.[7]	11.00	8.00	9.00					
Louisville, Ky		9.00	10.00	11.00	5.00	8.00	8.50	10.00
Memphis, Tenn		.45						
Milwaukee, Wis	1.22½	.75	.97½	1.22½	.70	1.00	1.25	1.12½
Minneapolis, Minn			.85	.85			.80	
Nashville, Tenn	1.00	.80	1.00	1.00		.90	1.00	1.00
New Haven, Conn	1.25	.85	1.00	1.25	.75	1.00	1.15	1.12½
New York City	.85	.65	.65	.85	.60	1.25	1.00	1.00
Norfolk, Va	9.00	7.00	7.00	8.00	5.00	7.00	7.00	8.00
Oklahoma City, Okla.[7]	1.25	.80	.80	1.06¼			1.25	
Omaha, Nebr			.87½				.75	
Philadelphia, Pa	1.17½	.40	1.00	1.25	.62½	1.25	1.00	1.20
Phoenix, Ariz.[7]			.75					
Pittsburgh, Pa	1.12½	.87½	.80	1.06¼	.62½	1.06¼	1.00	1.12½
Portland, Me	.87½	.82½	.87½	.87½			.87½	
Reading, Pa	1.00						.60	
Redfield, S. Dak	1.12½	.65	.75	1.00	.50	1.00	.70	.87½
Richmond, Ind	1.00	1.00	1.00	1.00			1.06¼	1.12½
Richmond, Va	1.25	1.12½	1.12½	1.12½	.87½	1.12½	1.25	1.12½
Rochester, N. Y		.50	.75				.75	
Saginaw, Mich	1.00	.87½	.87½	1.00		1.00	.85	1.00
San Francisco, Calif.[9]	8.00	6.00	8.00	9.00			8.00	8.50
Savannah, Ga	1.12½	1.00	.90	1.12½	.75	1.00	1.12½	1.00
Sharon, Pa					.50		1.10	
Sioux City, Iowa	1.00	.70	.90	1.00	.55	1.12½	1.12½	1.25
Shreveport, La						10.00	7.00	9.00
St. Joseph, Mo	1.05	.80	1.00	1.05				
St. Louis, Mo	1.00	.55	.75	1.00		1.12½	1.06¼	1.12½
St. Paul, Minn	1.12½	1.00	.90	1.12½	.75	1.00	1.12½	1.06¼
St. Petersburg, Fla	1.00	1.00	1.00	1.00	.50	1.00	1.00	1.00
Tucson, Ariz.[7]	1.25	1.00	1.00	1.25	.50	1.25	1.25	1.25
Washington, D. C	1.25	1.25	1.25	1.25	.50	1.25	1.12½	1.37½
Webster City, Iowa	1.25	.75	.90	1.25	.50	1.00		1.00
Youngstown, Ohio	1.25	1.25	1.25	1.25	.75	1.25	1.25	1.25
	.87½	.80	.87½	.87½	.55	1.12½	.87½	1.12½
	1.25		1.00	1.25				1.25
	8.00		7.00	8.00	[9]			
		.40						
	1.25	1.15	1.06¼	1.06¼	.65	1.12½	1.25	1.12½
	.90			.90	.40	1.25		
	1.25	1.15	1.15	1.00		1.25	1.00	1.12½

[6] Per day.
[7] 8-hour day; rate per day.
[9] American or open-shop plan.
[10] Minimum.
[12] Maximum.

Wages In Porto Rico, 1921-22.

THE following wage statistics for 1921–22 are taken from the report of the commissioner of agriculture and labor of Porto Rico for the fiscal year ended June 30, 1922: [a]

DAILY WAGES PREVAILING ON SUGAR-CANE PLANTATIONS AND IN SUGAR MILLS OF PORTO RICO, 1921–22.[1]

Occupation or process.	Northern section.		Southern section.		Eastern section.		Western section.	
	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.
	Plantations.							
Lopping off	$0.60	$0.75	$0.62	$0.75	$0.60	$1.00	$0.50	$0.70
Felling	.60	.75	.62	.75	.60	1.00	.50	(2)
Plowing	.70	.80	.50	.90	.60	1.00	.50	.55
Cross plowing	.70	.80	.65	(2)	.70	.75	.50	.55
Furrowing	.70	.80	(2)	(2)	.70	.80	.50	.55
Harrowing	.70	.80	(2)	(2)	.70	1.00	.55	.75
Embanking (hilling)	.35	.75	.50	.75	.60	.90	.75	.90
Ditching	.60	.88	.75	1.25	.75	1.25	.50	.55
Hole digging	.50	.65	.60	.75	.60	.90	.65	(2)
Carrying seeds	.65	.75	.62	.87	.75	1.00	.60	.85
Scattering fertilizers	.40	1.00	.40	.50	.30	.70	(2)	(2)
Weeding	.50	1.25	.50	.65	.60	.80	.50	.75
Replanting	.60	(2)	.40	.75	.60	.80	.50	.60
Stripping of leaves	.75	1.25	.75	1.00	.60	.75	.50	.55
Cane cutting	.65	.75	.65	.90	.65	.75	.40	.80
Cane hauling	.65	.80	.62	.87	.60	.65	(2)	(2)
Filling	.45	.75	(2)	(2)	.75	1.00	.50	.70
Water carriers	.40	.60	.35	.50	.25	.40	.30	.35
Stewards	.80	1.50	.75	1.00	.75	1.25	1.00	2.00
Yoke drivers	.30	.75	.30	1.50	.40	.50	.30	.35
Watchmen	.37	1.16	1.00	1.15	.75	1.00	(2)	(2)
Foremen	1.00	2.66	2.00	3.00	1.66	3.00	2.50	4.00
Herdsmen	.56	.83	(2)	(2)	1.66	(2)	(2)	(2)
	Mills.							
Mechanics	$1.00	$4.80	$1.75	$6.50	$2.85	$6.25	$2.50	$7.00
Electricians	1.10	3.33	.75	3.00	1.00	2.96	1.25	2.00
Stewards	3.33	5.83	(2)	4.16	3.33	4.16	2.63	2.91
Foremen	.85	1.50	3.00	3.25	.75	1.75	1.37	2.63
Machinists	2.00	4.50	(2)	(2)	1.10	2.00	2.00	2.91
Blacksmiths	.75	3.00	1.50	2.75	1.50	3.40	1.10	1.25
Carpenters	2.00	3.00	2.50	3.25	1.75	3.00	1.00	1.25
Brick masons	2.25	3.00	3.00	3.25	2.00	4.00	2.00	2.50
Stokers	1.00	1.50	.75	.80	1.25	1.35	1.10	1.30
Weighers	1.91	4.16	(2)	3.00	2.00	3.33	1.00	1.40
Cartmen	.75	1.50	(2)	(2)	.62	.80	.70	.80
Switchmen	(2)	(2)	(2)	(2)	1.00	1.20	.75	3.23
Boiler tenders	.55	1.50	.70	1.50	.75	1.62	.75	1.50
Workers at boiler furnaces	.90	1.50	1.00	1.35	.62	2.00	(2)	(2)
Bagasse men	.60	1.35	.66	.75	.60	1.75	.75	(2)
Centrifugalers	.90	3.00	.75	2.25	.62	2.00	1.50	2.50
Workers at lime pits	.90	1.35	.66	.75	1.00	2.00	.70	.80
Workers at pumps	1.40	(2)	1.25	(2)	.62	2.00	(2)	(2)
Triplers	1.25	2.33	1.00	(2)	.62	2.00	1.66	2.00
Crystallizers	1.00	(2)	.90	1.00	.62	2.00	.90	1.50
Defecators	.60	1.00	.70	1.25	.62	2.00	.80	1.00
Sugar-scum workers	.75	1.20	.70	.90	1.00	2.00	.65	.80
Workers at filters	.55	1.50	.80	.85	.62	2.00	.65	.80
Workers at cranes	1.00	(2)	.88	1.66	.70	2.50	.75	1.00
Herdsmen	(2)	(2)	(2)	(2)	.66	1.00	.40	.75
Stablemen	.75	1.16	(2)	(2)	.75	1.66	.83	1.33
Chauffeurs	2.50	4.16	1.50	3.16	1.66	4.00	1.66	(2)
Workers at molasses boilers	.75	1.25	.62	1.00	.75	1.50	(2)	(2)

[1] The wages in sugar mills are "according to investigations carried out during fiscal year 1921–22."
[2] Not stated on the pay roll.
[a] War Department, Bureau of Insular Affairs. Commissioner of Agriculture and Labor of Porto Rico. Report [for fiscal year ending June 30, 1922]. Washington, 1923. 66 pp.

Wages in the Netherlands, 1921, 1922, and 1923, as Compared with 1914.

IN A recent issue of the Maandschrift (Sept. 29, 1923, pp. 1039, 1040), the Central Bureau of Statistics of the Netherlands publishes a table showing the weekly wage rates in various occupations, as fixed by collective agreements, in several large cities of the Netherlands, that were in force in 1920, 1921, and 1923 and compares them with the rates of 1914. The wage rates shown include cost-of-living bonuses, wherever such bonuses have been paid. The table, which is reproduced in part below, indicates that wages reached their highest level in July, 1921, when they were from two and one-half to three times as high as in January, 1914. In 1923 all trades had to submit to wage reductions. In most occupations these reductions were small with the exception of seamen and firemen in the merchant marine whose wage rates were reduced by nearly one-third.

WEEKLY WAGE RATES IN VARIOUS OCCUPATIONS, FIXED BY COLLECTIVE AGREEMENTS IN FOUR LARGE CITIES OF THE NETHERLANDS, 1920, 1921, AND 1923, AS COMPARED WITH 1914.

[1 guilder at par=40.2 cents.]

Occupation.	January, 1914.		January, 1920.		July, 1921.		July, 1923.	
	Wage rate.	Index number.	Wage rate.	Index number.	Wage rate.	Index number.	Wage rate.	Index number.
	Amsterdam.							
	Guilders.		*Guilders.*		*Guilders.*		*Guilders.*	
Compositor, hand	15.39	100	38.25	249	38.25	249	36.00	234
Compositor, machine	17.67	100	42.75	242	42.75	242	40.32	228
Bookbinder	13.20	100	38.25	290	38.25	290	36.00	273
Carpenter	[1] 3.14	100	[1] 7.20	230	[1] 7.52	240	[1] 7.23	230
Mason	[1] 3.14	100	[1] 7.20	230	[1] 7.52	240	[1] 7.23	230
Navvy	[1] 3.00	100	[1] 6.80	227	[1] 7.12	237	[1] 6.80	227
Plumber	[1] 3.20	100	[1] 7.20	225	[1] 7.52	235	[1] 7.23	226
Baker, journeyman, 23 years of age	14.00	100	31.00	221	37.00	264	36.00	257
Gardener	14.00	100	.....	.....	30.00	214	22.00	157
	Haarlem.							
Compositor, hand	14.25	100	36.00	253	36.00	253	33.60	236
Compositor, machine	16.53	100	40.50	245	40.50	245	37.92	229
Carpenter	[1] 2.70	100	[1] 7.20	267	[1] 7.52	279	[1] 7.23	268
Mason	[1] 2.70	100	[1] 7.20	267	[1] 7.52	279	[1] 7.23	268
Navvy	[1] 2.20	100	[1] 6.80	309	[1] 7.12	324	[1] 6.80	309
Baker, journeyman, 23 years of age	12.00	100	31.00	258	37.00	308	36.00	300

[1] Daily rate.

WEEKLY WAGE RATES IN VARIOUS OCCUPATIONS, FIXED BY COLLECTIVE AGREEMENTS IN FOUR LARGE CITIES OF THE NETHERLANDS, 1920, 1921, AND 1923, AS COMPARED WITH 1914—Concluded.

Occupation.	January, 1914.		January, 1920.		July, 1921.		July, 1923.	
	Wage rate.	Index number.	Wage rate.	Index number.	Wage rate.	Index number.	Wage rate.	Index number.
	The Hague.							
	Guilders.		*Guilders.*		*Guilders.*		*Guilders.*	
Compositor, hand	14.82	100	37.35	252	37.35	252	35.04	236
Compositor, machine	17.10	100	41.85	245	41.85	245	39.36	230
Bookbinder	13.20	100	37.44	284	37.80	286	35.04	265
Carpenter	[1] 2.95	100	[1] 7.20	244	[1] 7.52	255	[1] 7.23	245
Mason	[1] 3.14	100	[1] 7.20	230	[1] 7.52	240	[1] 7.23	230
Navvy	[1] 2.80	100	[1] 6.80	243	[1] 7.12	254	[1] 6.80	243
Painter	[1] 2.70	100	[1] 6.80	252	[1] 7.36	273	[1] 6.80	252
Plasterer	[1] 2.85	100	[1] 7.20	253	[1] 7.52	264	[1] 7.04	247
Electrician	18.24	100	36.00	197	42.75	234	38.40	211
Assembler (telephone)	20.65	100	38.40	186	42.75	207	40.50	196
Baker, journeyman, 23 years of age	13.50	100	31.00	230	37.00	274	36.00	267
Brewery worker	13.50	100	31.85	236	34.50	256	34.50	256
	Rotterdam.							
Compositor, hand	14.82	100	37.35	252	37.35	252	35.04	236
Compositor, machine	17.10	100	41.85	245	41.85	245	39.36	230
Bookbinder	12.54	100	37.44	299	37.80	301	35.04	279
Assembler (telephone)	20.65	100	38.40	186	42.75	207	40.50	196
Baker, journeyman, 23 years of age	14.00	100	31.00	221	37.00	264	36.00	257
Brewery worker	13.50	100	31.85	236	34.50	256	34.50	256
Seaman, merchant marine	[2] 44.00	100	[2] 145.00	330	[2] 145.00	330	[2] 100.00	227
Stoker, merchant marine	[2] 48.00	100	[2] 150.00	313	[2] 150.00	313	[2] 105.00	219

[1] Daily rate.
[2] Monthly rate.

MINIMUM WAGE.

Recent Minimum-Wage Orders, British Columbia.

THE Minimum Wage Board of the Province of British Columbia has for some time had under consideration a revision of its manufacturing order. As noted in its annual report (see MONTHLY LABOR REVIEW, November, 1923, pp. 119, 120), the subject was one of varying aspects, requiring extensive investigation. The results of this investigation are embodied in orders No. 16 and 16A, promulgated September 20, 1923, to be effective 60 days from that date. The order that is superseded was issued September 1, 1919; and its revision followed upon a petition presented to the board by employers in the manufacturing industry to review the whole subject.

In the present form the orders cover the work of females engaged in any process of making, repairing, altering, finishing, packing, etc., and adapting for use or sale any article or commodity excepting fish, fruit and vegetable drying, canning, preserving, or packing. The minimum rate for experienced employees is $14 per week of 48 hours, whether on time work or at piece rates. This is the same as under the earlier order, the changes that were made affecting the schedules for learners in order 16A. Employment in excess of 8 hours per day or 48 per week is forbidden except under permission granted in accordance with the provisions of the factories act. The foregoing are provisions of Order No. 16. Order No. 16A relates to inexperienced employees, and prescribes varying periods of learning time and grades of pay in different classes of manufacturing industries. Schedule No. 1 of the order applies to work on or in connection with the preparation for sale of the following commodities: Tea, coffee, spices, essences, sauces, jelly powders, baking powders, molasses, sugar, syrups, honey, peanut butter, cream and milk products, butter, candy, confectionery, biscuits, macaroni, vermicelli, meats, soft drinks, yeast, cans, buttons, soap, paint, varnish, drug and toilet preparations, photographs, ink, seeds, brooms, whisks, pails, washboards, wooden boxes, clothespins, matches, explosives, munitions, gas mantles, and window shades. Beginners in this kind of work receive not less than $8 per week for the first two months, not less than $10 per week for the second two months, and not less than $12 per week for the third two months, after which they are rated as experienced employees. This makes a training period of six months.

Schedule No. 2 embraces the manufacture, etc., of the following articles: Cotton bags, envelopes, overalls, shirts, ladies' and children's wear, gloves, hats, caps, men's neckwear, waterproof clothing, tents, awnings, regalia, carpets, furniture, bedding, pillow covers, loose covers, mattress covers, draperies, casket furnishings, factory-made

millinery, knit goods, blankets, brushes, machine-made cigars, and dipped chocolates. Rates of pay for this work are the same as in Schedule 1, but the periods are doubled, making a learning period of one year.

Schedule No. 3 embraces the more skilled trades, the list being as follows: Bookbinding, embossing, engraving, printing, dressmaking, men's and women's tailoring, and the manufacture of ready-to-wear suits, paper boxes, jewelry, furs, leather goods, hand-made cigars, boots, shoes, and hand-made millinery. Beginners in these trades receive not less than $7 per week for the first six months, not less than $10 for the second six months, and not less than $13 per week for the third six months. This gives a learning period of 18 months, but a different wage-rate distribution from that adopted for Schedules 1 and 2.

The classifications are of interest as an attempt to solve the difficult problem of learning periods adapted to a wide variety of employments calling for varying degrees of skill and experience. Regularly indentured apprentices whose indentures have been approved by the Minimum Wage Board are not affected by the foregoing schedules.

WOMAN AND CHILD LABOR.

Child Labor on Maryland Truck Farms.

THE United States Children's Bureau has recently published a study of the work of children on Maryland truck farms, based on a survey made in May, June, and July, 1921. Two districts were selected for study, Anne Arundel County near Baltimore, and Wicomico, Somerset, and Worcester Counties in the section known as the Eastern Shore. In both of these districts trucking is an important industry. The young workers may be children of a farmer employed on the place, children living in the neighborhood, or children of families brought to the farms for the special season of truck work. The study indicates that, as at present carried on, such work for children is open to three objections: It is wholly unregulated, and children may be put at work too heavy for them and required to work too long hours; it interferes with school attendance and leads to retardation; and for children of migratory or seasonal workers it may involve housing conditions detrimental alike to health and morals.

The study covered 808 children in Anne Arundel County and 840 on the Eastern Shore. In both districts children were employed on almost every kind of work involved in truck farming and in both they began work early. In Anne Arundel County 8.7 per cent of the white and 8.1 per cent of the colored children at work were under 8 years of age, while on the Eastern Shore the proportions were, respectively, 14.6 per cent and 17.3 per cent. Naturally the younger children could not do the heavy work, but there were no restrictions upon their employment at anything which the employer considered within their power.

> Most children, both white and negro, under 10 years of age work a short day at simple kinds of work and for only a few days or weeks during the year, and their work therefore presents no serious problem. Most white girls do little more work than the young children of both races and sexes, but some of the older negro girls and a large proportion of white and negro boys 12 years of age or more, especially those in farmers' families, do a great variety of work, and many work 9 or 10 hours a day. * * * Some of the simpler kinds of work, such as picking berries or hoeing, while monotonous, are likely to prove physically taxing only if kept up for long hours; but plowing, harrowing, machine cultivating, and some kinds of machine transplanting, which require skill and strength, are fatiguing even when done for only a few hours at a time. Such work in conjunction with long hours was reported by many of the boys 12 years of age and over. In order to safeguard this group of children from working beyond their strength at an early age and from the strain of excessive hours some legal regulation as to minimum age and maximum hours for the work of children on farms, at least in such occupations as these, would appear to be desirable.

The extent of the interference with school attendance varied with the age and race of the children. In Anne Arundel County 35 per cent of the white and 31 per cent of the colored children reported absence from school for farm work, the time lost varying from less than 10 to over 80 days; on the Eastern Shore the proportions were 64 and 53 per cent. The smaller percentage of colored children losing time

is explained as partly due to the shorter session of the colored schools, which closed before strawberry-picking time began, thus setting the children free to do the work for which they were most in demand. In most of the negro schools the term was from 136 to 140 days, as compared with 175 to 181 days in the white schools. In 1922 the Maryland Legislature made several changes in the school law, among them being a provision which lengthened the term of negro schools to 160 days, so that at present the loss of time, as between the races, might be more nearly equal. The interruption to school attendance naturally caused retardation; in Anne Arundel County 50 per cent of the white and 71 per cent of the colored children were retarded, being from one to three years behind the grade considered normal for their years; on the Eastern Shore 38 per cent of the white children and 81.7 per cent of the colored children were retarded.

The children of families of seasonal workers presented a special aspect of the school-attendance problem. In Anne Arundel County a study was made of 145 white migratory families in which 262 children under 16 worked on truck farms. These families were brought down from Baltimore for the season, which is usually from six to eight weeks. The season begins from a month to six weeks before the Baltimore schools close, so the children inevitably lose much time, whether or not they themselves are at work.

Nine-tenths of the children left school at least 20 days before the end of the term three-fourths withdrew 20 but less than 30 days before the close of school. From four to six weeks, therefore, was the usual amount of time lost for withdrawals for field work on truck farms. * * * Of the children between 8 and 16 years included in the study, 69 per cent were retarded in school. This rate of retardation is much higher than average rates for city children of various ages.

The migratory families were expected to bring their own bedding and kitchen utensils, while the farmers supplied sleeping quarters, usually grouping the workers together in what are locally called camps. Children working on farms were found living in twenty-two of the camps visited. Housing conditions in these camps were far from satisfactory.

Most of the camps contained but one building, known as a "shanty," which served as sleeping quarters for the workers. This building, usually two stories high, was erected on piles or rough stones. In most camps it was weather beaten or unpainted and the windows usually lacked either glass or shutters, or both. As a rule, there was but one room on each floor, with stairs on the outside leading to the upper room. In some a partition divided the lower floor, which was about 25 by 30 feet, into two rooms. On each side of a narrow aisle down the center of the room the floor was divided into sections or pens by boards 10 or 12 inches in height. Each pen was about 6 feet long and from 4 to 6 feet wide and covered with straw for a mattress. Each family was allotted one of these pens, the larger families sometimes securing those 6 feet in width. At night men, women, and children, partially clad, one family separated from the next by the plank 10 inches in height lay side by side.

Arrangements for sanitation of any kind were usually lacking, and the water supply generally came from springs or from wells which the families had dug, and little attention was paid to whether or not the water was safe for drinking. The survey suggests that some measure of control over these conditions is desirable.

The housing provided for migratory truck-farm workers in these localities is so unsatisfactory that it appears to call for some public supervision, such, for example, as that exercised for a number of years in California, in order that growing children may escape the physical and social effects of promiscuous and unhealthful living conditions.

Occupations of Juvenile Workers in Detroit.[1]

IN CONNECTION with the work of the Vocational Guidance Bureau of Detroit, a study has recently been made of the occupations of young workers, in order to get especially the beginner's attitude toward his job. The study was confined to those attending the Detroit Junior Continuation School, who were chosen as being at once the most typical and the most convenient group for the purposes of the investigation. The school is made up of boys and girls who have taken out permits to work and who are still obliged to attend school for eight hours a week. These were asked to fill out a questionnaire in which the queries were divided into three groups: Questions of fact, which dealt with the job, its duties, hours, and wages; questions of interpretation, which dealt with the time required to learn the job, its most and least agreeable features, and the advice the incumbent would give a new worker taking it up; and questions relating to the future, such as the next job in line of promotion, what job the worker might like to have and the reasons for his preference.

Data are given regarding the jobs held by 585 boys and 753 girls, but as 277 of the latter were listed as employed in housework at home, the answers covered only 476 girls who were employed in the same sense that the boys were. The boys were engaged in about 149 different occupations, and the girls in 54. The investigation was made in the early part of 1922, at which time the shortage of building trades workers was keenly felt, and there was much discussion of methods of increasing the number of those entering those trades. Yet of the 585 boys studied, only 18 could possibly be classed as in building trades, and only 3 of these were plainly apprentices. By way of contrast, the dead-end occupations seemed to be fully represented; there were 35 delivery boys, 27 errand boys, 30 office boys, and 71 messengers. About two-fifths, 39.3 per cent, of the boys were in commercial occupations, 20 per cent were in manufacturing jobs, 11.1 per cent in trades, 28.7 per cent in transportation jobs, and 0.9 per cent in agricultural jobs.

Of the 753 girls, 50 per cent were given as engaged in domestic service, a term which included housework, laundry work, restaurant occupations, and hair dressing. This percentage was unduly weighted by the inclusion of 277 girls who had left school on permit to do housework at home, of whom it was found that only 36 were actually engaged in such work. As this showed that some 240 girls had left school unnecessarily, the investigators call attention to the figures which, they say, "show that careful investigation and follow-up work should be made in the case of the home-permit girl." The conditions of home work do not seem to have been specially desirable.

The information given us by the 36 girls (who in all probability were representative of the group) showed that long hours rewarded by little or no pay was the lot of the home-permit girl. It was interesting to learn that only one of these 36 home-permit girls wished to remain in her present position, the majority (28) wishing to become clerks, office girls, or telephone operators.

[1] Michigan, University of. School of Education. Vocational education department. Occupations of junior workers in Detroit, by Alexander C. Crockett and Jennie M. Claw. Ann Arbor, 1923. 76 pp. Special studies No. 1.

Considering only the 476 girls who were employed away from home, 54 per cent were engaged in commercial jobs, 24 per cent in manufacturing jobs, and 22 per cent in domestic service.

Wages began at $5 a week for the boys and $3 for the girls, and for both groups ran up to $20 or over. The boys averaged $10.80 a week, the girls, $10. Hours per day ranged from 6 or less up to 14, the average for both sexes being 9. Of the boys 6.40 per cent and of the girls 8.33 per cent had a working-day of from 11 to 14 hours. These hours included the noon hour period but no information was given concerning its length.

One of the questions asked was as to the time required for learning the job, and the answers were strongly indicative of the kind of work the children were doing. The average time given by both boys and girls was three days, the majority in both groups assigning a week as the proper period. Fifty-three of the boys and 12 of the girls thought it would require from 6 months to over a year, but on the other hand, 20 of the girls and 42 of the boys considered an hour sufficient.

The reasons given for liking or disliking their jobs reflect the character of the individual as well as the nature of the jobs. The most agreeable features, as given by boys, vary from a "chance for advancement," "learning the business," and "getting experience," to "pay day" and "the noon hour," while among the girls they range from "responsibility" and "contact with people" to the "music and congenial fellow workers" enjoyed by seven ushers. Among both boys and girls there are some who like everything about their work and some who like nothing, but in general they seem to adjudge their jobs much as adults do. Not infrequently the feature which one cites as the most disagreeable is given by another as an advantage; in other words, the personal element counts for much.

The investigators consider that a study of the likes and dislikes of the children, which are given at length, should be helpful to parents, vocational counselors, and employers in helping to fit the young worker into his proper place. They also consider that apart from the work to be done the character of the employer plays an important part and should be carefully studied by placement agents.

The extent to which training may be considered good or bad depends entirely upon the firm where the worker is employed. The number of jobs which provide good, mediocre, or bad training can not be determined by this study except in a very general way. * * * A study of the firms employing workers rather than the employees working for the firms is needed to answer the question as to training. We know that approximately three-fourths of the juniors appear from their statements to be receiving no outlined training. The need for the young person seeing the value of entering a good concern, in order that he may receive desirable training, is very evident.

Entrance of Women Into Railway Clerical Work in Australia.

ACCORDING to the Railways Union Gazette (Melbourne) for September 20, 1923, the increasing utilization of women in clerical work by the railways is giving some concern to the unions. Women have always been employed by the railroads as caretakers, seamstresses, laundresses, and the like, but of late they have appeared in clerical work which has hitherto been reserved

exclusively for men. Protests by the men were met with an assurance that there was no intention of employing women extensively, but, according to the Gazette, they are still being taken on a few at a time. The low wages at which they can be secured seem to constitute the principal reason for the innovation.

> Cheap labor and efficient service are two things that must undoubtedly sway the administration to an extension of the policy. * * * The maximum salary of a seventh-class clerk is £252 [$1,226, par], yet his sister is paid a maximum rate by outside wages board determination of only £143 [$696, par] per annum, thus the department waxes fat to the extent of £109 [$530, par], per year for each typist employed.

Under the circumstances, the Gazette considers that it is hopeless to oppose the employment of women, and it calls on the unions, accordingly, to organize the newcomers as rapidly as possible, and to adopt as a cardinal principle equality of pay for the sexes. "Equal pay for equal work, or equal class of work, is the platform on which the sexes should unite."

LABOR AGREEMENTS, AWARDS, AND DECISIONS.

Decisions of the Railroad Labor Board.

Supervisory Forces.

SEPTEMBER 28, 1923, the Railroad Labor Board handed down a decision (No. 1979) in regard to representation of maintenance of way foremen in agreement negotiations.

The case had been before the board before (Decision No. 1644) and the facts, opinion, and decision therein were printed in the MONTHLY LABOR REVIEW for June, 1923, pages 160–164, thus rendering a detailed repetition of the case unnecessary.

In that case the board decided that its settlement of a dispute between the Brotherhood of Maintenance of Way Employees and Railway Shop Laborers and their employers should become effective, though occurring after a satisfactory agreement had been made between the supervisory forces of the same brotherhood and the same employers, inasmuch as the latter agreement had not been properly brought to the attention of the board.

Following this decision, the general manager of the railroad placed in effect the order of the Labor Board and notified the general chairman of the brotherhood of the intention of the carrier, June 1, 1923, to cancel the agreement thus placed in force and to conclude an agreement with the supervisory forces independent of the other members of the brotherhood.

June 2, the carrier caused an election to be held, as a result of which 173 foremen indicated their desire to be represented by the Supervisors' Association of Maintenance of Way Foremen, while 20 indicated their desire to be represented by the brotherhood.

The representatives of the employees took the position that the balloting of these employees separately from the entire group was improper, protested against the entire procedure, requested that the carrier hold the election in abeyance until the Railroad Labor Board had passed on the propriety of taking such a ballot and refused to assist in the balloting.

The carrier insisted that the election was conducted in conformity with the rules laid down by the board and that the results should determine the association with whom it should conduct negotiations relative to rules and working conditions for foremen and assistant foremen in the maintenance of way department. Because of the protest, however, the carrier did not enter into such negotiations and awaited the approval of the election by the board.

The opinion and decision of the board were briefly expressed as follows:

Opinion.—The Railroad Labor Board feels that the carrier has complied with the meaning and intent of Decision No. 1644 referred to herein, and that the election referred to has been conducted in a fair and impartial manner. The majority of the board has clearly outlined its position relative to the right of foremen to negotiate an

agreement governing rules and working conditions providing the provisions of the transportation act, 1920, are complied with. This opinion will be found in Decision No. 1269, covering a dispute between the United Brotherhood of Maintenance of Way Employees and Railway Shop Laborers and the Delaware, Lackawanna & Western Railroad Co. The board wishes to reiterate the expressions contained therein.

Decision.—The Railroad Labor Board decides upon the evidence submitted that the carrier has complied with the provisions of Decision No. 1644, as well as the provisions of the transportaion act, 1920, in the conduct of the election referred to in this dispute, and the result thereof shall determine with whom the carrier shall negotiate rules and working conditions governing foremen and assistant foremen employed in the maintenance of way department.

One of the labor members of the board filed a lengthy and vigorous dissent from the above decision—

Because it is obvious that the rights of the organization presenting the dispute have been wholly disregarded and ignored;

That the members of the board voting for this Decision No. 1979 willfully and premeditatedly disregarded the rights of the employees, and also ignored practically all of its previous decisions and rulings governing procedure;

That this carrier and the members of the board who voted for this Decision No. 1979 have knowingly perverted the true purpose of the labor provisions of the transportation act, 1920.

In this case the employees declined to permit the carrier to dictate who should or should not represent certain employees. They also declined to participate in the carrier's program of destroying their own organization, at least until after they had submitted the facts to the Railroad Labor Board for hearing and decision. The carrier declined to join the employees in submitting the dispute to the board. On the contrary the carrier advised the representatives of the United Brotherhood of Maintenance of Way Employees and Railway Shop Laborers that the election would proceed without their participation or action by the board. This program was carried out.

A supporting opinion by the majority was also filed from which the following quotations are made:

1. The Railroad Labor Board long ago held that maintenance of way foremen were entitled to maintain an organization separate from that of the employees they supervised, if they so desired. The board furthermore expressed the view that such an arrangement was conducive to the efficient operation of the railways and to the best interest of both the employees and their foremen. It may also be added that in other classes of railway employees it is not the practice for foremen to belong to an organization with their subordinates and to be placed in a position where they may be controlled or influenced by those under their supervision. The same principle is recognized in the railway service by not permitting unskilled labor to represent and dominate skilled employees. In both the shop crafts and the clerical organizations this principle has been continually recognized by the board, including the writer of the dissenting opinion herein.

2. The board did not, however, hold that the foremen could not affiliate with the unskilled employees in the maintenance of way brotherhood and select that organization to represent them, if they so desired. It merely held that the foremen should have the right to choose between said brotherhood and a separate organization of foremen, and that the unskilled employees of the brotherhood could not vote in the decision of this question.

This policy did not deny liberty of choice to anybody, but it preserved that liberty for the foremen.

On the other hand, it necessarily meant that the very distinct rights and interests of the unskilled should not be under the control of their foremen.

3. The Railroad Labor Board having established the principles above outlined, the foremen on this railroad had a right to negotiate an agreement with the carrier. This right they and the carrier attempted to exercise, but, in Decision No. 1644, the board held that inasmuch as the maintenance of way brotherhood then held an agreement covering the foremen and containing a provision requiring notice to that organization of the carrier's desire to modify or annul the agreement, which notice had not been given, the procedure of the carrier and foremen was invalid.

Thereupon, the carrier gave the necessary notice to the brotherhood of maintenance of way employees and, in the subsequent conference, proposed to hold a proper election to permit the foremen to decide whether they would be represented by the brother-

hood or by an association of their own. The brotherhood declined to participate in such election, unless the unskilled group of employees belonging to the organization were permitted to vote. The carrier, relying upon the previous decisions of the board, declined. The election was then held and the evidence shows that by a secret ballot conforming to the board's decisions a large majority of the foremen voted for a separate organization.

The carrier has very properly awaited the action of the board on this dispute before proceeding to negotiate with the foremen's association.

Subordinate Officials.

A DECISION relative to "subordinate officials" has been recently handed down by the Railroad Labor Board (No. 1985, October 17, 1923), concerning the Interstate Commerce Commission definition of this class of employees.

The commission issued a regulation (Ex parte No. 72, November 24, 1920) containing the following statement:

The above definitions include all of the classes of employees whose claims to recognition as "subordinate officials" were presented at the hearings, except supervisory station agents. The supervisory station agents are those who have supervision of the work of other station employees. They cover the range from the station where one employee other than the agent is employed to the agents at the largest and most important points. They are the official and responsible representatives of the company in its relationships with the public and frequently in a legal sense. Their compensation naturally varies with the responsibilities of their positions. It is not believed that this class can be consistently included within the term "subordinate officials," as that term is used in Title III of the transportation act, 1920.

Acting under this regulation the Philadelphia & Reading Railway Co., in the agreement it was negotiating with a committee elected by the employees in the telegraph department, sought to exclude as being supervisory agents station agents who supervised one or more employees, holding that they—

Are not subject to the jurisdiction of the employees' committee and do not come under the provisions of the proposed agreement; furthermore, since the agents which the carrier proposes to exclude as supervisory agents do not perform any of the duties specified in the scope of the agreement which is being negotiated between the carrier and the committee elected to represent employees in the telegraph department, the carrier holds that these positions should not be subject to the jurisdiction of this committee nor to the provisions of the proposed agreement covering rules, working conditions, and rates of pay.

The employees contend that all agents should be included in the schedule agreement which have been incorporated in the previous schedule agreement for the following reasons:

1. Many of such employees have accepted such positions believing they would be continued under the agreement.

2. They perform routine office work, which we believe should be the determining factor in whether or not agencies should be included.

3. The majority of these employees are members of the same organization as the balance of employees we have agreed to incorporate, and perform service which is analogous.

4. The balance of the employees in station, tower, and telegraph service have an inherent right to their inclusion, as inclusion of agents' positions places them where the regular line of promotion will fill them.

The essential parts of the opinion and decision follow:

Opinion.—The authority under which the Interstate Commerce Commission promulgated its decision on this question, as quoted in the joint submission of this dispute, is conveyed in paragraph 5, section 300, Title III of the transportation act, 1920, reading as follows:

"The term 'subordinate official' includes officials of carriers of such class or rank as the commission shall designate by regulation formulated and issued after such

notice and hearing as the commission may prescribe, to the carriers, and employees and subordinate officials of carriers, and organizations thereof, directly to be affected by such regulations."

The Interstate Commerce Commission was empowered to say what men in the railway service were "subordinate officials." This was not for the purpose of drawing a dividing line between "employees" and "subordinate officials." That was a matter of no concern to Congress, because both classes were placed under the application of the transportation act, 1920, and the jurisdiction of the Railroad Labor Board. The purpose of Congress evidently was to have a dividing line drawn between "officials" and "subordinate officials," in order that officials might fall without and subordinate officials within the jurisdiction of the board.

It was not primarily the duty or purpose of the Interstate Commerce Commission to designate and classify officials or employees, but in its action on this matter it did say that all agents who supervise as many as one are not subordinate officials, because inferentially they are officials. The agent who supervises one employee was classed by the Interstate Commerce Commission with the agent who supervises 100 employees, and both were declared not to be "subordinate officials" because of their supervisory authority, and because of the further fact that "they are the official and responsible representatives of the company in its relationship with the public and frequently in a legal sense."

It was the plain and intentional meaning of the language used by the Interstate Commerce Commission that all agents who supervised as many as one employee were officials, and that therefore they were not subordinate officials. In the language of the Interstate Commerce Commission the same supervisory authority that excluded the agent with 100 subordinates from the class of "subordinate officials" also excluded the agent with one supervised employee. In other words, the Interstate Commerce Commission held that all such supervisory agents were not subordinate officials, because they were officials.

This action of the Interstate Commerce Commission left another plain inference—namely, that such agents as those who supervised nobody were employees within the meaning of the transportation act, 1920. It did not, however, formally designate them as employees, because it was not authorized by the act to declare who were employees any more than it was to declare who were officials.

All that it had been asked to do and all it had the legal authority to do was to designate as subordinate officials such agents as it deemed proper. It did not declare that any of them were subordinate officials. It is therefore an unescapable conclusion that inasmuch as no station agents are subordinate officials, they must all fall either under the head of officials or that of employees. Such of them as are officials are not within the jurisdiction of the board; such of them as are employees are within the board's jurisdiction.

Under the law, the board can not declare that these supervisory agents are subordinate officials. The Interstate Commerce Commission has settled that question. On the other hand, the board would create a very awkward situation if it declared any part of the supervisory agents to be employees in the face of the Interstate Commerce Commission's virtual finding that they are officials. It would place the board's action in conflict with that of the Interstate Commerce Commission.

The practices that may have existed prior to Federal control or the agreements that may have since been made by certain carriers can not affect the jurisdiction conferred upon the board by the transportation act, 1920. The carrier may make such contracts as it may see fit with its officials, and the board could never be concerned thereby unless it should be made to appear in a case properly submitted that such agreements with those not under the jurisdiction of the board conflicted with the rights of those who are under its jurisdiction.

The question as to whether the two factors upon which the Interstate Commerce Commission based its action in Ex parte No. 72—namely, the supervisory capacity of the agents and their official relationship to the public—drew the proper dividing line between officials and subordinate officials, is not one upon which the Railroad Labor Board can properly pass. It will be a question for the consideration of the Interstate Commerce Commission when the matter is reopened and reheard before the commission as the board is informed it will be. The board is not therefore expressing any opinion herein as to the merits of the contentions of the employees as to what agents should rightfully be included in their agreements, but is recognizing the fact that it is bound by Ex parte No. 72 unless and until same is revised by the commission.

Decision.—In view of the premises, the Railroad Labor Board decides that it has no jurisdiction over those classified as supervisory agents by the Interstate Commerce Commission.

[1350]

Longshoremen and Lighter Captains—Port of New York.

AN AGREEMENT between Lighter Captains' Union, Local 996, of the International Longshoremen's Association, and the members of the Lighterage Association of the Port of New York became effective October 1, 1923, for one year. The scale affects about 2,200 men carrying freight between the various railroad and steamship piers, about one-half working for the railroad companies and one-half for owners of privately operated barges. By this agreement the men working on the privately owned barges receive 40 cents per week more than war-time wages and those working for the railroads $15 per month less than war-time wages.

The more important sections in the agreement are shown in the following extracts:

CAPTAINS.

1. Minimum wage on covered barges, $28 per week; minimum wage on hand winch boats, $28 per week; minimum wage on steam and gasoline hoisting lighters, $29 per week.

2. The working hours of the day to be from 7 a. m. to 6 p. m., or 10 hours per day. Six (6) days to constitute a week's work. Regular working time of the week shall begin 7 a. m. Monday morning and end 6 p. m. Saturday. Sunday work to be time and a half.

3. When captains of lighters are ordered to work after 6 p. m. they shall receive time and a half for actual time worked and an additional allowance of one dollar and fifty cents ($1.50) for watching, provided, however, that when captains receive six (6) hours or more overtime, no additional allowance shall be paid for watching the balance of the night.

NIGHT WATCHING AND NIGHT TOWING.

4. Compensation for night watching to be one dollar and fifty cents ($1.50) per night. Additional allowance for towing at night fifty cents (50c.).

5. When captains are ordered to be on their boats on Sunday for the purpose of watching or towing, they shall receive one full day's pay.

6. All car fare in excess of ten cents (10c.) to be paid by the employer to men living within the Metropolitan district. All car fare to be paid by the employers when the men are on the company's calls.

8. All disputes arising under this agreement, or questions arising regarding interpretation of clauses contained therein, shall be referred to a committee of two for settlement. Said committee to be composed of one representative of each party to this agreement. If this committee is unable to agree, they shall choose a third disinterested man whose decision shall be final and binding on both parties.

9. No discrimination of any kind shall be made against union men.

Printing Industry (Web Pressmen)—New York City.

DURING the progress of negotiations looking to the making of a new agreement, 2,200 web pressmen, members of the New York Web Printing Pressmen's Union No. 25, went on strike without authorization. The signing of the new agreement, dated September 21, 1923, between the Publishers' Association of New York City and the International Printing Pressmen and Assistants' Union of North America, practically broke the strike, though the strikers did not all return to work until October 1. Union No. 25 was dissolved and its charter revoked by the international union.

The new agreement, which was in a sense national in making though local in operation, secured to the men an increase of $3 per week and

a reduction in hours from 48 to 41 for night work and from 48 to 45 for day work. Under its provisions the international union undertakes to furnish men to operate the presses of the publishers' association "in accordance with definite stipulations that will guarantee full production, peace, and the highest possible efficiency in the press-rooms."

The points of settlement were as follows:

(1) Night work shall consist of forty-one (41) hours per week, to be performed in the following manner: Two nights at eight hours each to be designated by the office, to be changed only upon one week's notice; all other nights during the week to be of six and one-half hours each. It is specifically understood that on the two designated eight-hour night shifts, that half of one hour for luncheon shall be allowed on office time, and as nearly as practicable in each office at the same time each working day or night.

It is further understood and agreed that no press crew shall be sent to lunch before the third hour after starting work, or be kept from lunch more than five hours after starting work, except on the six-and-one-half hour night shift provided for in the next paragraph.

(2) It is agreed that on the six-and-a-half hour nights the office shall have continuous operation and no lunch period is required to be given at the expense of the office, provided, however, that no press crew shall work longer than six and one-half hours without receiving a lunch period.

(3) Night work shall be between 8 p. m. and 6 a. m. except Saturday night, when the hours shall be between 5 p. m. and 5 a. m.

(4) Day work shall consist of eight consecutive hours per day, between 7 a. m. and 7 p. m., including half an hour for luncheon on office time.

(5) Color presses and rotagravure presses shall be operated, when required, in three shifts, a day shift of eight hours, a night shift of seven hours, and a third shift, part day and part night, of seven hours, which last named two shifts shall be paid for at night rates, provided men working on either of the two 7-hour shifts on rotagravure and color presses shall receive a wage scale in excess of that established for black presses in an amount equal to one hour each week at time and a half. A luncheon period of one-half hour shall be allowed on office time on the 8-hour day shift; on either of the two 7-hour shifts men may be sent to lunch in turn without shutting down the press or presses.

OVERTIME.

(6) Employees may be called in before their regular working hours whenever in the judgment of the office it is necessary, but all such work shall be paid for at time and one-half. When overtime extends beyond or before the day hours or beyond or before the night hours, the night overtime rates shall be paid.

(7) All time required and actually worked before or continued after the regular day or night work shall be counted as overtime and shall be paid for at the rate of time and one-half for any part of the first four hours of work and double time thereafter.

EARLY CALLS AND CALL BACK.

(8) When men are called back for work, after getting "good day" or "good night," they shall receive two ($2) dollars for the call and double time for all time actually worked after reporting at their positions.

Day men called before 7 a. m. shall be paid one ($1) dollar in addition to the regular day wage.

COMPENSATION.

(9) It is agreed that the compensation rates shall be as follows:

For men in charge on day work, they shall receive fifty-four ($54) dollars per week; journeymen on day work shall receive forty-eight ($48) dollars per week; juniors shall receive thirty-two ($32) dollars per week.

For men in charge on night work, they shall receive fifty-seven ($57) dollars per week; journeymen on night work shall receive fifty-one ($51) dollars per week; juniors shall receive thirty-five ($35) dollars per week.

It is provided that the foregoing scale is agreed to by the parties to this contract with the following reservations:

(*a*) That the difference in the total compensation rates as proposed by the party of the first part in their proposed contract of August 6, 1923, and the rates proposed by

the party of the second part, in its proposed contract of May 4, 1923, shall be considered in the following manner:

That immediately the parties hereto agree to set up a conciliation board of three (3) members each, who shall proceed forthwith in an endeavor to reach an agreement upon the differences as between the compensation rates referred to in order to determine a permanent compensation rate.

In the event of the conciliation board failing to agree, that then and in such event the board thus named shall proceed to select three (3) disinterested persons within fifteen (15) days, who shall act as a board of arbitration to determine definitely such differences and all other differences not settled by conciliation as herein provided, it being understood that the voting power of such board of arbitration shall be confined to three (3) votes, to-wit, one vote representing the party of the first part, one vote to represent the party of the second part, and one vote to represent the three (3) disinterested members of such board of arbitration.

If in ten days the conciliation board is unable to agree on the three disinterested persons, then the Governor of the State of New York, who was heretofore agreed on as a nominator by all parties now or previously interested, shall be called on to designate the three disinterested men or any number of the three on whom agreement was not arrived at.

It is agreed that in the interim the compensation rates operative as of section 9 shall continue in full force and operation until a permanent compensation rate has been determined in accordance with the foregoing; provided, however, until such permanent rate of compensation is so determined, the extra payments now made in certain offices shall be so readjusted that no employee shall receive (including the three dollars per week increase in regular wages and the higher overtime rates herein provided) less compensation per week than such employee would have received for a corresponding number of hours' work prior to September 17, 1923.

It is provided that such permanent compensation rates agreed to in accordance with the foregoing shall be made retroactive to the date of this contract.

It is further agreed that the conciliation board heretofore provided shall aid the parties hereto in preparing all the provisions necessary for a complete working contract for one year from September 1, 1923, between the parties hereto; that the two proposed contracts submitted respectively by the president of the international union to the New York newspaper owners on May 4, 1923, and the proposed contract submitted by the Publishers' Association of New York City to the New York City union on August 6, 1923, shall be used as the basis of discussion by the parties hereto in preparing such working contract for one year, and that any point or points on which the parties hereto can not agree shall be decided finally by the said conciliation board, enlarged as provided and acting as an arbitration board, by a majority or unanimous vote.

It is agreed that any contract arrived at pursuant to this agreement shall contain a clause providing for its renewal or replacement at expiration by arbitration in the event of failure to arrive at a complete agreement by conciliation or negotiation and that such arbitration shall be in accordance with the plan herein provided.

Taxicabs—Rochester, N. Y.

AN AGREEMENT between the Rochester Taxicab Co. and the Yellow Cab Co., both operated under the same management, and Teamsters' Local 543, was signed April 14, 1923, terminating a strike begun two weeks before on the refusal of the companies to sign a closed-shop agreement prepared by the union. The agreement is to remain in force for five years.

The following extracts from this agreement are of interest:

ARTICLE I. Parties of the first part shall have the right and privilege of conducting its business upon what is known as the "open-shop" plan, but will give preference to members of the union known as local No. 543, or to such persons as express to the first parties their willingness to join such local after they have been in the employ of the first parties for a period of fifteen days.

ART. II. The employees of the first parties shall have the right to join local 543 and continue their membership therein and will not be discriminated against for so doing.

ART. III. There shall be a steward chosen by the employees of the first parties whose duty shall be to receive the complaints of the employees of the first parties, and who in turn shall present such complaints to the first parties. In the event that such steward and first parties shall not agree, such disputes shall be submitted in writing by memorandum signed by said parties and the steward to a person to be selected by the president of the Rochester Chamber of Commerce, and the decision of such person shall be final and binding upon all parties. No strike or lockout shall take place pending the decision of said person.

ART. V. The question of wages of all drivers and working hours shall be submitted by the first [parties] hereto to an arbitration committee, consisting of three members to be appointed by the president of the Rochester Chamber of Commerce, and pending the decision of said arbitration committee all drivers shall receive a commission of 25 per cent of all bookings each week, excepting funeral drivers, who shall receive $30 per week; and also, pending said decision of said arbitration committee, drivers shall not be required to work more than ten hours each day, or more than six days each week. Upon receipt of a copy of the written decision of said arbitration committee the same shall be binding upon the parties hereto, and thereupon and thereafter the first parties shall pay, and the drivers shall receive during the life of this agreement, the compensation fixed by said arbitration committee.

After hearings the decision of the arbitrators appointed under Article V above was rendered May 26. It was limited to fixing wages and working hours, and was accepted by all garages and brokerage houses in the city. Extracts from the award follow:

The board found the general practice in Rochester and generally throughout the country to pay taxicab drivers on a commission basis and felt that no other method was practicable, and after the board's deliberation, extending over a period of several weeks, the board's decision was reached.

The board decided on the following scale of weekly commission for drivers unless the various firms feel that the flat wage scale of $22.50 per week of ten (10) hours per day and six (6) days per week and 25 per cent on all bookings over $75 in any one week [is preferable]. This also will be acceptable to members of Chauffeurs' Local Union, No. 543, and to take effect from the time of the expiration of the old agreement and to be in full force until April 1st, 1924. All funeral drivers shall receive $30 per week.

	Per cent.
On receipts up to $60, inclusive	26
On receipts up to $60 to $70, inclusive	27
On receipts up to $70 to $80, inclusive	28
On receipts up to $80 to $90, inclusive	29
On receipts up to $90 and upward	30

The board urges the companies to devise immediately a system which will protect the drivers from responsibility for uncollected charge accounts and also assume the burden of minor damages which is inevitable in such a hazardous industry.

The percentages granted were those asked for by the union. Several companies accepted the alternative plan of paying drivers $22.50 per week and 25 per cent commission on all bookings over $75.

Italian Decree Regulating Collective Agreements.[1]

IN RECENT months the Italian Confederation of Labor, the Catholic Federation of Labor, and the National Facisti Corporations have each requested the Italian Government to regulate collective labor agreements. In accordance with these requests the prime minister, on September 2, submitted to the cabinet a decree making collective agreements legally binding and providing arbitration boards for all disputes arising from the application of such agree-

[1] The data on which this article is based are from Battaglie Sindacali, Milan, Sept. 6, 1923.

ments. The cabinet approved the decree. The provisions of the decree are as follows:

ARTICLE 1. A collective labor agreement concluded by one or several labor organizations and one or several employers' organizations, even if these exist only de facto, as well as one concluded by one or several labor organizations and individual employers, shall be binding upon all the members of the organization or organizations and upon the individual employers who have concluded the agreement. The agreement shall within 30 days of its conclusion be deposited with the prefect of the Province within the limits of which it is to be applicable. The agreement shall be entered on a special register kept by the prefect. The deposit of the agreement shall be considered legally valid even if it has been effected by only one of the contracting parties.

ART. 2. Whenever the contracting parties have agreed upon the deposit of a sum as bond for the observance of the agreement, this sum shall be deposited with a credit institute. The receipt for the deposit must be presented to the prefect together with the agreement.

ART. 3. At the time when the agreement is deposited or within two weeks thereafter the contracting parties shall name their representatives on the arbitration board dealt with in article 4.

ART. 4. In each provincial capital there shall be established at the prefecture an arbitration board (*commissione arbitrale*) to which shall be submitted all disputes arising from the interpretation, application, and enforcement of collective labor agreements deposited with the prefect. The board shall also decide all disputes relating to the nullity of the agreement owing to the absence of consent.

The board shall be presided over by the president of the provincial court or by a president of a branch of the court, or in their absence by a judge designated by the president, and shall be composed of two representatives of workers' organizations and two representatives of employers' organizations or of individual employers named by the interested parties in accordance with article 3.

Of the representatives of each class one shall be a regular member of the board and the other shall act as alternate. If the contracting parties of one collective agreement are, respectively, constituted of several workers' organizations, or of several employers' organizations, or of several individual employers, and if at the time of depositing the agreement with the prefect the parties can not agree on a choice of their respective representatives, representatives shall be appointed by the president of the provincial court from a list furnished him by the parties.

If one of the parties does not appoint its representatives, or if these refuse to take part in a decision, the president of the provincial court shall complete the board by appointing in their place a judge of the court or a pretor of the district. A clerk of the court chosen by the president of the provincial court shall act as secretary of the arbitration board.

ART. 5. In rendering awards the board shall have the powers of a friendly arbitrator in accordance with the provisions of the law on prudhommes of June 15, 1893 (No. 295), and with the administrative regulations relating to this law, in so far as they are applicable. When the board finds that the collective agreement has been violated it may, in addition to making the provisions required by the case, also order that the sum deposited by the party who has violated the agreement shall be forfeited to the other party or that the latter shall receive a part of this sum as damages, according to whether the agreement provides for a penalty or compensation of damages. An appeal from the decision of the board is permissible only on the ground of incompetence or excess of authority.

ART. 6. If the collective agreement covers several Provinces the locality in which the cash deposit has been made shall determine what arbitration board shall be competent to settle disputes.

ART. 7. The present decree shall come into force on the date of its publication in the Official Gazette, and shall be submitted to parliament for conversion into a law.

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in October, 1923.

THE Bureau of Labor Statistics received reports concerning the volume of employment in October, 1923, from 7,233 representative establishments in 51 manufacturing industries, covering 2,428,247 employees, whose total earnings during one week in October were $65,731,632. The same establishments in September reported 2,433,120 employees and total pay rolls of $63,694,596. Therefore in October, as shown from these unweighted figures for 51 industries combined, there was a decrease as compared with September of 0.2 per cent in the number of employees, an increase of 3.2 per cent in the total amount paid in wages, and an increase of 3.4 per cent in average weekly earnings.

The bureau's questionnaire does not make inquiry concerning labor turnover, but as this is the season of the year when men are looking for regular work and an assured income it is probable that this slight decrease in employment, coupled with a substantial gain in average weekly earnings, is due to greater regularity of work and less floating labor than during the summer months. The likelihood of this explanation being true is further confirmed by the few increases in rates of wages reported.

Comparing data from identical establishments for September and October, increases in employment are shown in 26 of the 51 industries and increases in the amount paid in wages in 36 industries.

The greatest increase in employment was 8 per cent in the confectionery and ice-cream industry. The increases in the dyeing and finishing textiles, paper boxes, chewing tobacco, shirts and collars, and glass industries ranged from 4.7 per cent down to 2.2 per cent, and the increases in 21 other industries were all less than 2 per cent.

The carriage and wagon industry was the only one showing a large decrease in employment, 8 per cent, all the remaining (24) decreases being 3 per cent or less.

Two industries show very large increases in pay-roll totals; these increases were 14.6 per cent in women's clothing and 11.4 per cent in automobiles. Two other industries, chewing tobacco and shirts and collars, show increases of over 8 per cent.

The cotton goods industry shows the greatest decrease in pay-roll totals, 7.3 per cent, followed by the carriage and wagon industry, 6 per cent.

Considering the industries by groups, increases in employment are shown in the total of all establishments in the food industries and in the paper and printing, tobacco, and vehicles groups. These increases were small except in the food industries, which as a whole increased 2.3 per cent. Small decreases in employment appear in the remaining 8 groups.

Forty-two of the 51 industries show increased per capita earnings in October as compared with 39 in September, 25 in August, and only 10 in July.

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

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK IN SEPTEMBER AND OCTOBER, 1923.

Industry.	Establishments.	Number on pay roll.		Per cent of change.	Amount of pay roll.		Per cent of change.
		September, 1923.	October, 1923.		September, 1923.	October, 1923.	
Food and kindred products:							
Slaughtering and meat packing	84	91,913	93,290	+1.5	$2,262,816	$2,285,096	+1.0
Confectionery and ice cream	137	18,640	20,148	+8.1	370,740	397,694	+7.3
Flour	269	15,810	15,985	+1.1	404,468	422,243	+4.4
Baking	253	35,007	35,674	+1.9	938,590	921,970	−1.8
Sugar refining, not including beet sugar	12	9,136	9,304	+1.8	278,078	292,444	+5.2
Textiles and their products:							
Cotton goods	253	156,933	152,266	−3.0	2,767,228	2,564,368	−7.3
Hosiery and knit goods	238	71,384	72,190	+1.1	1,135,427	1,188,787	+4.7
Silk goods	221	55,205	54,924	−0.5	1,150,525	1,164,050	+1.2
Woolen goods	159	59,781	59,930	+0.2	1,393,060	1,426,087	+2.4
Carpets	22	20,626	20,762	+0.7	569,514	586,764	+3.0
Dyeing and finishing textiles	65	24,593	25,754	+4.7	558,221	600,404	+7.6
Clothing, men's	210	59,049	57,286	−3.0	1,452,397	1,430,286	−1.5
Shirts and collars	90	23,457	24,091	+2.7	347,980	376,172	+8.1
Clothing, women's	154	15,420	15,109	−2.0	369,463	423,522	+14.6
Millinery and lace goods	76	12,327	11,928	−3.2	269,080	254,788	−5.3
Iron and steel and their products:							
Iron and steel	186	242,946	242,171	−0.3	7,044,685	7,394,512	+5.0
Structural-iron work	134	18,093	17,825	−1.5	485,750	501,855	+3.3
Foundry and machine-shop products	536	161,537	156,492	−3.1	4,785,440	4,759,801	−0.5
Hardware	33	21,111	21,052	−0.3	519,481	539,159	+3.8
Machine tools	139	18,147	18,054	−0.5	502,438	501,602	−0.2
Steam fitting and steam hot-water heating apparatus	106	32,364	31,944	−1.3	938,318	957,564	+2.1
Stoves	83	16,290	16,504	+1.3	445,274	465,179	+4.5
Lumber and its remanufactures:							
Lumber, sawmills	235	72,664	71,727	−1.3	1,506,681	1,510,255	+0.2
Lumber, millwork	180	25,138	24,964	−0.7	611,856	625,267	+2.2
Furniture	254	37,661	38,192	+1.4	860,691	902,899	+4.9
Leather and its finished products:							
Leather	129	27,453	27,366	−0.3	682,774	701,799	+2.8
Boots and shoes, not including rubber	163	81,150	80,431	−0.9	1,812,533	1,780,364	−1.8
Paper and printing:							
Paper and pulp	175	49,410	49,007	−0.8	1,272,621	1,266,071	−0.5
Paper boxes	143	15,678	16,244	+3.6	318,073	332,710	+4.6
Printing, book and job	216	26,203	26,356	+0.6	866,143	893,844	+3.2
Printing, newspapers	199	43,569	44,360	+1.8	1,598,608	1,659,496	+3.8
Chemicals and allied products:							
Chemicals	87	15,994	16,077	+0.5	411,793	437,088	+6.1
Fertilizers	112	8,571	8,613	+0.5	170,047	162,975	−4.2
Petroleum refining	63	47,045	45,564	−3.1	1,500,683	1,469,296	−2.1
Stone, clay, and glass products:							
Cement	76	23,898	23,733	−0.7	706,964	709,594	+0.4
Brick and tile	315	26,440	25,661	−2.9	678,364	675,552	−0.4
Pottery	50	11,991	12,068	+0.6	309,059	323,701	+4.7
Glass	129	32,346	33,060	+2.2	795,132	847,429	+6.6
Metal products, other than iron and steel:							
Stamped and enameled ware	37	15,024	14,919	−0.7	331,936	330,802	−0.3
Tobacco manufactures:							
Tobacco, chewing and smoking	30	3,656	3,775	+3.3	55,590	60,199	+8.3
Tobacco, cigars and cigarettes	168	31,322	31,611	+0.9	553,282	592,914	+7.2
Vehicles for land transportation:							
Automobiles	172	270,495	274,542	+1.5	8,737,915	9,735,249	+11.4
Carriages and wagons	38	2,567	2,356	−8.2	56,648	53,273	−6.0
Car building and repairing, electric-railroad	183	18,049	17,888	−0.9	510,511	525,805	+3.0
Car building and repairing, steam-railroad	285	171,143	171,744	+0.4	4,931,147	5,176,701	+5.0

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK IN SEPTEMBER AND OCTOBER, 1923—Concluded.

Industry.	Establishments.	Number on pay roll.		Per cent of change.	Amount of pay roll.		Per cent of change.
		September, 1923.	October, 1923.		September, 1923.	October, 1923.	
Miscellaneous industries:							
Agricultural implements	75	20,014	19,369	−3.2	$517,530	$517,647	+[1]
Electrical machinery, apparatus, and supplies	119	92,805	92,910	+.1	2,551,696	2,634,434	+3.2
Pianos and organs	28	7,742	7,710	−.4	220,635	236,369	+7.1
Rubber boots and shoes	8	12,833	12,941	+.8	331,836	339,234	+2.2
Automobile tires	67	34,544	33,942	−1.7	1,001,484	983,171	−1.8
Shipbuilding, steel	37	27,946	28,433	+1.7	804,391	785,147	−2.4
Railroads, class I { August 15, 1923	.....	1,957,055		.....	[2] $263,145,797		.....
{ September 15, 1923	.....	1,929,493		−1.4	[2] $248,173,732		−5.7

[1] Increase of less than one-tenth of 1 per cent. [2] Amount of pay roll for one month.

Reports are available from 3,185 establishments for a comparison of data between October, 1923, and October, 1922.

These reports from identical establishments in the two years show an increase in the 12 months of 9.2 per cent in the number of employees, an increase of 21.5 per cent in total pay rolls; and an increase of 11.3 per cent in average weekly earnings.

Thirty-one of the 43 separate industries show increased employment, while 40 show increased pay rolls.

The greatest increase in employees in the year was 51 per cent in the pottery industry, reflecting the strike of 1922, followed by over 23 per cent in the automobile industry.

The greatest increases in pay-roll totals were 69 per cent in the pottery industry, 41 per cent in the foundry and machine-shop products industry, and nearly 39 per cent in the electrical machinery industry.

The greatest decreases in both employees and earnings during the 12 months were in the automobile tire and carriage and wagon industries.

Considering the industries by groups, all but stamped ware and the tobacco industries show increases in the number of employees. These increases range from 21 per cent in the vehicles group and 16 per cent in the iron and steel group, to 1 per cent in the leather group. In pay roll totals every group except stamped ware shows an increase in the 12-month period. These increases range from 35 per cent each in the iron and steel and vehicles groups, 25 per cent in the stone, clay, and glass products group, 20 per cent in the food products group, and 18 per cent in the lumber group, to 5 per cent in the leather group.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK IN OCTOBER, 1922, AND OCTOBER, 1923.

Industry.	Establishments.	Number on pay roll		Per cent of change.	Amount of pay roll.		Per cent of change
		October, 1922.	October, 1923.		October, 1922.	October, 1923.	
Food and kindred products:							
Slaughtering and meat packing	77	82,535	91,115	+10.4	$1,833,121	$2,227,237	+21.5
Flour	38	5,342	5,557	+4.0	147,246	152,705	+3.7
Baking	123	14,411	15,995	+11.0	398,700	467,894	+17.4
Textiles and their products:							
Cotton goods	135	97,637	99,981	+2.4	1,548,986	1,700,244	+9.8
Hosiery and knit goods	132	46,088	45,581	−1.1	783,238	821,414	+4.9
Silk goods	113	35,172	36,900	+4.9	691,322	803,543	+16.2
Woolen goods	98	45,231	48,781	+7.8	991,710	1,192,073	+20.2
Carpets	21	18,533	19,816	+6.9	499,707	562,648	+12.6
Dyeing and finishing textiles	27	16,070	15,757	−1.9	338,233	367,117	+8.5
Clothing, men's	110	42,739	43,245	+1.2	1,081,838	1,142,501	+5.6
Shirts and collars	61	20,231	20,164	−0.3	286,587	322,233	+12.4
Clothing, women's	73	9,250	9,373	+1.3	290,993	299,262	+2.8
Millinery and lace goods	18	3,064	2,949	−3.8	66,202	68,038	+2.8
Iron and steel and their products:							
Iron and steel	126	169,037	195,396	+15.6	4,436,780	5,922,733	+33.5
Foundry and machine-shop products	160	77,905	93,432	+19.9	2,102,476	2,965,840	+41.1
Hardware	20	15,390	17,181	+11.6	331,080	449,537	+35.8
Stoves	22	6,579	6,172	−6.2	183,057	187,477	+2.4
Lumber and its remanufactures:							
Lumber, sawmills	175	54,126	58,137	+7.4	980,258	1,210,310	+23.5
Lumber, millwork	101	14,698	15,113	+2.8	355,554	391,493	+10.1
Furniture	93	18,612	19,203	+3.2	439,470	495,723	+12.8
Leather and its finished products:							
Leather	120	26,578	25,910	−2.5	617,770	667,463	+8.0
Boots and shoes, not including rubber	115	66,510	68,224	+2.6	1,483,954	1,543,093	+4.0
Paper and printing:							
Paper and pulp	97	32,245	32,857	+1.9	786,014	858,049	+9.2
Paper boxes	56	9,861	10,408	+5.5	208,511	224,230	+7.5
Printing, book and job	80	14,938	15,692	+5.0	513,275	553,124	+7.8
Printing, newspapers	96	25,937	28,158	+8.6	937,648	1,061,688	+13.2
Chemicals and allied products:							
Chemicals	31	9,424	9,022	−4.3	224,249	254,268	+13.4
Fertilizers	22	2,336	2,340	+0.2	40,385	45,912	+13.7
Petroleum refining	29	34,673	37,175	+7.2	1,159,318	1,200,424	+3.5
Stone, clay, and glass products:							
Brick and tile	140	12,619	13,783	+9.2	296,822	379,324	+27.8
Pottery	18	3,779	5,727	+51.5	94,795	160,346	+69.2
Glass	86	24,248	24,743	+2.0	565,858	652,004	+15.2
Metal products, other than iron and steel:							
Stamped and enameled ware	12	5,645	5,397	−4.4	131,828	127,544	−3.2
Tobacco manufactures:							
Tobacco, chewing and smoking	9	1,474	1,560	+5.8	24,213	27,361	+13.0
Tobacco, cigars and cigarettes	105	24,936	23,452	−6.0	440,024	443,335	+.8
Vehicles for land transportation:							
Automobiles	109	164,825	203,906	+23.7	5,345,619	7,204,516	+34.8
Carriages and wagons	15	1,576	1,308	−17.0	37,193	31,871	−14.3
Car building and repairing, steam-railroad	101	65,228	75,841	+16.3	1,709,229	2,305,384	+34.9
Miscellaneous industries:							
Agricultural implements	55	17,456	18,173	+4.1	409,548	488,382	+19.2
Electrical machinery, apparatus, and supplies	78	63,869	77,144	+20.8	1,573,549	2,183,390	+38.8
Pianos and organs	12	4,421	5,026	+13.7	126,524	161,311	+27.5
Automobile tires	58	33,206	27,112	−18.4	921,482	780,640	−15.3
Shipbuilding, steel	18	18,167	17,384	−4.3	444,443	504,061	+13.4
Railroads, Class I { Sept. 15, 1922	.....	1,692,779		.....	[1] $232,140,858		.....
Railroads, Class I { Sept. 15, 1923	.....	1,929,493		[1] +14.0	$248,173,732		[1] +6.9

[1] Amount of pay roll for one month.

Per capita earnings increased in October as compared with September in 42 of the 51 industries considered; women's clothing and automobiles leading with 17 per cent and 9.8 per cent, respectively. The largest decreases were 4.5 per cent in the cotton-goods industry and 4.6 per cent in the fertilizer industry.

Comparing per capita earnings in October, 1923, with those in October, 1922, increases are shown in all of the 43 industries for which data are available except in the flour and petroleum industries. The greatest increases were 21.6 per cent in the hardware industry, 18.6 per cent in steel shipbuilding, 18.5 per cent in chemicals, 17.6 per cent in foundry and machine-shop products, and 17 per cent in the brick and tile industry.

COMPARISON OF PER CAPITA EARNINGS—OCTOBER, 1923, WITH SEPTEMBER, 1923, AND OCTOBER, 1923, WITH OCTOBER, 1922.

Industry.	Per cent change in October, 1923, as compared with—		Industry.	Per cent change in October, 1923, as compared with—	
	September, 1923.	October, 1922.		September, 1923.	October, 1922.
Clothing, women's	+17.0	+1.5	Dyeing and finishing textiles	+2.7	+10.7
Automobiles	+9.8	+8.9	Foundry and machine-shop products	+2.7	+17.6
Pianos and organs	+7.6	+12.2	Brick and tile	+2.6	+17.0
Tobacco: Cigars and cigarettes	+6.2	+7.1	Printing, book and job	+2.6	+2.6
Chemicals	+5.6	+18.5	Carpets	+2.4	+5.3
Iron and steel	+5.3	+15.5	Carriages and wagons	+2.4	+3.3
Shirts and collars	+5.3	+12.8	Woolen goods	+2.1	+11.4
Tobacco: Chewing and smoking	+4.9	+6.8	Printing, newspaper	+2.0	+4.3
Structural ironwork	+4.8	.....	Silk goods	+1.7	+10.8
Car building and repairing, steam-railroad	+4.6	+16.0	Lumber, sawmills	+1.6	+15.0
Glass	+4.3	+12.9	Clothing, men's	+1.5	+4.4
Hardware	+4.1	+21.6	Boots and shoes, rubber	+1.4	.....
Pottery	+4.1	+11.6	Cement	+1.1	.....
Car building and repairing, electric-railroad	+3.9	.....	Petroleum refining	+1.1	−3.4
Hosiery and knit goods	+3.6	−6.1	Paper boxes	+0.9	+1.8
Furniture	+3.5	+9.3	Stamped and enameled ware	+0.4	+1.2
Agricultural implements	+3.4	+14.5	Machine tools	+0.3	.....
Steam fittings and steam and hot-water heating apparatus	+3.4	.....	Paper and pulp	+0.3	+7.1
Sugar refining, not including beet sugar	+3.3	.....	Automobile tires	−0.1	+3.7
Flour	+3.2	−0.3	Slaughtering and meat packing	−0.5	+10.0
Electrical machinery, apparatus, and supplies	+3.1	+14.9	Confectionery and ice cream	−0.8	.....
Leather	+3.1	+10.8	Boots and shoes, not including rubber	−0.9	+1.4
Stoves	+3.1	+9.2	Millinery and lace goods	−2.2	+6.8
Lumber, millwork	+2.9	+7.1	Baking	−3.6	+5.7
			Shipbuilding, steel	−4.1	+18.6
			Cotton goods	−4.5	+7.3
			Fertilizers	−4.6	+13.5

Reports as to operating time in October were received from 6,070 establishments. A total of these reports from 51 industries shows that 80 per cent of the establishments reporting were on a full-time schedule, 19 per cent on a part-time schedule, and 1 per cent were not in operation.

Nearly one-half of the 80 per cent of the 6,070 establishments working full time also reported full-capacity operation, about one-third reported part-capacity operation, and the remainder failed to report as to capacity operation.

The following table expands the full-time reports in a few industries. Establishments in the silk goods, men's clothing, foundry and machine-shop products, machine tools, leather, and electrical machinery industries show more part-capacity than full-capacity operation, although as stated in the September report it is probable that a majority of the establishments failing to report as to capacity were operating at full capacity.

Industry.	Establishments reporting full time—			
	And full capacity.	And part capacity.	But not capacity.	Total.
Flour	63	34	19	116
Cotton goods	124	26	42	192
Hosiery and knit goods	72	44	23	139
Silk goods	50	63	6	119
Woolen goods	62	40	10	112
Men's clothing	33	39	33	105
Women's clothing	26	16	36	78
Iron and steel	52	45	16	113
Foundry and machine-shop products	149	188	82	419
Machine tools	20	71	14	105
Sawmills	131	13	31	175
Furniture	111	28	50	189
Leather	26	46	16	88
Boots and shoes	41	34	22	97
Paper and pulp	51	8	23	82
Paper boxes	50	30	27	107
Book and job printing	58	54	58	170
Cement	41	10	10	61
Brick and tile	132	33	43	208
Pottery	20	10	10	40
Glass	45	29	14	88
Automobiles	55	44	30	129
Steam-railroad car building and repairing	173	14	31	218
Electrical machinery apparatus and supplies	27	30	29	86

FULL AND PART-TIME OPERATION IN MANUFACTURING ESTABLISHMENTS IN OCTOBER, 1923.

Industry.	Establishments reporting.			
	Total.	Per cent operating full time.	Per cent operating part time.	Per cent idle.
Food and kindred products:				
Slaughtering and meat packing	76	93	7	.....
Confectionery and ice cream	104	89	11	.....
Flour	237	49	50	(1)
Baking	202	90	10	.....
Sugar refining, not including beet sugar	8	75	25	.....
Textiles and their products:				
Cotton goods	241	80	20	.....
Hosiery and knit goods	192	72	28	.....
Silk goods	176	68	32	(1)
Woolen goods	151	74	26	.....
Carpets	17	82	18	.....
Dyeing and finishing textiles	66	52	48	.....
Clothing, men's	160	66	34	(1)
Shirts and collars	76	64	36	.....
Clothing, women's	104	75	25	.....
Millinery and lace goods	55	78	22	.....
Iron and steel and their products:				
Iron and steel	166	68	24	8
Structural ironwork	117	92	8	.....
Foundry and machine-shop products	491	85	14	(1)
Hardware	34	88	12	.....
Machine tools	124	85	14	1
Steam fittings and steam and hot-water heating apparatus	99	88	12	.....
Stoves	79	76	24	.....
Lumber and its remanufactures:				
Lumber, sawmills	206	85	14	1
Lumber, millwork	143	93	6	1
Furniture	209	90	10	.....
Leather and its finished products:				
Leather	96	92	5	3
Boots and shoes, not including rubber	128	76	23	1
Paper and printing:				
Paper and pulp	138	59	38	2
Paper boxes	117	91	9	.....
Printing, book and job	193	88	12	.....
Printing, newspapers	135	100	.....	.....
Chemicals and allied products:				
Chemicals	55	80	18	2
Fertilizers	98	47	51	2
Petroleum refining	38	100	.....	.....
Stone, clay, and glass products:				
Cement	64	95	3	2
Brick and tile	274	76	18	6
Pottery	48	83	17	.....
Glass	120	73	9	18
Metal products other than iron and steel:				
Stamped and enameled ware	32	84	16	.....
Tobacco manufactures:				
Tobacco, chewing and smoking	27	67	33	.....
Tobacco, cigars and cigarettes	124	81	18	1
Vehicles for land transportation:				
Automobiles	154	84	16	1
Carriages and wagons	34	71	29	.....
Car building and repairing, electric-railroad	132	98	2	.....
Car building and repairing, steam-railroad	262	83	16	1
Miscellaneous industries:				
Agricultural implements	58	84	14	2
Electrical machinery, apparatus, and supplies	94	91	9	.....
Pianos and organs	25	96	4	.....
Rubber boots and shoes	6	100	.....	.....
Automobile tires	54	57	35	7
Shipbuilding, steel	31	94	6	.....

[1] Less than one-half of 1 per cent.

No general increase in wages movement appeared in any one industry during the month ending October 15, although some increases were reported by establishments scattered through 37 of the 51 industries here considered. However, with the exception of three industries, iron and steel, steam-railroad car building and repairing, and boots and shoes, these increases affected comparatively few employees and were for the most part in the relatively smaller establishments.

The increases, ranging from 2.5 per cent to 28.6 per cent were reported by a total of 147 establishments. The weighted average increase for the 37 industries combined was 9.6 per cent and affected 22,514 employees, being 48 per cent of the total employees in the establishments concerned, and 1 per cent of the entire number of employees in all establishments in the 51 industries covered by this report.

One establishment each in six industries reported decreases in rates of wages during the month. These decreases are shown in footnotes to the table following.

WAGE ADJUSTMENTS OCCURRING BETWEEN SEPTEMBER 15 AND OCTOBER 15, 1923

Industry.	Establishments.		Amount of increases.		Employees affected.		
	Total number reporting.	Number reporting increases.	Range.	Average.	Total number.	In establishments reporting increases.	In all establishments reporting.
Food and kindred products:			*Per ct.*	*Per ct.*		*Per ct.*	*Per ct.*
Slaughtering and meat packing	84	1	6	6.0	161	8.9	0.2
Confectionery and ice cream	137	7	5–17	6.2	406	30.1	2.0
Flour	269	5	7–10	7.6	171	32.9	1.1
Baking	253	3	5–20	13.7	75	21.7	.2
Sugar refining, not including beet sugar	12	1	14.3	14.3	60	6.0	.6
Textiles and their products:							
Cotton goods	253	3	8–10	8.6	272	100.0	.2
Hosiery and knit goods	238	2	10–18	11.9	15	5.4	(1)
Silk goods	221	2	5	5.0	357	78.8	.6
Woolen goods	159	1	5	5.0	125	100.0	.2
Carpets	22	(2)					
Dyeing and finishing textiles	65	1	5.8	5.8	17	21.3	.1
Clothing, men's	210	(2)					
Shirts and collars	90	2	10	10.0	40	17.9	.2
Clothing, women's	154	1	7.5	7.5	5	11.4	(1)
Millinery and lace goods	76	2	10	10.0	318	48.0	2.7
Iron and steel and their products:							
Iron and steel	186	9	3–25	12.8	9,683	76.7	4.0
Structural ironwork	134	7	2.5–12.5	7.6	25	16.3	.1
Foundry and machine-shop products	536	[3] 12	2.9–22	4.8	692	22.9	.4
Hardware	33	(4)					
Machine tools	139	4	6.5–10	8.3	17	8.8	.1
Steam fittings and steam and hot-water heating apparatus	106	[5] 4	5–21	15.7	115	27.4	.4
Stoves	83	3	10–19.2	16.6	67	10.0	.4
Lumber and its remanufactures:							
Lumber, sawmills	235	1	10	10.0	150	59.0	.2
Lumber, millwork	180	5	5–10	7.9	111	16.0	.4
Furniture	254	9	3–10	6.1	98	11.3	.3
Leather and its finished products:							
Leather	129	(2)					
Boots and shoes, not including rubber	163	5	4.2–10.4	9.8	2,153	55.0	2.7

[1] Less than one-tenth of 1 per cent.
[2] No wage change reported.
[3] Also 1 establishment reduced the rates of 75 of its 167 employees 10 per cent.
[4] One establishment reduced the rates of 100 of its 196 employees from 5 to 10 per cent.
[5] Also 1 establishment reduced the rates of 200 of its 592 employees 6.5 per cent.

WAGE ADJUSTMENTS OCCURRING BETWEEN SEPTEMBER 15 AND OCTOBER 15, 1923—Concluded.

Industry.	Establishments.		Amount of increases.		Employees affected.		
	Total number reporting.	Number reporting increases.	Range.	Average.	Total number.	In establishments reporting increases.	In all establishments reporting.
Paper and printing:			*Per ct.*	*Per ct.*		*Per ct.*	*Per ct.*
Paper and pulp	175	(2)					
Paper boxes	143	8	5–10	9.4	177	18.0	1.1
Printing, book and job	216	11	5–15	6.5	678	36.7	2.6
Printing, newspapers	199	8	2.5–22	12.4	696	16.2	1.6
Chemicals and allied products:							
Chemicals	87	3	5–12	5.5	622	45.0	3.9
Fertilizers	112	3	10–20	17.3	83	85.6	1.0
Petroleum refining	63	1	4.5	4.5	500	65.0	1.1
Stone, clay, and glass products:							
Cement	76	(2)					
Brick and tile	315	6	8–16.7	9.6	144	94.1	.6
Pottery	50	(2)					
Glass	129	(2)					
Metal products, other than iron and steel:							
Stamped and enameled ware	37	2	10–28.6	26.0	29	12.8	.2
Tobacco manufactures:							
Tobacco, chewing and smoking	30	(2)					
Tobacco, cigars and cigarettes	168	(6)					
Vehicles for land transportation:							
Automobiles	172	(7)					
Carriages and wagons	38	1	18	18.0	100	66.7	4.2
Car building and repairing, electric-railroad	183	(2)					
Car building and repairing, steam-railroad	285	8	4–8	4.1	4,223	73.3	2.5
Miscellaneous industries:							
Agricultural implements	75	(2)					
Electrical machinery, apparatus, and supplies	119	3	5–14	7.6	62	10.6	.1
Pianos and organs	28	1	5	5.0	50	5.0	.6
Rubber boots and shoes	8	(2)					
Automobile tires	67	8 1	10	10.0	10	20.0	(1)
Shipbuilding, steel	37	1	6.7	6.7	7	11.8	(1)

[1] Less than one-tenth of 1 per cent.
[2] No wage change reported.
[6] One establishment reduced the rates of 100 of its 450 employees 8 per cent.
[7] One establishment reduced the rates of its 728 employees 7 per cent.
[8] Also 1 establishment reduced the rates of 110 of its 345 employees 13.5 per cent.

Employment and Earnings of Railroad Employees, September, 1922, and August and September, 1923.

THE following table shows the number of employees and the earnings in various occupations among railroad employees in September, 1923, in comparison with employment and earnings in August, 1923, and September, 1922.

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 SEPTEMBER, 1923, WITH SEPTEMBER, 1922, 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.
	Number of employees at middle of month.					
September, 1922	163,344	24,100	308,190	53,065	238,460	420,669
August, 1923	175,054	25,486	291,264	80,518	247,176	471,185
September, 1923	174,964	25,571	290,416	74,385	233,818	450,013
	Total earnings.					
September, 1922	$20,041,252	$2,776,007	$40,616,761	$3,756,601	$15,887,473	$35,253,262
August, 1923	22,422,615	3,066,260	39,091,319	7,035,978	19,674,396	45,571,541
September, 1923	21,629,854	2,986,370	37,950,677	5,980,632	17,029,412	40,772,647

Month and year.	Maintenance of equipment and stores.					
	Carmen.	Machinists.	Skilled trade helpers.	Laborers (shops, engine houses, power plants, and stores).	Common laborers (shops, engine houses, power plants, and stores).	Total for group.
	Number of employees at middle of month.					
September, 1922	95,021	38,555	94,697	42,698	49,012	410,278
August, 1923	142,393	69,323	138,217	50,036	68,231	605,120
September, 1923	141,001	68,392	135,009	49,553	65,829	595,327
	Total earnings.					
September, 1922	$17,941,527	$8,869,383	$13,962,976	$4,399,167	$4,277,833	$66,811,268
August, 1923	21,296,296	11,388,894	15,590,360	4,954,528	5,834,966	80,756,009
September, 1923	19,458,019	10,526,313	14,203,125	4,716,493	5,268,170	74,759,081

Month and year.	Transportation other than train and yard.					Transportation (yardmasters, switch tenders, and hostlers).
	Station agents.	Telegraphers, telephones, and towermen.	Truckers (stations, warehouses, and platforms).	Crossing and bridge flagmen and gatemen.	Total for group.	
	Number of employees at middle of month.					
September, 1922	31,685	27,044	38,646	22,205	217,828	24,513
August, 1923	31,749	27,618	42,100	23,256	218,823	26,498
September, 1923	31,707	27,764	42,922	23,244	219,866	26,473
	Total earnings.					
September, 1922	$4,692,814	$3,879,189	$3,389,683	$1,506,132	$25,214,402	$4,363,942
August, 1923	4,824,023	4,055,428	4,000,596	1,753,175	26,468,984	4,763,257
September, 1923	4,618,540	3,922,366	3,845,102	1,737,391	25,509,245	4,615,490

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN SEPTEMBER, 1923, WITH SEPTEMBER, 1922, AND AUGUST, 1923—Concluded.

Month and year.	Transportation, train and engine.					
	Road conductors.	Road brakemen and flagmen.	Yard brakemen and yardmen.	Road engineers and motormen.	Road firemen and helpers.	Total for group.
	Number of employees at middle of month.					
September, 1922	35,647	74,212	48,349	43,645	45,545	311,301
August, 1923	39,106	80,619	55,574	47,135	49,380	344,165
September, 1923	39,510	81,681	55,289	47,901	50,135	347,398
	Total earnings.					
September, 1922	$8,407,861	$12,781,044	$7,660,704	$11,353,499	$8,445,683	$59,881,223
August, 1923	9,095,933	13,722,328	9,089,103	12,357,997	9,123,610	66,494,687
September, 1923	8,850,029	13,341,784	8,803,820	11,994,790	8,858,100	64,566,592

Extent of Operation of Bituminous Coal Mines, September 22 to October 13, 1923.

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 September 22 to October 13, 1923. 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 from 55 to 60 per cent of the total output of bituminous coal. The figures are based on data furnished the Bureau of Labor Statistics by the United States Geological Survey.

WORKING TIME IN THE BITUMINOUS COAL MINES IN THE UNITED STATES, BY WEEKS, SEPTEMBER 22 TO OCTOBER 13, 1923.

[The mines included ordinarily represent from 55 to 60 per cent of the total output. Prepared by the Bureau of Labor Statistics from data furnishd by the United States Geological Survey.]

Week ending—	Number of mines reporting.	Mines.															
		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.		Working full time of 48 hours or more.	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
1923.																	
Sept. 22.	2,266	563	24.8	45	2.0	170	7.5	357	15.8	414	18.2	309	13.6	246	10.9	162	7.1
Sept. 29.	2,319	594	25.6	53	2.3	200	8.6	356	15.4	388	16.7	312	13.5	263	11.3	153	6.6
Oct. 6...	2,307	620	26.9	50	2.2	187	8.1	358	15.5	407	17.6	315	13.7	227	9.8	143	6.2
Oct. 13.	2,317	640	27.6	52	2.2	207	8.9	363	15.7	386	16.7	289	12.5	223	9.6	157	6.8

Recent Employment Statistics.

Iowa.[1]

THE percentage fluctuations in the numbers on the pay rolls in the principal industry groups in Iowa from August, 1922, to August, 1923, and from September, 1922, to September, 1923, are shown in the following table:

PER CENT OF INCREASE OR DECREASE IN EMPLOYMENT IN SPECIFIED INDUSTRY GROUPS IN IOWA, AUGUST AND SEPTEMBER, 1923, AS COMPARED WITH AUGUST AND SEPTEMBER, 1922.

Industry group.	Per cent of increase from—	
	August, 1922, to August, 1923.	September, 1922, to September, 1923.
Food and kindred products	18.1	5.5
Textiles	6.9	19.8
Iron and steel work	32.8	23.8
Lumber products	14.9	21.7
Leather products	25.8	9.4
Paper products, printing and publishing	7.8	5.4
Patent medicines, chemicals and compounds	9.0	3.9
Stone and clay products	3.8	22.7
Tobacco and cigars	25.4	[a] 15.3
Various industries	6.7	[a] 39.3
Total	16.4	3.7
Railway car shops (5 reporting)	90.0	74.9

[a] Decrease.

Massachusetts.[2]

STATISTICS of employment and earnings in 796 manufacturing establishments in Massachusetts for a specified week in August and September, 1923, are given below:

NUMBER OF EMPLOYEES AND AVERAGE WEEKLY EARNINGS IN MASSACHUSETTS MANUFACTURING ESTABLISHMENTS, WEEK INCLUDING OR ENDING NEAREST TO THE 15TH OF AUGUST AND SEPTEMBER, 1923.

Industries.	Number of establishments.	Number of employees on pay roll.		Average weekly earnings.	
		August, 1923.	September, 1923.	August, 1923.	September, 1923.
Automobiles, including bodies and parts	13	2,730	2,676	$30.75	$33.73
Boot and shoe cut stock and findings	52	2,221	2,244	22.53	23.88
Boots and shoes	82	30,971	30,762	24.73	24.87
Boxes, paper	25	2,279	2,366	19.82	20.48
Boxes, wooden packing	10	1,012	1,006	21.89	23.92
Bread and other bakery products	37	1,666	1,669	29.49	28.80
Cars and general shop construction and repairs, steam railroad companies	4	3,319	3,379	27.42	31.83
Clothing, men's	28	2,820	2,698	23.52	23.32
Clothing, women's	24	846	889	17.67	16.90
Confectionery	14	3,533	3,929	18.27	18.72
Cotton goods	43	38,926	37,553	20.51	21.29
Cutlery and tools	25	4,954	5,029	23.70	23.83
Dyeing and finishing, textiles	6	5,980	6,175	19.39	22.21

[1] Iowa. Bureau of Labor Statistics. Iowa Employment Survey, Des Moines, September, 1923.
[2] Mimeographed material from the Department of Labor and Industries of Massachusetts.

NUMBER OF EMPLOYEES AND AVERAGE WEEKLY EARNINGS IN MASSACHUSETTS MANUFACTURING ESTABLISHMENTS, WEEK INCLUDING OR ENDING NEAREST TO THE 15TH OF AUGUST AND SEPTEMBER, 1923—Concluded.

Industries.	Number of establishments.	Number of employees on pay roll.		Average weekly earnings.	
		August, 1923.	September, 1923.	August, 1923.	September, 1923.
Electrical machinery, apparatus, and supplies	12	11,661	11,490	$27.98	$27.30
Foundry and machine shop products	61	7,823	7,894	29.34	30.01
Furniture	17	1,944	1,937	22.81	25.80
Hosiery and knit goods	10	4,034	3,838	17.92	17.77
Jewelry	22	1,409	1,492	23.68	23.38
Leather, tanned, curried, and finished	27	4,810	4,661	25.62	26.04
Machine tools	14	1,429	1,396	26.41	25.36
Musical instruments	5	742	742	25.30	26.72
Paper and wood pulp	21	5,776	5,651	25.91	25.81
Printing and publishing, book and job	36	3,029	2,986	30.25	31.27
Printing and publishing, newspaper	11	2,488	2,526	36.58	36.89
Rubber tires and goods	10	3,225	3,321	23.42	25.66
Silk goods	12	2,903	2,783	20.95	20.35
Slaughtering and meat packing	4	1,431	1,410	27.44	25.82
Stationery goods	9	1,282	1,336	18.59	19.24
Steam fittings and steam and hot-water heating apparatus	6	1,628	1,695	25.27	27.32
Textile machinery and parts	15	7,854	7,961	28.07	28.51
Tobacco	7	441	1,321	20.59	26.67
Woolen and worsted goods	41	19,979	20,277	22.19	22.44
All other industries	93	42,069	41,004	24.97	27.16
Total	796	227,214	226,096	24.06	24.94

Reports from the above tabulated establishments show 1,118, or 0.5 per cent, fewer persons on the pay roll in September than in August, 1923, an advance of $171,943, or 3.1 per cent, in the total pay roll, and an increase of 88 cents, or 3.7 per cent, in the average weekly earnings per employee.

The labor market in the districts in which the Boston (two offices), Springfield, and Worcester public employment offices operate improved slightly in September, 1923, as shown by the reports of the number of persons asked for by employers and the number of individuals placed. Usually there is some reduction in the demand for workers in July and August, but the seasonal decline was rather more marked in 1923 than in 1922. The renewed activity in September, 1923, was a very hopeful sign, and it seems probable that the demand for employees through the State employment offices will soon be as great as in the corresponding months of the preceding year. The number of persons called for at State employment offices by employers in September, 1923, was 3,946 persons—21 per cent below the number demanded in September, 1922. The total number of persons placed in September, 1923, was 3,170—9.5 per cent less than last year's record for that month.

In the first nine months of 1923 the number of persons called for through the four offices by employers was 40,618 and the number of persons placed 31,882, an increase of 9.3 per cent in the number of persons called for and of 12.7 per cent in the number of persons placed as compared to the first nine months of 1922.

Minnesota.

IN OCTOBER, 1923, approximately normal employment conditions throughout Minnesota were reported by the industrial commission of that State. The number of persons referred to positions from the free employment offices of the State in St. Paul, Minneapolis, and Duluth was 8,377, of whom 679 were farm hands sent to farmers in various sections of Minnesota. This was an increase of 503 in the number of persons referred and an increase of 121 in the number of farm hands furnished farmers in the corresponding month of 1922.

According to the commissioner in charge of the Minnesota public employment service, there should be, if the weather is seasonable, a steady demand extending well into the winter for labor in building construction and road work.

As an evidence of normal business conditions for mid autumn, the commissioner calls attention to the clerical and professional placements made by the State employment offices in October, 1923.

Conference of International Association on Unemployment.[1]

THE International Association on Unemployment, which was organized in 1910 as a sister society to the International Association for Labor Legislation, was compelled to suspend its activities for nearly 10 years on account of the war. Its work was resumed recently at a general meeting which was held at Luxemburg September 9 to 11, 1923. The meeting was attended by about 150 delegates, representing 18 countries. Mr. Herbert Hoover, Secretary of the United States Department of Commerce, had sent Dr. John B. Andrews to attend the meeting in the capacity of semiofficial observer. The International Labor Office was represented by its director, Mr. Albert Thomas.

After an introductory address by Mr. Thomas, in which he pointed out the intensity of the unemployment crisis of 1921–22, which still continues in certain countries, the meeting appointed a committee consisting of Dr. John B. Andrews (United States), J. L. Cohen (Great Britain), Max Lazard (France), and Leon Troclet (Belgium), and charged with submitting to the meeting a draft resolution embodying a general program of action. The draft resolution submitted by this committee was adopted by the meeting in the following form:

The International Association on Unemployment, in conference assembled on 11 September, 1923, at Luxemburg,

Having considered the state of the labor market throughout the world and the alarming number of workers involuntarily unemployed, urges on all countries a very careful reconsideration of the whole menacing problem of unemployment;

Considering that the economic disorganization provoked by the war is aggravated by the failure to adopt an economic policy of international cooperation,

Invites its national sections to examine the following suggestions:

(1) To substitute as soon as possible for the policy of exaggerated protection, which is a relic of war economy incompatible with a state of peace, a policy of greater freedom for the circulation of goods, effected where possible by customs unions between countries;

(2) To improve the financial situation and, above all, to prevent further monetary catastrophes, with the assistance of the principal countries concerned in the reestablishment of normal international financial relations;

[1] International Labor Office. Industrial and Labor Information, Geneva, Sept. 21, 1923, pp. 20–25.

(3) To establish in each country, and as far as possible according to a uniform system, complete statistics of production and of economic resources and needs, so as to encourage the cooperation of the managers of industry in providing a good distribution of work and of the factors of production throughout the world;
(4) To facilitate a desirable distribution of population;
(5) To develop an adequate and permanent system of public employment exchanges, with cooperation between the systems of different countries;
(6) To make unemployment insurance general and to consider the suggestions of experts and the result of practical experience with a view to bringing about greater regularity of employment;
(7) To promote the long-range planning of public works so as to increase their execution during periods of industrial depression;
(8) To increase educational facilities and to develop machinery for vocational guidance with a view to directing labor into the most desirable and efficient channels.

It is increasingly apparent that only through a policy of international solidarity can the material and moral patrimony of each nation be conserved.

The International Association on Unemployment therefore recommends, in view of the alarming nature of the present situation and the threatening consequences which are to be feared, that prompt action should be undertaken on the above-mentioned program.

Unemployment in Germany, October, 1923.

AT THE beginning of the present year unemployment in Germany had decreased to a negligible amount, there having been even less unemployment than in normal pre-war times. The total collapse of the mark has, however, been accompanied by such a turn for the worse in the employment situation that Germany to-day has to deal with a more serious unemployment problem than any other country in the world. A cable from the American commercial attaché at Berlin dated October 18, 1923 (Commerce Reports, Oct. 29, 1923, p. 271), says:

Figures obtained from a reliable source connected with the Government reflect the seriousness of the employment situation in Germany. It is estimated that on October 16 there were 1,500,000 workers totally unemployed in the unoccupied sections of the country. In addition to these there were between 4,000,000 and 5,000,000 workers on part time, including 2,000,000 working only half time or less.

The unemployment doles paid by the Government and the individual municipalities are totally inadequate to cover the cost of necessities. The maximum allowance to a married man with wife and two children for the week ending October 16 was 1,800,000,000 marks a week, whereas a loaf of bread weighing 1,200 grams cost 480,000,000 marks, a pound of potatoes 50,000,000, and a pound of margarine 900,000,000 at that time. The minimum allowance for a married man was 1,400,000,000 marks, for an unmarried man 810,000,000, and for an unmarried woman 600,000,000. It is estimated that the dole received by a worker covers about one-third of the wages he would have received if working. For example, a married man with wife and two children received in Berlin for a week of half-time work 3,100,000,000 marks in wages and a dole of 1,500,000,000 marks.

Effect on the English Worker of Unemployment and Unemployment Relief.

IN THE summer of 1922 a group of Englishmen [1] decided to make a study of the unemployment situation in England in order to supplement the information given in official reports and to gain a fuller realization of what the prevailing depression actually meant to the life of the country. Nine local investigations were under-

[1] The persons composing this group were: J. J. Astor, A. J. Bowley, Henry Clay, Robert Grant, W. T. Layton, P. J. Pybus, B. Seebohm Rowntree, George Schuster, and F. D. Stuart.

taken during August and September, and the reports of this work seemed of such interest that it was agreed to print the most important findings "as a contribution to an understanding of the present emergency." These local reports were much condensed and a general survey of the situation was prefixed, the whole being published under the title, "The Third Winter of Unemployment." One important part of the book is the study made of the effect upon the workers themselves of unemployment and of the measures taken to relieve it.

As to physical effects, the situation is rather complex. There was general agreement that as yet the degree of destitution witnessed in former trade depressions had not appeared. Actual starvation had been prevented, and even where the adults were showing signs of undernutrition, the children were not yet affected. In general, health was good. In Birmingham, according to the health authorities, it was even better than usual. "The health of the city has never been quite so good as at present, despite overcrowding."

The reason everywhere given is the same. Health is better than in pre-war depressions because the pre-war starvation is prevented. The unemployment insurance benefit, especially since it was proportioned to need by the allowances for dependents, has relieved many who would have endured months of privation before resort to the poor law; while the greater resort to the poor law, and the more generous scale of relief awarded, have assured a regular supply of good food in many homes that were not too well fed when trade was good.

The strain has been much more severe, it was found, among the skilled artisans and small tradesmen than among the unskilled, who are at the best of times poorly paid and irregularly employed. The latter were almost at once obliged to take advantage of relief measures; the maintenance thus gained was not far below their customary standard of living, and the report suggests that in some cases the change in the real position of their families was for the better. But with the workman normally employed at wages insuring a fair living, the position was very different. The depression followed a period of abnormal activity during which the workers had grown used to a better scale of living, which they hoped and believed would be permament. The change in their manner of living, due to unemployment, was much greater than in the case of the unskilled workers, and to the change was added the nervous strain of watching the exhaustion of their savings, the wearing out of their clothes, furniture, and other acquisitions of the boom periods, and the worry of enforced idleness. "There is abundant evidence of mental strain and suffering in this class."

Apart from destitution, both employers and workers are aware of an unfortunate physical effect of prolonged unemployment—the loss of skill through lack of opportunity to exercise it, or an actual impairment of ability to do fine work as a result of working at the rough and heavy jobs which are usually offered as relief work. Thus from Burnley, the investigators report that the authorities prefer excavation for relief work, because it requires neither skill nor expensive materials, but that this is most unsuitable for weavers—Burnley is a textile town—"for it hardens their hands and obviously lessens their efficiency in their regular occupation, in which the rapid handling of delicate threads of cotton yarn plays a great part." In Stoke-on-Trent, a pottery town, there was no complaint of the

kind of relief work furnished, but the loss of skill through unemployment was stressed.

An official of the Pottery Operatives' Union took a very grave view of this question, as did the assistant manager of one of the employment exchanges. The latter definitely stated that employers were not registering their vacancies at the exchanges because they did not want men who had been long out of work.

Similar reports came from other places, and there was pretty general agreement that the danger of this kind of deterioration is progressive.

Clearly, the value of the worker if reemployed to-day would be less than it was in 1920. The fall in value is, so far, only temporary, and the period needed for the recovery of skill and confidence would not be long; yet the fact indicates a real danger.

Turning to the morale of the unemployed worker, the investigators find that this question, too, has several sides. There is little or no evidence of the loss of self-dependence which maintenance without work is often supposed to produce. The men are not growing fond of idleness and manifesting a disposition to depend on public relief rather than to seek work. Rather they appear to be, as at Burnley, "heartily sick of doing nothing, and want work for its own sake in many cases." Their anxiety to get back to work was testified to by employers, employment exchange officials, and trade-union secretaries, as well as by individual workmen interviewed. Two conclusions were reached on this point.

The demoralization that, according to pre-war theories, would have been expected to result from the provision of maintenance without work has not yet shown itself. * * *

The longer a man is out of work the greater the danger that he may lose the habit of self-dependence; but up to the present the greater provision of relief has acted rather as a support to self-respect and a safeguard against demoralization. Maintenance without employment may be demoralizing, but unemployment without maintenance is much more certain in its demoralizing effect.

In some other respects it is agreed that morale has suffered. One of the most serious effects was said to be the discouragement to thrift and foresight. The workers who lived carefully and tried to provide for the future find that the utmost result of their efforts is that they are enabled to put off dependence on the uninsurance payments or the final resort to the poor law for a few months longer than their thriftless neighbors, and inevitably they question whether their self-denial has justified itself. Discouragement and resentment affect them profoundly.

The case of the small tradesmen in Blaina who have had to close their shops and sell their houses, and the case of many a careful artisan who has had to part with the savings that he had accumulated for the education of his children, leave a bitterness of spirit that may not issue in any revolutionary activity—since the saving man is not usually a revolutionary—but does change a man's outlook on society.

From all their conclusions the investigators except one class—the young men who spent in the army the years which would normally have been devoted to apprenticeship or to industrial training. They have not been habituated to industrial work and most of them possess no special skill. They can not be held responsible for their condition, but the fact remains that they constitute a serious problem.

Many of these are regarded to-day as almost useless. They have nothing to offer which is of any great value in the labor market. They have been at a disadvantage

because work has been given first to married men. They have been out of work for long periods, just at the time when their mental and moral faculties are most sensitive, and the result is that they now form a section which employers and public officials are very much inclined to label "demoralized."

Among this class, the investigators feel, there is grave danger that maintenance without employment may lead to a permanent loss of self-dependence, and it is suggested more than once that for them maintenance should be made contingent upon taking some form of industrial training.

It must be remembered that the conclusions here discussed were reached more than a year ago, at the beginning of the third winter of unemployment. The investigators themselves expressed doubts as to what the conditions might be should the depression continue for another year or even longer.

Report of the British Unemployment Grants Committee.[1]

THIS is the second (interim) report covering the proceedings from March 3, 1922, to June 28, 1923, but an appendix gives the first (interim) report, recounting proceedings from December, 1920, to March 2, 1922, so that the whole of the committee's work is covered. In view of the depression prevailing in the autumn of 1920, the Government decided to give financial aid to local authorities who would undertake approved schemes of useful work for the sake of providing employment, and this committee was appointed to pass upon the schemes and to administer the funds provided. A sum of £3,000,000 ($14,599,500 par) was at first voted for this purpose, but this has been materially increased from time to time. Two different plans for giving help have been used. Under the first the committee pays 60 per cent of the wage bill, and under the second it undertakes to pay from 50 to 65 per cent of interest and sinking fund charges for from 5 to 15 years, according to the character of the work under consideration. The committee summarizes its work as follows:

> The committee have, from the commencement of their operations in December, 1920, up to June 28, 1923, dealt with 9,444 schemes of work which have been submitted to them by many hundreds of local authorities; 2,592, of an estimated value of over £12,000,000 [$58,398,000, par] have been approved for direct grants, amounting to £3,320,000 [$16,156,780, par], on the basis of 60 per cent of the wages cost; and 3,601 schemes involving a total expenditure to be defrayed from loan of £28,837,696 [$140,338,648, par] have been approved for grant in respect of interest and sinking fund charges. Commitments and provisional approvals affect schemes of a further value of £475,000 [$2,311,588, par].
>
> The total volume of direct employment provided as a result of the various schemes is estimated to amount approximately to 1,500,000 man-months.

The committee discusses at some length a wage provision which has roused bitter opposition from the workers. If a State-aided scheme is carried out directly by the local authorities, they are required to pay unskilled labor a lower rate than their usual standard, the reduction generally, at that time, being 25 per cent. This the committee justifies on the ground that the wage fund can thus be made to cover a greater number of men; that the employees, being

[1] Great Britain. [Treasury.] Unemployment Grants Committee. Second (interim) report of proceedings from March 3, 1922, to June 28, 1923. London, 1923. 16, 21 pp.

recruited from all classes and unused to such work, can not give the standard output; that it is undesirable to compete in any way with ordinary employment; and that these are really emergency works designed primarily to relieve distress. The committee admits, however, that this wage policy brings about some awkward situations.

The rate of wages being paid on most relief works is now less than formerly, and indeed in some cases, particularly in rural districts, 75 per cent of the local authority's rate has worked out at a figure so low as to compare unfavorably with the amount obtainable by unemployed men by way of poor relief, where the men were married men with families. * * * In other cases it would appear that it is almost as advantageous financially for a married man with a family to do nothing and to draw out relief as to be employed on State-aided works.

Unemployment Insurance by Industry in Great Britain.

WHEN the English unemployment insurance act of 1920 was passed it contained a section permitting any industry which wished to take entire responsibility for its own unemployment to contract out of the general scheme, under certain carefully detailed conditions. The abnormal unemployment which has prevailed since the passage of the act threw such a strain upon the finances of the general scheme that by the summer of 1921 it was felt necessary to withdraw this permission until more normal conditions should obtain, but interest in the idea was not given up, and the Ministry of Labor has recently published a report[1] on the subject, giving the conditions under which special schemes were permitted by the act of 1920, discussing difficulties in the way of establishing satisfactory plans and giving details concerning the one scheme which was brought into effect before permission was revoked.

Under the act of 1920 a special scheme can be established only for the whole of an industry within a given area, and it must cover all the work people employed in that industry, regardless of their occupations. Power is given to exclude specific classes of workers, if the Minister of Labor approves, but this power is closely restricted. Persons who are not eligible for benefits under the general unemployment insurance scheme can not be included in a special scheme.

In general, a special scheme must be devised by the joint industrial council for the industry concerned, or, if no such body exists, by an association of representatives of employers and employees so constituted as to represent a substantial majority of the employees in the industry. It must give a definite right to unemployment benefits, and these may not be less than those provided under the general scheme. Subject to this proviso, the amount and duration of benefits may be laid down by the scheme itself. The Government will make an annual contribution to its fund, though on a less liberal basis than to the general scheme, the ruling in this respect being as follows:

An annual grant to special schemes is made out of State funds * * * The grant is limited to one or other of the following amounts, whichever is the less, viz:

(i) One-fourth of the contributions paid by employers and employees under the provisions of the special scheme; or

[1] Great Britain. Ministry of Labor. Employment and insurance department. Report on the administration of section 18 of the unemployment insurance act, 1920. London, 1923. 44 pp. Cmd. 1613.

(ii) A sum not exceeding 30 per cent of the Exchequer contributions which would have been paid under the general scheme, at the original rates of contributions in respect of the persons to whom the special scheme applies, if the special scheme had not been in operation.

Other provisions deal with machinery for collecting contributions, receiving claims, and paying benefits, safeguarding the funds, verifying the statements as to unemployment or underemployment of the claimants, and similar practical details.

Demarcation seems to be one of the principal difficulties in the way of establishing special schemes. Industries are not separated from one another by hard and fast lines. They overlap and interlace, and even an establishment clearly belonging to one industry may have one or more departments carrying on work claimed by another. Employees are even harder to keep within the limits of a strict classification. A ship joiner may on occasion work in the building trades; a machinist may be employed by any one of a number of industries; an unskilled laborer may pass from one industry to another half a dozen times within a single year, and these interchanges create serious difficulties for those trying to establish special schemes.

Moreover, this aspect of special schemes is probably responsible to some extent for the objection raised to the whole principle of insurance by industries on the ground that any such system is unfair to certain workers and particularly to the large interchangeable fringe of unskilled laborers.

Again, it requires a considerable degree of tact, initiative, and driving power to put through a special scheme, since its establishment requires the cooperation of a large number of employers and employees, whose views and interests may differ widely. It is easier to remain quiescent and accept the terms of the general scheme. And always there is the doubt as to whether it will prove financially advantageous for an industry to accept full responsibility for its own unemployment.

Even in an industry with a low record of unemployment the advantage of the reduced contributions under a special scheme is not large, particularly to employers, in comparison with other expenses, and is made less owing to the reduced Exchequer grant payable to a special scheme. On the other side is to be set the liability of a special scheme to meet its own charges without assistance from the wider area of the general scheme. Should bad times come, this liability might be a serious burden on the limited resources of a single industry, and it would fall at a moment when the industry was least able to bear it. It seems probable that considerations of this kind may have had a good deal of weight with those who were estimating the relative advantages of a special scheme with the alternative of remaining under the general scheme.

The special scheme adopted by the insurance industry came into effect on July 4, 1921. It covers approximately 85,000 workers, 57,000 males and 28,000 females. It is administered by a joint board consisting of five employers and five employees, who hold office for two years, half of them retiring each year. The employer pays the same weekly contribution for each adult worker in his employ that is required from the employer under the general scheme, but the employee, at least for an experimental period, pays nothing.

Normally, no contribution is paid by the employee. * * * In the event of a deficiency being disclosed after the scheme has been in operation for seven years a contribution limited to one-half the current rate of contribution payable by employed persons under the general scheme may be imposed on the employees.

Benefits are on a slightly more liberal scale than under the general scheme. The periods for which they are to be paid correspond closely to those of the general scheme, but the waiting time is three days, instead of six. For the first year the receipts under the special scheme amounted to £236,382 ($1,150,353, par), benefits paid out to the unemployed were £31,651 ($154,030, par), and expenses of administration were £17,672 ($86,001, par), showing a balance on hand at the end of the year of £187,059 ($910,323, par). During the year 4,300 claims for benefit were made.

HOUSING.

Housing Situation in New York City.[1]

DURING the week beginning October 15, 1923, the New York State Housing Commission held a series of hearings in New York City to secure evidence bearing on the question of whether or not an attempt should be made to obtain an extension of the rent laws beyond February, 1924, the date now set for their termination. The hearings were crowded, and interest in the problem seemed as intense as at any earlier date. Tenants, landlords, real estate owners, social workers, building contractors, students of social problems, and public officials were all heard, and the evidence showed a wide divergence of opinion as to the actual situation, some contending that the emergency to meet which the rent laws were enacted, if it had ever existed, had now passed, while others held that it was as acute as ever. The varying and sometimes contradictory testimony seemed, however, to point to two conclusions: First, that there is now sufficient accommodation in New York for those who can afford to pay from $20 to $25 or over per room per month; and second, that for those who can not pay such rents, the situation is as bad as it was in 1920, when the rent laws were first passed. Some witnesses considered it worse.

Tenement House Commissioner Mann, testifying on October 16, gave data as to the actual vacancies in tenement apartments, as found by his department at different dates:

> Out of 956,000 apartments in 1916 there were a total of 5.61 per cent of vacancies or 51 [sic] for every thousand. In March, 1917, out of 972,910 apartments, 3.66 per cent, or approximately 37 per thousand, were vacant. In 1919, when the housing shortage was beginning to be felt more acutely there were 2.18 per cent vacancies, or 21 vacancies per thousand out of a total of 982,926 apartments. In April, 1920, there were 982,408 apartments, four vacancies to every thousand. In 1921, out of 932,930 apartments, the vacancies were only 0.15 per cent, or one and a half apartments per thousand. In March, 1923, out of 1,001,457 apartments, 0.37 per cent or four in a thousand were vacant. He pointed out that at the present time the percentage of vacancies was the same as that of 1920, despite the increased number of apartments that have been built.

As a result of this situation, he testified, people were living in old and insanitary houses which would ordinarily have become obsolete. Moreover, it was impossible to enforce the tenement house laws.

> If the tenement house department prosecuted every owner of a converted house on which violations have been placed by the department, between 25,000 and 30,000 persons would be camping in the parks and streets.

There was pretty general testimony that there had been much building in the last three years, but that it was not of a kind to meet the needs of the average wage earner. The superintendent of buildings in the Borough of the Bronx said that not a building to rent for

[1] Except where otherwise noted, the data on which this article is based are taken from the reports of the hearings given in the New York Evening Post and the New York Times for Oct. 15 to Oct. 20, 1923, inclusive.

as low as $10 a room had been put up in the Bronx for six years past. Apartments now under construction rented on the average, for about $20 per room. The head of the Tenants' Associations of Greater New York testified that with the exception of one house put up by a semiphilanthropic association, not one tenement to rent for $10 a room had been built for three years. On the other hand there was some testimony that the city was already overbuilt with apartments renting at $20 a room or over.

Professor Lindsay, of Columbia University, presented an elaborate statistical study of the whole situation, indicating that there had never been any positive evidence of real physical shortage of housing in New York City; that during the last three years and a half the increase in the number of apartments provided had outstripped the increase in the population; that rents had risen less proportionately than wages or general cost of living; and that while it is highly desirable to encourage the construction of cheap dwellings, "all possible freedom from unnecessary restrictions upon the operation of economic forces of free competition for all building construction" must be guaranteed. "Only with such encouragement to builders and investors will a sufficient surplus of housing of all classes exist to make consumers secure."[2]

The apparent discrepancy between this testimony and that of earlier witnesses disappeared when Professor Lindsay was questioned as to the exact meaning of his data.

Professor Lindsay admitted that none of the additional construction was of any benefit to the average wage earner who could pay up to $10 or $12 a room. * * * On cross-examination Mr. Lindsay admitted that an emergency existed in 1920 and further that, as it applies to the average wage earner, practically the same emergency exists to-day. He said that there were old law tenements admittedly undesirable which could be had until the economic condition improved. In this case he held it was rather a part of the poverty problem and not the rent problem and was of the opinion that State interference to the extent of housing for the poor might be justified. On cross-examination again the witness admitted that the number of old law apartments was practically nil.

There was a good deal of testimony to show that rents had risen beyond the capacity of the ordinary wage earner to pay, and that consequently there was much overcrowding, even in tenements unfit for normal occupancy. Rentals on the East Side, it was testified, had jumped from $6 and $9 to $16 and $20, and even more was charged if there were a change of tenants. The head of the Association for Improving the Condition of the Poor gave the results of a survey covering 550 families under the care of his association, having an average income of $75 a month. According to his testimony, "the average rent paid by this class of people in 1914 * * * was $9.53 a month, as against $16.13 in 1920, and $19.13 this year. The number of persons occupying a room at this time is 1.7, or about five to three rooms."

The scarcity of cheap apartments and the increases in rents seems to have told with special severity against the negro population. It was testified that in some of the Harlem districts landlords met objections to rent increases by threatening to let the apartments to negroes. If the whites remained obdurate, the threat was carried

[2]Lindsay, Samuel McCune: Some Economic Aspects of the Recent Emergency Housing Legislation in New York. New York, 1923, p. VIII.

out, the newcomers being charged materially higher rents than their predecessors. Cases were cited in which colored tenants were charged $106 a month for apartments for which whites had paid about $35. Colored tenents were frequently charged twice or three times as much as the whites who had occupied the apartments before their coming. In order to meet these charges, they were forced to resort to almost unbelievable overcrowding.

There was diversity of opinion as to what ought to be done about the condition of affairs. Tenants and social workers argued emphatically that the rent laws should be continued; the real estate interests, in general, thought that they should be allowed to lapse, or that, at most, their operation should be confined to apartments renting for less than $20 a room. Some urged that it should be made compulsory upon the State and municipalities to invest part of their sinking funds in land bank bonds, so that more money might be available for building. Senator Copeland, formerly health commissioner of New York, advised the formation of a housing commission with power to determine the kind of buildings which should be erected; he also urged the adoption of zoning and the development of a system of town planning, so that provision might be made for housing workers near the industry in which they are employed. Mr. Norman, of the Building Trades Employers' Association, suggested a rather elaborate scheme of control, to make sure that housing should not be passed over for the sake of industrial or business building.

Mr. Norman suggests that some competent body, perhaps the new State Housing Commission itself, make a survey of the labor and materials which will be available for a year's construction of all kinds in the metropolis. After calculating the number of new structures which can be provided within that period, Mr. Norman would have these facts taken up by the heads of the various money lending institutions. "If," he says, "with so many men and so much material, so many structures can be erected, the money lending officials could determine the ratio of housing to schools and commercial structures. Arriving at such a conclusion, and with the ratio of new building to be put up in the course of the year established, the conference could then agree to refuse loans on buildings beyond the percentage arrived at as a result of the survey." (New York Record and Guide, October 27, 1923, p. 518.)

The commission adjourned at the end of the week, but it is intimated that further hearings may be held in other boroughs of Greater New York.

Housing for Employees in Finland.

SOCIAL Tidskrift, Nos. 4, 6, 7, and 9, 1923, published by the Social Ministry of Finland, gives accounts of welfare work,[1] including housing, undertaken for their employees by employers in Finland, information as to which was gathered by the woman factory inspectors in the course of their regular duties. The data gathered covered the following matters: Workmen's houses; measures to better the employees' economic condition; health measures; old-age pensions and homes; education, and welfare measures for children and young people; libraries and reading rooms; gymnastics, sports, etc.

[1] For an account of employers' welfare work, see p. 191 of this issue of the MONTHLY LABOR REVIEW.

The investigation covered 150 large industrial enterprises operating 222 factories. Of the 150 industries investigated, 133 had built houses for their employees. Of a total of 57,171 workers, 18,645, or 32.6 per cent, lived in houses furnished by the employer. This figure is twice that for all industry generally,[2] showing that the large industrial undertakings have been more active than the rest of industry in meeting their employees' housing needs. Of these 150 industrial establishments, 17 had provided no dwellings for their workers, 115 had built dwellings ranging in number from 2 to 100, and 12 had provided from 100 to 200; the remaining 6 owned more than 200 dwellings each.

The inspectors reported 38 per cent of the houses as good, 42 per cent as satisfactory, 15 per cent as fair, and 5 per cent as poor.

The most common type of dwelling is the so-called "workers' barracks." The original type of barracks, which is now gradually disappearing, is a two-story building having a corridor running through, with separate rooms on each side, one room being assigned to each family. In addition to being unattractive they are dangerous in case of fire and contagious diseases, and have other hygienic disadvantages. The newer type is a one-story building having two, four, or six apartments of one room and kitchen, closet, and outbuildings. Apartments with two rooms and kitchen are also now fairly common.

Besides homes for married workers a number of establishments have built homes for their unmarried workers. These rooms, however, are not, in the majority of cases, fitted for light housekeeping, which is very inconvenient, especially for the woman workers.

One firm has built two other types of houses—two-story row houses painted white with red tile roofs, and detached two-family houses painted red with white tin roofs. The row dwellings consist of a cellar, one room (with fireplace) on the first floor, and two rooms on the second floor. In addition to the kitchen garden each tenant has the right to a plat of potato land at some distance from the dwelling. Work in the gardens is done under the supervision of a garden instructor employed by the factory management so that the place resembles the so-called garden cities.

In the two and four family houses built by another firm, each dwelling consists of one or two rooms and kitchen, with private entrance, cellar, woodshed, and other outbuildings, and a garden fenced by hedges so that in time this settlement will also take on the appearance of a garden city.

In most cases electric lights and a certain quantity of wood are furnished free. Formerly the houses also were free or were supplied as part of the wage payment, but this system is gradually being abolished in favor of the cash wage and the charging of rent, on the ground that the workers appreciate the houses more when they pay rent. Rents vary greatly, sometimes being merely a nominal sum or one sufficient to pay for the upkeep of the buildings; in other cases rates current in the community are charged. Time for giving notice is usually 14 days, or 1 month for factory workers.

[2] Of the total number of industrial workers employed in 1920-21 only 15.7 per cent lived in dwellings provided by the employers.

In building workmen's homes the importance of garden land is stressed both because of economic advantages as well as the effect on the workers' physical well-being. Many establishments are fixing their attention on this matter, some employing garden instructors whose duty it is, in addition to giving instruction, to arrange for lectures, exhibits, premiums, etc., to promote interest in gardens. It is stated that colony gardens are found in other countries but not to any extent in Finland, but that they are to be recommended especially for factories in the large cities.

In an investigation begun by Socialstyrelsen covering all industries it was found that at the beginning of 1921 there were 13,715 dwellings provided by Finnish employers for their employees. Of these 51 per cent were one-room dwellings, as a rule a kitchen or room with a fireplace, but in a number of industrial enterprises the dwelling consists of one room and a share in a common kitchen. About 42 per cent of the dwellings have two rooms, usually one room and a kitchen; occasionally dwellings of two rooms and a common kitchen or two rooms without kitchen are found. Only 5 per cent of the dwellings have three rooms. Very few have four or more rooms; these are seldom occupied by workers, being usually reserved for foremen or superintendents.

INDUSTRIAL ACCIDENTS AND HYGIENE.

Electrical Code of Wisconsin.[1]

SINCE September 13, 1922, there has been in force in the State of Wisconsin an electrical code formulated under the auspices of the industrial commission and the railroad commission of the State. The code was prepared by a representative advisory committee, assisted by a number of technical experts. Work on the code was begun in December, 1919, and continued until May, 1922.

The introduction states that the code is based on the two national codes, viz, the national electrical code of the National Board of Fire Underwriters and the national electrical safety code of the United States Bureau of Standards. Its scope is indicated by this statement found on the first page: "Requirements for all electrical and signal equipment of places of employment, public buildings, private buildings, and overhead and underground electrical supply and signal lines, now or hereafter installed."

The code consists of an introduction and the following special parts: Part 1, dealing with supply stations, substations, and equipment; part 2, with supply and signal lines; part 3, with utilization equipment; and part 4, with safety measures to be observed in operation of equipment and lines. Parts 1, 2, and 4 are enforced by the railroad commission and part 3 by the industrial commission.

It is not possible here to comment on any of the details of the code, but attention is called to the fact that the State of Wisconsin has deemed it desirable to consolidate into a single document the provisions of the two national codes on which its code is founded.

It may be confidently stated that any State or municipality wishing to have a workable manual for the control of its electrical installations will be obliged to make a similar consolidation. Why do not the proponents of the national codes formulate such a combined code? If other jurisdictions follow the example of Wisconsin, there will be the inevitable confusion attendant on the local preparation of such codes.

Industrial Placement of Heart Patients.

AN ARTICLE on "Placing cardiac patients in regular industries," by Mrs. John S. Sheppard, is published in the Journal of Industrial Hygiene, October, 1923 (pp. 189–204). The work of the Employment Bureau for the Handicapped in New York City especially in reference to the placement of heart patients, is reviewed in this article and a list is given of industries and occupations in which heart patients have been successfully placed. This list is

[1] Wisconsin. Industrial Commission and Railroad Commission. Wisconsin State electrical code. Madison, 1922. 283 pp. First edition.

classified according to the degree of heart impairment which will permit a person to engage in any particular occupation.

As a result of the recognition in recent years by physicians of the value not only of the work but of participation by heart patients in a gainful occupation in regular industry, much constructive work for such patients has been accomplished. In 1912 a report made by a committee appointed by the New York conference on hospital social service made the following suggestion: "That, inasmuch as cardiac cases need a protracted convalescence upon discharge from the hospital, this convalescent period of several months would provide an ideal opportunity for a study of the patient's capacity and adaptability, both physical and mental, and for the selection and teaching of a trade suitable both to his intelligence and to his physical handicap." As a result of this suggestion a convalescent home for heart patients was established in 1913 where industrial training for those with heart impairment was instituted. The men were trained in making flower pots, sun dials, fountains, and all kinds of garden furniture from cement. Later this enterprise was incorporated as the Trade School for Cardiac Convalescents.

In January, 1913, a workshop was established in New York City in which men who had been trained in this school were employed under ideal conditions. The men were carefully supervised, being given a weekly medical examination, and in practically every case the work was said to have had a beneficial effect upon the patient. This school was forced to close in 1916 as a result of the unsettled social and economic conditions resulting from the war, but the experience was sufficient to establish certain conclusions. Marked contrast was shown between the progress of those patients in the convalescent home before training was established and those later ones who had the benefit of work as an occupation. In the first annual report of the institution it was said, "The patient gets a motive, a reason for forgetting himself, a future to look forward to, and a ground for self respect."

The experience of the trade school appeared to show that in many cases the patients do not need a long period of convalescence, but can begin work suited to their capabilities either after a short convalescence or immediately upon leaving the hospital. It was shown, too, that in occupations which do not overtax the strength of the patients, they can work under the piecework system without danger to their health, proving that heart patients have a greater work tolerance than was formerly considered to be the case.

Although this experiment was not of sufficiently long duration to show whether or not such a workshop could be self supporting, it hardly seems probable that it could, the writer says, because special workshops and factories cost too much for the small number of heart patients who can not work in occupations in regular industries which are suited to their condition. The number of patients who can not be so placed is becoming smaller as the selection of industries improves and as patients are more carefully classified in regard to work tolerance by the physician who sends them to the placement worker.

The Hospital Social Service Association took up the problem of employment for heart patients in 1918 in connection with the general problem of employment for all physically handicapped persons and

their placement was undertaken by the Employment Bureau for the Handicapped, which was opened in April, 1918. In this connection the writer calls attention to the fact that a large general employment bureau for the handicapped can do more for special groups than can bureaus organized only to deal with such groups. "The larger the number and the more diversified the group of applicants for work, the more chance the employer has of finding the person that he wants for the job and consequently the more frequently he will apply to that employment bureau for workers. Also, the larger the number and the more diversified the industries with which the placement worker is in touch, the more kinds of work she can try out and the more new openings she finds for work which may be well adapted to special types of handicaps. The work becomes better known to employers in general, and the enlarged field of industries makes better placements possible."

The Employment Bureau for the Handicapped placed 5,304 persons from the time it was established up to November 1, 1922, of whom 1,039 were heart patients. The value of this work to the individuals and to the community is shown by the fact that in one month the wages amounted to approximately $11,660, while in the same month it cost less than $500 to run the bureau. An employment bureau for the handicapped can not be run on the same lines as a commercial bureau, as the majority of the applicants would not come there if a fee were charged. Most of these persons have lost the desire to work and one of the most important duties of those managing such a bureau is to persuade them to try. Employers, too, can not be expected to pay for being supplied with men who are physically handicapped and about whose usefulness there is some question—a usefulness which must frequently be demonstrated to the employer. Placement of handicapped persons, therefore, requires expert knowledge on the part of the placement officer and takes so much time that it would not pay as a commercial enterprise, so that it is evident that such work must be supported by people who realize its value or it must be maintained by the State.

The average cost of placements made by the bureau in 1922 was $3.31 for each case, showing that such a service will not become a great burden on the community and that its cost compared with that of establishing and carrying on special industries for the handicapped is inconsiderable.

A survey of the industries considered suitable for handicapped persons generally was made after the establishment of the bureau and a list was drawn up after consultation with the industrial experts of some of the life insurance companies. The factories to which the patients were to be sent were examined and the cooperation of the employers secured. Special attention was paid to finding suitable work for heart patients, since the result of overstrain is so easily disastrous to them.

It is estimated, the article states, that there are more than 2,000,000 persons in the United States who have heart disease. Rejections on this account by draft boards during the war amounted to 42.3 men out of every thousand, and these men were in the age group from which the greatest work output is expected, so that their inability to take their places in industry is a great economic loss.

The proper placement of handicapped persons of any type is difficult, but owing to the marked functional disturbance in heart disease which causes a highly nervous condition, heart cases are especially difficult to handle and these patients who come to the bureau for placement have frequently had a long illness and have lost the habit of work.

The assistance of the hospital social service worker who refers the patient to the bureau can be made effective by sending a dependable classification as to work tolerance and instructing the patient in regard to the importance of accepting work suited to his handicap, even if it involves taking lower wages than he has been receiving, while the importance of reporting for work when he has promised to commence work at a definite time can also be stressed by the social worker. Although the situation has improved, a dependable classification as to work tolerance is essential, and at the present time there is great difference in the tests by which patients are classified. The classification used is that of the Association for the Prevention and Relief of Heart Disease, which divides heart patients into five classes according to the degree of disability. Class I consists of patients with organic heart disease who are able to carry on habitual physical activity but who should return for examination every three months. Class II is divided into two grades, in the first of which there is slightly diminished activity necessitating their return to the clinic every month so that the effect of the work can be watched, and in the second of which there is greatly diminished physical activity. The patients in the latter grade furnish the greatest problem since they need very carefully selected industries and should report to the clinic frequently for observation. Class III includes patients who are unequal to any physical activity. These patients are sometimes able to work, but should not be placed without warning being given to the employer of the danger of sudden death. The records of the bureau, however, show only two cases of sudden deaths of patients while at work, and one of these was an elderly man doing clerical work. Classes IV and V are possible and potential cases of heart disease. Class IV covers cases in which there are doubtful murmurs which can not, however, be clearly diagnosed as organic heart disease, while patients in Class V have some predisposing history. Neither of these classes presents a real problem although they should be carefully placed.

The occupations of heart patients should never require the maximum exertion they are able to give and as far as possible should follow the lines of the former employment in order to minimize the discouragement incidental to giving up a former occupation. Noise and dust are no worse for heart patients than for any nervous persons. Patients in the first group of Class II can work eight hours standing, but those in the second group should not have to climb stairs nor do any stooping or lifting, and their work should be near home, as a long trip to and from work adds too much strain. This class is the most difficult for which to find suitable work, although the writer states that every year of experience in the bureau shows that the lives of very few patients in this class are shortened by work if it is carefully supervised.

In general, employers are said to have cooperated well with the bureau in its work. During the first three years of the existance of the bureau the shortage of labor made it easy to find work for handicapped persons, but during the subsequent period of unemployment, when it was difficult for normal persons to find work, it was particularly difficult for the handicapped. However, in spite of this fact, in 1921 the bureau placed 1,128 out of 8,398 applicants and in 1922, 1,717 out of 4,789 applicants.

In order to secure the full measure of usefulness of such a service the writer emphasizes the importance of not asking the employer to take patients as a charity, but of selecting occupations in which the heart patients can give full labor for a full wage. Some employers have not wished to employ heart patients because of the added risk of a serious outcome in the case of accident to a person having heart disease. This, however, has not proved a formidable obstacle, and the bureau has had no complaints from employers about trouble under the workmen's compensation act with patients placed by it.

The effect of regular work on heart patients has, in general, been found to be excellent. In 1920 a study of the effects of the employment on 123 heart patients showed that in six months the condition of 90 had improved, 30 had remained stationary, 2 had been lost sight of, and only 1 had grown worse. Another study covering 69 men, some of whom had not worked for months or years, showed 64 placed in new positions and 1 in his former job. At the end of the year 59 were still at work. Ten of these patients had been back in hospitals for short periods with heart attacks, 14 others had heart treatments, and the 1 elderly man mentioned before died suddenly while at clerical work.

In conclusion, the writer says that if the report seems to err on the side of being too optimistic, it can be stated that the results in the placing of heart patients have more than justified the efforts made for them, and that a much greater work tolerance has been shown by them than was believed possible at the outset. The success which has already been achieved may also be expected to make the work easier, since much of the trouble with heart patients is due to their bad mental attitude and neurasthenia, and that as an increasing number is shown to be capable of taking places in regular industries the attitude of both the patients and the public may be expected to change to a more hopeful and helpful point of view.

Industrial Accidents in the Rubber Industry, First Half of 1923.

THE National Safety News for November, 1923, contains (p. 40) the industrial accident record for the first half of the year 1923 of certain firms in the rubber industry reporting their experience to the National Safety Council. The number of firms so reporting was 15, having 65,080, 1,000-hour exposure. The number of accidents occurring in these establishments during the six months' period was 2,332, of which 7 resulted in death, 1 in permanent total disability, 52 in permanent partial disability, 547 in temporary disability of over two weeks, 417 in temporary disability of over one to two

weeks, and 1,308 in temporary disability of one week and under. The frequency rate for these establishments was 35.83 per 1,000,000 hours worked, while the severity rate per 1,000 hours worked was 1.50. The frequency rate for the two and one-half years' experience ending June 30, 1923, was 33.02, while the severity rate for the same period was 1.04.

Estimated Annual Number and Cost of Industrial Accidents in the United States—A Correction.

IN THE article on the "Estimated annual number and cost of industrial accidents in the United States," published in the November, 1923, issue of the MONTHLY LABOR REVIEW, the figures shown in the sixth line on page 9 should read 227,169,970 and $1,022,264,866, instead of 227,356,541 and $1,023,104,435.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE.

Recommendations of American Federation of Labor.

THE 1922 convention of the American Federation of Labor held at Cincinnati, Ohio, authorized the appointment of a committee to inquire into the present status of workmen's compensation and employers' liability laws. Acting in conformity with the authority thus conferred upon him, President Samuel Gompers, with the approval of the executive council, appointed William Green, Frank Duffy, and Matthew Woll to serve in this capacity. The following report of this special committee was submitted to the federation at its 1923 convention held in Portland, Oreg.[1]

Complying with instructions given by the executive council of the American Federation of Labor, predicated on the authorization delegated to it by the Cincinnati convention of the American Federation of Labor, your committee so selected was especially charged to inquire into the following subjects:

(*a*) The activities of insurance companies in preventing the establishment of State insurance funds to carry the risks arising out of industrial employment.

(*b*) Differences arising out of conflicting interpretations and constructions of laws of State and Federal Governments.

(*c*) Activities of employers in adopting and enforcing limits of age and standards of physical employment to lessen risks arising out of industrial employment and using workmen's compensation laws as a pretext to do this.

(*d*) The wide difference in the administrative features, scheduled benefits, and other allowances and provisions contained in the various State laws.

We have endeavored to perform the work assigned us by making diligent inquiry, through all means available, into the very important subject matter referred to us for inquiry and investigation. We respectfully submit the following report:

(*a*) *The activities of insurance companies in preventing the establishment of State insurance funds to carry the risks arising out of industrial employment.*

Workmen's compensation legislation is based upon the fixed principle that employers must be required to furnish adequate security guaranteeing the payment of compensation, as provided in the statutes, to injured workmen and the dependents of killed employees. Exclusive State insurance, mutual companies, private stock companies, and self-insurance are the commonly accepted forms of insurance employed as security in the payment of workmen's compensation schedules of benefits. All but three States (Alabama, Arizona, and Kansas) require the employer to secure his compensation payments either by insuring his risks in an authorized private insurance carrier or in a State fund where such fund is provided or, in the case of self-insurers, to deposit bonds or other collateral security and to furnish a financial statement showing assets and liabilities. Thirty-two States permit insurance in private carriers. Seven States have an exclusive State insurance fund in which the fund becomes the sole insurance carrier, no private company being allowed to operate. Nine States have a competitive State insurance fund in which the fund operates in competition with other forms of insurance. Of the 42 compensation States, 12 are compulsory and 30 are elective. Many of the States enacted elective laws to overcome constitutional difficulties.

Unquestionably private insurance companies are opposed to the establishment of State insurance funds. This is particularly true where the statutes creating State in-

[1] American Federation of Labor. Executive Council. Report to the forty-third annual convention, pp. 63–66.

surance funds are supplemented by the enactment of legislation which excludes private insurance companies from participation in the sale of workmen's compensation insurance. The private companies are active in their opposition to workmen's compensation State insurance fund legislation. They are powerfully organized and naturally seek to retain for themselves the business of selling workmen's compensation insurance. It is a question of business and profit to the liability insurance companies.

As evidence of the power and influence of private insurance companies in the enactment of workmen's compensation legislation, only in 7 States have exclusive State insurance funds been created by law, no private companies being allowed to operate, while in 32 States employers are permitted to insure with private carriers.

Summarizing the situation which our inquiry disclosed, the private insurance companies are engaged in the work of preventing the enactment of exclusive State insurance workmen's compensation legislation. Their agents work both openly and secretly, as circumstances may require. They attempt to deceive the unwary and unthinking representatives of labor by misrepresentation and through insidious propaganda. Stories attacking the solvency of exclusive State insurance funds are surreptitiously circulated and criticism of the schedules provided in the laws are made by agents of the private companies. In some instances they succeed in preventing the passage of exclusive State insurance workmen's compensation legislation by encouraging labor representatives to oppose the enactment of such legislation because the legislation proposed does not carry with it the ideals and full demands of labor. They create opposition to this form of legislation, among labor representatives, not because of the exclusive State insurance fund feature but because, in some inconsequential minor way the bill proposed does not measure up to the demands of labor. By this policy the agents of private companies have succeeded in preventing the passage of exclusive State insurance workmen's compensation legislation in some States.

The United States Department of Labor made an investigation into the subject of workmen's compensation insurance. It reported and commented upon the relative types of insurance as follows:

"There has been much discussion as to the relative merits of different types of insurance. The Department of Labor recently completed an investigation upon the subject. The result of this investigation showed that the State funds could operate cheaper than either the mutual or stock companies. In fact, the average exclusive State funds can do business about 25 to 30 per cent cheaper than the average private stock company. There is considerable variation in the quality of service furnished by the several States funds. However, comparing the State funds as a whole with the private companies as a whole it was found that the State fund furnished slightly better service than the private companies. As regards security State funds are on a par in this respect with private carriers. Thus far no injured workman has lost his compensation because of the insolvency of State funds nor has any large mutual company become insolvent. On the other hand there have been several disastrous failures of private stock companies during the last three or four years. These failures have resulted in hundreds of thousands of dollars in unpaid claims."

(b) Differences arising out of conflicting interpretations and constructions of laws of State and Federal Governments.

It does not appear, from such information as we were able to secure, that any serious differences have arisen out of conflicting interpretations and constructions of law defining State from Federal Governments. No controversies of any serious consequence have arisen with regard to persons employed upon railroads and pipe lines, but some differences have arisen affecting those employed in maritime work. This prevails in California, Oregon, and some other Pacific and Atlantic Coast States where persons are employed in maritime labor connected with the ocean-going and coastwise trade.

State workmen's compensation laws can be made to apply only to employers and employees engaged in private industry and interstate commerce. Legislation of this character can not be made to apply to persons employed on railroads and transportation lines engaged in interstate commerce. The higher courts have held, in decisions made sustaining the constitutionality of workmen's compensation legislation, that the States have a legal right to enact workmen's compensation legislation, and that the States may make such legislation compulsory in its application to private industries located in and coming within the jurisdiction of the respective States. However, the courts have held, in construing the interstate commerce section of the constitution of the United States, that persons employed by common carriers, engaged

in transporting interstate commerce can not come within the scope of or become subject to the operation of the State workmen's compensation laws.

Obviously, the remedy for this State of affairs is the enactment of a Federal workmen's compensation law applicable to those persons engaged in interstate commerce and who come wholly within the Federal jurisdiction.

We believe such legislation should define clearly the class of employers and employees who are subject thereto and should be similar to the Ohio workmen's compensation law which the American Federation of Labor has officially accepted as the standard act in this character and kind of legislation.

(c) *Activities of employers in adopting and enforcing limits of age and standards of physical employment to lessen risks arising out of industrial employment and using workmen's compensation laws as a pretext to do this.*

Our investigation discloses the fact that employers in some industries establish age limits and require physical examination on the part of persons seeking employment. This practice, however, is not generally followed by employers of labor. Age limits and physical examination are required of those seeking employment upon railroads and in some rubber factories, electrical manufacturing plants and in other miscellaneous trades and callings. While these requirements may be set up in order to reduce risks arising out of industrial employment and using workmen's compensation laws as a pretext to do it, there is no evidence which we could find in support of it.

The practice itself seems to be followed as a matter of policy rather than to accomplish a purpose. It was put into effect in some industries before the enactment of workmen's compensation legislation. It would no doubt be carried on if there were no workmen's compensation legislation in effect.

In our opinion the only effective safeguard upon which the worker may rely as protection against injustice and discrimination growing out of age limit and physical examination, as followed by some employers is thorough and effective organization. Imposition of wrong and injustice by selfish employers can be successfully resisted in industries, factories and establishments where the workers are thoroughly organized.

(d) *The wide difference in the administrative features, scheduled benefits, and other allowances and provisions contained in the various State laws.*

Our investigations into the principal provisions of existing State compensation laws has disclosed the fact that there is a wide variation in these essential provisions of compensation legislation. The principal provisions requiring attention may be said to include:

1. The scope or coverage of existing laws.
2. Injuries embraced.
3. Waiting period involved.
4. Medical service provided.
5. Percentage rate of compensation fixed.
6. Weekly maximum and minimum compensation requirements.
7. Compensation periods embraced.
8. Second injuries included.
9. Administrations.
10. Accident prevention.
11. Suits for damages.
12. Compulsory or elective compensation.
13. Insurance and other like features.

It must be self-evident that a thorough inquiry into all these provisions and the formulation of concrete proposals suitable to all States and uniform in character involves a large task, requiring the utmost care and most intelligent consideration possible.

Your committee has made substantial progress in this work. However, the work done has not been advanced sufficiently to enable us to present a complete and comprehensive report at this time. Instead, it is recommended that the investigation made, compilation undertaken, and formulation of a standard model workmen's compensation law at present under consideration, be continued by this or a like committee, with the understanding that the committee's final report be submitted to the executive council of the American Federation of Labor, and that the executive council be authorized to pass final judgment upon this report and publish and distribute it in pamphlet form and in such other manner as may be deemed most helpful, desirable, and advisable by the executive council.

Pending the final report of this committee and the conclusions reached by the executive council, it is recommended that the Ohio workmen's compensation law continue as the model law on this subject.

The executive council recommended favorable action upon the several conclusions contained in the committee's report including authorization to complete the work undertaken in the manner indicated and recommended by the committee.

The recommendations of this special committee, as presented in the report of the executive council, were considerably modified by the committee on the executive council's report. The report of this latter committee was presented to the convention and was approved by both the executive council and the federation. The committee's report in so far as it relates to workmen's compensation is as follows:[2]

In the executive council's report, pages 63 to 66, inclusive, under the caption "Workmen's compensation law," is presented a partial report of the committee appointed in conformity with the authority given by the Cincinnati convention to the executive council to make inquiry into the present status of workmen's compensation and employers' liability laws.

This committee has made a very careful inquiry covering a broad area of the subject, whose scope is such that it can not be completely treated in a single report.

The committee emphasizes a point which is apparent to all who have studied the subject, that is, that private insurance companies have interfered with and seriously retarded progress in the field of workmen's compensation and employers' liability laws. The opposition to State insurance funds, on the part of private insurance, is easily understood because wherever a State insurance fund is well established profits that are enjoyed by the private insurance companies are cut off from them and remain in the possession of the State, and thereby tend to reduce to that extent at least the cost to the employers of the maintenance of the fund required to take care of the victims of industrial mishaps.

The solution for this serious phase of the general question, that readily suggests itself, is the rigid exclusion from the field of the private insurance company. Before this remedy can be effectively applied there must be a more general dissemination of information concerning the exact nature of the work that is undertaken by the State in the establishment of the insurance fund.

Experience has shown that the workmen as well as the employers are not willing to entirely forego certain of their natural rights even though it be made plain that by doing so and accepting the conditions of a properly safeguarded compensation law, with the accompanying State insurance fund, they really are accepting an advantage to themselves. The impersonal character of the State insurance is a guaranty to both employer and employed of justice rather than the unavoidable suspicion that attaches to transactions controlled by a privately managed concern that frankly exists solely for the profits that arise from the business it transacts.

When those who are most vitally interested in this tremendously important feature of our modern industrial life come to realize that their interests are identical, and to trust one another in this as they do in other matters pertaining to their relations, and will accept the operations of an agency that is within their own control, because it is set up by a law which they have helped to make, and not allow themselves to be pulled apart by ambulance-chasing lawyers and profit-seeking insurance agents, the true benefits of the workmen's compensation law will become apparent to all. The mutual distrust which has been created by interested persons or agencies for selfish purposes must be dispelled and for it must be substituted a confidence resting on the mutual understanding of the parties most directly concerned.

Your committee listened carefully and with interest to statements made before it by delegates and others who are interested in the general subject dealt with in the report. We feel that this is one of the most important subjects now being dealt with by organized labor bodies, by welfare groups, State boards, legislatures, and the courts. The literature on the subject is increasing rapidly as experience determines the need for modification or extension, or the abandonment and substitution of new for existing practices.

[2] Report of proceedings of forty-third annual convention of the American Federation of Labor, pp. 309–310.

While the committee reporting to the executive council in its concluding paragraph says:

"Pending the final report of this committee and the conclusions reached by the executive council, it is recommended that the Ohio workmen's compensation law continue as the model law on this subject," we do not understand that the committee, so reporting, intends to convey the impression that the Ohio law is a perfect law, but it is so referred to because of the very many valuable features which it contains and which features have stood the test of the courts and have proven their worth, that the law as a whole is suggested to those groups who have not as yet formulated a measure to cover the points.

Your committee would recommend that, in addition to the suggestion contained in the Ohio law, the following eight points be given full weight in the preparation of any compensation law or amendments to same:

1. Employees in all occupations to be protected.
2. Work accidents and occupational injuries and diseases to be compensated.
3. Benefits to be provided only by State insurance funds.
4. Such surgical care, hospital service, orthopedic appliances, and artificial limbs as may be necessary to as complete physical restoration as is possible.
5. Compensation for widows for life or until remarriage.
6. Compensation for life for permanent and total disability.
7. No waiting period.
8. Vocational rehabilitation.

The executive council in presenting the report of its special committee concludes:

"Having given careful attention to the foregoing report, the executive council recommends favorable action on the several conclusions contained therein, including authorization to complete the work undertaken, and in the manner undertaken, and recommended in the committee's report."

We recommend concurrence in and approval of the report and the recommendations.

The recommendation of the committee was adopted.

Report of Industrial Board of Indiana.

THE report of the Industrial Board of Indiana for the year ending September 30, 1922, reviews the experience under the compensation law. There were reported to the board during the year 38,604 accidents, which is an increase of 4,235 over the number reported the previous year. Of these accidents 198 were fatal and 609 resulted in the loss of some member of the body. The number of agreements approved was 18,416 and the number of awards was 1,405. The amount of compensation paid in closed cases amounted to $2,356,056.

Results of Damage Suits Under Ohio Workmen's Compensation Law.

A PROVISION of the Ohio workmen's compensation act allows the injured employee to sue for damages in lieu of accepting the compensation benefits if the injury arises from the failure of the employer to comply with any lawful requirement for the protection of the lives, health, and safety of employees. There has been considerable criticism of this section of the law but it has been impossible to eliminate this provision without a constitutional amendment.

A recent study of the results of damage suits brought by employees under this provision of the compensation act has been made by Mr. Emile E. Watson, consulting actuary and former actuary of the Ohio Industrial Commission. The following tabular statement shows

what the claimants have received as damages and what they would have received had they accepted the compensation benefits.

RESULTS OF DAMAGE SUITS BROUGHT UNDER OHIO WORKMEN'S COMPENSATION LAW.

Item.	Total.	Average.
Number of cases	58	
Amount for which suits were brought	$1,710,630	$29,494
Amount of final settlement	174,480	3,008
Amount of claimants' attorney fees and court costs	61,068	1,053
Net amount received by claimants	113,412	1,955
Amount receivable had claimants accepted compensation benefits	163,563	2,820
Amount of employers' attorney fees and court costs	41,875	722
Cost to employers of settlements plus attorney and court costs	216,355	3,730

The average delay in receiving settlements through the courts was two years and five months.

It will be noted that the claimants who sued for damages actually received, on the average, over 30 per cent less than they would have received as compensation, while it cost the employers 32 per cent more. A constitutional amendment providing for the elimination of this provision of the constitution was submitted to the people of the State November 6, 1923, and was adopted by a vote of 581,907 for and 514.120 against the amendment.

Invalidity Insurance in Denmark.[1]

THE Invalidity Insurance Fund of Denmark receives and examines requests for invalidity pensions, pays the pensions, and attends to other administrative matters. It can not, however, decide as to whether or not invalidity exists; this is a function of the Invalidity Insurance Court, which court, to a certain extent, also acts as a court of appeals on decisions made by the fund. This court was established by Act No. 253 of May 6, 1921,[2] and consists of a president and five other members. The act became effective October 1, 1921, but according to its provisions the court could be appointed and function before that time and this was done when the Ministry of Interior issued its instructions of August 22, 1921.

When the invalidity fund has examined a request for pensions and decides that requirements have been met with respect to membership in a sick fund, paid-up premiums, citizenship and other matters, the request is forwarded to the Invalidity Insurance Court for a decision as to whether invalidity exists as understood by the law, i. e., earning capacity reduced to one-third or less, and whether it is temporary or permanent. The first report of the court states that according to the law it is the earning ability and not the actual earnings which is the determining factor but that it does not necessarily follow that actual earnings are not considered. The law stresses not special occupational earning ability but the general ability to work. Only such

[1] Data are from: Denmark, Invalideforsikringsretten, 1ste Aarsberetning, 1. Oktober, 1921 to 31. December, 1922, Copenhagen, 1923; and Social Forsorg No. 5, Copenhagen, 1923.
[2] See MONTHLY LABOR REVIEW, January, 1922, pp. 198, 199.

sickness as seems to involve a lasting reduction of earning ability to one-third or less is considered invalidity as understood in the law of May 6, 1921.

Decisions of the court are final and may be changed, even by the court itself, only in certain instances and by permission of the Ministry of Interior.

Persons with invalidity insurance at the end of the year numbered 1,298,100, of whom 1,128,300 paid annually the lowest premium, 5.40 kroner ($1.45, par), 26,200 paid increased premium, and 143,600 were exempt from paying premiums. The income of the invalidity insurance fund for the fiscal year was 7,785,400 kroner ($2,086,487, par), of which 7,402,400 kroner ($1,983,843, par) represents premiums from persons insured and 179,100 kroner ($47,999, par) contributions from the employers. This last amount is small because the insurance companies settle accounts with the invalidity funds at the end of the fiscal year so that the contributions paid to the companies during 1922 will not be turned over to the fund until 1923. The fund's expenditures amounted to 3,803,300 kroner ($1,019,284, par), of which invalidity pensions amounted to 3,345,300 kroner ($896,540, par). The fund's cash balance on December 31, 1922, was 3,982,100 kroner ($1,056,203, par) of which the fund had 237,700 kroner ($63,704, par) while the authorized sick funds have 3,555,500 kroner ($952,874, par).

From October 1, 1921, to December 31, 1922, the fund received 14,270 requests for invalidity pensions. Taking the country as a whole, 109 out of every 10,000 insured against invalidity sent in a request for pension. Of the applicants, 6,405 were men and 7,865 were women. Of the requests, 150 were rejected by the fund either because the applicant was over 62 years of age, or was not a Danish citizen, or had not been a member of a sick fund for one year, or because he was not entitled to membership in a sick fund.

In the period from October 1, 1921, to December 31, 1922, the Invalidity Insurance Fund forwarded to the Invalidity Insurance Court 11,010 claims, 5,093 of which were finished by the court by the end of 1922, while 5,917 were still under consideration; 11 terminated before a decision was reached. In the same period the Invalidity Insurance Court held 87 meetings; in the 5,236 cases brought before it for a decision, 154 decisions were postponed pending further information or for similar reasons, and a decision was rendered in 5,082 cases. In this same period of the cases in which a decision was reached, 789 (15.5 per cent) were disallowed, 675 (13.3 per cent) were adjudged temporary invalidity, and 3,618 (71.2 per cent) permanent invalidity.

Tuberculosis caused 754, or 15 per cent, of the 5,082 cases; diseases of the brain, spine, and nerves caused 707, or 14 per cent; chronic poisoning and infection 682, or 13 per cent; insanity, etc., 419, or 8 per cent; blindness, etc., 403, or 8 per cent; and old age, etc., 406, or 8 per cent.

Extension of French Workmen's Compensation Law to Domestic Service.[1]

A FRENCH law of August 2, 1923, extends the provisions of the workmen's compensation act of April 9, 1898, articles, 2, 3, and 6 of the law of April 12, 1906, and the law of December 30, 1922, to cover domestic servants, chauffeurs, governesses, porters (*concierges*), and all persons connected with household service.

The law provides that compensation payments shall be based solely on the wages and payments in kind directly paid by the employer in execution of the contract and shall exclude all other money received by the employee. At the same time all incidental and usual payments uniting to form the real remuneration, such as gifts on New Year's Day or other special days, should be added to the basic wage for the calculation of the compensation in case of permanent incapacity or death.

The law is to become effective six months from the date of publication and it is applicable to Algeria subject to the modifications upon metropolitan legislation relating to labor accidents of the law of September 25, 1919.

According to the provisions of the original act [2] the compensation payments amount to 66⅔ per cent of the annual wages for total disability and 50 per cent of the daily wages, beginning with the fifth day, for temporary disability, while in the case of death funeral expenses, not to exceed a certain sum, and annuities of varying amounts are payable to the dependent heirs. Costs of medical and urgical treatment are also payable by the employer.

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[1] France. Bulletin du Ministère du Travail, July-Aug.-Sept., 1923, p. 73*.

[2] See U. S. Bureau of Labor Statistics Bul. No. 203: Workmen's compensation laws of the United States and foreign countries, p. 315.

LABOR LAWS AND COURT DECISIONS.

Amendment of the German Home Work Law.[1]

THE German home work law of 1911 has been amended in a very important respect by a law enacted on June 27, 1923. The text of the law as amended was promulgated on June 30, 1923 (Reichsgesetzblatt I, p. 472). The amending law introduces in Germany for the first time a system whereby minimum wage rates may be fixed for home industries. The law of 1911 contained provisions of various kinds for the protection of home workers, dealing, for instance, with hygiene, child labor, and the posting of the rates for particular kinds of home work. The law also authorized the establishment by the Federal Council[2] or certain State authorities of trade committees (*Fachausschüsse*) for particular home industries, consisting of an equal number of representatives of home workers and their employers, with three independent members, one of these being the chairman. An attempt was made, when the law of 1911 was under consideration, to give these committees power to fix minimum wage rates in their trades, but this proposal was defeated and the committees were left merely with power to investigate the conditions of home work, to advise the authorities on matters concerning home work, to cooperate in any measures for improving the conditions of home work, and to encourage the voluntary conclusion of collective agreements fixing rates of pay for home workers.

The amendment now gives the committees power to fix minimum rates (art. 20) and brings German legislation into line with the home work laws of Austria, Czechoslovakia, and Norway. The new law still seems to regard the conclusion of collective agreements between groups of home workers and their employers as the ideal. When a trade committee comes to the conclusion that the wages of home workers are "obviously insufficient," it must first attempt to bring about a voluntary agreement for an improvement in the rates. If this fails the committee may resolve that any existing collective agreement, even if such agreement covers only a small part of the workers, shall be generally binding (art. 31), or, in the absence of any suitable agreement it may proceed to fix minimum wage rates on its own initiative (art. 32). As the committees are normally appointed for specified districts only, provision is made for the convocation of joint committees (*Gesamtfachausschüsse*), as occasion arises, to act for several districts together, in order to prevent any tendency of home workers to migrate from one district to another owing to lack of uniformity in the operation of the law (art. 27).

[1] Germany. Reichsarbeitsverwaltung. Reichsarbeitsblatt, Berlin, July 16, 1923, pp. 451-456.
[2] Later replaced for this purpose by the Minister of Labor.

Rates of pay are to be held insufficient if they do not enable home workers working a normal number of hours to earn either the wages customary in the locality or the wages earned by persons doing the same work in other districts with similar economic conditions or the wages earned by workers doing similar work in factories and workshops in the same district (art. 20).

Whenever possible, the rates to be fixed for home work shall be piece rates. If, however, piece rates are not practicable, time rates shall be agreed upon or fixed, which shall be based on the piece rates current in the trade. Special rates shall be fixed for middlemen (*Zwischenmeister*), so as to enable them, in their turn, to pay to the home workers the minimum rates fixed for the latter (art. 29).

Decisions adopted by the votes of two-thirds of the workers' and employers' representatives on the committee and approved by the chairman and one of the independent members (*Beisitzer*) are final; in other cases the confirmation of the decision by the authorities establishing the committee is needed (art. 34). The committees may assess fines for failure to pay the minimum rates (art. 37). The committees act also as boards of conciliation and arbitration for the settlement of disputes between home workers and their employers (arts. 20 and 41).

LABOR ORGANIZATIONS AND CONVENTIONS.

Forty-third Annual Meeting of American Federation of Labor.[1]

THE forty-third annual convention of the American Federation of Labor was held in Portland, Oreg., October 1 to 12, 1923. There were 380 delegates in attendance, including the fraternal delegates representing the British Trades-Union Congress, the Canadian Trades and Labor Congress, and the National Women's Trade-Union League.

According to the American Federationist of November, 1923, the three matters standing out most prominently in the work of the convention were:

(1) The declaration of a philosophy and policy which would best advance the interests of industry and a democratic development within industry.

(2) The strong determination that the efforts toward the organization of nonunion workers should be everywhere redoubled.

(3) The decision to eliminate from the trade-union movement "the last remnants of destructive and revolutionary effort."

The report of the executive council to the convention declares: "Henceforth the organization of workers into trade-unions must mean the conscious organization of one of the most vital functional elements for enlightened participation in a democracy of industry," among the purposes of which are "the rescue of industry from chaos, profiteering, and purely individual whim, including individual incapacity, and the rescue of industry also from the domination of incompetent political bodies."

> Industry must organize for service, for constructive effort, for orderly continuity, for justice to all who participate. It must bring itself to a realization of its mission and to that end it must organize and come together in deliberative bodies where the full wisdom and experience of all may contribute to final decisions. * * * Industry must realize that it exists to give service to a nation and not to a single master or to a syndicate of stockholders.

The convention showed its interest in increasing the membership of the Federation by ordering a campaign for the organization of casual and migratory labor, by indorsing a nation-wide movement for the unionization of "white-collar employees," and by directing that a national conference be held to launch a campaign for gathering woman workers into trades-unions.

The meeting directed continued efforts to promote friendship and understanding between wage earners and farmers. A continuance of steps to effect an affiliation with the International Federation of

[1] Report of Proceedings of the 43d Annual Convention of the American Federation of Labor, Washington, 1923 (advance copy); Report of the Executive Council of the American Federation of Labor to the 43d Annual Convention, 1923; mimeographed statement from Information and Publicity Service of American Federation of Labor; and American Federationist, November, 1923.

Trade-Unions on terms satisfactory to American labor and insuring national autonomy was also directed.

A resolution in behalf of the so-called amalgamation plan and also resolutions calling for compulsory instead of voluntary action relative to the affiliation of local unions with central bodies and State federations were defeated.

The convention placed itself on record as favoring prohibition; against the granting of injunctions "in cases where no injunction would lie if no industrial dispute were in evidence;" and emphasized its position in regard to the "sanctity of contract in relations with employers." A continuation of activities "to prevent prison labor from coming into competition with free labor" was directed.

The congress recommended the assignment of one or more members of the legislative committee (when Congress is not in session) to explain and promote the cooperative movement and to furnish standard literature on the Rochdale system at cost, and that the Federation urge the establishment of cooperative bureaus for the study of the Rochdale movement. The possibilities of large financial savings to the workers through the establishment of a cooperative insurance company were pointed out and the convention authorized the federation to direct or conduct an investigation of "all forms of insurance and death benefit systems now provided by national and international unions" and "group insurance plans and other insurance features used by employers to provide insurance for their employees."

The continuation of the federation's inquiry into the present status of workmen's compensation and employers' liability legislation was favored, and amendments to the Constitution were demanded, prohibiting child labor and empowering Congress to reenact laws which the Supreme Court has declared unconstitutional.

The meeting urged that demands for a "still more efficient and extensive Department of Labor be impressively submitted to the President of the United States and to our National Congress."

The executive council was directed to request the Pan American Federation of Labor to make a survey of conditions in Venezuela and to ask the United States Government to take steps to end profiteering and reduce the cost of living. A general investigation of living and working conditions in the Philippines was also desired.

General recommendations of the convention included "a more stringent immigration policy" curtailing present quotas; the careful study of intelligence tests and the insistence on the importance of the participation of labor in the direction of the application of such tests; the expansion of the federation's information and publicity service; and the elimination of the Railway Labor Board.

According to the secretary's report the balance on hand on April 30, 1922, was $198,794.68. The total receipts for the year ending April 30, 1923, including this balance amounted to $886,675; the total expenses to $662,398.84, leaving a balance on August 31, 1923, of $224,276.16 of which $183,994.28 was in the defense fund for local trade and Federal labor unions. The average paid-up and reported membership for the fiscal year 1922 was 3,195,635 and for 1923, 2,926,468, a decrease of 269,167.

The federation's voting strength in 1923 was 30,486, which was 2,850 less than in 1922.

The following amounts were paid out in trade-union benefits mainly by international organizations:

Death benefits	$1,944,930.22
Death benefits to members' wives	135,974.50
Sick benefits	648,680.42
Traveling benefits	19,818.50
Tool insurance	319.00
Unemployment benefits	28,820.00

The above amounts represent only a small proportion of the aggregate sums paid out in trade-union benefits as numerous local unions which did not report to the federation on this matter provide such benefits for their members.

Mr. Samuel Gompers was again elected president of the federation. The secretary, Mr. Frank Morrison, and the treasurer, Mr. Daniel Tobin, for 1922–23, were also chosen to serve for another year.

It was decided to hold the next annual meeting in El Paso, Tex.

Number and Earnings of Members of International Typographical Union, 1909 to 1923.

IN THE September issue of the bulletin issued by the International Typographical Union are published (p. 30) statistics from the report (1923) of the secretary-treasurer of that organization, from which the following table is compiled showing the membership of the union and their earnings from 1909 to 1923.

The total earnings shown in the table are based on the old-age pensions and mortuary assessments, each one of which is paid at the rate of one-half of 1 per cent on the earnings of the members. Dividing the total earnings each year by the number of members recorded by the union as paying the per capita for that year gives the average annual earnings per member as shown in the last column of the table.

MEMBERSHIP AND TOTAL AND AVERAGE ANNUAL EARNINGS OF MEMBERS OF THE INTERNATIONAL TYPOGRAPHICAL UNION FOR YEARS ENDING MAY 31, 1909, TO 1923.

Year ending May 31—	Number of members.	Total earnings.	Average earnings per member.	Year ending May 31—	Number of members.	Total earnings.	Average earnings per member.
1909	44,921	$40,293,738	$897	1917	61,350	$66,652,431	$1,086
1910	47,848	45,602,944	953	1918	62,661	71,756,014	1,145
1911	51,095	49,770,668	974	1919	65,203	82,464,167	1,265
1912	53,807	53,378,902	992	1920	70,945	114,594,258	1,615
1913	55,614	56,944,486	1,023	1921	74,355	141,964,382	1,909
1914	58,537	61,050,332	1,042	1922	68,746	123,429,452	1,795
1915	59,571	61,155,285	1,027	1923	68,144	130,792,901	1,919
1916	60,231	62,711,805	1,041				

Alliance of Five Needle-Trade Unions.[1]

ON SEPTEMBER 8, 1923, the Needle Trades Workers' Alliance was formed by the Amalgamated Clothing Workers, the International Ladies' Garment Workers' Union, the United Cloth Hat and Cap Makers, the Journeymen Tailors' Union, and the International Fur Workers' Union. The purpose of the combination is "to promote solidarity, mutual aid, and cooperation among the affiliated international unions." Provision has been made for permanent headquarters in New York for the new organization which is to have a paid manager or executive secretary. The approximate membership of the five unions is 350,000. The executive council of the alliance is composed of one representative from each of the five affiliated unions. The budget must not exceed $20,000 per year. An annual conference is to be held by the organization, the president of which is Mr. Morris Sigman, who is also the president of the International Ladies' Garment Workers' Union.

Meeting of Pan American Federation of Labor, 1924.

THE Pan American Federation of Labor will hold its next convention in Mexico City in December, 1924, instead of at Guatemala, as was originally planned, according to an announcement made by the Mexican-American labor conference which was held in El Paso, Tex. The concluding sessions of the convention may be held in Guatemala if political conditions there are improved.

Annual Meeting of Canadian Trades and Labor Congress.[2]

THE Trades and Labor Congress of Canada held its thirty-ninth annual meeting in Vancouver September 10 to 14, 1923. The final report of the credential committee showed 220 delegates in attendance. Some of the important resolutions adopted at the meeting were those requesting that the Government of Ontario be petitioned to extend the workmen's compensation act so as to include all workers; that the Government of Quebec be urged to pass a compensation law similar to those in operation in the other Provinces; that the Government of British Columbia be asked to institute examinations in English for workers whose native tongue is other than English and that employers be fined for hiring such foreigners for service in plants using water, steam, gas, or electricity as motive power.

Other resolutions favored Government health insurance; the total exclusion of orientals, and laws for the more effective control of the activities of orientals now residing in the Dominion; regulations requiring "periodical medical examination of all persons employed or engaged in the preparation of food for public consumption"; and the creation of a Dominion council of action to combat war and

[1] Daily News Record, New York, Sept. 10, 1923, pp. 1, 3.
[2] Labor Gazette, Ottawa, October, 1923, pp. 1088–1102.

follow the example of the British Labor Party in its efforts to prevent war.

The executive officers of the congress for 1923–24 were instructed by resolution to use all means in their power to have enacted into law as promptly as possible "the findings of the International Labor Conference in connection with the law of nations and part 13 of the treaty of Versailles."

It was resolved, also, that the Trades and Labor Congress "continue to act as the legislative mouthpiece for organized labor in Canada, independent of any political organization engaged in an effort to send representatives of the people to parliament, the provincial legislature, or other elective bodies of this country," and it was urged that efforts be made to amend the criminal code so that peaceful picketing and persuasion in strikes may be legalized.

Among other resolutions were those requesting the Government to stop unauthorized persons from "filling the country with out-of-works," protesting against any additional persons entering Canada as farm laborers and later taking the places of Canadian citizens; calling on the Dominion Government to assume responsibility on a national scale for the unemployment situation; and reiterating a previous request of the congress for legislation for a "simplified form of incorporation of cooperative societies."

Mr. Tom Moore was reelected president. Mr. P. M. Draper is the secretary-treasurer for the coming year. The 1924 convention will be held in London, Canada.

Trade-Union Movement in Norway, 1922.[1]

AT THE end of 1922, 1,449 trade-unions were in affiliation with the Norwegian National Federation of Trade-Unions. These had a combined membership of 83,640 (4,938 being women); this represented a decrease of 12,325 members during the year. Afterwards the decrease was checked and by July, 1923, the membership had increased to 87,189. The membership decreased in all unions except three—the union of employees of the paper industry, the commune workers' union, and the stonecutters' union—which showed increases of 260, 112, and 56 members, respectively.

Collective agreements, most of which were arrived at through arbitration awards, concluded during the year numbered 360 and affected 84,952 workers. In 1922, 313,876 kroner ($84,119, par) as against 3,746,010 kroner ($1,003,931, par) in 1921 was paid out in strike benefits, 89,677 kroner ($24,033, par) of which was paid by the National Federation. The number of working days lost because of disputes was 99,932 in 1922 and 2,217,786 in 1921. Reductions in wages in 1922 affecting 78,233 workers were estimated to amount to 72,310,861 kroner ($19,379,311, par) or approximately 924 kroner ($248, par) per worker. Similar reductions in 1921 amounted to about 680 kroner ($182, par) per worker. Only 825 workers received wage increases, these amounting to 187,892 kroner ($50,355, par), or about 228 kroner ($61, par) per worker.

[1] Data are from Meddelelsesblad Christiania, September, 1923, and Sociala Meddelanden, Stockholm, No. 10, 1923.

The hours of work remained unchanged. The vacation period in several industries was reduced from 12 to 8 days. The average number of days' vacation in 1922 was 9.77 as against 10.74 in 1921.

According to reports from 22 unions and 1 directly affiliated organization with 70,922 members, the number of days lost in 1922 because of lack of work was 2,678,386, or 37.76 per member, as against about 4,000,000, or 49 days per member, in 1921. Days lost due to illness numbered 423,269; to military service, 96,697; and to other causes, 164,270; a total of 3,362,622, or 47.41 days lost per member.

For traveling and unemployment aid 26 organizations paid out 6,199,804 kroner ($1,661,547, par). In 1921 the trade-unions paid unemployment relief amounting to 12,851,064 kroner ($3,444,085, par). For medical aid and sick relief, 8 organizations paid out 550,580 kroner ($147,555, par) and for funeral benefits and insurance 27 organizations paid out 402,923 kroner ($107,983, par), and for invalidity and other aid 60,177 kroner ($16,127, par). Disbursements of all the insurance funds amounted to 7,212,889 kroner ($1,933,944, par). During the year the affiliated organizations had a total income of 13,241,777 kroner ($3,548,796, par) and expenditures amounting to 12,227,431 kroner ($3,276,952, par). Contributions to the National Federation in 1922 amounted to 1,067,194 kroner ($286,008, par).

At the congress of the National Federation in April, 1923, it was resolved that the trade-union movement, as in Sweden, should be reorganized on the basis of industrial unionism, so that all workers at a place of work always would belong to one and the same organization.

Program of Polish Federation of Trade-Unions.[1]

AN EXTRAORDINARY congress of the Polish Federation of Trade-Unions (*Zjednoczenie Zawodowe polskie*) was held at Poznan on July 29 and 30, 1923. The chief object of the congress was to draw up new rules and a program of action for the federation. Briefly summarized, the main points of the new program are the following:

(1) Strict observance of the hours of employment act (the 46-hour week in industry and commerce and a 6-hour day in occupations likely to injure the health of the workers—mines, blast furnaces, etc.).

(2) Night work and Sunday work to be reduced to a minimum.

(3) Prohibition of night work for women and young persons.

(4) Prohibition of the employment of children under 15 years of age.

(5) Enactment of legislation prohibiting mothers from working outside their own homes, this measure to be introduced gradually.

(6) Efforts to secure as high wages as possible, based on quantity and quality of output. Introduction of a method of fixing wages such as to insure that their value shall correspond to the pre-war value.

(7) Institution of a joint body to fix periodically the minimum wage required to meet the bare necessities of life, this minimum to be made compulsory everywhere.

(8) Enforcement of collective agreements and legal recognition of the right to strike.

(9) Legislation providing for the introduction of profit sharing.

[1] International Labor Office. Industrial and Labor Information, Geneva, Oct. 5, 1923, pp. 6–8. Based on information from Warsztati Rola, Aug. 4, 1923, and Presse de Poznan, July 31 and Aug. 17, 1923.

(10) Amendment and extension of existing legislation concerning trade courts and introduction of legislation for the institution of trade courts and special mining courts in every locality with a population of more than 5,000, and at least in every district.

(11) Institution of public joint employment offices; legislation concerning public employment offices and organization of joint employment offices administered by the State or the local authorities.

(12) Amendment of the workers' holidays act and extension of the right to a holiday with pay to all categories of workers.

(13) Extension of the works councils act at present in force in Upper Silesia to the whole of the country.

(14) Enactment as soon as possible of a factory inspection act which will make the factory inspection department independent of all other administrative authorities.

(15) Legislation for the protection of the life and health of the workers.

(16) Legislation for the protection of women and young persons.

(17) Introduction of health measures in all industrial and commercial undertakings.

(18) Application of labor legislation to home work.

(19) Guaranty of right of association and assembly in conformity with the Polish Constitution.

(20) Introduction of compulsory health, accident, invalidity, old-age and unemployment insurance under State control.

(21) Measures for the protection of emigrants, and for the collaboration of the trade-unions in the supervision of emigration.

(22) Codification and unification of labor legislation.

(23) Development of vocational education.

(24) Encouragement of the cooperative movement (productive and distributive cooperative societies).

(25) Introduction of a system of taxation based chiefly on direct taxes, a tax on capital and a graduated income tax.

(26) Measures for the protection of workers against abusive practices in trade employment offices.

(27) Measures for the solution of the housing problem by the construction of working class houses, which will in time become the property of the workers by a system of repayments; prolongation of the tenants' protection act in the case of all tenants earning less than five million marks per month.

Various resolutions were adopted by the congress, including a resolution concerning social insurance urging the Government and parliament—

(1) To codify, unify, and amend existing legislation concerning invalidity, old age, and other branches of social insurance, and extend such legislation to the whole of Polish territory.

(2) To take steps as soon as possible for the institution of health insurance societies in Polish territory formerly belonging to Russia.

(3) To fix pension rates so as to insure that their real value is not below the pre-war level.

Another resolution urged the Government to introduce in parliament a bill for the ratification of the draft conventions adopted at the various sessions of the International Labor Conference.

STRIKES AND LOCKOUTS.

Strikes and Lockouts in the United States, April to June, 1923.

ACCORDING to information received by the United States Bureau of Labor Statistics, 603 labor disputes resulting in strikes and lockouts occurred in this country during the second quarter of 1923, or more than double the number reported for the first quarter of 1923. Inasmuch as some reports do not reach the bureau until several months after the strikes occur, the number of strikes occurring during the second quarter was probably somewhat larger than the above figure. Complete data relative to these strikes have not been received by the bureau, and it has not been possible to verify all that have been received. The figures 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, JANUARY TO JUNE, 1922 AND 1923.

Year.	January.	February.	March.	April.	May.	June.	Month not stated.	Total.
1922	126	79	73	102	99	59	41	579
1923	65	70	106	203	234	126	58	862

As respects number of strikers involved, the most important strikes occurring during the quarter included the following: That of 50,000 workers in some 2,000 shops of the clothing industry of New York City, during May, for a 10 per cent wage increase; that of 5,000 clothing workers in Philadelphia in June for a wage increase of $5 per week; the strike of 5,000 shoe workers in Lynn during April for a wage increase of 30 per cent; the strike in May, of about 5,000 coal miners in 40 mines of Hopkins County, Ky., over renewal of contract; that of about 5,000 bakers for the Ward Baking Co., on May 1, against the open shop in various plants of the company located in New York, Ohio, Pennsylvania, Massachusetts, etc.; the unsuccessful strike, beginning May 16, of about 4,500 workers in 45 shoe factories in Brockton, Mass., for a 20 per cent wage increase and elimination of the State board of conciliation and arbitration as a stipulated medium for the settlement of disputes; and the successful strike, beginning May 1, of about 4,000 bricklayers and helpers in New York City for a two-year agreement carrying a basic wage of $12 per day to bricklayers. Mention should also be made of the strike for a wage increase of 3,950 telephone operators in the five New England States of Maine, New Hampshire, Massachusetts, Rhode Island, and Vermont, beginning June 26. After running for a month the strike was called off by the workers.

The data in the following tables relate to the 603 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 1923.

State.	Number of disputes.					State.	Number of disputes.				
	April.	May.	June.	Month not stated.	Total.		April.	May.	June.	Month not stated.	Total.
New York	32	53	30	5	120	District of Columbia	2	2	1	.....	5
Massachusetts	30	51	20	8	109	Texas	2	2	.....	.....	4
Pennsylvania	33	28	19	9	89	Colorado	.....	1	1	1	3
New Jersey	6	9	10	2	27	Maine	2	.....	.....	1	3
Ohio	8	11	4	2	25	Michigan	1	2	.....	.....	3
Connecticut	9	11	3	1	24	Montana	2	.....	.....	1	3
Washington	16	7	1	.....	24	New Hampshire	.....	1	.....	2	3
Illinois	8	7	6	1	22	Wisconsin	1	2	.....	.....	3
California	8	7	4	2	21	Georgia	.....	.....	2	.....	2
Indiana	4	6	3	1	14	Kentucky	.....	1	1	.....	2
Rhode Island	7	5	2	.....	14	Oklahoma	.....	1	1	.....	2
West Virginia	2	8	2	1	13	8 other States	5	3	.....	.....	8
Missouri	6	3	3	.....	12	Interstate	5	3	1	1	10
Iowa	4	1	6	.....	11						
Maryland	5	3	1	.....	9	Total	203	234	126	40	603
Minnesota	1	4	2	2	9						
Oregon	4	2	3	.....	9						

Of these 603 disputes, 470 occurred east of the Mississippi River and north of the Ohio and Potomac Rivers, 102 occurred west of the Mississippi; and 21 occurred south of the Ohio and Potomac Rivers and east of the Mississippi River. Of the 10 interstate strikes, 6, including the Ward bakers and the New England telephone operators, occurred east of the Mississippi River; 1 occurred west of the Mississippi River, and 3, of minor importance, embraced both sides of the river.

About 63 per cent of the disputes occurred in the industrial States of New York, Massachusetts, and Pennsylvania.

As to cities, New York City leads with 79 strikes, followed by Boston and Chicago with 14 each, and Springfield, Mass., with 10; while Philadelphia, Cleveland, St. Louis, Brockton, Mass., and Seattle each had 8.

As to sex of the strikers involved, the distribution was as follows: Males only were involved in 426 disputes; females only in 11; both males and females in 101; and in 65 strikes the sex of the strikers was not reported.

The following table shows the number of disputes reported as occurring in the industries specified. About 62 per cent of them occurred in the building trades, clothing, textiles, coal mining, and metal trades.

NUMBER OF DISPUTES IN SPECIFIED INDUSTRIES REPORTED AS OCCURRING DURING THE SECOND QUARTER OF 1923.

Occupation.	Number of disputes.				
	April.	May.	June.	Month not stated.	Total.
Building trades' workers	39	46	26	11	122
Clothing workers	21	41	23	4	89
Textile workers	32	20	5	3	60
Coal miners	17	20	8	8	53
Metal trades employees	18	16	15	2	51
Bakers	.....	14	4	.....	18
Chauffeurs and teamsters	4	5	6	1	16
Street, sewer, and park employees	6	5	2	3	16
Lumber and timber workers	9	3	1	.....	13
Food workers	4	3	2	.....	9
Steamboat men	8	1	.....	.....	9
Longshoremen and freight handlers	3	1	4	.....	8
Paper workers	2	4	1	1	8
Printing and publishing employees	1	5	2	.....	8
Stone workers	2	3	.....	3	8
Electrical workers	3	3	1	.....	7
Hotel and restaurant employees	2	3	1	1	7
Leather workers	3	4	.....	.....	7
Barbers	1	2	3	.....	6
Street-railway employees	.....	5	1	.....	6
Laundry workers	2	2	1	.....	5
Motion picture and theatrical employees	3	1	1	.....	5
Tobacco workers	2	3	.....	.....	5
Brick and tile workers	2	2	.....	.....	4
Glass workers	1	2	1	.....	4
Shipbuilding employees	3	1	.....	.....	4
Slaughtering, meat cutting and packing employees	2	.....	2	.....	4
Iron and steel workers	3	.....	.....	.....	3
Light, heat, and power employees	1	1	2	.....	4
Rubber workers	.....	2	1	.....	3
Stationary firemen	.....	3	.....	.....	3
Clerks and salesmen	1	1	.....	.....	2
Fishermen	.....	2	.....	.....	2
Furniture employees	.....	1	1	.....	2
Oil and chemical employees	2	.....	.....	.....	2
Telephone and telegraph employees	.....	.....	2	.....	2
Miscellaneous	6	9	10	3	28
Total	203	234	126	40	603

In 423 disputes the employees were reported as connected with unions; in 37 disputes they were not so connected; in 5 disputes both union and nonunion employees were involved; in 7 disputes they were unionized after the strikes began; and in 131 disputes the question of union affiliation was not reported.

In 378 disputes only one employer was concerned in each disturbance; in 28 disputes, 2 employers; in 14 disputes, 3 employers; in 5 disputes, 4 employers; in 8 disputes, 5 employers; in 41 disputes, more than 5 employers; and in 129 disputes the number of employers was not reported.

In the 480 disputes for which the number of persons was reported there were 258,255 employees directly involved, or an average of 538 per strike.

In 57 disputes in which the number involved was 1,000 or more, the strikers numbered 190,580, thus leaving 67,675 involved in the remaining 423 disputes, or an average of 160 each.

By months the figures are as follows: April, 67,982 persons in 172 disputes, average 395, of whom 26,314 were in 152 disputes of less than 1,000 persons each, average 173; May 123,638 persons in 188 disputes, average 658, of whom 26,886 were in 168 disputes of less

than 1,000 persons each, average 160; June, 51,784 persons in 104 disputes, average 498, of whom 12,324 were in 90 disputes of less than 1,000 persons each, average 137. In 16 disputes, involving 14,851 persons the month in which the strike began was not reported.

The following table shows the principal causes of the disputes in so far as reported. In more than 50 per cent of them wages were a prominent question:

PRINCIPAL CAUSES OF DISPUTES REPORTED AS OCCURRING IN THE SECOND QUARTER OF 1923.

Cause.	Number of disputes.				
	April.	May.	June.	Month not stated.	Total.
Increase of wages	88	84	52	17	241
Decrease of wages	3	6	.....	.....	9
Wages not otherwise specified	4	7	5	4	20
Increase of hours	.....	1	.....	.....	1
Decrease of hours	2	1	.....	.....	3
Increase of wages and decrease of hours	14	4	10	1	29
Recognition of union	4	14	5	2	25
Recognition and wages	2	10	7	.....	19
Recognition and hours	.....	3	.....	.....	3
Recognition, wages, hours	1	7	3	.....	11
General conditions	18	11	5	1	35
Conditions and wages	15	7	3	1	26
Conditions and hours	1	.....	.....	.....	1
Conditions, wages, hours	1	2	.....	.....	3
Conditions and recognition	.....	2	1	.....	3
Discharge of foreman demanded	.....	.....	.....	1	1
Discharge of employees	2	4	5	1	12
Employment of nonunion men	.....	4	4	.....	8
Objectionable persons hired	.....	.....	1	.....	1
Discrimination	1	2	.....	.....	3
Open or closed shop	10	18	6	2	36
Unfair products	2	.....	.....	.....	2
In regard to agreement	8	7	3	.....	18
New agreement	3	3	1	.....	7
Sympathy	3	8	3	2	16
Jurisdiction	2	4	.....	.....	6
Miscellaneous	4	17	6	3	30
Not reported	15	8	6	5	34
Total	203	234	126	40	603

It is often difficult 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 401 disputes during the quarter, including about 28 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 first six months of 1922 and 1923:

NUMBER OF DISPUTES ENDING IN THE FIRST SIX MONTHS OF 1922 AND 1923.

Year.	January.	February.	March.	April.	May.	June.	Month not stated.	Total.
1922	37	27	35	37	76	47	45	304
1923	57	59	70	110	160	107	31	594

The table following shows the results of disputes ending in the second quarter of 1923:

RESULTS OF DISPUTES ENDING DURING THE SECOND QUARTER OF 1923.

Result.	Number of disputes.				
	April.	May.	June.	Month not stated.	Total.
In favor of employers	41	44	31	1	117
In favor of employees	20	51	41	22	134
Compromised	27	38	18	.....	83
Employees returned pending arbitration	2	1	3	.....	6
Not reported	20	26	14	1	61
Total	110	160	107	24	401

The next table gives the duration of disputes ending in the second quarter of 1923, by classified periods of duration.

CLASSIFIED DURATION OF DISPUTES ENDING IN THE SECOND QUARTER OF 1923.

Duration.	Number of disputes.				
	April.	May.	June.	Month not stated.	Total.
1 day or less	18	22	7	.....	47
2 days	12	7	9	.....	28
3 days	6	14	8	.....	28
4 days	9	13	5	.....	27
5 to 7 days	17	24	13	.....	54
8 to 14 days	24	29	23	.....	76
15 to 21 days	7	16	13	.....	36
22 to 29 days	1	6	4	.....	11
30 to 90 days	.....	8	13	.....	21
Over 90 days	5	.....	2	.....	7
Not reported	11	21	10	24	66
Total	110	160	107	24	401

The number of days lost in the industrial disputes ending in the quarter for the 335 reporting was approximately 5,594. The average duration of these was 17 days. The average duration of the disputes lasting less than 90 days was 10 days. By months the record is as follows: April, 2,443 days lost, average 25 days; May, 1,294 days lost, average 9 days; June, 1,857 days lost, average 19 days.

Of the 401 disputes ending during the quarter, 335 reported duration, and of this number 302 reported the number of employees involved, aggregating 180,641, an average of 598 employees.

Of the 401 disputes reported as ending during the quarter, 340 reported the number of employees involved, aggregating 197,790, an average of 582 employees.

Strikes and Lockouts in Czechoslovakia, 1922.[1]

THE difficult industrial situation in Czechoslovakia during 1922 found expression in 262 strikes and 20 lockouts, which involved 979 establishments and a total of 114,909 workers. Almost one-fifth of the workers affected were women. Of the total number of strikes and lockouts, 212 affected single establishments, while 70 were conducted as group or district affairs. The industrial disputes of 1922 resulted in a total loss of 2,554,350 working-days and of 98,071,500 crowns ($19,908,514, par) in wages.

There were undoubtedly numerous small strikes during the year under review, which were not officially recorded. It is reasonable, therefore, to estimate the number of workers affected by strikes and lockouts as approximately 150,000, the time lost as 3,000,000 working-days, and the loss of wages at 150,000,000 Czecho-Slovak crowns ($30,450,000, par).

More than half of the strikes were due to protests on the part of employees against the general lowering of wages in all branches of industry, undertaken with a view to relieving the industrial stagnation which resulted from the phenomenal rise in the exchange rate of the Czecho-Slovak crown. Disagreement over the recognition of workers' representatives or organizations proved to be the next principal cause of strikes and lockouts during the year. In the textile industry this was the leading cause of disagreement, which may be explained by the fact that the majority of workers in the textile trades are women, who are less well organized than the male employees in other industries.

Only 50 of the 282 disputes were settled in favor of the workers. Of the remaining cases, 147 were settled in favor of the employers and 82 by compromise agreements. Three strikes remained unsettled at the close of the year.

The following table shows the distribution of the labor disputes of 1922, by industry groups:

STRIKES AND LOCKOUTS IN CZECHOSLOVAKIA, BY INDUSTRY, 1922.

[1 crown=20.3 cents par.]

Industry.	Number of strikes.	Number of lockouts.	Total number of labor disputes.	Number of establishments affected.	Number of employees affected.	Working-days lost.	Loss of wages.
							Crowns.
Earthenware and glassware	40	4	44	178	28,712	486,428	17,729,912
Metal working	10	.....	10	18	2,914	62,077	2,459,215
Machinery and tools	43	1	44	168	42,489	1,058,528	50,126,728
Woodworking	62	6	68	212	9,252	197,464	5,769,304
Rubber	1	1	2	2	560	23,455	1,121,101
Leather	11	1	12	15	1,124	9,383	324,930
Textile	24	3	27	88	13,593	391,140	11,647,933
Upholstering	1	.....	1	2	30	810	36,750
Clothing	15	.....	15	54	2,129	91,330	1,867,494
Paper	6	2	8	17	4,302	125,247	3,674,534
Foodstuffs	14	.....	14	71	960	10,014	409,266
Building	16	2	18	119	5,436	51,866	1,526,128
Chemical	13	.....	13	29	2,929	44,414	1,300,743
Printing	1	.....	1	1	79	79	2,370
Electric power plants	1	.....	1	1	117	995	37,810
Commerce	2	.....	2	2	46	235	10,732
Transportation	2	.....	2	2	237	885	26,550
Total	262	20	282	979	114,909	2,554,350	98,071,500

[1] From a report of the American consul at Prague, dated Apr. 18, 1923.

VOCATIONAL EDUCATION AND TRAINING.

New Apprenticeship Regulations in New South Wales.

THE scarcity of apprentices in the building trades has been causing grave concern in the Antipodes as well as here, and New South Wales has recently adopted some new apprenticeship rules which, it is hoped, will relieve the situation as far as bricklayers are concerned. In its issue for August 31, 1923, the New South Wales Industrial Gazette gives the terms of the new regulations, which were drawn up by the Board of Trade under the industrial arbitration act, and signed by the Governor on August 10. One of the most important provisions is the adjustment of the required period of training to the age at which it is commenced. Those entering the trade between 14 and 16 years of age are to be apprenticed for five years, those between 16 and 17 for four years, and those between 17 and 19 for three years. For those over 19 the period may be even shorter.

Any apprentice entering the trade after attaining his nineteenth birthday may complete his apprenticeship in two years if he shall have satisfactorily passed through a course of 12 weeks' instruction at the training school for bricklayers conducted by the Master Builders' Association, or such other training school as may from time to time be approved by the said board.

Apparently in New South Wales, as in the United States, it is difficult for an individual employer to provide continuous employment and training for an apprentice, and the regulations name two bodies which may take over the responsibility, and under whose direction the apprentice may be transferred from one employer to another, as may be considered desirable.

The Master Builders' Association or the Operative Bricklayers' Society may, respectively, by their presidents, or any representative officials thereof, be the masters of apprentices in the said trade. * * *

The Master Builders' Association and the Operative Bricklayers' Society, respectively, as masters, may direct the service of the apprentice to be performed under the control of persons to be named by them, and for whose actions and defaults, as deputy masters, they respectively shall be responsible; and the apprentice shall serve accordingly. This condition shall be deemed to be incorporated in all contracts of apprenticeship to the said association or society.

Regulations are made as to wages, hours of work, and, for the younger apprentices, attendance at continuation schools, and one important provision deals with the question of limitation.

Unless and until otherwise ordered, no limitation shall be placed on the proportion of apprentices to journeymen, but application may be made from time to time to fix the proportion of any employer in respect of whom it is alleged that there is undue employment of junior labor.

Vocational Guidance in Brussels.

AN ACCOUNT of the methods employed in the vocational guidance and placement of young people in Brussels and its environs is given in the International Labor Review for September, 1923 (pp. 345–359). The Vocational Guidance Bureau of Brussels was founded in 1911 and consists of local offices which have been set up in every commune and a central office which collects literature, prepares material for tests, conducts propaganda, deals with difficult cases, and assists the local offices.

The establishment of vocational guidance in Belgium was not the result of a difficult economic situation, as in many countries, since between the years 1870 and 1910 the trade and industry of the country had enjoyed a period of remarkable prosperity. At the end of that period their further development was checked, however, and the lack of apprentices in the old handicrafts due to the growth of large-scale industry became apparent. It was realized that it was necessary to improve the labor force of the country in view of the competition in the foreign markets which was certain to become more intense in the future, since Belgium could produce hardly a quarter of the food needed and must therefore be in a position to export largely. To do this it was essential to produce goods of equal or, if possible, superior quality to those of its competitors and to sell at equal or lower prices, and this idea was responsible for a movement, supported by all parties, for the improvement of technical education. Popular sentiment had favored for some time the development of elementary education, and manual training had been instituted in the schools in order to enable working-class children to complete their education and at the same time prepare for a trade.

A society was formed in Brussels, of business and professional men, which had for its purpose the study of matters relating to children, and in 1909 a section was established for the placement of apprentices and the supervision of apprenticeship. In this first work, from which the scheme for vocational guidance developed, the choice of a trade was not considered, the aim being to find suitable situations for boys and girls and to see that they were not exploited.

Experience in this work showed that frequently parents paid no attention to the physique of their children when choosing an occupation for them, that they often overestimated the intellectual abilities of their children, and were also ignorant of the requirements of the occupation selected. Because of these conditions there was developed a system of school reports, psychological examinations, and examinations in motor functions, which gradually and without any predetermined plan led up to the formation of a system of vocational guidance and the establishment of the bureau. Attempts to classify the occupations from the standpoint of the special qualifications required, by means of questionnaires circulated among manufacturers and craftsmen, failed, since the replies brought out the objective qualities but did not reveal the characteristics of the occupations or help to classify the workers. A doctor, a psychologist, and a technician were therefore appointed to observe skilled workers in the exercise of their trades in order to determine the essential qualifications in the different occupations, a method, the article states, which recent

developments have shown to be the most practical one for the solution of the problem.

The tests followed in the plan for vocational guidance include as a first essential a thorough medical examination. In addition to the physical examination, the physician is expected to furnish information relating to the child's temperament, his probable degree of resistance to muscular and nervous fatigue, and his ability to work under certain conditions. The mental examination, which is used only as a means of checking the reports of the teachers of the children examined, includes tests on attention, sensation and perception, memory, and complex intellectual activity. Laboratory tests of motor abilities are conducted which measure rapidity, endurance, facility in starting a movement, and motor memory; tests are also given involving training of the motor functions.

The Intercommunal Vocational Guidance Office is controlled by a committee composed of two delegates from each commune and two delegates of the State and the Province. It is supported in the main by contributions by the communes. The office has three departments—medical, psychological, and research in technical abilities. The work of the staff of the central office includes assembling documentary material on vocational guidance (library, museum of apparatus, etc.), collecting data showing the essential qualifications for success in the various trades, training the staff of the communal offices in the technique of vocational guidance, examining all special or new cases referred to it by the communal offices, and inspecting the local offices. There is also a committee, consisting of the director of the office and delegates from employers' and workers' organizations, to collect statistics and study conditions under which the various occupations should be carried on. This committee is authorized to secure the assistance of specialists when necessary. There are local communal offices in each commune, the number depending upon its population and financial resources. Each of these offices includes at least one vocational counselor and two examiners, one of whom is a doctor.

The placement of apprentices, after compulsory examination by the vocational guidance office, has taken place through the trade associations, but by a recent agreement between the official employment exchange and the vocational guidance office a special department has been established in the employment exchange to look after the placement of male and female apprentices. This department is supervised by a committee composed of five employer members appointed by the chamber of commerce, four representatives of the workers appointed by the Association of Socialist and Independent Trade-Unions, one member appointed by the Federation of Christian Trade-Unions, three delegates of the employment exchange, three delegates of the vocational guidance office, and one representative of the Ministry of Labor.

All applications for employment are dealt with by the employment exchange and the results of the examination given at the vocational guidance office are taken into consideration in the placement of young people applying for positions. Lists of pupils of about the age of 14 are furnished the vocational counselor by the schools when they are about to complete the elementary school course. The preferences

of the children or of their parents in the choice of a trade are noted and in addition the teacher reporting is asked to send a school report for each child. On receipt of this list the vocational counselor writes to the parents of the children requesting them to take advantage of the services of the communal office. In assisting the young people in the choice of a trade the wishes of the parents and the child are followed so far as possible whenever they have clear preferences which seem to be based upon good reasons, unless the work involves a risk which the medical examination shows should not be incurred, or where there are very definite counterindications in respect to mental, sensory, or motor faculties. Attempts also are made to prevent the choice of a trade which is overcrowded and in which there is no chance of improvement within a reasonable length of time. In cases where no decided preference is evidenced for any particular occupation the results of the various examinations, tests, and reports are taken into consideration in assisting young people in the choice of a trade, and if a child is found to have ability which warrants further study the parents, if unable to meet the expense, are directed to agencies where they can obtain assistance. Cases which present unusual difficulties are not dealt with by the local offices but are referred to the central office for settlement.

In general all cases, whether those of children leaving school or of young persons who have entered a trade but think they have been mistaken in their choice of a vocation, are considered individually and the attempt is made to weigh the various factors "just as a patient is treated by a doctor or as a case is studied by counsel for the defense."

Vocational and Other Educational Training by Employers in Finland.

AN INVESTIGATION recently carried on in 150 large industrial establishments in Finland [1] showed that employers are gradually beginning to recognize the importance of vocational instruction for young persons.

In 1921 new legislation was passed which provided for the reorganization of the school system as a whole and required two years' continuation instruction for pupils leaving school to go to work. In certain industrial districts an attempt has been made to direct this required continuation instruction toward the pupil's future vocation. Apprentices at factories receive theoretical instruction for one or two days per week, thus combining the theory with their practical experience in the factory. Of the enterprises investigated, only nine had established special trade schools for their employees, but it is hoped that more will do so when reorganization of the school system is completed.

Of the vocational schools in Finland, that established in 1919 by the Machine & Bridge Building Co. for its employees is stated to be of the most interest. The school provides a four-year course, to which

[1] The results of this investigation are given in Nos. 4, 6, 7, and 9 of Social Tidskrift. For an account of employers' housing and welfare work for employees, see pp. 154 and 191 of this issue of the MONTHLY LABOR REVIEW.

24 pupils are admitted each year, and furnishes theoretical instruction in both trade and general elementary subjects. As far as possible attempts are made to secure pupils whose homes are in the rural districts. A dormitory (*internat*) accommodating 50 pupils is connected with this school. The resident pupils are under the supervision of an experienced teacher and receive all care and necessary clothing. After a trial period of three months, during which the student may leave if he desires, an apprenticeship contract is made out and the company deposits to the credit of the resident pupil (*intern*) 500 marks ($96.50, par) at interest while the pupil stays with the school. The wage which the resident pupil would receive during this first year is withheld to cover part of the expenditure of the dormitory. During the three remaining years of apprenticeship, the same amount is withheld, but as the apprentice's wages, beginning with the second year, are based on piece rates, there may be a considerable surplus over this amount. This surplus is credited to the pupil's savings account, so that when his schooling is finished he has a sum that allows him to continue his education at home or abroad.

Some industrial establishments have provided free lecture courses for their employees; these have increased in popularity from year to year. Another form of educational activity is the establishing of libraries and reading rooms for the workers. Of the enterprises investigated, 33 have arranged for libraries or reading rooms; others furnish funds to young people's societies for this purpose. Still other employers subscribe for newspapers which employees wish sent to them. Some factories have arranged for practical courses in household economy, sewing, care of children, and other matters.

WELFARE.

Welfare Work for Employees in Finland.

INFORMATION as to welfare measures undertaken by Finnish employers for their workers has been collected by the Finnish woman factory inspectors in the course of their regular work [1] and published in Nos. 4, 6, 7, and 9 of Social Tidskrift. The investigation covered 150 large industrial firms operating 222 factories.

In 44 of the 150 firms, joint-purchase schemes have been established whereby the employees by combining their purchases may obtain their supplies at the lowest possible cost, the buying being done by a qualified person paid by the firm. Factory kitchens or restaurants have been installed by about 30 firms, the kitchen or restaurant being operated by a manager paid by the firm, by a joint committee of employees, or by outside parties. It was found that the second method of operation was apparently the most satisfactory to the employees.

Another measure instituted by some of the larger employers is the setting up of so-called "interest offices." These offices generally perform such duties as paying, for the worker, his taxes, insurance, school expenses, and other regularly recurring expenditures; in some instances, however, these offices also make arrangements for taking care of loans, savings, and the management of joint-purchase schemes, and even, in some cases, the operation of day nurseries or courses in cooking, gardening, nursing, etc.

Of the 150 establishments studied, 78 had made some arrangement for the provision of medical attention for their workers and 33 either had their own hospital or sick rooms or had made arrangements for rooms at the commune or other hospitals where their employees could be treated. Company hospitals range all the way from those with the simplest equipment to those equipped with all the most modern appliances. One firm also has a convalescent and vacation home. In many factories where there is no hospital a doctor is employed; often the same physician is employed by several factories. Factories located in cities often make arrangements with several doctors, the medical attendance being given free or at greatly reduced rates. Of the enterprises studied, 65 employ nurses, etc., and 87 have established sick funds for the employees. Funeral funds have also been established at several large enterprises.

Some 20 factories employ welfare workers to advise their employees, and two large establishments jointly employ a welfare director who has oversight of hygienic conditions in the workshops, works out any necessary welfare and protective measures, and directs the social activities of the workers.

Other measures instituted by the employers for the benefit of their workers include vocational training for young workers, lecture courses for older employees,[2] day nurseries and summer colonies for their employees' children, and support of the employees' athletic and social clubs.

[1] The data gathered as to housing for employees are summarized on pp. 154 to 156 of this issue of the MONTHLY LABOR REVIEW.

[2] For an account of these activities, see pp. 189 and 190 of this issue of the MONTHLY LABOR REVIEW.

COOPERATION.

Cooperative Restaurants and Distribution of Milk, Minneapolis.[1]

THE success of the Franklin Cooperative Creamery Association of Minneapolis shows what can be done by the cooperative movement in distributing milk. This association was formed as a result of a controversy in the fall of 1919 between the local milk distributors and their drivers. The society, formed by some of the strikers, has had a steadily increasing success. The business is carried on by the workers themselves on a salary basis, the surplus savings made by the business being returned to the member patrons on the basis of patronage.

Between July, 1921, and July, 1923, the number of wagons operated by the association increased from 46 to 146 and the number of employees from 120 to 381. In July, 1923, the sales amounted to $286,095 as compared with $86,849 in July, 1921. The sales during the period January to September, 1923, reached a total of $2,285,408. The association delivers milk to "more than 40,000 homes in the city of Minneapolis," and is stated to be the largest creamery in the city. Ice cream is also manufactured and sold by the association.

Its net savings for the first nine months of 1923 amounted to $158,612. It is stated that the creamery not only has "materially reduced the price of milk," but it has returned to its patrons a 5 per cent dividend on their purchases, amounting to $86,047.

Some two months ago a cooperative restaurant was opened in the down-town district of the same city by a cooperative organization formed chiefly of members of the Northwestern Cooks' Association and employees of the Franklin Cooperative Creamery Association. This very soon proved to be too small and the new association, the Franklin System Cooperatives (Inc.), opened another early in September. Both places are reported to be operating successfully and the society is already running its own small bakery.

Progress of Consumers' Cooperative Wholesale Societies.

Cooperative Central Exchange.

DURING the first seven months of 1923, according to a statement in the October, 1923, issue of Cooperation (New York), the Cooperative Central Exchange of Superior, Wis., had sales amounting to $289,700, or $97,399 more than in the corresponding period of the previous year. A saving of $2,961 was made from these sales as compared with a loss of $2,113 in 1922.

[1] Data are from the Minneapolis Cooperator, issues of June 15 and Sept. 14, 1923, and news service of The Cooperative League.

Central States Cooperative Wholesale Society.[2]

THE Central States Cooperative Wholesale Society, East St. Louis, Ill., recently held its annual convention, at which some 50 societies with a membership of about 15,000 were represented.

It is stated that a "broad educational program" was adopted at the meeting, which will pay particular attention to the need of intensive cooperative education of the people of the mining towns of Illinois.

This wholesale society was, until about a year ago, operated on what was called the "American plan." It has now been reorganized on a strictly Rochdale basis with control entirely in the hands of its constituent retail societies. According to the report of the assistant manager of the wholesale, all but 14 of the 43 "American plan" stores in existence when the reorganization began have been disposed of. In many cases independent Rochdale societies were organized and the stores were turned over to them to operate, while in other cases the stores were either closed or sold out.

Course in Cooperative Training, Minneapolis.[3]

THE Northern States Cooperative League has been conducting a five weeks' course in cooperative training. The course, which opened in Minneapolis September 4, 1923, covered the theory, principles, and history of the cooperative movement, bookkeeping (including the special system, adapted to cooperative enterprises, recommended by the Cooperative Central Exchange) and problems of organization and administration of consumers' cooperative societies of various types.

This is stated to be the "first attempt made in the United States to organize a cooperative training school to be conducted in the English language," although similar courses, in the Finnish language, have been given for several years by the Cooperative Central Exchange, at Superior, Wis.

Altogether 22 students, 4 of them women, took the course, 14 of whom come from places outside Minneapolis. Of the students attending, 9 were born in the United States, 6 in Sweden, 5 in Finland, 1 in Canada, and 1 in Norway.

Guiding Points in the Location of the Cooperative Store.

STUDENTS of the cooperative training course recently held in Minneapolis[4] drew up the following set of points for a guide to cooperative societies in locating their cooperative stores:

Get a good street map of the town (or of the section of the city) in which the society is located. Then, using different colored pins or different characters (such as *, x, o):

1. Plot the homes of members of the society.
2. Plot all competitor stores, distinguishing between chain stores and individual private stores.

[2] Data are from press release of Central States Cooperative Wholesale Society, dated Oct. 2, 1923; and Cooperation, New York, November, 1923.
[3] Data are from Cooperation, New York, August, 1923, and The Minneapolis Cooperator, Sept. 14, 1923.
[4] See article immediately preceding.

3. Plot all available locations, distinguishing between stores for rent and ground that might be used for new buildings.

Study the situation carefully in each instance and answer the following questions, with regard to each available location:

1. How available is it to the members?
2. How is it located with reference to the nearest general shopping center?
3. How is it located with reference to its nearest competitors?
4. With reference to the movement of shopping crowds, is it (*a*) on the right side of the street? (*b*) directly in the line of approaching home-bound commuters (near a large city)? (*c*) how many leisure-hour shoppers pass this site (between 9 and 12 a. m.; 1 and 4 p. m.)?
5. How many people of all classes pass this point between 8 and 9 a. m.; between 12 and 1 p. m.; between 4 and 6 p. m.?
6. Class of people in the majority passing the store (business men; school children; industrial workers; women)?
7. How many of these are possible buyers?
8. What nationality are these people?
9. Approximately what proportion of the people in the neighborhood are good material for new members?
10. Are the people in the neighborhood well established or is the population shifting?
11. Have there been cooperative stores in this district previously? If so, what happened to them?
12. Is the neighborhood attractively laid out?
13. How near is the location to post office (in small town) or to other general centers of attraction?
14. Is the competition between other stores so keen that prices are abnormally low?
15. How much of the trade is cash and carry; how much credit and delivery?

With regard to the property itself—

1. What is its rental value (or purchase value)?
2. What kind of a building is it and for what was it used previously?
3. What is the nature of the most immediate neighbors on either side and across the street (business or dwelling and how engaged or of what class)?
4. Is is a corner lot? How much window space? What kind of windows?
5. How wide is the sidewalk? Made of what material?
6. What are the sanitary conditions in and about the building?
7. What improvements are there in the building?
8. How high are buildings on either side and across the street? How prominent?
9. Are all improvements placed under street and paid for?
10. What sun hits the windows (morning, noon, or afternoon)? Are there any shade trees or other protection? [5]

Report of British Labor Copartnership Association, 1922.

THE September, 1923, issue of Copartnership (London) contains (pp. 138 and 139) the thirtieth annual report of the Labor Copartnership Association. This association is a federation of societies whose declared aim it is "to bring about an organization of industry based upon the principle of labor copartnership; that is to say, a system in which all those engaged shall share in the profits, capital, control, and responsibility."

In the 1921 report (see MONTHLY LABOR REVIEW, November, 1922, pp. 226 and 227) it was stated that 1921 was the worst year yet experienced; the present report states that 1922 was equally bad, but the hope is expressed that the worst is now over and that an improvement in business conditions may be expected.

[5] From Cooperation, New York, November, 1923, p. 196.

The table below contains figures, taken from the report, showing details of operation for 1922 of the societies engaged in various kinds of work:

RESULTS OF OPERATION OF COPARTNERSHIP PRODUCTIVE SOCIETIES IN GREAT BRITAIN, 1922, BY INDUSTRY.

[£ at par=$4.8665.]

Country and industry.	Number of societies.	Share and loan capital and reserve.	Amount of business.	Profit.	Loss.	Amount paid as dividend on wages.
England:						
Textile	13	£577,409	£1,153,754	£65,290	£12,059	£7,292
Boot and shoe	15	354,050	645,695	28,276	10,089	6,089
Metal	3	36,951	81,760	3,478	63	1,375
Building and wood	6	54,811	47,733	496	1,649	.....
Printing, etc	16	191,389	372,205	21,082	81	3,337
Miscellaneous	7	168,445	174,738	501	13,320	144
Total	60	1,383,055	2,475,885	119,123	37,261	18,237
Scotland:						
Textile	1	282,989	274,293	16,200	.....	1,085
Baking	1	840,391	1,384,801	89,148	.....	14,109
Printing	2	22,037	24,711	868	.....	66
Total	4	1,145,417	1,683,805	106,216	.....	15,260
Grand total	64	2,528,472	4,159,690	225,339	37,261	33,497

The table following shows the development of the copartnership movement since 1883:

DEVELOPMENT OF COPARTNERSHIP MOVEMENT IN GREAT BRITAIN, 1883 TO 1922.

[£ at par=$4.8665.]

Country and year.	Number of societies.	Amount of capital.	Amount of business.	Profit.	Loss.	Amount returned as dividend on wages.
England and Wales:						
1883	12	£85,786	£138,248	£7,519	£114	.....
1896	83	433,439	808,136	31,833	11,329	£6,900
1909	93	679,425	1,138,915	52,665	7,283	10,135
1913	76	744,585	1,503,339	85,899	2,086	13,949
1920	61	1,353,527	4,904,580	272,065	24,853	57,761
1921	61	1,439,533	2,873,212	85,256	130,770	19,598
1922	60	1,383,055	2,475,885	119,123	37,261	18,237
Scotland:						
1883	3	17,650	22,503	1,512	.....	.....
1896	7	581,991	1,043,047	73,181	.....	9,088
1909	6	1,302,328	3,058,923	143,814	197	15,433
1913	5	1,525,495	3,545,298	159,877	.....	19,614
1920	4	1,104,413	2,801,102	185,550	.....	10,531
1921	4	1,145,576	2,212,163	141,876	.....	18,784
1922	4	1,145,417	1,683,805	106,216	.....	15,260
Great Britain:						
1883	15	103,436	160,751	9,031	114	.....
1896	90	1,015,430	1,851,183	105,014	11,329	15,988
1909	99	[1] 2,981,753	4,197,838	196,479	7,480	25,568
1913	81	[1] 2,270,078	5,048,637	245,776	2,086	33,563
1920	65	[1] 2,457,930	7,705,682	457,615	24,853	68,292
1921	65	2,585,109	5,085,375	227,132	130,770	38,382
1922	64	2,528,472	4,159,690	225,339	37,261	33,497

[1] Not the exact sum of the amounts given above for Scotland and England and Wales, but is as given in the report.

Cooperation in Foreign Countries.

Australia.

LABOR Report, 1922, No. 13, of the Bureau of Census and Statistics of Australia contains the results of a comprehensive investigation of the cooperative movement in that country made by the bureau.

The following table taken from the report shows the number of societies in 1922:

NUMBER OF SOCIETIES IN AUSTRALIA OF EACH TYPE IN 1922, BY STATE.

State.	Producers' societies.		Consumers' societies.		Total.	
	Number.	Membership.	Number.	Membership.	Number.	Membership.
New South Wales	58	52,098	43	49,179	101	101,277
Victoria	67	53,048	29	20,158	96	73,206
Queensland	40	25,699	10	4,412	50	30,111
South Australia	25	38,451	10	30,398	35	68,849
West Australia	26	2,619	43	6,832	69	30,006
Tasmania	12	20,555	2		14	
Total	228	192,470	137	110,979	365	303,449

The table below shows the statistics of operation in 1922:

OPERATIONS OF COOPERATIVE SOCIETIES IN AUSTRALIA IN 1922, BY STATE AND TYPE OF SOCIETIES.

State.	Producers' societies.			Consumers' societies.			
	Share capital.	Sales for year.	Net saving.	Share capital.	Sales for year.	Net saving.	Amount returned in dividends on purchases.
New South Wales	£824,503	£12,230,060	£141,785	£483,319	£3,148,913	£255,044	£236,054
Victoria	1,214,728	10,174,929	47,116	156,105	894,970	24,860	10,765
Queensland	400,644	5,597,966	59,275	35,423	233,862	5,737	3,373
South Australia	719,231	5,468,747	[1] 10,145	498,545	1,791,658	69,844	37,164
West Australia	42,999	202,806	9,403	54,419	494,195	9,755	5,349
Tasmania	99,257	258,014	13,435				
Total	3,301,362	33,932,522	260,869	1,227,811	6,563,598	365,240	292,705

[1] Loss.

The above tables include figures for plant stores established by employers for the benefit of their employees. In the case of New South Wales they also include statistics for the cooperative wholesale society, thereby involving a certain amount of duplication.

Canada.

A REPORT from the Cooperative Union of Canada noted in the October, 1923, issue of the International Cooperative Bulletin (pp. 247, 248) contains statistics for certain affiliated Canadian cooperative societies for the year 1922. These statistics cover only 12 consumers' societies and the great Canadian cooperative market-

ing association, the United Grain Growers (Ltd.). The report states that 1922 was a year of trading losses and unemployment on a large scale, but that on the whole the cooperative societies fared very well. Four societies reported decreased sales, aggregating $197,944, but it is pointed out that "it is probable that the deflation of prices contributed to this as much as reduction in trade support through reduced purchasing power of members."

The combined membership of the 12 consumers' societies was 6,552 and the sales for the year $2,166,196. The societies' share capital totaled $293,183 and their loan capital $157,782. Their reserve funds amounted to $94,781.

Dividends on purchases ranging from 1½ to 10 per cent were paid by nine societies and amounted to $138,761.

It should be pointed out that the statistics given fall far short of disclosing the actual condition of the organized movement in Canada during 1922. Even if statistics of the entire organized movement were available they would represent a very small proportion of those of Canadian societies organized on the Rochdale plan. There are hundreds of societies operating in isolation, and the Federal Government has no machinery at its disposal for collecting the necessary data. The isolated societies are bound to disappear sooner or later, since, deprived of the experience of other societies, and generally organized in ignorance of cooperative principles, there is little chance of many of them being permanently successful. Persistent efforts are, however, being made to bring such societies to see the folly of the policy of isolation, and, as is stated in the Canadian Cooperator, if the campaign now being conducted meets with considerable success, there should be a great improvement in the position of the organized movement by next year.

The United Grain Growers (Ltd.) reported a membership of 35,748 and sales of $2,838,424.

Saskatchewan.

A summary of the annual report of the cooperation and markets branch of the Saskatchewan Department of Agriculture given in the September, 1923, issue of the Public Service Weekly (Regina) "indicates that during the year ended April 30, 1923, agricultural cooperation has made very satisfactory progress." "The bountiful harvest of 1922 is reflected in the ledgers of the associations."

The number of shareholders in cooperative associations at the present time is 16,849. The paid-up capital invested has increased from $501,070.33 to $504,570.19. During the year 52 associations marketing livestock shipped 805 cars, the receipts amounting to $749,360.58. The value of farm products marketed through the associations amounted to $25,361.41, while the total value of supplies sold amounted to $3,332,517.08. The aggregate turnover of the associations, including livestock, amounted to $4,107,239.07, the net profit earned being $110,997.34. * * *

That the Saskatchewan Cooperative Elevator Co. had a good year is shown by the fact that its net profit for the year was $463,056.63, and a cash dividend of 8 per cent on the paid-up value of the shares was made. During the year 332 elevators handled a total of 34,769,955 bushels of all grains, and 2,565,422 bushels were shipped over the platform, making a total of 37,335,377 bushels compared with 27,990,437 bushels handled during the previous year. The commission sales department handled 36,519,352 bushels and the terminal elevators 22,419,398 bushels.

Ceylon.

THE Ceylon Blue Book for 1922 contains (pp. Z1–Z3) detailed data showing for each of the cooperative societies in the colony the date of registration, whether of limited or of unlimited liability, number of members, paid-in share capital, reserve, and data as to loans granted by the Government. These figures show that on

April 30, 1922, there were 167 cooperative societies, with 19,957 members. Their paid-in share capital amounted to Rs. 150,354 ($73,170, par) and their reserve to Rs. 25,057 ($12,194, par). Loans to the amount of Rs. 43,345 ($21,094, par) had been granted to these societies by the Government; of this amount Rs. 36,043 ($17,540, par) was still owing.

No information is given as to the kind of business done by the various societies.

Czechoslovakia.

THE September 28, 1923, issue of Industrial and Labor Information (Geneva) contains (p. 33) a summary of the 1922 report of the Czecho-Slovak Union of Building and Housing Cooperative Societies. According to this account 232 local housing societies are affiliated with the union. Of these societies, during 1922, 75 bought building land valued at 4,469,353 kronen ($907,279, par); 79 societies built a total of 639 houses, containing accommodation for 739 families, and 17 blocks of houses containing 164 flats.

The report states that the number of societies which undertook building operations was larger than in the preceding year but that fewer houses were built. This decrease in dwellings provided was due chiefly to the difficulty of securing capital.

India (Punjab).

THE report of the Punjab registrar of cooperative societies for the year 1921–22 contains statistics of the movement there of which the following is a summary:

OPERATIONS OF COOPERATIVE SOCIETIES IN THE PUNJAB IN 1921–22, BY TYPE OF SOCIETY.

[Rupee at par=48.665 cents.]

Type of society.	Number of societies.	Number of members.	Paid-in share capital.	Reserve fund.	Working capital.	Profit for year.
			Rupees.	*Rupees.*	*Rupees.*	*Rupees.*
Central banking societies	144	[1] 8,233	1,435,880	601,469	16,613,534	280,404
Agricultural societies:						
Credit	8,232	214,837	5,027,134	5,708,785	24,665,989	1,066,209
Purchase and purchase and sale	160	1,175	57,241	20,377	312,915	[2] 17,689
Production and sale	11	477	83,760	17,078	277,925	[2] 212
Other	354	22,179	1,494	1,167	3,826	694
Total	8,757	238,668	5,169,629	5,747,407	25,260,655	1,049,002
Nonagricultural societies	401	17,594	331,094	101,118	1,202,840	15,229
Insurance societies	41	529	.....	.....	.....	.....

[1] Member societies. [2] Loss.

Similar data for other parts of India were given in the July, 1923, issue of the MONTHLY LABOR REVIEW (pp. 239–242).

Italy.

Fascist Cooperatives.

IT APPEARS, from an article in the September 5, 1923, issue of L'Association Ouvrière (Paris), that there is now a Fascist cooperative movement in Italy. There was already a Catholic, a

Socialist, and a "neutral" movement, though many of these societies have been destroyed by Fascist supporters.

The Fascist societies held their first convention at Milan on June 17, 1923, at the call of their federation, the Italian Union of Cooperatives, which was formed in April, 1921. The union claims to have in affiliation 1,341 local societies with a combined membership of 247,000 and a business for 1922 of 350,000,000 lire ($67,550,000, par).

According to the article, the convention unanimously approved the attitude taken by the Central Commission on Cooperation in its revision of the Commercial Code in providing that cooperative societies should be allowed to pursue no other purposes than those for which they were formed. It is admitted that the purpose of this provision is to prevent societies from participating in political or other "extra-cooperative" movements. This provision is of interest because of the fact that such participation is given by the Fascists as the excuse for the destruction of the cooperative societies.

The intention was announced of calling a congress which would be a congress not only of members of the Italian Union of Cooperatives but of the whole Italian cooperative movement.

Labor Cooperatives.

A recent book by Odon Por, entitled "Guilds and Cooperatives in Italy," contains a chapter (pp. 98–116) on the present (1922) condition of the cooperative movement—especially the workers' productive cooperative societies—in that country. These societies began with such simple work as digging canals or making dams, then gradually began to undertake more technical work, until finally their "combines," or federations of societies, have become able to compete "with the biggest and best-equipped private enterprises," while in some Provinces "they have actually wiped out the private contractors and are practically controlling productive activities, doing work for the authorities and for the public alike."

Hundreds and thousands of workers are directly interested in these cooperatives that have now made good their position in every branch of production. They are building bridges in brick and steel; public and private palaces and whole garden cities; they are constructing roads, railways and ports; they are digging canals; they are manufacturing machines of all kinds; they are building sailing ships, cargo boats, liners, and warships; they redeem and cultivate rationally vast stretches of land; they are active in shipping and transportation; they have rebuilt, within a short period of time, whole districts where the war wrought havoc. In the arts and crafts they are numerous. As the workers work willingly and with enthusiasm for these their own enterprises, and as the societies are able to shift organized bodies of labor from one end of the country to another when required, they are able to execute works hardly realizable by private enterprise, which can never obtain the whole-hearted cooperation of hired labor.

To-day, the vast number of workers in the cooperative movement and their excellence, the extent and variety of undertakings, the technical and managerial experience vested in them, form such a solid block of interests that the problems connected with its efficient and undisturbed functioning constitute a national problem. Cooperation must live and grow undisturbed if the economic life of the Nation is to proceed regularly and progressively.

These vast institutions, distributed all over the country, command attention not merely by virtue of their technical equipment, organizing ability and business capacity, but especially by virtue of their manifest will to work, not for profits, but for service. Their will to serve the community is a motive that the community, besieged as it is by profiteers, can not afford to overlook.

In the introduction to a recent government bill on cooperation it is explicitly recognized that the cooperative movement is the most fitting means of regenerating the economic forms and institutions which have proved themselves inadequate to cope with the problems matured during the war; that the army of middlemen and profiteers that has sprung up during the war and has infested all activities can be kept in check only by the cooperatives, which by their very nature exclude all profit making. The rapid and skillful execution of the public work entrusted to them, making practically no profit on it, is one of the chief features of these cooperatives, and therein lies their great future.

It is remarkable that out of the thousands of cooperative societies very few have failed during the present industrial and financial crisis, while numerous gigantic private enterprises have gone bankrupt. This proves their stability and the efficiency of their managers. Nevertheless, the cooperatives are suffering from the crisis, for they can not obtain sufficient credit.

These combines are grouped into a federation, the National Federation of Cooperatives of Production and Labor, which represents them in their relations with the State, organizes the exchange of equipment among the federated combines, arranges for supplies of raw materials, and provides technical and business assistance and advice. The federation already owns its own brick works and quarries and is planning to extend its operations in this field. "Thus, while the single combines represent, regionally, industrial bodies of the most modern type—doing any work from the roughest to the most artistic—their national federation constitutes a formidable force affecting the whole industrial life of the country." It has recently taken steps toward undertaking "great construction works in France and Russia in agreement with the labor organizations of these countries and under the control of their Governments and that of Italy."

Poland.

THE following table taken from the April, 1923, issue (p. 198) of the Revue Mensuelle de Statistique (Warsaw), shows the number of registered cooperative societies of each type, in Russian, Prussian, and Austrian Poland, on January 1, 1922.

NUMBER OF COOPERATIVE SOCIETIES OF EACH TYPE, IN POLAND, BY GEOGRAPHIC SECTION, JANUARY 1, 1922.

Type of society.	Number of societies of each type in—			Whole country.
	Russian Poland.	Prussian Poland.	Austrian Poland.	
Consumers' societies	2,323	117	1,756	4,196
Housing societies	341	76	58	475
Credit societies	1,164	1,028	3,151	5,343
Wholesale societies:				
Farmers'	53	133	600	786
Other	37	64	201	302
Raw-material societies	18	79	227	324
Societies for sale of dairy products	50	182	270	502
Other agricultural societies	5	47	27	79
Distilleries	2	60	5	67
Other industrial societies	2	39	29	70
Libraries, etc	6	10	37	53
Not reported	7	16	44	67
Total	4,008	1,851	6,405	12,264

CONCILIATION AND ARBITRATION.

Conciliation Work of the Department of Labor in October, 1923.

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION.

THE Secretary of Labor, through the Division of Conciliation, exercised his good offices in connection with 61 labor disputes during October, 1923. These disputes affected a total of 43,511 employees. The following table 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 or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workmen directly and indirectly affected:

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, OCTOBER, 1923.

Company or industry and location.	Nature of controversy.	Craft concerned.	Cause of dispute.	Present status.
Dana Collieries, Dana, Ind	Strike	Miners	Railroad transportation.	Adjusted.
Schuylkill Ry., Girardville, Pa	do	Traction workers	Wage dispute	Do.
Surface track laborers, Chicago, Ill	do	Track laborers	Asked 37 cents per hour increase.	Do.
Warwick Mills, Centerville, R. I	Threatened strike.	Textile workers	Wages, hours, and recognition.	Do.
Cloak makers, Los Angeles, Calif	Strike	Cloak makers	Union recognition	Pending.
Crowell Publishing Co. and Ralph Printing Co., Springfield, Ohio.	do	Wrappers and operators.	Open shop	Do.
Grass-Golden Shoe Co., Boston, Mass.	do	Shoe workers	Wages and alleged violation of contract.	Adjusted.
Meat cutters, Chicago, Ill	Controversy.	Meat cutters	Asked $5 per week increase and shorter hours.	Pending.
Pine Ridge, Pa	Strike	Miners	Union dispute: working conditions.	Adjusted.
Laurel Run Colliery, Pa	do	do	do	Do.
Delaware Colliery, Pa	do	do	do	Do.
Tennessee Coal & Iron Co., Whitwell, Tenn.	do	do	Asked regular wages in their section.	Pending.
U. S. Radiator Corporation, Edwardsville, Ill.	do	Foundry workers.	Hours, conditions, and union recognition.	Do.
Kater & Co., Philadelphia, Pa	Threatened strike.	Garment makers	Wages and hours of labor.	Adjusted.
Chas. K. Fein, Philadelphia, Pa	do	do	do	Do.
De May Co., Philadelphia, Pa	Strike	do	do	Do.
Hoe Printing Co., New York City	do	Machinists	(1)	Pending.
Marble cutters, New York City	do	Cutters, carvers,	Asked $1 a day increase.	Adjusted.
Opera Fur Co., Boston, Mass	do	Furriers	Asked union recognition.	Do.
Bliss Colliery, Glen Alden Coal Co., Nanticoke, Pa.	do	Miners	Wages and working conditions.	Do.
United Hosiery Co., Chattanooga, Tenn.	do	Textile workers	Alleged discrimination for union affiliation.	Pending.
Telephone operators, Sullivan, Ind	do	Telephone operators.	One operator discharged.	Do.

[1] Not reported.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, OCTOBER, 1923—Continued.

Company or industry and location.	Nature of controversy.	Craft concerned.	Cause of dispute.	Present status.
U. S. Furniture Co., Hoboken, N. J.	Strike	Basket makers	Open shop and working conditions.	Adjusted.
Building trades, Newark, N. J.	do	Building trades	Asked $10 a day and 5 days a week.	Pending.
Tailors, Newark, N. J.	do	Tailors	Asked wage increase	Do.
Hudson Coal Co., Pa.	do	Miners	Working conditions.	Adjusted.
Furriers, South Norwalk, Conn.	do	Furriers	[1]	Pending.
East End Coal Co., Pond Creek, Pa.	do	Miners	Lack of equipment.	Adjusted.
Jewelry workers, New York City.	do	Jewelry workers	[1]	Pending.
Cigar makers, Boston, Mass.	Controversy	Cigar makers	Wage agreement	Do.
Dexter Paper Co., Windsor Locks, Conn.	Strike	Paper workers	Asked increase; discrimination for union affiliation.	Do
A. C. Meeley Co., Philadelphia, Pa.	Threatened strike.	Ladies' tailors	Wages, hours, and recognition of union.	Unable to adjust.
Graham Co., Philadelphia, Pa.	Strike	do	do	Adjusted.
Margaret Arkwright, Philadelphia, Pa.	Threatened strike.	do	do	Do.
Julia C. Morris Co., Philadelphia, Pa.	Strike	do	do	Do.
Ladies' tailors, Louisville, Ky.	do	do	Asked wage increase of 17½ cents per hour.	Pending.
Lorraine Manufacturing Co., Pawtucket, R. I.	do	Loom fixers	Closed shop	Do.
Kovatz & Knauber Co., New York City.	do	Bronze workers	Employees refused certain work.	Unclassified.
Bevelers and mirror makers, New York City.	do	Mirror workers	Wage increase and recognition of union.	Pending.
Longshoremen, Norfolk, Va.	do	Longshoremen	Wage increase and new agreement.	Adjusted.
Longshoremen, New Orleans, La.	Controversy	do	Working conditions.	Pending.
Derrick men, New York City	Strike	Derrick men	Asked $1 a day increase.	Do.
Lax & Abowitz, Brooklyn, N. Y.	do	Shoemakers	Recognition of union	Adjusted.
Avondale Colliery, Pa.	Threatened strike.	Miners	Wages and working conditions.	Pending.
Peach Orchard Colliery, Pa.	do	do	do	Do.
Truesdale Colliery, Pa.	do	do	do	Do.
Woodward Colliery, Pa.	do	do	do	Do.
Pettebone Colliery, Pa.	do	do	do	Do.
Loomis Colliery, Pa.	do	do	do	Do.
Auchinclos Colliery, Pa.	do	do	do	Do.
No. 6 Colliery, Pennsylvania Coal Co., Pittston, Pa.	Strike	do	Price on rock, wages, and conditions.	Adjusted.
Barnum Colliery, Pittston, Pa.	do	do	Company refused to discharge man.	Do.
Central Colliery, Avoca, Pa.	do	do	Union dispute	Do.
Canaanville Coal Co., Ohio.	do	do	[1]	Pending.
Golden State Woolen Mills, Long Beach, Calif.	do	Textile workers	Wages; company refused to renew agreement.	Do.
Brownwell Brush & Wire Co., Greensburg, Ind.	do	Brush and wire makers.	5 per cent reduction in wages.	Adjusted.
Carpenters, St. Louis, Mo.	do	Carpenters	Asked 25 cents per hour increase.	Do.
Eisenlohr Co., Reading, Pa.	do	Cigar makers	Asked 10 per cent increase and piecework.	Pending.
Wilkinson Lumber Co., Indianapolis, Ind.	do	Building trades	Jurisdictional dispute.	Adjusted.
No. 14 Colliery, Pittston, Pa.	do	Miners	Wage rates	Do.
Commonwealth Steel Co., Granite City, Ill.	do	Iron molders	Company representation plan.	Pending.

[1] Not reported.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, OCTOBER, 1923—Continued.

Company or industry and location.	Terms of settlement.	Duration.		Men involved.	
		Beginning.	Ending.	Directly.	Indirectly.
		1923.	1923.		
Dana Collieries, Dana, Ind	To Public Service Commission.	Oct. 1	Oct. 19	120	
Schuylkill Ry., Girardville, Pa	To arbitration	do	Oct. 3	100	200
Surface track laborers, Chicago, Ill	do	Sept. 13	Oct. 9	1,200	
Warwick Mills, Centerville, R. I	Agreement concluded	Oct. 1	Oct. 12	900	
Cloak makers, Los Angeles, Calif		Sept. 20		300	
Crowell Publishing Co. and Ralph Printing Co., Springfield, Ohio.		(1)		23	
Grass-Golden Shoe Co., Boston, Mass.	Wages settled; agreement concluded.	Sept. 1	Sept. 18	60	
Meat cutters, Chicago, Ill		Oct. 1		2,500	
Pine Ridge, Pa	One man discharged	Oct. 2	Oct. 6	650	
Laurel Run Colliery, Pa	do	do	do	450	
Delaware Colliery, Pa	do	do	do	750	
Tennessee Coal & Iron Co., Whitwell, Tenn.		May 8		450	100
U. S. Radiator Corporation, Edwardsville, Ill.		Aug. 16		600	
Kater & Co., Philadelphia, Pa	44-hour week; $44 week minimum.	Oct. 4	Oct. 8	15	508
Chas. K. Fein, Philadelphia, Pa	do	do	do	14	34
De May Co., Philadelphia, Pa	do	Oct. 5	do	20	30
Hoe Printing Co., New York City		Aug. 2		1,150	
Marble cutters, New York City	To arbitration for settlement	Oct. 1	Oct. 20	1,200	1,800
Opera Fur Co., Boston, Mass	Men return to work; strike off	Oct. 6	Oct. 9	18	
Bliss Colliery, Glen Alden Coal Co., Nanticoke, Pa.	To district board for adjustment.	Oct. 8	Oct. 15	855	
United Hosiery Co., Chattanooga, Tenn.		Sept. 5		950	
Telephone operators, Sullivan, Ind		Sept. 24		14	
U. S. Furniture Co., Hoboken, N. J	Union recognition granted	Sept. 15	Oct. 14	48	
Building trades, Newark, N. J		(1)		(1)	
Tailors, Newark, N. J		(1)		(1)	
Hudson Coal Co., Pa	To district board for settlement; strike off.	Oct. 8	Oct. 9	15,000	
Furriers, South Norwalk, Conn		(1)		100	
East End Coal Co., Pond Creek, Pa	Equipment furnished by company.	Sept. 25	Oct. 1	100	
Jewelry workers, New York City		(1)		(1)	
Cigar makers, Boston, Mass	Men returned; conferences pending.	Aug. 1		(1)	
Dexter Paper Co., Windsor Locks, Conn.		Mar. 1		24	150
A. C. Meeley Co., Philadelphia, Pa	Company increased wages; strike continues.	Oct. 9		20	100
Graham Co., Philadelphia, Pa	44-hour week, $44 per week	Oct. 15	Oct. 17	10	20
Margaret Arkwright, Philadelphia, Pa.	do	Oct. 13	Oct. 16	12	30
Julia C. Morris Co., Philadelphia, Pa	do	Oct. 12	Oct. 15	15	35
Ladies' tailors, Louisville, Ky		(1)		18	
Lorraine Manufacturing Co., Pawtucket, R. I.		Oct. 1		58	
Kovatz & Knauber Co., New York City.	Adjusted prior to commissioner's arrival.	Oct. 6	Oct. 15	6	
Bevelers and mirror makers, New York City.		Sept. 4		20	
Longshoremen, Norfolk, Va	Received 10 cents per hour increase.	Oct. 6	(1)	700	
Longshoremen, New Orleans, La		(1)		(1)	
Derrick men, New York City		Oct. 15		200	200
Lax & Abowitz, Brooklyn, N. Y	Men returned without discrimination.	Sept. 3	Oct. 28	100	35
Avondale Colliery, Pa		(1)		480	
Peach Orchard Colliery, Pa		(1)		395	
Truesdale Colliery, Pa		(1)		1,900	
Woodward Colliery, Pa		(1)		1,725	
Pettebone Colliery, Pa		(1)		395	
Loomis Colliery, Pa		(1)		900	
Auchinclos Colliery, Pa		(1)		390	
No. 6 Colliery, Pennsylvania Coal Co., Pittston, Pa.	Unauthorized strike; men returned.	Oct. 20	Oct. 22	1,675	75
Barnum Colliery, Pittston, Pa	Returned; demand settlement later.	Oct. 19	do	200	

[1] Not reported.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, OCTOBER, 1923—Concluded.

Company or industry and location.	Terms of settlement.	Duration.		Men involved.	
		Beginning.	Ending.	Directly.	Indirectly.
		1923.	1923.		
Central Colliery, Avoca, Pa	To be submitted as per rules of union.	Oct. 17	Oct. 20	600	25
Canaanville Coal Co., Ohio		(1)		(1)	
Golden State Woolen Mills, Long Beach, Calif.		Aug. 1		110	140
Brownwell Brush & Wire Co., Greensburg, Ind.	5 per cent cut; bonus of 10 per cent for piecework over 600 yards.	Oct. 1	Oct. 24	45	5
Carpenters, St. Louis, Mo.	(1)	(1)	Oct. 31	500	
Eisenlohr Co., Reading, Pa		Oct. 15		17	350
Wilkinson Lumber Co., Indianapolis, Ind.	Work awarded to iron workers.	Oct. 14	Oct. 24	10	40
No. 14 Colliery, Pittston, Pa	Returned. Submitted to union regulations.	Oct. 23	Oct. 29	1,610	90
Commonwealth Steel Co., Granite City, Ill.		June 1		280	
Total				40,002	3,509

[1] Not reported.

On November 1, 1923, there were 67 strikes before the department for settlement and, in addition, 16 controversies which had not reached the strike stage. Total number of cases pending, 83.

IMMIGRATION.

Statistics of Immigration for September, 1923.

By W. W. Husband, Commissioner General of Immigration.

THE following tables show the total number of immigrant aliens admitted into the United States and emigrant aliens departed from the United States from July to September, 1923. The tabulations are presented according to the countries of last permanent or future permanent residence, races or peoples, occupations, and States of future permanent or last permanent residence. The last table (Table 6) shows the number of aliens admitted under the per cent limit act of May 19, 1921, from July 1 to November 7, 1923.

Table 1.—INWARD AND OUTWARD PASSENGER MOVEMENT, JULY TO SEPTEMBER, 1923.

Period.	Arrivals.					Departures.			
	Immigrant aliens admitted.	Non-immigrant aliens admitted.	United States citizens arrived.	Aliens debarred.	Total arrivals	Emigrant aliens.	Non-emigrant aliens.	United States citizens.	Total departures.
1923.									
July	85,542	13,039	20,637	2,899	122,117	8,041	14,213	39,898	62,152
August	88,286	13,688	33,510	2,804	138,288	6,489	12,267	27,744	46,500
September	89,431	18,221	51,894	2,331	161,877	6,073	10,245	16,025	32,343
Total	263,259	44,948	106,041	8,034	422,282	20,603	36,725	83,667	140,995

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED DURING SEPTEMBER, 1923, AND FROM JULY TO SEPTEMBER, 1923, BY COUNTRIES.

Country.	Immigrant.		Emigrant.	
	September, 1923.	July to September, 1923.	September, 1923.	July to September, 1923.
Albania	53	166	22	48
Austria	828	3,417	14	64
Belgium	289	970	60	168
Bulgaria	145	286	10	38
Czechoslovakia	2,507	6,555	136	474
Denmark	601	1,803	43	184
Esthonia	50	147	.....	3
Finland	699	2,244	33	124
France, including Corsica	916	2,586	46	336
Germany	7,993	26,910	70	338
Great Britain and Ireland:				
England	4,615	13,277	418	1,561
Ireland	3,187	9,796	136	505
Scotland	6,720	18,106	72	298
Wales	365	821	7	19
Greece	872	2,506	536	1,553
Hungary	927	2,393	39	175
Italy (including Sicily and Sardinia)	7,308	22,239	1,538	5,432
Latvia	298	687	1	48
Lithuania	340	1,145	54	147
Netherlands	573	1,982	22	117
Norway	2,078	6,452	45	225
Poland	5,670	13,216	233	1,046
Portugal (including Azores and Cape Verde Islands)	513	1,527	383	1,071
Rumania	1,853	5,290	62	312
Russia	2,843	7,860	81	275
Spain (including Canary and Balearic Islands)	96	371	193	638
Sweden	3,375	11,052	63	257
Switzerland	709	2,070	14	91
Turkey in Europe	293	1,132	46	47
Yugoslavia	653	1,371	156	496
Other Europe	27	153	7	15
Total Europe	57,396	168,530	4,540	16,105
China	1,524	2,793	330	751
Japan	555	1,466	159	453
India	31	67	14	37
Syria, Palestine, and Mesopotamia	543	1,371	59	164
Turkey in Asia	589	1,192	1	97
Other Asia	39	126	7	21
Total Asia	3,281	7,015	570	1,523
Africa	149	618	10	38
Australia, Tasmania, and New Zealand	80	321	30	113
Pacific Islands (not specified)	11	26	4	8
Canada and Newfoundland	16,657	49,237	209	754
Central America	293	764	37	146
Mexico	8,097	26,529	294	539
South America	1,328	3,403	84	305
West Indies	2,137	6,803	295	1,072
Other countries	2	13	.....	.....
Grand total	89,431	263,259	6,073	20,603
Male	53,358	161,334	4,304	13 713
Female	36,073	101,925	1,769	6,890

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING SEPTEMBER, 1923, AND FROM JULY TO SEPTEMBER, 1923, BY RACES OR PEOPLES.

Race or people.	Immigrant.		Emigrant.	
	September, 1923.	July to September, 1923.	September, 1923.	July to September, 1923.
African (black)	1,519	4,408	61	359
Armenian	584	1,657	2	8
Bohemian and Moravian (Czech)	870	2,599	123	458
Bulgarian, Serbian, and Montenegrin	288	699	167	500
Chinese	766	1,476	314	733
Croatian and Slovenian	543	1,241	4	8
Cuban	252	651	97	249
Dalmatian, Bosnian, and Herzegovinian	22	122	11	63
Dutch and Flemish	1,005	3,324	88	300
East Indian	21	42	9	32
English	10,530	29,998	658	2,245
Finnish	659	1,979	45	140
French	3,860	11,389	65	351
German	10,493	34,724	113	497
Greek	937	2,639	546	1,567
Hebrew	8,557	22,479	.....	59
Irish	5,754	16,963	133	564
Italian (north)	1,462	4,623	56	260
Italian (south)	6,081	18,508	1,487	5,203
Japanese	448	1,303	150	447
Korean	9	22	5	8
Lithuanian	341	943	52	179
Magyar	1,141	3,187	46	182
Mexican	7,926	25,809	286	513
Pacific Islander	3	6	.....	.....
Polish	3,478	9,660	246	1,067
Portuguese	671	1,964	390	1,106
Rumanian	252	728	61	307
Russian	1,995	4,840	95	324
Ruthenian (Russniak)	213	650	.....	1
Scandinavian (Norwegians, Danes, and Swedes)	6,598	20,959	188	763
Scotch	8,854	24,526	80	387
Slovak	1,415	3,310	9	64
Spanish	393	1,680	256	841
Spanish-American	422	999	50	240
Syrian	215	786	67	163
Turkish	31	209	44	127
Welsh	424	1,080	8	23
West Indian (except Cuban)	241	705	35	186
Other peoples	158	372	26	88
Total	89,431	263,259	6,073	20,603

TABLE 4.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING SEPTEMBER, 1923, AND FROM JULY TO SEPTEMBER, 1923, BY STATES OR TERRITORIES.

State.	Immigrant.		Emigrant.	
	September, 1923.	July to September, 1923.	September, 1923.	July to September, 1923.
Alabama	72	172	2	19
Alaska	19	83	12	24
Arizona	2,268	4,438	31	109
Arkansas	35	69	1	5
California	6,187	17,938	463	1,417
Colorado	224	570	8	52
Connecticut	1,855	5,457	108	439
Delaware	86	221	1	3
District of Columbia	229	616	20	107
Florida	428	1,300	87	423
Georgia	48	151	3	26
Hawaii	159	621	21	63
Idaho	132	383	11	27
Illinois	6,776	20,226	322	1,037
Indiana	814	2,348	48	158
Iowa	438	1,542	10	63

TABLE 4.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING SEPTEMBER, 1923, AND FROM JULY TO SEPTEMBER, 1923, BY STATES OR TERRITORIES—Concluded.

State.	Immigrant.		Emigrant.	
	September, 1923.	July to September, 1923.	September, 1923.	July to September, 1923.
Kansas	207	615	14	35
Kentucky	82	177	5	9
Louisiana	147	396	20	131
Maine	895	2,658	9	23
Maryland	469	1,259	26	97
Massachusetts	7,262	20,889	699	2,035
Michigan	7,076	21,036	202	668
Minnesota	1,319	4,501	58	181
Mississippi	62	206	2	12
Missouri	624	1,762	24	114
Montana	192	683	14	40
Nebraska	353	1,056	16	39
Nevada	20	107	4	11
New Hampshire	536	1,973	8	11
New Jersey	4,548	13,545	245	819
New Mexico	138	289	5	17
New York	23,031	66,360	2,024	7,935
North Carolina	42	118	14	32
North Dakota	209	927	11	33
Ohio	3,667	10,626	255	813
Oklahoma	93	212	2	15
Oregon	668	1,922	35	79
Pennsylvania	7,731	21,383	558	1,826
Porto Rico	24	65	17	64
Rhode Island	947	2,915	146	385
South Carolina	39	78	3	5
South Dakota	147	475	1	25
Tennessee	70	167	2	15
Texas	4,243	17,216	207	314
Utah	131	514	11	55
Vermont	285	728	2	17
Virginia	291	735	29	77
Virgin Islands	1	2	.....	.....
Washington	2,391	6,287	142	325
West Virginia	314	885	43	168
Wisconsin	1,314	4,094	61	184
Wyoming	93	263	11	22
Total	89,431	263,259	6,073	20,603

TABLE 5.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING SEPTEMBER, 1923, AND FROM JULY TO SEPTEMBER, 1923, BY OCCUPATIONS.

Occupation.	Immigrant.		Emigrant.	
	September, 1923.	July to September, 1923.	September, 1923.	July to September, 1923.
Professional:				
Actors	126	387	2	17
Architects	40	146	1	5
Clergy	277	688	20	138
Editors	11	18	1	3
Electricians	485	1,568	6	21
Engineers (professional)	533	1,942	27	88
Lawyers	41	79	5	17
Literary and scientific persons	98	286	3	15
Musicians	227	581	11	29
Officials (Government)	64	175	7	38
Physicians	165	362	14	27
Sculptors and artists	54	131	1	9
Teachers	558	1,348	28	119
Other professional	364	1,312	19	132
Total	3,043	9,023	145	658

TABLE 5.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING SEPTEMBER, 1923, AND FROM JULY TO SEPTEMBER, 1923, BY OCCUPATIONS—Concluded.

Occupation.	Immigrant.		Emigrant.	
	September, 1923.	July to September, 1923.	September, 1923.	July to September, 1923.
Skilled:				
Bakers	457	1,357	20	48
Barbers and hairdressers	367	1,043	16	58
Blacksmiths	462	1,423	3	21
Bookbinders	37	117	.....	1
Brewers	4	20	.....	.....
Butchers	374	1,075	6	29
Cabinetmakers	57	196	2	17
Carpenters and joiners	1,905	6,566	44	155
Cigarette makers	9	23	1	1
Cigar makers	30	114	11	51
Cigar packers	4	7	.....	1
Clerks and accountants	2,949	8,705	82	307
Dressmakers	593	1,667	6	46
Engineers (locomotive, marine, and stationary)	732	1,495	7	24
Furriers and fur workers	37	152	.....	3
Gardeners	128	463	11	25
Hat and cap makers	40	129	.....	1
Iron and steel workers	1,474	3,650	4	20
Jewelers	80	159	1	4
Locksmiths	475	1,447	.....	1
Machinists	856	2,580	18	71
Mariners	1,095	3,174	20	74
Masons	719	2,390	5	23
Mechanics (not specified)	1,125	3,256	18	61
Metal workers (other than iron, steel, and tin)	223	501	1	4
Millers	91	249	7	35
Milliners	108	289	.....	.....
Miners	1,076	3,035	50	240
Painters and glaziers	443	1,524	10	23
Pattern makers	62	174	1	1
Photographers	64	183	3	3
Plasterers	91	283	.....	8
Plumbers	260	826	3	31
Printers	226	587	4	15
Saddlers and harness makers	34	126	.....	.....
Seamstresses	322	968	2	9
Shoemakers	765	2,163	33	93
Stokers	118	325	1	1
Stonecutters	89	271	1	4
Tailors	1,023	3,015	22	118
Tanners and curriers	33	37	2	3
Textile workers (not specified)	56	198	.....	1
Tinners	82	311	1	2
Tobacco workers	5	16	.....	.....
Upholsterers	37	134	.....	3
Watch and clock makers	82	249	.....	3
Weavers and spinners	481	1,302	63	142
Wheelwrights	27	61	.....	.....
Woodworkers (not specified)	92	289	.....	.....
Other skilled	795	2,245	10	47
Total	20,694	60,619	489	1,828
Miscellaneous:				
Agents	226	777	8	32
Bankers	27	65	5	25
Draymen, hackmen, and teamsters	253	697	8	12
Farm laborers	3,658	11,996	18	77
Farmers	2,091	6,827	135	417
Fishermen	203	741	7	12
Hotel keepers	22	64	2	4
Laborers	12,354	40,384	2,773	8,172
Manufacturers	89	225	2	17
Merchants and dealers	1,389	4,003	186	509
Servants	7,318	21,072	102	498
Other miscellaneous	3,499	10,467	325	1,372
Total	31,129	97,318	3,571	11,148
No occupation (including women and children)	34,565	96,299	1,868	6,969
Grand total	89,431	263,259	6,073	20,603

TABLE 6.—STATUS OF THE IMMIGRATION OF ALIENS INTO THE UNITED STATES UNDER THE PER CENTUM LIMIT ACT OF MAY 19, 1921, AS EXTENDED BY PUBLIC RESOLUTION NO 55, SIXTY-SEVENTH CONGRESS, APPROVED MAY 11, 1922, JULY 1 TO NOVEMBER 7, 1923.

Country or region of birth.	Maximum monthly quota.	Admitted Nov. 1 to 7, 1923.	Annual quota.	Admitted July 1 to Nov. 7.	Balance for year.[1]
Albania	58	[2] 55	288	280	[3]
Armenia (Russian)	46	5	230	73	148
Austria	1,468	230	7,342	4,197	3,009
Belgium	313	112	1,563	1,364	99
Bulgaria	61	35	302	275	8
Czechoslovakia	2,871	1,039	14,357	10,739	2,865
Danzig	60	27	301	247	39
Denmark	1,124	101	5,619	2,686	2,896
Esthonia	270	18	1,348	313	1,020
Finland	784	79	3,921	3,181	625
Fiume	14	1	71	54	9
France	1,146	139	5,729	3,118	2,517
Germany	13,521	2,490	67,607	37,663	29,367
Great Britain and Ireland	15,468	[2] 15,468	77,342	77,340	[3]
Greece	613	538	3,063	2,986	[3]
Hungary	1,149	178	5,747	3,541	2,010
Iceland	15	3	75	15	60
Italy	8,411	2,522	42,057	31,841	9,092
Latvia	308	165	1,540	1,171	287
Lithuania	526	285	2,629	2,253	251
Luxemburg	19	2	92	76	9
Netherlands	721	238	3,607	3,100	475
Norway	2,440	112	12,202	8,006	3,416
Poland	6,195	1,932	30,977	23,228	5,290
Portugal	493	[2] 471	2,465	2,443	[3]
Rumania	1,484	476	7,419	5,905	1,058
Russia	4,881	[2] 4,881	24,405	24,405	[3]
Spain	182	77	912	805	28
Sweden	4,008	82	20,042	15,040	4,825
Switzerland	750	527	3,752	3,527	111
Yugoslavia	1,285	139	6,426	2,905	3,263
Other Europe	17	[2] 12	86	80	[3]
Palestine	12	[2] 6	57	54	[3]
Syria	177	[2] 156	882	864	[3]
Turkey	531	[2] 517	2,654	2,641	[3]
Other Asia	19	[2] 16	92	92	[3]
Africa	21	[2] 16	104	100	[3]
Egypt	4	[2] 2	18	18	[3]
Atlantic Islands	24	.....	121	96	20
Australia	56	25	279	240	19
New Zealand and Pacific Islands	16	[2] 4	80	67	[3]
Total	71,561	33,181	357,803	277,029	72,816

[1] After all pending cases for which quotas have been granted and admissions under the act during the current fiscal year have been deducted from the annual quota.
[2] Maximum monthly quota exhausted. The balance of the quota not yet shown as admitted, are pending cases for which quotas have been granted.
[3] Annual quota exhausted.

Proposed International Conference on Emigration and Immigration.[1]

THE success of the conference of those countries with a large emigration, which was held in Rome in July, 1921, on the initiative of Italy, has induced the Italian Government to send out invitations for another conference to be held in Rome in 1924. In order that this conference may be able to contribute to the solution of problems of both emigration and immigration, invitations were sent not only to countries with large emigration but also to those with large immigration. The formal letter of invitation sent by the Italian Government to the various countries was accompanied by the following program outlining the scope and character of the conference:

[1] Italy. Commissariato Generale dell'Emigrazione. Bollettino della Emigrazione. Rome, August-September, 1923, pp. 617-621.

The International Labor Organization, attempting to enlarge its ample program, has expressed the intention of giving its attention also to problems of emigration. For obvious reasons, however, any efforts that might be made by the general conferences of the permanent labor organization to promote an international regulation in the special field of emigration and immigration would require considerable time and serious and long preparation. Such efforts would, moreover, lack the participation of those countries that are not members of the organization.

Not all countries are equally interested in the phenomena of emigration and immigration. On the other hand, there are countries in which, owing to demographic, geographic, and economic conditions, emigration and immigration constitute a specially important element of their national life. Owing to the fact that they are more directly interested, these latter countries can better appreciate the necessity of making a strenuous effort to establish direct international agreements and to coordinate their activities in all matters relating to emigration and immigration. Because of this consideration, the Italian Government believes that a conference of technical delegates of the various nations that are typical countries of emigration or of immigration would be particularly apt to promote an inquiry into those problems, conducted in an essentially practical spirit, with the result that a number of suggestions would be collected that would probably furnish effective orientation for an international regulation of these complex problems. In this belief the Italian Government has taken the initiative in inviting the principal countries of emigration and immigration to an international conference.

I. The international conference on immigration will be held at Rome during the first months of next year on a date to be fixed later.

II. The conference will have the character of a technical and not of a diplomatic conference. Excluding all problems which by their very nature can be solved only by each individual State by means of local legislation, the conference will examine the various problems relating to emigration with a view to considering what agreements would seem desirable in order to coordinate the emigration and immigration services of the various countries and to supply, in a more satisfactory manner, the needs of emigration and immigration. In accordance with its strictly technical character the conference will not have the power to sign collective conventions but will limit itself to summarizing in the form of proposals or in the form of a declaration of principles or recommendations those criteria that it will decide to suggest as the principles that should govern general international or individual conventions, which the Governments may subsequently conclude, or administrative liaisons which the Governments may find convenient to establish between the respective services.

III. In order that its work may proceed in a more orderly manner the conference will be divided into sections. Each section will have the task of examining specified questions pertaining to a particular group of problems.

IV. With reservation as to later changes, the conference shall be composed of the following sections:

(*a*) Transport of emigrants.

(*b*) Hygiene and sanitary services.

(*c*) Collaboration between the emigration and immigration services of the various countries.

(*d*) Assistance to emigrants in the ports of embarkation and to immigrants in the ports of disembarkation, and by private institutions to those who have emigrated.

(*e*) Suitable means for adjusting immigration to the labor needs of countries of immigration (information services as to the labor markets, employment, and colonization enterprises).

(*f*) Development of cooperation, thrift, and mutual aid among emigrants.

(*g*) Principles that should govern emigration treaties.

V. Each government accepting the invitation for participation in the conference shall have the right to propose, not later than November 30, 1923, particular questions to be submitted to the various sections of the conference for examination.

VI. The conference shall in plenary meeting, after having adopted its own rules of procedure, determine definitely, on proposal of a committee appointed by it, what questions among those proposed shall become the order of the day and be assigned to the various sections.

The monthly bulletin of the Italian Emigration Commission states that the Governments of the countries principally concerned with emigration and immigration have already expressed their intention of sending delegates to the proposed conference.

Recent Italian Measures for Protection of Emigrants.[1]

THE Gazzetta Ufficiale of August 16, 1923, publishes the text of a royal decree of July 19, 1923 (No. 1686), issued with a view to the reorganization of the services for the training of emigrants, for finding employment for emigrants abroad and for the prevention of clandestine emigration. The decree authorizes the Minister of Foreign Affairs to appoint temporarily, under the General Emigration Department, a chief inspector, four regional inspectors, and provincial delegates (inspectors).

On September 5, 1923, the cabinet approved the draft of a decree providing for the establishment at the principal ports of embarkation of refuges and hostels for emigrants. The General Emigration Department may either administer these establishments directly or entrust their management to private undertakings. The commissioner general of emigration is empowered to requisition for a limited period hotels situated near the railway stations or harbors, for the purpose of utilization as emigrant hostels.

The following regulations with regard to the transport of emigrants by foreign shipping companies have been issued by the commissioner general of emigration:

1. To obtain a license to carry emigrants, foreign vessels must as a rule fit out in Naples, and must touch at Palermo at least every other voyage.
2. The conditions of employment of Italian subjects in the service of such companies must be satisfactory.
3. The companies must pledge themselves not to undertake propaganda for the purpose of inducing persons to emigrate, and must also require their agents to abstain from such propaganda. They must also undertake not to carry any Italian subject who is not in possession of the usual papers as required by Italian law.
4. From the quota allowed to them will be deducted a number equivalent to that of the Italian passengers embarking on ships of the same company at foreign ports.

On September 7, 1923, the cabinet approved the draft of a decree authorizing the savings bank department of the Bank of Sicily to set up agencies abroad for undertaking the transfer of emigrants' savings. Up to the present, of the three banks of issue in Italy only the Bank of Naples had been authorized by the act of 1901 to do business of this nature. The Government, however, considers that these operations should be extended in order to prevent the frauds which too frequently take place at the expense of emigrants. The draft decree further empowers the bank to participate in the management of foreign companies which undertake to provide for the economic interests of Italian emigrants. The expenditure incurred in setting up these agencies and in participating in the foreign companies in question shall not exceed a quarter of the reserve funds of the savings bank department.

It may be added that the Government has recently requested the National Cooperative Credit Institute to take steps for coordinating the activity of Italian cooperative societies abroad, and has authorized it to approach the banks with a view to concluding agreements for giving the necessary financial support to the cooperative societies which are finding profitable opportunities of work in France.

[1] International Labor Office. Industrial and Labor Information, Geneva, Oct. 5, 1923, pp. 15, 16. Based on information from Corriere della Sera Sept. 4–7, 1923, and Gazzetta Ufficiale, Aug. 16, 1923.

WHAT STATE LABOR BUREAUS ARE DOING.

Massachusetts.[1]

IN SEPTEMBER, 1923, 85 complaints regarding nonpayment of wages were brought to the Massachusetts Department of Labor and Industries, and 16 cases were prosecuted. During that month the payments by employers to employees after complaint aggregated more than $1,600.

There were 1,345 industrial safety orders issued in the month of September and the department's inspectors investigated 91 cases of industrial accidents and 2 cases of occupational disease.

Porto Rico.

THE appropriations of the Bureau of Labor of Porto Rico provided for only 10 inspectors for the fiscal year 1921–22, according to the report of the commissioner of agriculture and labor of the island for that period. One district with 11 towns is in the charge of a single inspector. Another inspector has 10 towns within his jurisdiction. A doubling of the inspection force and an appropriation for traveling expenses up to $15,000 are recommended. The table given below shows the number of indictments in the year covered by the report for violations of the labor laws:

CASES OF INDICTMENT, 1921–22.

Violated laws.	Number of indictments.	Number of employers sentenced.	Number of employers acquitted.	Number of cases pending.
Minimum wage	255	93	94	68
Women and children law	81	19	20	42
Law regulating the weight workers may carry	20	5	1	14
Law on the duties of the employers	4	2	1	1
Act No. 75, on employment of minors	24	14	6	4
Law on labor contract	109	26	27	56
An act to provide for a dispensary	1	1	.....	.....
The safety scaffold law	7	3	2	2

The following statistics on wage claims handled by the bureau of labor are also taken from the above-mentioned source:

Total number of claims handled during fiscal year 1921–22	293
Number of claims settled	79
Number of claims unsuccessful	208
Number of claims pending	6
Amount of 76 claims settled (amounts involved in 3 others not given)	$2,666.63
Amount of 200 unsuccessful claims (amounts involved in 8 others not given)	8,044.03
Amount of claims pending	664.74
Total amount of claims with exceptions specified above	11,375.40

[1] Information from the Massachusetts Department of Labor and Industries, received Nov. 10, 1923.

It will be noted that over 70 per cent of these wage claims have not been successful. The commissioner of agriculture and labor states that his office has not the requisite powers to enforce the claims and calls attention to the necessity of having a formal agency for this purpose. Porto Rico already has a law "to determine the procedure in cases of claims for wages of farm laborers against their employers" and the extension of the act to all occupations is suggested in the report.

The commissioner deplores the utter inadequacy of the employment agency, which is under the direction of the chief clerk of the Bureau of Labor. The functioning of this placement service has become increasingly difficult because of insufficient funds and the failure of employers to cooperate. Furthermore, there is no law authorizing the Bureau of Labor to set up employment agencies in the island, nor has this office the necessary means to collect employment statistics which would indicate the approximate situation in the labor market.

The housing of peasants in Porto Rico is reported as "most degrading." The huts of these people "may not be compared to the housing of any other workman of the countries advanced in civilization." The bureau's inspectors visited 796 families supporting 2,839 children and 914 other relatives. The living conditions of those in the rural districts are "deplorable," while in the urban zone also the workers' dwellings are unhealthy and wholly out of harmony with "the progress of our cities."

In the judgment of the commissioner the bureau of labor should "undergo a complete reorganization so as to make it more useful and effective." He also emphasizes the urgent need for progressive social and economic changes in the life of the people on the island through adequate legislation and government.

CURRENT NOTES OF INTEREST TO LABOR.

Reduction of Working-Days per Week in Finland.

ACCORDING to Arbejdsgivern (Copenhagen), October 12, 1923, the Finnish Footwear Employers' Association has decided to reduce the working week to four days throughout the whole country. This measure, which, it is stated, will most likely become effective November 1, is a result of the extensive importations of footwear, coming principally from Germany.

Scandinavian Employers' Conference.

ACCORDING to a consular report from Stockholm, Sweden, dated September 18, 1923, the eighth conference of Scandinavian employers was held in Stockholm August 31 and September 1, 1923. There were 80 representatives present from Norway, Sweden, Denmark, and Finland.

While conferences have not been held every year (the first meeting was held at Copenhagen in 1907, but Finland was first represented in 1910) the Scandinavian countries and Finland have kept in touch with each other by annual meetings of the permanent committee and have exchanged reports. Some subjects discussed at the conference were as follows:

"The question of uniform laws in the Scandinavian countries regarding social conditions.

The possibility of enacting uniform unemployment laws in the Scandinavian countries.

Employers as contributors to social institutions.

Vital questions relative to collective agreements.

Wage policies of the employers' union during periods of depression.

Passport regulations in connection with the migration of foreign labor into Sweden."

The next conference is to be held at Christiana in 1925, on a date to be decided upon by the permanent committee.

Reorganization of Swedish Unemployment Commission.

ACCORDING to Sociala Meddelanden No. 10, 1923, issued by the Swedish Labor Bureau (*Socialstyrelsen*), the Government has decided that beginning with October 1, 1923, the commission is to consist of five members and that the commission is to appoint from its own membership a labor committee of three which is to handle and decide such matters as need not come before the committee in full. Hereafter the question of payment of unemployment benefit to those unemployed because of labor disputes is to be referred by the local relief body to the State unemployment commission. Under the previous legislation every such case was considered by the labor committee; if the committee failed to reach an agreement it was referred to the Government.

The committee of three members appointed March 10, 1922, to report to the Government on these matters ceases to function.

PUBLICATIONS RELATING TO LABOR.

Official—United States.

ARKANSAS.—*Bureau of Labor and Statistics. The childhood of Arkansas. Little Rock [1923]. 15 pp.*

Contains the Arkansas law relating to child labor, information as to the issuance of permits, and statistics showing the distribution of employed children. In 1920 the State had 48,140 children from 10 to 15 years of age gainfully employed, of whom 94.9 per cent were employed on farms.

CONNECTICUT.—*Board of Compensation Commissioners. Compendium of awards, June 1, 1920, to May 31, 1922, inclusive. [New Haven, 1923?] 824, 130 pp.*

This volume is a continuation of the series of awards by the compensation commissioners of Connecticut, together with decisions of the superior court and of the supreme court of errors on appeal. Selected opinions of the commissioners are given, but all decisions of the superior court and of the supreme court of errors have been printed in full, the last named appearing as part two of the volume, including decisions rendered in the October term, 1922. Analytic headings and a statement of the findings in the form of syllabi, followed in a number of cases by a memorandum of the commissioner, make the first part a compendium of practice and construction; while the court decisions furnish the authoritative determinations on a number of points drawn into dispute by appellants. An index of cases and a topical index complete the work.

ILLINOIS.—*Board for Vocational Education. Statement of plans and policies, five-year period, 1922–1927. Springfield, 1923. 60 pp. Bulletin No. 27.*

Outlines courses for agricultural education, trade and industrial education, education in home economics, and teacher training.

INDIANA.—*Industrial Board. Report [for fiscal year ending September 30, 1922]. [Indianapolis, 1923?] 67 pp.*

Data on industrial accidents, taken from this report, are published on page 167 of this issue of the MONTHLY LABOR REVIEW. The report of the department of women and children was summarized in the MONTHLY LABOR REVIEW for May, 1923.

PENNSYLVANIA.—*Department of Labor and Industry. Industrial home work in Pennsylvania, by Agnes M. H. Byrnes. [Harrisburg, 1921?] 189 pp.*

Gives the results of a survey of industrial home work made in 1916 and 1917, and of a brief resurvey made in 1920. The study traces the development of industrial home work, and gives data concerning the number, age, sex, and marital status of the workers, earnings, extent to which child labor is utilized, and general effects of the system. In general, the effects are considered undesirable. The work is said to be harmful to the health of the workers (especially to children), destructive to family welfare, and a danger to the health of the community.

Viewed from the economic and social standpoint, the system is no more desirable. It offers a low wage scale, and in spite of the fact that family groups often cooperate in production it brings in but scanty returns. It weakens the position of the employee in the factory, and is a detriment to efficient production, since the employer "relies upon a cheap and unskilled labor supply, instead of upon machines and other improved methods of manufacture, and upon efficient organization of employees." To offset these disadvantages only two benefits are mentioned: The work enables women

to supplement inadequate family earnings and affords an opportunity for earning money to many who dread the exactions of factory life.

The report recommends a system of gradually increasing legal restrictions which would eventually eliminate home work, but which would avoid the hardships that would result from abruptly sweeping it away.

TEXAS.—*Board for Vocational Education. Outline of plans for vocational education in Texas as related to trades and industry, 1922–1927. Austin, 1923. 112 pp. Bulletin No. 161.*

In addition to outlining the plans for vocational education through the five-year period 1922 to 1927, this report contains an account of what has been accomplished under the Smith-Hughes Act since the work was begun in 1918.

WISCONSIN.—*Industrial Commission and Railroad Commission. Wisconsin State electrical code. Madison, 1922. 283 pp. First edition.*

A brief notice regarding this code is given on page 157 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—*Department of the Interior. Bureau of Mines. Erection of barricades during mine fires or after explosions, by J. W. Paul and others. Washington, 1923. 28 pp. Illustrated. Miners' circular 25.*

This pamphlet is a practical study of the hazards from gas during a mine fire or explosion, and gives directions for building barricades, with illustrations of measures taken by entombed miners to save themselves in a number of serious mine disasters. It is designed for the practical instruction of underground workers in coal and metal mines.

—— —— *Bureau of Pensions. Retirement Division. Handbook containing abstracts of decisions and opinions and rules of procedure relating to the retirement act of May 22, 1920, and amendments. Washington, 1923. x, 82 pp.*

This handbook sets forth the text of the act of May 22, 1920, and its amendments, regulating the retirement of employees in the classified civil service of the United States. The text of the law is first printed in sections, each paragraph followed by annotations embodying abstracts of decisions and opinions on the subject matter. The law and its amendments and Executive orders relative thereto, together with circulars and instructions, are reproduced consecutively in an appendix. Important decisions as to classification, status, the effect of leave, modes of computing service, disability annuities, automatic separation, refunds, etc., are presented.

—— *Department of Labor. Children's Bureau. Child labor on Maryland truck farms, by Alice Channing. Washington, 1923. 52 pp. Bureau publication No. 123.*

A discussion of the findings of this study is given on pages 118 and 119 of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Ten years' work for children, by Grace Abbott. Washington, 1923. 10 pp. Reprinted from North American Review for August, 1923.*

This pamphlet reviews briefly the work of the United States Children's Bureau during the 10 years since it began functioning in the summer of 1912.

—— *Interstate Commerce Commission. Bureau of Statistics. Report on the statistics of railways in the United States for the year ended December 31, 1921, together with abstracts of periodical reports for the year ended December 31, 1922. Washington, 1923. cxviii, 476 pp.*

This report contains the usual statistics of mileage, equipment, capitalization, traffic and operation, income and profit and loss statements, investments, etc. Statistics of employees include number, compensation, and service hours.

—— *War Department. Bureau of Insular Affairs. Commissioner of Agriculture and Labor of Porto Rico. Report [for fiscal year ending June 30, 1922]. (Reprint from the report of the Governor of Porto Rico, pp. 438–504.) Washington, 1923. 66 pp.*

Extracts from this report appear on pages 113 and 213 of this issue of the MONTHLY LABOR REVIEW.

Official—Foreign Countries.

AUSTRALIA.—*Bureau of Census and Statistics. Labor report, 1922. Melbourne, 1923. 183 pp. No. 13.* [*C. S. No. 415.*]

Contains, in addition to the strictly labor data, statistics relating to wholesale and retail prices, price index numbers, and cooperative societies. (Data on the number and operations of cooperative societies in Australia in 1922 are given on page 196 of this issue of the MONTHLY LABOR REVIEW.) Several tables are devoted to the movement of trade-union membership since the close of the war. At the end of 1918 the total membership was 581,755. For three years it continued to rise, the percentage of increase being 7.9 per cent in 1919, 9 per cent in 1920, and 2.7 per cent in 1921. In 1922 the membership fell from 703,009 at the beginning of the year to 702,938 at the end, a decrease so small as to be negligible. During these years the number of male members rose from 531,090 to 616,886, an increase of 16.2 per cent, while the female membership rose from 50,665 to 86,052, an increase of 69.8 per cent. However, at the end of 1922 only 34.5 per cent of the estimated total number of female workers 20 years of age and over were in the unions, while for male workers the corresponding percentage was 59.2.

The trade-union returns as to unemployment show the following variations during the same period:

	Number unemployed.	Per cent unemployed.
1918	17,536	5.8
1919	20,507	6.6
1920	22,105	6.5
1921	40,549	11.2
1922	35,238	9.3
1923 (first quarter)	27,112	7.2

Previous to 1921, the highest percentage of unemployment reported by the unions was 10.8 per cent in 1896, at which time the trade-union membership was so small—4,227—that it may be doubted whether the figures were representative of general conditions. At the end of 1922, the highest percentage of unemployment, 15.6, was found in the unions of the engineering and metal-working trades, the next, 13.5 per cent, among the workers engaged in mining, quarrying and the like, while the unions of those working with food, drink, and tobacco stood third with a percentage of 12.1. No other group of unions showed as large a proportion as 10 per cent unemployed.

The percentage of unemployment, by cause, is given for each quarter since the beginning of 1918 under three headings: Lack of work, sickness, and other causes. In the first three quarters of 1919, the influenza year, illness caused a material amount of unemployment, the percentage varying from 1.5 to 2.5, but in no other quarters from that time on did it account for as much as 1 per cent. In the second quarter of 1919 "other causes" accounted for 0.7 per cent, but for the rest of the period it was never responsible for more than 0.3 per cent. Throughout the whole period lack of work has been the outstanding cause of unemployment.

——— *Pocket compendium of Australian statistics. Melbourne, 1923. 147 pp.* [*C. S. No. 419.*]

Of interest to labor are the data on cooperative societies, friendly societies, wages and hours of labor, industrial disputes, old-age and invalid pensions, prices of commodities, rents, trade-union membership, and unemployment.

CEYLON.—*Department of Census and Statistics. The Ceylon blue book, 1922. Colombo 1923.* [*Various paging.*]

Certain figures with regard to cooperative societies, taken from this report, are given on page 197 of this issue of the MONTHLY LABOR REVIEW.

DENMARK.—*Invalideforsikringsretten. 1ste Aarsberetning, 1. Oktober 1921 to 31. December 1922. Copenhagen, 1923. 171 pp.*

First report of the Invalidity Insurance Court of Denmark, covering the period from October 1, 1921, to December 31, 1922. Future reports will cover the calendar year. This report gives the composition and organization of the court, its competence, method of handling cases, statistical survey, and surveys of special cases.

A brief report on operations under the invalidity insurance law is given on page 169 of this issue of the MONTHLY LABOR REVIEW.

FINLAND.—*Ministère des Affaires Sociales. L'agriculture et la situation des ouvriers agricoles en Finlande. Helsingfors, 1923. 55 pp.*

This is a short survey, in French, of agriculture and the situation of agricultural workers in Finland. It gives statistics of production, the work of the cooperative societies, the number of farm owners and of workers, hours of labor, wages, and payments in kind, and housing conditions.

FRANCE.—*Ministère du Travail. Statistique Générale de la France. Annuaire statistique 1922. Paris, 1923. xvi, 396 pp.*

The thirty-eighth annual report of the General Statistical Office includes tables relating to climate, population, commerce, finance, and industries of France, its colonies and protectorates, covering different periods of time. About half of the report gives similar information on these subjects for other countries.

GERMANY.—[*Statistisches Reichsamt.*] *Jahresberichte der Gewerbe-Aufsichtsbeamten und Bergbehörden für das Jahr 1922. Berlin, 1923. 4 vols.* [*Various paging.*]

These four volumes contain the annual reports for the year 1922 of the factory and mine inspection services of the various German States. A summary of these reports is given on pages 39 to 50 of this issue of the MONTHLY LABOR REVIEW.

GREAT BRITAIN.—*Department of Overseas Trade. Report on the economic and financial conditions in Germany to March, 1923, by J. W. F. Thelwall and C. J. Kavanagh. London, 1923. 158 pp.*

This report on the economic and financial conditions in Germany, prepared by two members of the British commercial diplomatic service, covers conditions up to March, 1923. It deals with German finance and foreign trade, the coal industry, the iron and steel and allied industries, labor, wages, and the cost of living.

—— *Exchequer and Audit Department. Unemployment insurance acts, 1920 to 1922. Unemployment fund account, 1921–1922. London, 1923. 6 pp.*

Gives the balance sheet of the fund for the insurance year ending July 2, 1922. During this time contributions to the fund showed an increase, as compared with the preceding year, from £13,483,118 ($65,615,594, par) to £42,431,769 ($206,494,204, par), while payments to the unemployed rose from £34,126,201 ($166,075,157, par) to £53,060,622 ($258,219,517, par).

—— *Ministry of Agriculture and Fisheries. Committee on distribution and Prices of Agricultural Produce. Interim report on meat, poultry and eggs. London, 1923. 185 pp. Cmd. 1927.*

A study of the methods and costs of selling and distributing meat and poultry products.

—— *Ministry of Labor. Employment and Insurance Department. Report on the administration of section 18 of the unemployment insurance act, 1920. London, 1923. 44 pp. Cmd. 1613.*

Contains the sections of the unemployment insurance act of 1920 which provided for special schemes of insurance by industries, an account of how far these provisions were effective, some discussion of the difficulty of establishing special schemes, and a description of the one special scheme, established in 1921, for insurance of workers in the insurance business. For a brief summary of the report, see pages 149 to 151 of this issue of the MONTHLY LABOR REVIEW.

INDIA (PUNJAB).—[*Department of Industries and Land Records. Inspector of factories.*] *Annual report on the working of the Indian factories act, 1911, in the Punjab, for the year 1922. Lahore, 1923.* [*Various paging.*]

Contains, in addition to the report, statistical tables showing the number of factories covered by the law, the average daily number of workers, the shifts and holidays, accidents, convictions, and inspections. The sections of the report dealing with working conditions are summarized on pages 50 and 51 of this issue of the MONTHLY LABOR REVIEW.

—— [*Registrar of Cooperative Societies.*] *Report on the working of the cooperative societies in the Punjab for the year ending July 31, 1922. Lahore, 1922. 7, 31, xcvii pp.*

Figures taken from this report are given on page 198 of this issue of the MONTHLY LABOR REVIEW.

ITALY.—*Ministero per il Lavoro e la Previdenza Sociale. Direzione Generale del Lavoro. Occupazione operaia e riduzioni d'orario nelle industrie (Luglio 1920–Novembre 1921). Rome, 1923. 177 pp.* (*Supplemento al "Bollettino del Lavoro e della Previdenza Sociale" N. 37.*)

Report on the results of an investigation of the extent of unemployment and short-time work in Italy in November, 1921, as compared with July, 1920. The investigation was made by the Italian factory inspection service by means of printed schedules filled in by industrial employers and verified by personal inquiries of factory inspectors. It covered all establishments employing more than five workers, with the exception of establishments in Sicily and in the Provinces of Catanzaro and Reggio Calabria. The returns from these Provinces were not included in the results because they were incomplete.

The returns covered 18,320 establishments. Of these, 1,002 were closed and 17,318 were in operation in November, 1921, as against 1,583 closed and 16,737 in operation in July, 1920. The establishments operating in November, 1921, employed 1,046,769 workers (615,884 males and 430,885 females), while those operating in July, 1920, employed 1,204,728 workers (739,434 males and 465,294 females). The decrease in the number of workers employed in November, 1921, therefore, was 157,959, or 13.1 per cent. It should, however, be noted that of the 1,046,769 workers employed in November, 1921, only 829,639 worked full time while 217,139 were on short time.

NETHERLANDS.—*Centrale Commissie voor de Statistiek. Jaarverslag over het jaar 1922. The Hague, 1923. 54 pp.*

The annual report of the Central Statistical Commission of the Netherlands on its activities in the year 1922.

—— *Departement van Arbeid, Handel en Nijverheid. Verslag over het haventoezicht, 1922.* [*The Hague*] *1923. viii, 90 pp.*

The annual report of the Harbor Inspection Service of the Netherlands covering the year 1922. The report deals with the activities of the service with respect to the inspection of vessels, the enforcement of the stevedores' law, the stevedores' safety decree, and the decree regulating the hours of labor in harbors, discusses complaints made by various parties, and gives detailed statistics of accidents in harbor work and inland navigation. In addition it contains detailed reports for each of the three existing inspection districts as to working regulations and the extent of navigation in the various harbors of the country.

NEW ZEALAND.—*Pensions Department. Report for the year ending March 31, 1923. Wellington, 1923. 8 pp.*

The following figures taken from this report give some of the facts as to miners', old-age, and widows' pensions in the year ending March 31, 1923, compared with figures taken from the annual reports for the two preceding years:

STATISTICS OF MINERS', OLD-AGE, AND WIDOWS' PENSIONS IN NEW ZEALAND, FOR YEARS ENDING MARCH 31, 1921, 1922, AND 1923.

[£ at par=$4.8665; shilling=24.3 cents; penny=2.03 cents.]

Type of pension, and year ending—	Number of pensions in force.	New claims lodged during year.	Average amount of pension.	Cost per capita of European population.
			£ s.	s. d.
Miners' pensions:				
March 31, 1921	474	111	62 12	5¼
March 31, 1922	506	107	62 5	6
March 31, 1923	544	114	62 4	6
Old-age pensions:				
March 31, 1921	19,837	2,760	37 3	12 2
March 31, 1922	20,491	3,278	36 13	11 11
March 31, 1923	21,181	3,435	36 7	11 11
Widows' pensions:				
March 31, 1921	3,421	719	58 2	3 1
March 31, 1922	3,343	641	62	3
March 31, 1923	3,411	794	57 7	2 11

NEW ZEALAND.—*Registrar of Friendly Societies. Report for the year ended December 31, 1922. Wellington, 1923. 35 pp.*

The membership of the friendly societies in New Zealand whose returns were tabulated was 80,777 on December 31, 1922, an increase of 2,963, or 3.81 per cent, over 1921. The gross funds amounted to £2,593,692 ($12,622,202, par), an increase over 1921 of £147,849 ($719,507, par), the average capital per member being £32 2s. 2d. ($156.26, par). Average sick pay, per member sick, decreased from £7 11s. 5d. to £7 8s. 3d. ($36.84 to $36.07, par), although considered in relation to the number of weeks of sickness the average benefit paid per week was the same as in 1921, 13s. ($3.16, par.) The mortality rate was slightly higher than that of 1921, being 8.18 per thousand. The funeral benefit paid in 1922 amounted to £28,793 ($140,121, par), equal to 7s. 3d. ($1.76, par) per deceased member as compared with 6s. 8d. ($1.62, par) in 1921.

UNION OF SOUTH AFRICA.—*Department of Mines and Industries. Annual reports for the calendar year ended December 31, 1922. Pretoria, 1923.* [*Various paging.*] *28 tables.*

Contains statistical data relating to the mines and quarries of South Africa. In 1921 the labor force numbered 278,728, of which 87.6 per cent was colored; in 1922 the number employed had decreased to 255,703, but the proportion of colored workers had increased to 89.5 per cent. The figures as to accidents show on the whole an improvement; both fatalities and accidents were fewer in 1922 than in 1921. A section on miners' phthisis shows a decrease in the number of cases found, but the situation is not yet regarded as satisfactory.

The figures indicate that pure silicosis is still being produced at the rate of about 20 cases per month. This can not be regarded as satisfactory and points to the necessity for further improvement in underground health conditions, and for continued vigilance in existing preventive measures. Machine drilling is still the class of occupation which gives rise most rapidly to miners' phthisis.

Unofficial.

AMERICAN FEDERATION OF LABOR. *Executive Council. Report to the 43d annual convention, Portland, Oreg., October 1, 1923.* [*Washington, D. C.*] *1923. 127 pp.*

Extracts from this report are given in the account of the convention on pages 163 to 167 this issue of the MONTHLY LABOR REVIEW.

BILLERBECK, GERHARD. *Die Kündigung und Entlassung von Arbeitern. Berlin, 1921. 118 pp.* (*Bücherei des Arbeitsrechts, Band 2.*)

A compilation of the legal provisions relating to the giving of notice to and dismissal of workers in Germany, with commentaries and citations from legal decisions.

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE. *Division of Economics and History. Labor supply and regulation, by Humbert Wolfe. Oxford, Clarendon Press, 1923. xiv, 422, 10 pp.*

This is one of a series of monographs on the "Economic and social history of the World War." The series is intended to consist of "unofficial yet authoritative statements, which may best be described as about half-way between memoirs and blue books." In carrying out this purpose the author states that he has tried to make the book entirely impersonal and uncontroversial. It is doubtful whether such an attempt can ever be wholly successful when the matter handled is one on which opinion divides as sharply as it does concerning the treatment of labor during the war, but the author has confined himself pretty closely to an account of what was done, what were the intentions behind the doings, and what were, in the main, the results of the various measures.

At the outbreak of the war apparently no one realized that production and distribution of the necessaries of life were as essential to success as military measures, and enlistments were encouraged, regardless of how much the volunteers might be needed in industry. The author traces the various steps needed to remedy this situation, first to prevent the enlistment of those needed at home, then to retrieve for industry some of those who had been allowed to enlist, to see that enlistments were confined to those who could best be spared, to secure new labor supplies, and finally, to bring what labor was available to the highest pitch of productivity.

If securing and maintaining a labor supply involved considerable interference with the peace-time rights of the individual, the regulation of the labor so secured involved even more. A considerable degree of compulsion was introduced, and the industrial rights of both employer and employee were severely restricted. In essential industries, strikes and lockouts were prohibited, trade-union practices built up by decades of effort were abrogated, working conditions were regulated, wages were fixed, and for a time the worker's right to leave if he did not like his treatment was practically abolished though the employer's right to dismiss was not interfered with. An immense increase in output was the immediate result of these measures; their more remote results do not fall within the scope of this book.

An appendix contains the successive munitions acts, the Treasury agreements as to dilution of labor, rules for constituting and regulating the munitions tribunal, the various orders concerning wages, and similar documents, which are not always easy to obtain but are essential for any one wishing to study the war-time development of control of industry.

CONSULTATIVE COMMITTEE OF WOMEN'S ORGANIZATIONS. *Housing Subcommittee. The housing problem. A statement of the present position. London, 1923. 54 pp.*

This report, which is dated April, 1923, gives a brief historical sketch of the housing problem before the war, a discussion of the present situation, and a review of the current proposals for meeting the housing shortage, giving arguments for and against each plan cited. An appendix contains data on related subjects and a brief account of housing measures in other countries.

GOWIN, ENOCH BURTON, and WHEATLEY, WILLIAM ALONZO. *Occupations. A textbook for the educational, civic, and vocational guidance of boys and girls. Revised by John M. Brewer. Boston, Ginn & Co., 1923. x, 441 pp.*

This study of occupations is designed to aid high-school students in choosing their vocations. The revision retains much that was in the original edition with the addition of material relating to vocations for girls, and a general discussion of education and work and of vocational adjustment. A bibliography on occupations is appended.

HUNTER, MERLIN H. and WATKINS, GORDON S. *The background of economics. New York, McGraw-Hill Book Co. (Inc.), 1923. x, 514 pp.*

The purpose of this book is to furnish a background for the study of the principles of economics, and it is intended to be used in preparation for college work in economics. The study covers the forces and products of nature, the development of agriculture and manufacturing industries, the problems of industry, exchange, and Government and economic relations.

INSTITUT INTERNATIONAL D'AGRICULTURE. *Annuaire international de législation agricole, 1922. Rome, 1923. liii, 1056 pp.*

The international yearbook of agricultural legislation. Contains an analytical introduction and index in English; the text is in French. Part VIII contains the text of legislation on agricultural cooperation, insurance, and credit.

INSTITUT INTERNATIONAL DE STATISTIQUE. *Commission d'études pour les statistiques economiques internationales. Rapport sur les indices de la situation economique, par Lucien March. [Brussels?] 1923. 268 pp.*

This report was issued by a special commission appointed to make a study of index numbers relating to the economic situation—wholesale prices, retail prices, and cost of living; stock exchange transactions, issue of bills, etc.; and composite indexes of economic prosperity in different countries. The report was presented to the fifteenth session of the International Statistical Institute at Brussels, October, 1923, as part of the work toward establishing comparable statistics between the various countries.

INSTITUTE FOR GOVERNMENT RESEARCH. *The Division of Conciliation, its history, activities, and organization, by Joshua Bernhardt. Baltimore, Johns Hopkins Press, 1923. xi, 37 pp. Service monographs of the United States Government, No. 20.*

This monograph gives the history and organization of the Division of Conciliation of the Department of Labor and an account of its activities in working for industrial peace through conciliation and mediation. The work of the division does not include controversies between railroads, express companies, and sleeping-car companies which are subject to the interstate commerce act, and their employees. The historical section includes an account of national legislation relating to the settlement of disputes on certain carriers in interstate commerce, the creation of the Division of Conciliation, progress to the World War, effect of the war, and the present status of the division. The appendixes include an outline of organization, including number of personnel and salaries; a classification of activities; a statement of appropriations and expenditures; and a bibliography.

KASKEL, WALTER, and SYRUP, FRIEDRICH. *Arbeitsnachweisgesetz. Kommentar. Berlin, 1922. 330 pp. (Carl Heymanns Verlag, Taschen-Gesetzsammlung 103.)*

The authors of this volume, who had prepared the first draft of the German law on public employment offices (*Arbeitsnachweisgesetz*), after the enactment of this law on July 22, 1922, published the above commentary in order to aid the administrative authorities in the practical enforcement of the law and to contribute to the solution of the large number of difficult problems involved in the administration of the new law. A summary of the provisions of the law was given in the October, 1922, issue of the MONTHLY LABOR REVIEW (pp. 185–191).

MICHIGAN, UNIVERSITY OF. *School of Education. Vocational Education Department. Occupations of junior workers in Detroit, by Alexander C. Crockett and Jennie M. Clow. Ann Arbor, 1923. 76 pp. Special studies No. 1.*

A summary of this study is given on pages 120 and 121 of this issue of the MONTHLY LABOR REVIEW.

NATIONAL INDUSTRIAL CONFERENCE BOARD. *Wages, hours, and employment in American manufacturing industries, July, 1914–July, 1923. New York, 1923. vii, 154 pp. Research report No. 62.*

This report aims to portray "the important features of the movement of hourly and weekly earnings, hours of plant operation and worker hours, as well as of the numbers employed, during the nine years since the pre-war period, treating in detail the trends in the past three years, or since the general peak of industrial activity in 1920." It contains a number of summary tables, pay-roll data concerning different industries, and charts showing the fluctuations of the various factors considered.

PALLA, EDMUND. *Die Kammern für Arbeiter und Angestellte. Vienna, 1923. vi, 122 pp. (Die sozialpolitische Gesetzgebung in Österreich, Band XI, Heft 1.)*

This volume is one of a series of works on socio-political legislation in Austria and deals with the Austrian chambers of labor, a unique institution that has nothing in common with the French bourses du travail or the Italian camere di lavoro. The Austrian chambers of labor are public corporations created to represent and safeguard the economic interests of manual workers and salaried employees in the same manner as chambers of commerce represent the interests of employers in commerce and industry. The activities of these chambers consist chiefly in proposing and drafting legal measures in the interest of labor and in cooperating in the administration of such measures. The volume under review contains the full text of the law on chambers of labor of February 26, 1920, the decree regulating the election of members of such chambers, and of the by-laws of the chambers. Two tables show the result of the first elections held.

ROBERTSON, D. H. *The control of industry. New York, Harcourt, Brace & Co., 1923. ix, 171 pp.*

This book contains a general discussion of economic principles as exemplified by developments of large-scale industry; the organization of marketing; finance and industry; cooperation; workers' control; and joint control.

SPEISER, W. *Wirtschaftskennzahlen (Indexziffern). Berlin, 1922. 56 pp.*

The above brochure had as its principal aim the collecting, sorting, and discussion of the numerous economic indexes computed in Germany and foreign countries up to November, 1921. It deals with general, wholesale, and retail price indexes, cost of living, wage, foreign exchange, stock exchange, and other economic indexes, and contains several tables and a large number of charts. Wherever it was possible the pre-war period has been taken as the base period in the tables and charts in order to make the various indexes comparable.

TAYLOR, PAUL S. *The Sailors' Union of the Pacific. New York, Ronald Press Co., 1923. vii, 188 pp.*

This study of unionism among sailors on the Pacific coast deals with earlier conditions of seamen on vessel and on shore, the hardships and injustices they had to suffer, the development of union organization, and the influence of organization in securing legislation which remedied some of the worst conditions connected with their calling. The two last chapters of the book were published in the April, 1923, issue of the MONTHLY LABOR REVIEW (pp. 11–20) under the title "Organization and policies of the Sailors' Union of the Pacific."

WARBASSE, JAMES P. *Cooperative democracy. New York, Macmillan Co., 1923. xx, 493 pp.*

In this valuable contribution to the cooperative literature the president of the Cooperative League of the United States of America discusses "the cooperative movement, its philosophy, methods, accomplishments and possibilities, and its relation to the State, to science, art, and commerce, and to other systems of economic organizations." Cooperation is presented as a "practical working plan for a complete reorganization of society upon a voluntary nonpolitical basis." The author is convinced that

this reorganization of society must take place through the consumers' movement, and in order to show the basis for this belief he describes and analyzes such other forms of cooperation as producers' copartnerships, syndicalism, and agricultural producers' associations.

The author discusses at length the conditions which would obtain under the cooperative democracy as he visualizes it. Beginning with retail and then wholesale distribution the consumers' movement would undertake cooperative production of one article after another until finally all production would be carried on by the organized consumers.

The book contains a chapter showing what the movement has already done in such lines as distributive business (stores, bakeries, restaurants, etc.), laundry operation, housing, banking, medical service, insurance, telephone service, mining, wholesaling, importing, and manufacturing. Other chapters analyze the difference between cooperative and Government ownership, the profit motive and its defects, the organized labor movement, and the guild movement in its relation to cooperation, and sketch briefly the history and development of the cooperative movement in the different countries of the world.

WEAKLY, FRANK E. *Applied personnel procedure. New York, McGraw-Hill Book Co., 1923. vii, 192 pp.*

Certain specific phases of personnel management, such as placement, turnover, attendance, promotion, and transfers, job analysis, employee representation, profit sharing, and related subjects are treated from the standpoint of the author's varied experience as a manual worker, head of a personnel department, and a general executive.

YOVANOVITCH, D. *Le rendement optimum du travail ouvrier. Rémunération, organisation, hygiène, morale du travail. Paris, Payot, 1923. 490 pp.*

This book is a study of the modern stimulants of labor activity. It takes up the question of industrial organization from the labor point of view and attempts an evaluation of the different practices and reforms from the angle of their efficacy. The study is divided into three parts. The first treats of the remuneration of labor and includes a consideration of the various bonus systems, profit sharing, and other additions to wages. The second part takes up the organization and hygiene of labor, including scientific management, and the third part the relationship between the worker and the industry, covering works councils, labor control, and the occupational, economic, and general education of the workers.

SERIES OF BULLETINS PUBLISHED BY THE BUREAU OF LABOR STATISTICS.

*[The publication of the annual and special reports and of the bimonthly bulletin was discontinued in July, 1912, and since that time a bulletin has been published at irregular intervals. Each number contains matter devoted to one of a series of general subjects. These bulletins are numbered consecutively, beginning with No. 101, and up to No. 236 they also carry consecutive numbers under each series. Beginning with No. 237 the serial numbering has been discontinued. A list of the series is given below. Under each is grouped all the bulletins which contain material relating to the subject matter of that series. A list of the reports and bulletins of the Bureau issued prior to July 1, 1912, will be furnished on application. The bulletins marked thus * are out of print.]*

Wholesale Prices.

*Bul. 114. Wholesale prices, 1890 to 1912.
Bul. 149. Wholesale prices, 1890 to 1913.
*Bul. 173. Index numbers of wholesale prices in the United States and foreign countries.
*Bul. 181. Wholesale prices, 1890 to 1914.
*Bul. 200. Wholesale prices, 1890 to 1915.
Bul. 226. Wholesale prices, 1890 to 1916.
Bul. 269. Wholesale prices, 1890 to 1919.
Bul. 284. Index numbers of wholesale prices in the United States and foreign countries. [Revision of Bulletin No. 173.]
Bul. 296. Wholesale prices, 1890 to 1920.
Bul. 320. Wholesale prices, 1890 to 1921.
Bul. 335. Wholesale prices, 1890 to 1922.

Retail Prices and Cost of Living.

*Bul. 105. Retail prices, 1890 to 1911: Part I.
Retail prices, 1890 to 1911: Part II—General tables.
*Bul. 106. Retail prices, 1890 to June, 1912: Part I.
Retail prices, 1890 to June, 1912: Part II—General tables.
Bul. 108. Retail prices, 1890 to August, 1912.
Bul. 110. Retail prices, 1890 to October, 1912.
Bul. 113. Retail prices, 1890 to December, 1912.
Bul. 115. Retail prices, 1890 to February, 1913.
*Bul. 121. Sugar prices, from refiner to consumer.
Bul. 125. Retail prices, 1890 to April, 1913.
*Bul. 130. Wheat and flour prices, from farmer to consumer.
Bul. 132. Retail prices, 1890 to June, 1913.
Bul. 136. Retail prices, 1890 to August, 1913.
*Bul. 138. Retail prices, 1890 to October, 1913.
*Bul. 140. Retail prices, 1890 to December, 1913.
Bul. 156. Retail prices, 1907 to December, 1914.
Bul. 164. Butter prices, from producer to consumer.
Bul. 170. Foreign food prices as affected by the war.
Bul. 184. Retail prices, 1907 to June, 1915.
Bul. 197. Retail prices, 1907 to December, 1915.
Bul. 228. Retail prices, 1907 to December, 1916.
Bul. 270. Retail prices, 1913 to 1919.
Bul. 300. Retail prices, 1913 to 1920.
Bul. 315. Retail prices, 1913 to 1921.
Bul. 334. Retail prices, 1913 to 1922.

Wages and Hours of Labor.

Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
*Bul. 118. Ten-hour maximum working-day for women and young persons.
Bul. 119. Working hours of women in the pea canneries of Wisconsin.
*Bul. 128. Wages and hours of labor in the cotton, woolen, and silk industries, 1890 to 1912.
*Bul. 129. Wages and hours of labor in the lumber, millwork, and furniture industries, 1890 to 1912.
*Bul. 131. Union scale of wages and hours of labor, 1907 to 1912.
*Bul. 134. Wages and hours of labor in the boot and shoe and hosiery and knit goods industries, 1890 to 1912.
*Bul. 135. Wages and hours of labor in the cigar and clothing industries, 1911 and 1912.
Bul. 137. Wages and hours of labor in the building and repairing of steam railroad cars, 1890 to 1912.
Bul. 143. Union scale of wages and hours of labor, May 15, 1913.
Bul. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City.
*Bul. 147. Wages and regularity of employment in the cloak, suit, and skirt industry.
*Bul. 150. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1913.

Wages and Hours of Labor—Concluded.

*Bul. 151. Wages and hours of labor in the iron and steel industry in the United States, 1907 to 1912.
Bul. 153. Wages and hours of labor in the lumber, millwork, and furniture industries, 1907 to 1913.
*Bul. 154. Wages and hours of labor in the boot and shoe and hosiery and underwear industries, 1907 to 1913.
Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
Bul. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
Bul. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
Bul. 168. Wages and hours of labor in the iron and steel industry, 1907 to 1918.
*Bul. 171. Union scale of wages and hours of labor, May 1, 1914.
Bul. 177. Wages and hours of labor in the hosiery and underwear industry, 1907 to 1914.
Bul. 178. Wages and hours of labor in the boot and shoe industry, 1907 to 1914.
Bul. 187. Wages and hours of labor in the men's clothing industry, 1911 to 1914.
*Bul. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
*Bul. 194. Union scale of wages and hours of labor, May 1, 1915.
Bul. 204. Street railway employment in the United States.
Bul. 214. Union scale of wages and hours of labor, May 15, 1916.
Bul. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915.
Bul. 221. Hours, fatigue, and health in British munition factories.
Bul. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915
Bul. 232. Wages and hours of labor in the boot and shoe industry, 1907 to 1916.
Bul. 238. Wages and hours of labor in woolen and worsted goods manufacturing, 1916.
Bul. 239. Wages and hours of labor in cotton goods manufacturing and finishing, 1916.
Bul. 245. Union scale of wages and hours of labor, May 15, 1917.
Bul. 252. Wages and hours of labor in the slaughtering and meat-packing industry, 1917.
Bul. 259. Union scale of wages and hours of labor, May 15, 1918.
Bul. 260. Wages and hours of labor in the boot and shoe industry, 1907 to 1918.
Bul. 261. Wages and hours of labor in woolen and worsted goods manufacturing, 1918.
Bul. 262. Wages and hours of labor in cotton goods manufacturing and finishing, 1918.
Bul. 265. Industrial survey in selected industries in the United States, 1919. Preliminary report.
Bul. 274. Union scale of wages and hours of labor, May 15, 1919.
Bul. 278. Wages and hours of labor in the boot and shoe industry, 1907 to 1920.
Bul. 279. Hours and earnings in anthracite and bituminous coal mining.
Bul. 286. Union scale of wages and hours of labor, May 15, 1920.
Bul. 288. Wages and hours of labor in cotton goods manufacturing, 1920.
Bul. 289. Wages and hours of labor in woolen and worsted goods manufacturing, 1920.
Bul. 294. Wages and hours of labor in the slaughtering and meat-packing industry in 1921.
Bul. 297. Wages and hours of labor in the petroleum industry.
Bul. 302. Union scale of wages and hours of labor, May 15, 1921.
Bul. 305. Wages and hours of labor in the iron and steel industry, 1907 to 1920.
Bul. 316. Hours and earnings in anthracite and bituminous coal mining.
Bul. 317. Wages and hours of labor in lumber manufacturing, 1921.
Bul. 324. Wages and hours of labor in the boot and shoe industry, 1907 to 1922.
Bul. 325. Union scale of wages and hours of labor, May 15, 1922.
Bul. 327. Wages and hours of labor in woolen and worsted goods manufacturing, 1922.
Bul. 328. Wages and hours of labor in hosiery and underwear industry, 1922.
Bul. 329. Wages and hours of labor in the men's clothing industry, 1922.
Bul. 345. Wages and hours of labor in cotton goods manufacturing, 1922.
Bul. 348. Wages and hours of labor in the automobile industry, 1922. [In press.]
Bul. 353. Wages and hours of labor in the iron and steel industry, 1907 to 1922. [In press.]

Employment and Unemployment.

*Bul. 109. Statistics of unemployment and the work of employment offices.
Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
Bul. 172. Unemployment in New York City, N. Y.
*Bul. 182. Unemployment among women in department and other retail stores of Boston, Mass.
*Bul. 183. Regularity of employment in the women's ready-to-wear garment industries.
Bul. 192. Proceedings of the American Association of Public Employment Offices.
*Bul. 195. Unemployment in the United States.
Bul. 196. Proceedings of the Employment Managers' Conference held at Minneapolis, Minn., January, 1916,
Bul. 202. Proceedings of the conference of the Employment Managers' Association of Boston, Mass., held May 10, 1916.
Bul. 206. The British system of labor exchanges.
Bul. 220. Proceedings of the Fourth Annual Meeting of the American Association of Public Employment Offices, Buffalo, N. Y., July 20 and 21, 1916.
Bul. 223. Employment of women and juveniles in Great Britain during the war.
*Bul. 227. Proceedings of the Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.

Employment and Unemployment—Concluded.

Bul. 235. Employment system of the Lake Carriers' Association.
Bul. 241. Public employment offices in the United States.
Bul. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9–11, 1918.
Bul. 310. Industrial unemployment: A statistical study of its extent and causes.
Bul. 311. Proceedings of the Ninth Annual Meeting of the International Association of Public Employment Services, September 7–9, 1921, Buffalo, N. Y.
Bul. 337. Proceedings of the Tenth Annual Meeting of the International Association of Public Employment Services, Washington, D. C., September 11–13, 1922.

Women in Industry.

Bul. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia.
*Bul. 117. Prohibition of night work of young persons.
*Bul. 118. Ten-hour maximum working-day for women and young persons.
Bul. 119. Working hours of women in the pea canneries of Wisconsin.
*Bul. 122. Employment of women in power laundries in Milwaukee, Wis.
Bul. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories.
*Bul. 167. Minimum-wage legislation in the United States and foreign countries.
*Bul. 175. Summary of the report on condition of woman and child wage earners in the United States.
*Bul. 176. Effect of minimum-wage determinations in Oregon.
*Bul. 180. The boot and shoe industry in Massachusetts as a vocation for women.
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Bul. 253. Women in the lead industries.

Workmen's Insurance and Compensation (including laws relating thereto).

Bul. 101. Care of tuberculous wage earners in Germany.
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*Bul. 126. Workmen's compensation laws of the United States and foreign countries.
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*Bul. 185. Compensation legislation of 1914 and 1915.
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Bul. 210. Proceedings of the Third Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions.
Bul. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children.
Bul. 240. Comparison of workmen's compensation laws of the United States.
Bul. 243. Workmen's compensation legislation in the United States and foreign countries.
Bul. 248. Proceedings of the Fourth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 264. Proceedings of the Fifth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 272. Workmen's compensation legislation of the United States and Canada, 1919.
*Bul. 273. Proceedings of the Sixth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 275. Comparison of workmen's compensation laws of the United States and Canada.
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Bul. 301. Comparison of workmen's compensation insurance and administration.
Bul. 304. Proceedings of the Eighth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.
Bul. 312. National Health Insurance in Great Britain, 1911 to 1920.
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Bul. 333. Proceedings of the Ninth Annual Meeting of the International Association of Industrial Accident Boards and Commissions.

Industrial Accidents and Hygiene.

Bul. 104. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories.
Bul. 120. Hygiene of the painters' trade.
*Bul. 127. Dangers to workers from dust and fumes, and methods of protection.
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*Bul. 157. Industrial accident statistics.

Industrial Accidents and Hygiene—Concluded.

Bul. 165. Lead poisoning in the manufacture of storage batteries.
*Bul. 179. Industrial poisons used in the rubber industry.
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*Bul. 201. Report of committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. [Limited edition.]
Bul. 205. Anthrax as an occupational disease.
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Bul. 230. Industrial efficiency and fatigue in British munition factories.
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Labor Laws of the United States (including decisions of courts relating to labor).

*Bul. 111. Labor legislation of 1912.
*Bul. 112. Decisions of courts and opinions affecting labor, 1912.
*Bul. 148. Labor laws of the United States, with decisions of courts relating thereto.
*Bul. 152. Decisions of courts and opinions affecting labor, 1913.
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Foreign Labor Laws.

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Vocational Education.

Bul. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City.
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Labor, as Affected by the War.

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Safety Codes.

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Miscellaneous Series.

*Bul. 117. Prohibition of night work of young persons.
*Bul. 118. Ten-hour maximum working-day for women and young persons.
*Bul. 123. Employers' welfare work.
*Bul. 158. Government aid to home owning and housing of working people in foreign countries.
*Bul. 159. Short-unit courses for wage earners and a factory school experiment.
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Bul. 170. Foreign food prices as affected by the war.
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Bul. 242. Food situation in central Europe, 1917.
Bul. 250. Welfare work for employees in industrial establishments in the United States.
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Bul. 263. Housing by employers in the United States.
Bul. 266. Proceedings of Seventh Annual Convention of Governmental Labor Officials of the United States and Canada.
Bul. 268. Historical survey of international action affecting labor.
Bul. 271. Adult working-class education in Great Britain and the United States.
Bul. 282. Mutual relief associations among Government employees in Washington, D. C.
Bul. 295. Building operations in representative cities in 1920.
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Bul. 307. Proceedings of the Eighth Annual Convention of the Association of Governmental Labor Officials of the United States and Canada.
Bul. 313. Consumers' cooperative societies in the United States in 1920.
Bul. 314. Cooperative credit societies in America and in foreign countries.
Bul. 318. Building permits in the principal cities of the United States.
Bul. 319. The Bureau of Labor Statistics: Its history, activities, and organization.
Bul. 323. Proceedings of the Ninth Annual Covention of the Association of Governmental Labor Officials of the United States and Canada.
Bul. 326. Methods of procuring and computing statistical information of the Bureau of Labor Statistics.
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Bul. 342. International Seamen's Union of America: A study of its history and problems.
Bul. 346. Humanity in government.
Bul. 347. Building permits in the principal cities of the United States, 1922. [In press.]
Bul. 349. Industrial relations in the West Coast lumber industry. [In press.]
Bul. 352. Proceedings of the Tenth Annual Convention of the Association of Governmental Labor Officials of the United States and Canada. [In press.]

SPECIAL PUBLICATIONS ISSUED BY THE BUREAU OF LABOR STATISTICS.

Description of occupations, prepared for the United States Employment Service, 1918–19.

Boots and shoes, harness and saddlery, and tanning.
Cane-sugar refining and flour milling.
Coal and water gas, paint and varnish, paper, printing trades, and rubber goods.
Electrical manufacture, distribution, and maintenance.
Glass.
Hotels and restaurants.
Logging camps and sawmills.
Medicinal manufacturing.
Metal working, building and general construction, railroad transportation, and shipbuilding.
Mines and mining.
Office employees.
Slaughtering and meat packing.
Street railways.
*Textiles and clothing.
*Water transportation.